



# SOCIO ECONOMIC SURVEY 2016-17

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# SOCIO ECONOMIC SURVEY 2016-17

PLANNING DEPARTMENT  
GOVERNMENT OF ANDHRA PRADESH



## *PREFACE*

*At the national level, the Ministry of Finance, Government of India presents the Economic Survey in both houses of the Parliament every year, just before the Union Budget. It is the ministry's view on the annual economic development of the country. A flagship annual document of the Ministry of Finance, Government of India, Economic Survey, reviews the developments in the Indian economy over the previous 12 months, summarizes the performance on major development programs, and highlights the policy initiatives of the government and the prospects of the economy in the short to medium term. It contains certain prescriptions that may find a place in the Union Budget which is presented a day or two later.*

*The Government of Andhra Pradesh publishes 'Socio-Economic Survey' report every year and places it in both Houses of the State Legislature along with the budget documents. The report is a unique volume that captures the socio-economic changes taken place since the beginning of the financial year. The report essentially attempts to present the growth performance of the state economy by capturing the progress under key macro-economic aggregates and physical outcomes as a result of implementation of various programmes/ schemes during the year 2016-17.*

*The Socio Economic Survey 2016-17 is an outcome of the collective effort of all the stakeholders including the government departments, consultations made with experts from research bodies and interested readers who have offered their valuable advice.*



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CHAPTER **1** GENERAL  
REVIEW

## GENERAL REVIEW

## State Reconstruction – Sunrise Andhra Pradesh

The problems that arose post reorganization of the state persist and finding solutions amicably continues to be a challenge for the government. The government, converting the crisis into opportunities, has recorded appreciable progress in terms of the objective of achieving inclusive growth with noteworthy performance in both development and welfare sectors despite running financial deficits.

The State Government planning to build a world class infrastructure in the capital city of Amaravati, is anticipating for a big support from the Centre. All measures humanly possible have been taken, not only to overcome the difficulties but to convert every crisis into opportunity and also lay solid foundation for “Sunrise Andhra Pradesh”. The state reconstruction is planned in such a way that it promotes inclusive growth and the challenges are handled with effective and efficient IT-based solutions.

The Government while emphasizing on development, is equally committed to focus on social infrastructure for not only meeting basic minimum requirements of the people but for ensuring higher levels of social justice in society. The government is confident that once the process of social development is institutionalized, it provides sustenance for overall economic development.

## Geographic, Demographic and Socio-Economic profile of Andhra Pradesh

With a geographical area of 1,62,970 sq km, Andhra Pradesh ranks as the 8<sup>th</sup> largest State in the country. Situated in a tropical region, the state has the 2<sup>nd</sup> longest coastline in the country with a length of 974 km. The State has a forest area of 36909.36 Sq.Kms, as per the forest records.

Andhra Pradesh is the tenth largest state in the Country, in terms of population. As per 2011 Census, the State accounts for 4.10% of the total population of the country. The decadal growth of population rose from 18.88% during 1961-71 to 21.13% during 1981-91. Subsequently a significant decline was observed in the rate of growth of population and decline is even more prominent at 9.21% during 2001-11, lower than the All-India's growth rate of 17.72 percent.

The density of population for Andhra Pradesh is 304 persons per square kilometer, as against 382 persons per

square kilometer at all India level in 2011. The sex ratio in the state was up from 983 in 2001 to 997 in 2011 and is higher than all India figure of 943 in 2011.

The literacy rate of the State is 67.35 percent in 2011 as compared to 62.07 percent in 2001. The literacy rate of the State is lower than the all India literacy rate at 72.98% percent. Literacy in Andhra Pradesh increased over 37 percentage points from 29.94 percent in 1981 to 67.35 percent in 2011. Female literacy rate has gone up from 52.72 percent in 2001 to 59.96 percent in 2011.

Urbanisation has been regarded as an important component for growth realization. The percentage of urban population to the total population in the State is 29.47 percent in 2011 as compared to 24.13 percent in 2001.

Sand, silt, and clay are the basic types of soils and most of soils are made up of a combination of these three. The texture of the soil, how it looks and feels, depends upon the amount of each one in that particular soil. There are various types of soils and the formation of soil is primarily influenced by major factors such as climate, altitude and composition of bedrock etc. Disproportion in the distribution of rainfall in the country and excessive heat contribute special characters to the soils.

The land utilization classification reveals that 38.09% of the state geographical areas is under net area sown (62.08 lakh hectares), 22.63 % under forest (36.88 lakh hectares), 8.65 % under current fallow lands (14.10 lakh hectares), 12.47% under land put non-agricultural uses (20.32 lakh hectares), 8.27 % under barren and uncultivable land (13.47 lakh hectares) and remaining 7.63% is under other fallow land, cultivable waste lands like permanent pastures and other grazing lands (12.43 lakh hectares) and land under miscellaneous tree crops and groves are not included in the net area sown which is around 2.26%(3.69 lakh hectares)

## Macro-Economic Aggregates - Current Scenario

The Central Statistical Office(CSO) has shifted the base year from 2004-05 to 2011-12 and also revised the methodology. The GSDP at Current Prices for the year 2016-17 (Advance Estimates) is compiled by adding Product taxes and deducting Product subsidies to the GVA at current basic prices and is estimated at Rs.6,99,307crore as against Rs.6,09,934 crore for 2015-16(First Revised Estimates). As per the Advance



Estimates, the GSDP at constant (2011-12) Prices for the year 2016-17 is estimated at Rs.5,47,021 crores as against Rs.4,90,134 crores for 2015-16 (FRE) indicating a growth of 11.61 per cent. The corresponding growth rate of GDP of India is 7.1 per cent. The sectoral growth rates of GVA of Andhra Pradesh at constant (2011-12) prices are Agriculture: 14.03%, Industry: 10.05% and Services sector: 10.16%. The Per Capita Income (NSDP) of Andhra Pradesh at current prices increased to Rs.1,22,376 from Rs.1,08,163 in 2015-16 registering a growth of 13.14 percent.

### Public Finance:

The revenue for the state in FY 2015-16 (Accounts) stood at Rs.39,922 Crores from Own Tax sources, Rs.4,920 Crores from Own Non Tax sources and Rs.45,249 Crores of Central Transfer. The main contribution towards the State's Own Non Tax Revenue included the Mines and Mineral, Forests, Education and Other revenue sources. Mines and Minerals, Forests and Education sector contributed 25%, 20% and 21% respectively towards the State's Own Non Tax Revenue in the FY 2015-16. Resource flow from the Centre was Rs.45,249 Crores in the FY 2015-16 and was Rs.54,011 Crores in FY 2016-17 (RE). Finance Commission allocation constituted a major portion of this Central Transfers, which was Rs.30,078 Crores in the FY 2015-16 and Rs.33,630 Crores in FY 2016-17 (RE).

The Total Expenditure by the State excluding ways and means advance was Rs.1,10,510 Crores in the FY 2015-16 and was Rs.1,26,871 Crores in FY 2016-17 (RE). The revenue expenditure was Rs.95,950 Crores in the FY 2015-16 and was Rs.1,12,306 Crores in FY 2016-17 (RE). It is important to mention that in its strive to build a developed Andhra Pradesh, the state spent Rs.14,172 Crores on its Capital Outlay in FY 2015-16. This was mainly spent on capital works like irrigation, roads and infrastructure. Revenue expenditure through welfare schemes like subsidy rice, power subsidy, pavalavaddi, old age pensions, housing programs etc.

### Prices

Consumer Price Indices for Industrial Workers increased by 5.26% and 5.73% in the State and All India level respectively during the period from April, 2016 to Oct, 2016 over the corresponding period of previous year. Wholesale Price Index (WPI) serves as an important determinant in formulation of trade, fiscal and other economic policies

by the government. WPI (Base Year 2004-05) for All Commodities increased from 177.8 in Apr 2016 to 183.1 in Nov 2016.

### Public Distribution

29,054 Fair Price (FP) shops are functioning in the State as on 31.12.2016. On an average, each shop has 450 cards/family. There is one shop for every 1,725 persons in Andhra Pradesh vis-à-vis the Government of India's norm of one shop for every 2,000 persons.

Andhra Pradesh is the first State in the country to implement FP Shops Automation under "End-to-End Computerization of TPDS Operations". Out of total FP shops, 28,445 are functioning through ePoS Devices-cum-Electronic Weighing Machines in the State. 28,422 Iris readers were also integrated to ePoS devices for authentication whenever biometric authentication is not successful. With implementation of this, substantial savings are noticed. This innovative PDS in the state received wide accolades.

### Seasonal conditions:

Rainfall received during the South West Monsoon period for 2016-17 was 534mm as against the normal rainfall of 556 mm, recording a deficit by 4 %. The rainfall received during the North East monsoon period for 2016-17 was only 85 mm as against the normal rainfall of 296 mm, recording a deficit of 71%. The overall deficit is around 28% for the entire year.

### Agriculture & Allied sectors: Agriculture:

The area under food grains is estimated to be 41.34 lakh hectares in 2016-17 as against 41.36 lakh hectares in 2015-16, showing a marginal decline of 0.05%. The total production of food grains in 2016-17 is estimated at 156.85 lakh tonnes while it was 143.78 lakh tonnes in 2015-16 showing an increase of 9.09%. Higher productivity levels have been noticed in respect of certain crops, despite deficit rainfall and marginal decline in area under food grains

Innovative interventions like Farmer Producer Organisations (FPOs), Soil Health Cards, Testing of soil samples, reducing micro nutrient deficiency and extension and guidance from knowledge partners like ICRISAT are helping the farming community to enhance farm incomes.

## GENERAL REVIEW

## Horticulture:

Horticulture sector has been recognized as an essential component for food and nutritional security in the State. Efforts are being made to make Andhra Pradesh maintain its supremacy in the production of Oilpalm, Papaya, Citrus and Chillies, Mango and Tomato. Micro irrigation through drip and sprinkler mechanisms have proved effective both in terms of cost and output. The government is implementing strategies to make Rayalaseema as a Horticulture hub. It is targeted to cover one million farmers in next three years under Farmer Producer Organisations for Agriculture & Allied sectors in order to establish forward and backward linkages and to promote the products of Andhra Pradesh to global standards. It contributes about 7.40% of the State GVA and is moving towards value enhancement in addition to focus on production. The Government is keen to encourage horticulture in a big way and it is expected that value addition from this sub-sector will soon cross the agriculture share

Wide range of agro-climatic conditions of Andhra Pradesh are conducive for growing a large variety of Horticultural crops, including, root and tuber crops, ornamental crops, plantation crops like coconut, cashew and cocoa etc. During the year 2016-17, the Government has set a target of 20% growth in output and to achieve this, there is need for new initiatives, new interventions and implementations with the support and coordination of farmers and entrepreneurs.

15.41 Lakh Ha. area is under Horticulture with production of 202.50 lakhs MTs. The area under fruits is 5.76 lakhs Ha, Vegetables 2.28 lakh Ha, Spices 2.37 lakh Ha and Plantation crops 4.58akh Ha.

## Livestock and Fisheries

Andhra Pradesh takes pride in the country in having world renowned Livestock breeds like Ongole and Punganur in cattle, Godavari Buffaloes, Nellore in sheep and Aseel in poultry. As per Livestock Census 2012, 62.54 lakh (49.38%) households in the state are engaged in Livestock / Livestock related rearing activities. The Livestock resources in the state include 47.16 lakh Cattle, 64.62 lakh Buffaloes, 135.60 lakh Sheep (1st in country), 44.96 lakh Goats, 1.57 lakh pigs, 0.13 lakh other Livestock, 294.03 lakh total Livestock & 805.83 lakh poultry (3rd in country).

The government will implement the fodder security policy, which is first of its kind in the country, having various components to provide quality feed and fodder to the Livestock.

The state stands 2nd in Egg production (1417.67 crores), 4th in Meat production (5.66 lakh Metric Tons) and 5th in Milk production (108.17 Lakh Metric Tons) in the country as per the estimates of GoI during 2015-16.

Fisheries, occupies an important place in the Socio-economic development of sunrise Andhra Pradesh State. Fisheries, as one of the vibrant sub-sectors of the Primary Sector, is identified as one of the growth engines. It is a significant employment generator and a source of proteinous food and foreign exchange earner for the State. AP ranks 1st in total fish and shrimp production and contributes more than 70% of cultured shrimp produced in the country. AP ranks 3rd in Global shrimp production (0.3 million tons), 6th in aquaculture production (1.57 million tons) (FAO Report 2012). AP is contributing 1.19% of global and 20.77% of national fish production (2014-15).

Fisheries sector is supporting employment to 14.5 lakh persons and contributing significantly to the State's economy. The state government has initiated plans to make Andhra Pradesh the 'Aqua Hub' of the World. About 1.40 million people are directly or indirectly employed in the State in this sector. The A.P. Fisheries Policy, 2015 envisages 42 lakh tonnes of fish production with GVA of Rs.80,000 crore by 2019-20.

## Industrial Development

The Government is striving for creation of quality infrastructure coupled with congenial industrial environment in the State to make Andhra Pradesh an attractive destination for both foreign and domestic investors. Andhra Pradesh is the first state in India to take up the initiative in bringing A.P. Single Window Clearances system under e-Biz project of National e-Governance plan of Government of India. Andhra Pradesh has occupied the 1st position in Ease of Doing Business Rankings this year given by the World Bank and the Department of Industrial Policy and Promotion, Government of India.

The Government has organised two partnership summits in the year 2016 and 2017. During the first summit 328 projects committed MoUs with an investment worth

Rs.4,67,577 cr. and employment of 9,58,896. During the 2<sup>nd</sup> Partnership Summit held in Visakhapatnam on 27<sup>th</sup> - 28<sup>th</sup> January 2017, 665 MoUs were signed by the Government of Andhra Pradesh with an investment potential of Rs.1,054,594 cr and an possible employment of 2,234,096. 1867 Large and Mega Projects with an investment of Rs.86,894 crore have gone into production creating employment to 4,67,642 persons as on December,2016. The Government of India (GoI) has announced a National Manufacturing Policy, 2011, with the objective to enhance the share of manufacturing in GDP to 25% within a decade and creating 100 million jobs. Government of Andhra Pradesh proposed to develop NIMZs in Prakasam and Chittoor Districts for which in-principle approval was already accorded by Government of India.

Chennai Bangalore Industrial Corridor is one of the mega infrastructure projects of Government of India which passes through the State. With the main objective to increase the share of manufacturing sector in the GDP of the country and to create smart sustainable cities which will have world-class infrastructure, convenient public transport etc. Vizag Chennai Industrial Corridor is a key part of the planned East Economic Corridor and India's first coastal corridor and the extent of it is considered from Pydibhemavaram in Srikakulam district to Chennai in Tamilnadu.

## Industrial Infrastructure

Andhra Pradesh is the first State in the country to announce an exclusive state SEZ policy with special package of incentives and concessions and finalized the Visakhapatnam Special Economic Zone in an area of 3,500 acres of land. Out of 23 SEZs 4 were IT/ITES SEZs, 6 Multi Product SEZs, 4 Pharmaceuticals SEZs, 2 Textile and Apparel SEZs, 1 Building Products SEZ, 1 Leather Sector SEZ, 1 Footwear SEZ, 1 Alumina/Aluminium Refining SEZ, 1 Boitech, 1 Paper based and 1 Food Processing SEZ.

### Index of Industrial Production

The General Index for the period from April to October 2016 in Andhra Pradesh stands at 231.9 against 207.3 observed in the same period previous year.

## Mines and Geology

The main aim of State Mineral Policy is to serve as a guiding force to translate the State's mineral potential into reality with eco-friendly and sustainable mining. The

Mining Sector is identified as one of the growth engines and certain minerals have been identified as focus minerals viz. Bauxite, Heavy minerals, Beach Sand, Limestone, Gold, Diamond, Dolomite, Oil & Natural gas, Uranium, Garnet, Granite, Titanium, etc. for establishment of Cement, Gas based Thermal Plants, Oil Refinery, Cutting & Faceting, Mining & Refinery, Steel & Sponge, Alumina Smelter and Aluminium Refinery etc., as focus industry for overall development of the Mining Sector in the State. Mineral consumption is increasing due to promotion of various industries and manufacture of Mineral based products. The State produces about 43 million tonnes of industrial minerals and 156 million cubic meters of dimensional stones building materials with a value of Rs.14633 crores during 2015-16

## Commerce and Exports

The Exports from the state have recorded as Rs.29629.65 crore in the first half of the year 2016-17 (from April 2016 to September 2016). The Major exports from the state are Drugs & Pharmaceuticals, Marine, Agriculture and Agro based products, Handicrafts, Minerals and Mineral products and Software products.

## Irrigation

The State of Andhra Pradesh is allocated 512.040 TMC of Krishna Waters under the existing Projects and also given liberty to utilise remaining water to the extent feasible. The State of Andhra Pradesh has taken up 4 projects - Telugu Ganga, Handri Niva Srujala sravanthi, Galeru Nagari and Veligonda based on the surplus water as per Krishna Water Dispute Tribunal and are in advanced stage of completion. The existing utilization under Godavari is to the extent of 308.703 TMC.

Seven Priority projects viz - 1. Pattiseema Lift Irrigation Scheme, 2) Thotapalli Barrage project, 3) Handri Neeva Sujala Sravanthi Project, 4) Galeru Nagari Sujala Sravanthi Phase I, 5) BRR Vamsadhara Project (Stage II- Phase II), 6) Poola Subbaiah Veligonda Project and 7) Gundlakamma Reservoir, are planned for completion by 2017 - 18. The Government has already completed Pattiseema Lift Irrigation Scheme, Thotapalli Barrage project, Polavaram Right Cannal and Gundlakamma Project.

## GENERAL REVIEW

## Minor Irrigation

About 40,817 tanks serving an ayacut of 25.60 lakh acres (including 35,376 tanks transferred from Panchayat Raj department with an ayacut of 8.01 lakh acres) are under Minor Irrigation. As per the 5<sup>th</sup> Minor Irrigation Census 2013-14, there were 10.54 lakh minor irrigation sources in Andhra Pradesh against 9.72 lakh sources as per 4<sup>th</sup> Minor Irrigation Census 2006-07, registering an increase of 8.41%.

## Groundwater

The state has been divided into 748 watersheds (which are also called groundwater basins or assessment units) for estimation of groundwater resources. The net groundwater irrigation potential created during 2015-16 was 11.93 lakh hectares and gross area irrigated under groundwater was 16.43 lakh hectares with 15.09 lakh bore wells. 1254 Piezometers are functioning for real time monitoring of the ground water levels. The real time data is being analyzed with rainfall and reports are being disseminated through CM Coredash board.

Coastal Andhra region recorded a net rise of 0.22 metres and Rayalaseema region recorded a net fall of 3.94 metres. Neeru-Chettu Mission is a sub-mission of Primary Sector Mission and important two aspects of the mission are Water Conservation and Water management. The State is planning to become drought proof and several strategies are being put in place including real time monitoring of water levels by Piezometers.

## Power

From 22.5 million units of power deficit in June 2014, the state has become surplus power state and able to provide quality power supply to all domestic consumers on a 24X7 basis.

During the year 2016-17, it is programmed to release 50,000 new agricultural connections. So far i.e. up to 31-10-2016, 46,295 agricultural services have been released. The total agricultural services in the state as on 31-10-2016 is 16.28 lakhs. The state has bagged five national awards for energy efficiency and non-conventional energy solutions.

## Roads

The total R&B Road network in the state as on 31.03.2016 was 47,002 Kms. The R&B department maintains these roads (excluding NH roads) comprising 15,406 Kms of State Highways, 26,038 Kms of Major district roads and 5,558 Kms of rural roads. There are 26 National Highways in the state covering a length of 5293.43 Km) There are 26 National Highways in the state covering a length of 5293.43 Km and in terms of area coverage, a length of 32.82Kms is available for every 1,000 Sq. Kms in the State as against national average of 30.45 km.

## Transport

The transport department plays a key role in granting licenses to drivers, registration of motor vehicles, issue of transport permits, levy and collection of motor vehicle tax, enforcement of vehicle violations, and acts as nodal agency for road safety and motor vehicles pollution control. The State had a registry of 95.36 lakh vehicles, as on 01.12.2016.

## APSRTC

The corporation has 4 zones, 12 regions and 127 depots with a total fleet strength of 11,962 buses and 57651 employees on rolls as on October, 2016. The average vehicle productivity per day of its fleet is 378 kms. The Corporation bagged National Awards for 1. Highest Tyre Performance, 2. Fuel efficiency and 3 Productivity. Among the STUs in India, APSRTC stands top in physical performance in vehicle productivity and resource utilisation indicators like vehicle utilisation, fleet utilisation, average number of passengers transported, fuel efficiency, tyre life, break down rate and accident rate.

## Airports

Government has entered into memorandum of understanding with Airports Authority of India for upgradation/modernization of non-metro airports at Vijayawada, Tirupati, Kadapa and Rajahmundry. There is a scope for improvement of air linkage, essential to fast development in the state. There are proposals for development of regional airports at Kuppam, Chittoor district, Dagadarthi, Nellore district and Orvakallu, Kurnool district.

## Sea Ports

Andhra Pradesh has 974 Kms long coast line with a major Port at Visakhapatnam under Government of India control and 14 notified ports under State Government. Of which, 4 are captive ports. One port is proposed at Duggarajapatnam in SPSR Nellore district. The State Government declared Kakinada SEZ as a minor port. It is proposed to handle all cargos in SEZ through this captive port.

## Tourism

The State is a home to a number of holy pilgrim centres, attractive palaces, museums, ports, rivers, beaches and hill stations. Andhra Pradesh with more than 300 tourist locations attracts largest number of tourists in India. More than 7.5 million visitors visit the state every year. APTDC operates 28 tour packages including on demand tours. Most popular river Cruise on river Godavari between Pattiseema and Papikondalu is being operated that is attracting large number of tourists. Huge investment proposals are being tracked to promote tourism which not only adds GVA but provides employment.

## Information Technology

Government has put in place three policies – IT policy, Electronic policy and Innovation and Startup policy, which are based on four pillars - Infrastructure, Incentives, Human resource development and Good governance. The Policies offer Incentives and Facilitations unparalleled in the country. 100% Tax reimbursement of VAT/CST, for the new units started after the date of issue of the policy, for a period of 5 years from the date of commencement of production for products manufactured in AP and sold in AP. e-Pragati is a massive program covering 30 departments and 315 agencies and around 745 services have been identified so far.

## School Education

Out of the total enrollment of 68.47 lakhs, 34.76 lakhs are in I-V classes; 20.85 lakhs in VI-VIII classes, 12.87 lakhs in IX-X classes. During 2016-17, the dropouts at I-V classes (Primary Level) were 9.68%, 12.77% at I-VIII (Elementary Level) and 20.67% at I-X (Secondary Level). Necessary measures have been taken to retain children into schools.

The pass percentage of students in S.S.C examinations during 2015-16 was 94.53 which is higher than the previous

year percentage i.e., 91.42 in 2014-15. The Mid Day meal scheme a Centrally Sponsored Scheme with 60% Central and 40% share of and State Governments for I-VIII classes and the State Government is funding 100% of the Mid day meals scheme for IX & X classes. The main objectives of the programme are to improve the nutritional status of children, motivate children to attend school regularly, and providing nutritional support. 36.66 lakh children were covered under this programme during 2016-17 out of which, 18.27 lakh are in Primary [I-V] classes including NCLP, 11.15 lakh in Upper primary (VI-VIII) and 7.24 lakh children in High schools in the state.

The Government of India have sanctioned 163 Model Schools. At present 160 Model Schools are functioning in the State from classes VI to X and Intermediate 1st & 2nd year classes @ 80 students per class in co-education. 70,540 students are studying in English Medium from class VI to senior Intermediate (Class XII) in Educationally Backward Mandals during 2016-17. The result of AP Model Schools during 2015-16 in SSC Public Examination is 96.84%, first in the Government Managed Institutions and next to the best result of all Private Management Schools. AP Model School Rayachoty in Kadapa District stood as best school among all schools in Andhra Pradesh by achieving 05 top grades i.e., 10/10 GPA. The pass percentage in Intermediate course is 74.91% which is worth mentioning and has good scope for considerable improvement during 2016-17.

## Sarva Shiksha Abhiyan

Andhra Pradesh is the 1st state in the country to introduce digital class rooms in all 352 KGBVs and also proposed to provide Intermediate education in at least One KGBV per district from the academic year 2017-18. 13 KGBVs are proposed for upgradation as Junior colleges in the 1st phase. It is proposed to be the 1<sup>st</sup> State in the country to Monitor KGBVs through web based online Monitoring. NCC units are proposed for all KGBVs during this year to build up self confidence among KGBV girls

Government has set up 250 digital classrooms in Visakhapatnam district on pilot basis and improved enrolment and learning levels of the students. The unit cost of each digital class room is Rs.1.5 lakh. GIS School mapping is being progressed. 90% of schools were mapped and the remaining schools are being completed by end of February 2017.

## GENERAL REVIEW

### Intermediate Education

There are 447 government junior colleges, 8 government vocational junior colleges under the administrative control of the Director of Intermediate Education. Besides the Government sector, there are 1749 private un-aided junior colleges functioning in the state.

### Collegiate Education

Higher Education has been identified as a growth engine in the sunrise state of Andhra Pradesh and is pursued in a mission approach for sustaining and promoting quality of education and for providing purposeful education, particularly to students hailing from marginalized sections of the society. There are 146 Government degree colleges (145 Degree +1 oriental college) and 141 Private Aided colleges (126 degree +15 oriental) existing in the state with a total strength of 2,06,705 students.

As part of the educational reforms in the state, the State Government has formulated Knowledge Mission to develop Andhra Pradesh as a Global Knowledge and Education Hub. Andhra Pradesh aims at becoming one of the three best performing States of India by 2020, and to become one of the best states in the country by 2029. The Government is adopting a two-track approach for implementation of the Knowledge Mission:

**Track-I:** Strengthening of Existing Institutions through programmes like Curriculum upgradation, Establishment of Smart Campuses, Allotment of credits to Online courses, Introducing Gap Year concept, Establishment of Incubation Centers, Industry Collaborations, Training in Employability skills.

**Track-II:** Creation of new premier institutions of Higher Education. 28 Govt Degree Colleges are having WiFi connectivity

### Technical Education

At present, there are 1360 Diploma & Degree level professional institutions with an intake of 3,21,003 students in the State. There are 313 polytechnic institutions in the State with a total intake of 87681 and 18 D. Pharmacy institutions with a total intake of 1080. 41 Skill Development centers have been established in polytechnics to provide industry relevant skill training and to improve the quality in technical education.

IIT, Visakhapatnam, Indian Institute of Technology (IIT) at Merlapaka Village Yerpedu (M), Chittoor Dist., Indian Institute of Science Education Research (IISER) at Srinivasapuram, Panguru and Chindepalle Villages of Yerpedu (M), IIT, Sri City, Chittoor District, National Institute of Technology (NIT), Tadepalligudem and IIT, Kurnool were started in 2015-16 and two more National level Institutes are established i.e. Tribal University at Relli in Vizianagaram District and Central University in Ananthapuramu district for the Academic year 2016-17.

### Family Welfare

Family Welfare department provides maternal health care, child health care and family welfare services through 7659 Sub-centers, 1156 Primary Health Centers, 193 Community Health Centers, 31 Area Hospitals, 8 District Hospitals, 3 Mother and Child Health Centres and 11 Teaching hospitals. Apart from these 73 Urban Family Welfare Centers, 48 Post Partum Units and 222 e-UPHCs fall under the purview of the State.

The State Government has envisaged establishing 26 Special New Born Care Units (SNCUs), 18 Nutrition Rehabilitation Centres, 95 Newborn Stabilization Units (NBSUs) and 789 New Born Care Corners (NBCCs) in the state to reduce Infant Mortality Rate (IMR) by strengthening neo-natal care services.

In order to decrease Out of Pocket Expenditure (OPE) of the public, the government has taken several new initiatives like Thalli Bidda express, Chandranna Sanchara Chikitsa, NTR Vidya Parikshalu (Free Clinical Laboratory Services, Free Tele radiology services and free Dialysis), NTR Baby Kits Swasthya Vidya Vahini etc.

### Dr NTR Vaidya Seva

The scheme has established a demand-side mechanism that mobilizes and channels additional public financing to health, introduced an explicit benefits package, pioneered cashless care and fostered public private partnerships. There were 10.34 lakhs patients treated as out-patients and 9.57 lakhs patients treated as in-patients in the Network Hospitals. 8.97 lakhs therapies were pre-authorised at the cost of Rs.2521.14 crores for the period from 02.06.2014 to 31.10.2016.

All the Primary Health Centres (PHCs) which are the first contact point, Area/District Hospitals and Network Hospitals are provided with Help Desks manned by Vaidya Mithra to facilitate the patients. The Scheme is intended to benefit 150.95 lakh families in all districts of the state.

### A.P. Vaidya Vidhana Parishad

APVVP hospitals provide out-patient, in-patient services, diagnostic services and laboratory services. At present there are 116 hospitals under the control of APVVP in the State. There are 26 blood banks and 38 blood storage centres are functioning in APVVP Hospitals in the State. These blood banks are providing blood to the needy patients in the Hospitals. There are 1563 Doctors, 2022 Nursing and 1149 Paramedical, 386 Administration cadres working for health care in the state. Under NRHM 14 SNCU, 7 NRC, 96 NBSU, 77 CEMONC, 21 Tribal Hospitals are functioning in APVVP Hospitals. 3 MCH Hospitals are established in APVVP Hospitals. 96 new born stabilization units 84 new born are located in APVVP Hospitals.

### Health

Several schemes like National Leprosy Eradication Programme, Integrated Disease Surveillance Project, National Iodine Deficiency Disorders Control Program and National Programme for Prevention and Control of Diabetic, Cancer, Cardiovascular Diseases and Stroke are being implemented in the state. Awareness campaign about Iodine Deficiency Disorders and use of Iodized salt were conducted in all districts. Government of Andhra Pradesh, in the context of achieving the SDGs had opted for Health Promotion Initiative SVV (Swasthya Vidya Vahini) to improve health literacy of the rural populations by addressing the social determinants of health at the community and social environments.

### Women Development and Child Welfare

The Department is running 46 Homes for Children and 21 Institutions for Women to cater to the needs of Children and Women in difficult circumstances. About 9.07 Lakh children are attending pre-school education activities in Anganwadi centres. 257 ICDS projects are functioning in the State. At present the 31.87 lakh beneficiaries were covered under Supplementary Nutrition Programme

during 2016-17 (upto September 2016). "Anna Amrutha Hastam Programme" - One Full Meal to Pregnant & Lactating Women was implemented in 104 ICDS Projects in the State. 1.63 lakh persons were benefitted under "Maa Inti Mahalakshmi" programme so far.

### Welfare of Disabled

The Government of India sanctioned 7 District Disability Rehabilitation Centres in the districts of East Godavari, Vizianagaram, Kurnool, Prakasam, Nellore, Kadapa and Chittoor districts. The Government issued orders enhancing the award amount from Rs.50,000/- to Rs.1,00,000/- under the Scheme of Marriage Incentive Award for the marriages between normal and differently abled persons. Govt. have launched special recruitment drive for filling up of the backlog vacancies reserved for the differently abled. The period of recruitment has been extended from time to time upto 31.3.2017.

Govt., of India sanctioned Centre for Disability Sports at Visakhapatnam through National Institute for Mentally Handicapped.

### Backward Class Welfare

At present, there are 897 government B.C. hostels, (692 hostels for boys and 205 hostels for girls) with a total strength of 96,997 boarders were admitted in the hostels during 2016-17. There are 32 B.C. Residential Schools (17 for boys and 15 for girls) with a total strength of 12,292 students functioning in the state during the year 2016-17. 96.75% of X class students in BC hostels were passed against the 94.77% of state average during the year 2015-16. 11960 primary co-operative societies have been registered in all districts of the state for 10 Federations.

### Social Welfare

As per the 2011 Census, Scheduled Castes population forms 17.08 percent of the total population of Andhra Pradesh and 79.98% of the Scheduled Caste people live in rural areas. SC enrollment ratio is 82.29% and dropout rate was 39.64%. 958 Hostels are functioning in the state, with an admitted strength of 89,840 in 2016-17. 566 special hostels and 27 Integrated hostel Welfare Complexes are functioning in the State.

## GENERAL REVIEW

The overall pass percentage is 90.93 as against the State average of 94.52. 61 students are assisted under Dr.B.R Ambedkar Overseas Vidyanidhi for pursuing higher education to abroad. an amount of Rs.24.75 Crore was sanctioned during 2016-17 (up to October, 2016).

700 SC candidates were selected under NTR Vidyonnathi scheme to provide professional guidance to Civil Services examinations by sponsoring them to nationally reputed institutions.

### Tribal Welfare

Government is keen on providing quality residential education to all ST children. Proposed to convert the all the TW hostels into residential schools in a phased manner. During the year 2016-17, 80 TW hostels are converted as Residential schools and started functioning with a strength of 5708 from class 3rd to 5th. 90.87% pass percentage (91.42 state average) in SSC examinations. It is proposed to cover 5242 beneficiaries for effective implementation of the Economic Support Schemes. Under Skill Development programme, 9098 ST youth will be provided training for skill upgradation including direct placements. 5506 ST youth were provided placement upto October, 2016.

### Minorities Welfare

Government is providing Scholarships (both MTF and RTF) to the post matric students covering Intermediate, Graduation, Postgraduation, diploma courses like Polytechnic, Nursing etc., professional courses like MBBS, B.Tech, MBA, MCA etc., on saturation basis. Government introduced a new scheme Dulhan scheme, dispensing Mass Marriage Scheme enhancing financial assistance from Rs.25,000 to Rs.50,000. 100 Urdu ghar cum shadikhanas are functioning in the state.

### Housing

56,68,370 houses have been completed comprising 51,68,249 in rural areas and 5,00,121 in urban areas under weaker section housing program, since inception till the end of February 2017. APSHCL has taken up 2.00 lakh houses under NTR Rural housing programme and 72,885 lakh houses under NTR Rural housing (Gramin) programme dovetailing with MGNREGS during 2016-17.

73,041 houses were sanctioned under NTR Urban housing dovetailing with BLC component of PMAY, HFA (U) with a unit cost of Rs.3.50 lakh per house with a project cost of Rs.2556.44 crore

### Public Health

The State Government is giving top priority to provide protected drinking water to all urban local bodies by strengthening existing infrastructure and service levels. 35 water supply schemes with an estimated cost of Rs.833.99 crore were completed adding 368.92 MLD of water, thereby increasing the average water supply from 63 LPCD to 85 LPCD. With the increase in water supply approximately 34.90 lakhs of population were benefitted and have access to safe and clean water.

At present 8 ULBs i.e. Visakhapatnam, Vijayawada, Tirupathi, Rajahmundry, Kadapa, Pulivendula, Puttaparthi & Tadipathri Underground Drainage Schemes are functioning with a total treatment capacity of 295.00 MLD. Construction of sewage treatment plants in 6 ULBs are in progress at Visakhapatnam, Vijayawada, Yemmiganur, Kadapa, Nellore and Gunturu to add Additional Sewage capacity 425.8 MLD and are proposed to be completed by March 2019.

### Rural Water Supply and Sanitation

So far 1337 GPs are declared as ODF and 4.44 lakh Individual Household Latrines (IHHLs) are constructed as against the target of 2000 ODF Gram Panchyats along with 5 lakh IHHLs up to October 2016.

### Municipal Administration

Swachha Andhra Corporation was established on 01.05.2015 after launching of Swachh Bharat Mission (SBM) 02.10.2014 and taking up the activities in ULBs with a target to achieve 100% ODF by Oct 2019 i.e. 150th birthday of Mahatma Gandhiji. Swachha Andhra Corporation was incorporated under Companies Act, functioning under MA&UD department is coordinating with the ULBs with regard to Swachh Bharat Mission. Out of 1.82 lakh eligible house holds, 1.77 lakh individual house hold toilets were grounded and 1.69 lakh were completed upto January, 2017



The 14th FC has recommended grants to ULBs in two types i.e., 1) Basic Grant for Rs.2908.64 Crores and 2) Performance Grant for Rs.727.16 Crores (total for Rs.3635.80 Crores) on the ratio of 80:20 basis. The allocations of the amount to the ULBs is to be made based on Census-2011 Population with a weight of 90% and area with a weight of 10%.

## MEPMA

The Government of India has restructured the SJSRY scheme as NULM and is being implemented with effect from 01-04-2014 in 32 eligible towns / cities. The Mission is aimed at reducing poverty and vulnerability of urban poor households by enabling them to access gainful self-employment and skilled wage employment opportunities, resulting in an appreciable improvement in their livelihoods on a sustainable basis, through building strong grass root level institutions of the poor.

The main objective of MEPMA is to organize poor women into Self Help Groups by covering all families living in slums and enable them to become self-reliant. A total of 1,92,267 Self Help Groups, 6934 Slum Level Federations and 137 Town Level Federations were organized up to November, 2016.

30,520 Persons with Disabilities (PWDs) are also organized into 3,052 exclusive SHGs, 79 Town Vikalangula Samakyas (TVSSs) and 111 Parents Associations of Persons with Mental Rehabilitation (PAPWMRs) were formed in the State.

## Rural Development

Mahatma Gandhi National Rural Employment Guarantee Act is a legal Guarantee of 100 days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work. MGNREGS is being implemented in 13,085 Gram Panchayats in 661 Mandals of 13 districts. 84.84 lakh job cards were issued covering 1.78 crore wage seekers since inception of the scheme. 5.2 lakh Srama Shakti Sanghams have been formed with 60 lakh households covering 116 lakh wage seekers. Payments and Pay slips to Beneficiaries through DBT and Biometric system.

Flag ship programmes like 'Panta Sanjeevani' (Construction of farm ponds), Neeru – Chettu (Construction of water harvesting structures & plantation of trees), Swachh

Andhra Pradesh (Construction of Individual Household latrines) Wada Wadalo Chandranna bata (CC Roads) are the key Projects taken up by Andhra Pradesh Government during the year 2016-17, along with works like Vermi/NADEP compost pits, Anganwadi buildings, Solid waste management works and other works permissible under MGNREGS.

State Government is committed to securing a dignified life to all the poor, the old and infirm to support their minimum needs to bring happiness in their lives. NTR Bharosa has turned public service delivery into a reality- at the door step of the beneficiary with timely and hassle-free delivery of services month on month, at a huge scale of over 43 lakh pensioners and an annual outlay of Rs.5400 Crores.

1.78 Crores unorganized workers are enrolled under Chandranna Bhima against the target of 2 Crores. 4,874 claims (4,184 normal death cases and 690 accidental/disability cases) are reported. SERP as implementing agency, is leveraging the services of Zilla Samakhya Insurance Call Centres and Bima Mithras for enrollment of workers in the scheme and registration with Labour Officer, registration and quick processing of claims.

The Government has launched the Digital Literacy program for DWCRAs members.

## Poverty

The poverty ratios for rural and urban areas of united Andhra Pradesh were 10.96% and 5.81% respectively and combined ratio stands at 9.20%. The corresponding figures for All India during the same period were 25.70%, 13.70% for rural and urban areas and the combined was 21.92%. The poverty in the State is on a decline and currently stands at 9.2%.

## Employment – Unemployment

As per the National Sample Survey Office (NSSO) of 68th Round (during 2011-12) the unemployment rate for Andhra Pradesh State for Rural and Urban sectors stood at 12 and 43 respectively. Similarly, for All India, the corresponding estimates are 17 and 34 in respect of Rural and Urban areas.

## GENERAL REVIEW

## Employment & Training

There are 9,244 establishments in organized sector in the state providing employment to 8.60 lakh persons. Of the total establishments, 6,470 are in public sector (with employment of 6.04 lakh persons) and 2,774 (with employment of 2.56 lakh persons) are in private sector. 31 ITIs have been covered in all under the scheme for up-gradation as Centers of Excellence / Trades in a phased manner.

## Skill Development

Andhra Pradesh will face an incremental human resources requirement of approximately 10 million skilled workers between 2012 till 2022, across the high-priority and emerging sectors. Thus the main objective of the Andhra Pradesh State Skill Development Corporation is to implement a structured and pragmatic solution to skill & upskill the workforce in the state of A.P. and to increase employability, and promote entrepreneurship in sync with Industrial growth of the state. And this will be done in a mission mode and the target is to skill 20 million people in 15 years by meeting skilled human power demands of all missions and shape AP as the skilled-workforce and Knowledge hub for the world.

## Strategies for Achieving the Vision

The state is devising strategies that result in double digit growth in a sustained manner. It is a notable achievement that the state has successfully achieved double digit growth in the current year. Implementation of appropriate policies and programmes by the state, as per the advance estimates, have enabled to register an impressive growth rate of 11.61% in the GSDP for the year 2016-17, compared to India's growth rate of 7.1%. The growth rate in the Gross Value Added(GVA) stands at 11.18%. It is targeted to grow at 15% next year.

Andhra Pradesh, rich in natural and human resources, is keen to leverage its strengths through district specific growth strategies and achieve double digit growth targets. While

focus will be on Coast-led growth, manufacturing, agro-processing, pharma, development of physical infrastructure like ports, airports and river ways are some of the key areas identified for pushing the growth significantly. Sector specific strategies have been developed to achieve desired inclusive growth.

## Janma Bhoomi Maa Vooru

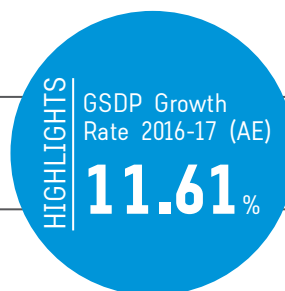
The Government has launched a people-centred development and welfare programme "Janmabhoomi-Maa Vooru" and conducted first three rounds of the programme during October,2014, June 2015 and January 2016 covering identified thrust areas. The 4th Round of Janma Bhoomi was conducted from 2nd to 11th January, 2017 with the main theme of Kutumba Vikasam, Samaja Vikasam leading to Smart Village Smart Ward thrust areas of NTR Bharosa Pension (NBP) Scheme, Public Distribution System, Panta Sanjiivini, NTR Jala Siri, Waada Waada lo Chandranna Baata(CC Roads), NTR Vaidya Pariksha scheme, Swatcha Bharat-Toilets, NTR Vaidya Seva, Tali Bidda express scheme and Grievances.

## Integrated Monitoring Framework for Sustainable Development

While real time governance, innovation and adoption of best practices remain the core agenda to sustain the growth momentum, government is keen to put in a performance management framework to measure performance at family level (15 themes of Kutumba Vikasamu-KV) and community level (10 themes of Samaja Vikasamu-SV) and linking them with Sustainable Development Goals(SDGs). In tune with the priorities of Vision 2029, the state government has come out with 27 macro level indicators and a set of 104 indicators at activity and output level. These indicators are being aligned with the indicators identified under Kutumba Vikasamu(35 indicators) and Samaja Vikasamu(47 indicators) under the overarching 5-theme framework of Gross value Added(GVA)-Sustainable Development Goals(SDG)-Kutumba Vikasam(KV)-Samaja Vikasam(SV) and Key Performance Indicators (KPI).



CHAPTER  
2  
MACRO  
ECONOMIC AGGREGATES



## State Economy – setting a new normal

While the state re-organisation had put tremendous stress on the financial and other resources, the state government's commitment to withstand the difficulties and come out with specific growth strategies started yielding fruitful results with double digit inclusive growth strategy. The State has been targeting sustained double digit growth of 12% for about 15 years and the journey thus far is encouraging.

Growth story of Andhra Pradesh revealed encouraging trends. Due to persistent efforts and innovative policies, the growth expectations indicate a sustained performance for the year 2016-17 and the government have recognized that maintaining impressive economic growth as an imperative for sustained development leading to a happy society.

Besides continuing focus on Agriculture and Industries sectors, the government is focusing on the key sub-sectors pertinent to services sector and give it a big push, as Service Sector is one of the major contributors to growth.

The growth pattern is being monitored on a quarterly basis and Andhra Pradesh, perhaps is the only state to focus on monitoring the growth achievements every quarter. The performance of the state economy is encouraging and the growth achievement of Andhra Pradesh has been consistently more than India's growth rate in all the quarters during the last two and half years.

### Gross State Domestic Product

Gross State Domestic Product (GSDP) in common parlance known as "State Income", is a measure in monetary terms of sum total volume of all goods and services produced during a given period of time within the geographical boundaries of the state, accounted without duplication. This is one of the most important commonly used single economic indicators to measure the growth and to study the structural changes taking place in the economy.

### Structural shifts – capturing the change

Improvement in availability of basic data over the years has helped in reviewing the methodology from time to time for

estimating the State Domestic Product. Periodic updation of data and shifting base year to a more recent year are being undertaken regularly so as to capture the structural and sectoral shifts taking place in a developing economy.

The State Domestic Product (SDP) is usually estimated by 'Income originating approach', wherein income generated by the factors of production physically located within the geographical boundaries of the state are aggregated. It represents the value of all goods and services produced within the state, counted without duplication during a specified period of time, usually a year. The estimates of SDP and related aggregates are generally prepared both at current and constant prices. The estimation of SDP and related aggregates including District Domestic Product is being done both at current and constant prices.

These estimates of economy over a period of time reveal the extent and direction of changes taking place in the level of economic development. Sectoral composition of SDP gives an idea of the relative position of different sectors in the economy over a period of time which not only indicates the real structural changes taking place in the economy but also facilitates formulation of plans for overall economic development. These estimates when studied in relation to the total population of the state indicate the level of per capita net output of goods and services available or the standard of living of the people in the State. These are referred as estimates of Per Capita Income (PCI).

The Central Statistical Office (CSO), Government of India, with an intent to take into account the structural changes which have been taking place in the economy and to depict a true picture of the economy through macro aggregates viz., Gross State Domestic Product (GSDP), Per Capita Income, Government Final Consumption Expenditure (GFCE), Private Final Consumption Expenditure, shifted the Base year of the GDP Estimates from 2004-05 to 2011-12.

### Base Year Revision from 2004-05 to 2011-12

The Central Statistical Office (CSO), Government of India have shifted the Base year of the GDP Estimates from 2004-05 to 2011-12, duly incorporating recommendations of SNA 2008, adopting the results of latest surveys and studies and also factored in some critical methodological

changes to bridge the data gaps and to improve the quality of data sets. Changes are also made in the presentation of estimates to improve ease of understanding for analysis and facilitate international comparability.

CSO has issued guidelines and data sets to the states to shift to new series and requested the states to release state level estimates in the new base from 2011-12 to 2015-16.

### Improvements in the New Series with 2011-12 as Base Year

In the new series, the industry wise estimates being presented as “Gross Value Added (GVA) at Basic Prices” and GSDP at market prices shall be referred as “GSDP-Gross State Domestic Product” which is a practice at international level.

$GSDP = \sum GVA \text{ at basic prices} + \text{Product taxes} - \text{Product subsidies}$ .

Comprehensive coverage of Manufacturing and Services Sectors has been facilitated by incorporation of annual accounts of companies as filed with the Ministry of Corporate Affairs (MCA) under their e-governance initiative, MCA21. The Financial Sector coverage was expanded by inclusion of Asset management companies, Stock Brokers, Stock Exchanges and Regulatory Bodies like SEBI, PFRDA & IRDA. The Results of the latest NSSO Rounds have been used to capture the realistic scenario of the economy.

### GSDP Estimates - Periodical revisions – factoring in the latest data sets

As per the methodology of the Central Statistical Office (CSO) and reconciliation of the estimates with CSO thereafter, the states keep revising the figures of the economy initially released as Advance estimates for the year. The Advance estimates take into consideration only the first three quarters data and expected value addition in the fourth quarter.

As complete data sets start getting available for the year in a phased manner, there will be three revisions for the GSDP figures estimated under Advance estimates in a time span of 3 years First Revised Estimates (FRE), Second Revised Estimates (SRE) and finally after reconciliation with CSO

as Third Revised Estimates (TRE), as these latest data updations get factored in from time to time.

It is therefore pertinent to note that there is every possibility that the figures of the economy-the aggregates as well as growth rates reported in advance estimates or in further revisions, undergo a change. This revision could be upward or downward, depending upon various factors, especially the issues that have domestic/national/global impact.

The data pertaining to inputs, Consumption of Fixed Capital (CFC), Supra Regional Sectors, Central Non Departmental Commercial Undertakings (CNDCUs), Autonomous Bodies, Central Government Administration & Private Corporate Sector etc., is provided by CSO for all States.

### Calendar of annual estimates of GSDP

- The Central Statistical Office has released calendar of Annual Estimates of Gross State Domestic Product for release as detailed hereunder:
  - 1) Advance Estimates: 28th February every year.
  - 2) First Revised Estimates: 31st January (10 months after completion of the year)
  - 3) Second Revised Estimates: 31st Jan of succeeding year (1 year 10 months after completion of a year)
  - 4) Third Revised Estimates: 31st January of two succeeding years (2 Years 10 months after completion of a year)
- Directorate of Economics & Statistics, Government of Andhra Pradesh compiles Advance Estimates, First, Second & Third Revised Estimates after a gap of 1 week from the date of release of estimates by the Government of India as stated above.

### First Half year (April-Sept.2016) Estimates of GSDP

As per the Advance estimates for 2015-16, Andhra Pradesh has recorded an impressive economic growth performance of 10.99% at constant (2011-12) prices in the fiscal year

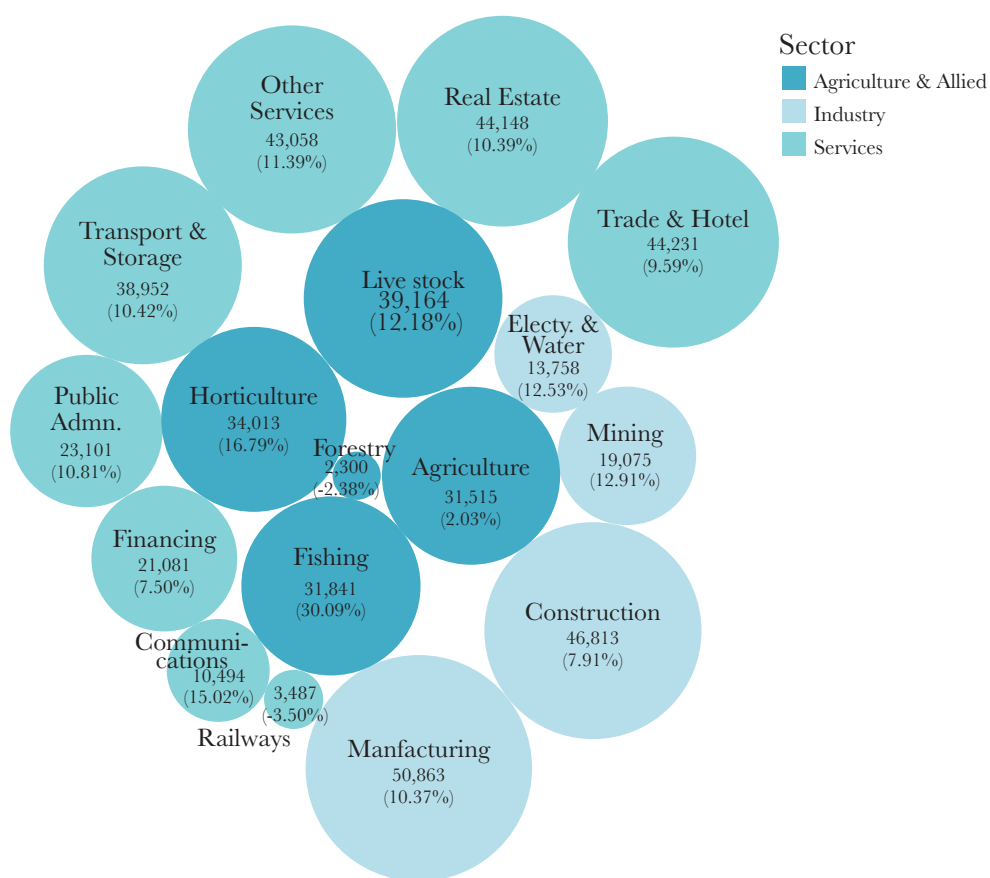
MACRO ECONOMIC AGGREGATES

2015-16, the only State among major states in the Country to record double digit growth. Due to sustained efforts and innovative policies put in by the state, continuing the upward trend, a healthy growth rate of 12.23% could be recorded during the first half of the year 2016-17 with an expectation to maintain double digit growth for the full year.

### Estimates of GSDP for 2016-17 (AE) at Constant(2011-12)Prices

The GSDP at constant (2011-12) Prices for the year 2016-17 (Advance Estimates) is estimated at Rs.5,47,021 crores as against Rs.4,90,134 crores for 2015-16 (First Revised Estimates) indicating a growth of 11.61%.

### GVA Estimates At Constant Prices for 2016-17 in new base (2011-12)

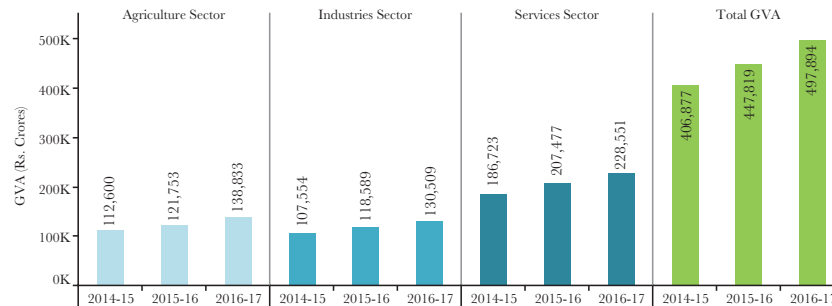


### Estimates of GVA at Constant (2011-12) Basic Prices

As per the Advance Estimates, the GVA at Constant (2011-12) Basic Prices for Andhra Pradesh for the year 2016-17 is estimated at Rs.497894 crore as against Rs.447819 crore for the year 2015-16 (FRE), a growth rate of 11.18 percent compared to the India growth rate of 6.7 percent.

Continuing the ascending trend, cutting across broad sectors, the sub-sectors that registered an impressive double digit growth in the year 2016-17 are: Horticulture (16.79%), Livestock (12.18%), Fishing and Aqua culture (30.09%), Mining and Quarrying(12.91%), Manufacturing (10.37%), Electricity, Gas, Water Supply (12.53%), Transport by other means & storage (10.42%), communications (15.02%), Real Estate and Ownership of Dwellings (10.39%) and community, Social and personal services also registered above 10%.

## GVA Estimates At Constant Prices (2011-12)



### Agriculture & Allied Sectors

The noteworthy feature of the growth pattern in Agriculture & Allied Sectors is that this key sector which is supporting about 62% of the population, is consistently maintaining an ascending trend during the last three years, especially marked by an encouraging growth rate of 14.03% in 2016-17 at Constant (2011-12) Prices with a GVA of Rs.1,38,833 crores.

Agriculture proper (Agri.+Horti.) has registered a growth rate of 9.19 percent during 2016-17. Agriculture sub sector alone, despite a deficit rainfall of 28% and depleted ground water levels, registered a growth rate of 2.03%, bouncing back from a dismal (-) 9.94% growth rate in last year.

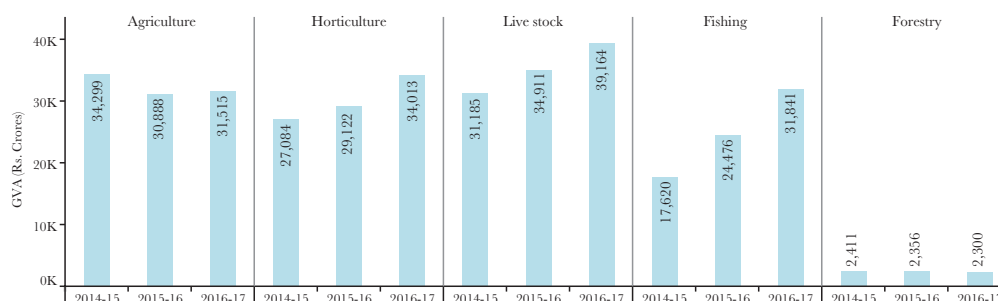
The agrarian state of Andhra Pradesh is heading towards a value addition platform from the conventional production approach. 'Horticulture' sub sector, recognized by the government as is an essential component for food and nutritional security in the State, continued its ascendancy, showing an impressive growth of 16.79 per cent, a reflection of initiatives of the government such as Sprinkling /Drip Irrigation, Polynets/ Shadenets, Panta Sanjeevini, Panta Raksha. These initiatives augur well for the state to realize

its goal of making Rayalaseema as a Horticulture hub. It is pertinent to note that horticulture, no longer a sub sector to agriculture sector, has crossed agriculture in terms of value addition.

The livestock sector has emerged as an alternative and dependable source of income generation even during the times of severe drought. Increase in the production of Milk (12.58%), Meat (13.63%) & Egg (11.66%) resulted in an encouraging growth rate of 12.18% in the livestock sector. The fodder policy and timely interventions have helped the livestock sector, alone accounting for more than 28 per cent of the total Agriculture sector GVA, to bypass all the other sub sectors in the Agri. Allied group.

Fisheries sector, which until recently was a non-descript sector, started showing phenomenal growth, with its contribution now matching with the agriculture sub-sector. Maintaining the uptrend, the increase in the production of Marine fish (2.26%), Inland fish (13.23%) and prawns/ Shrimps (42.34%) lead to register a significant growth rate of 30.09% in Fishing Sector. Forestry & Logging Sector registered a negative growth rate of 2.38% in 2016-17.

### Agriculture & Allied Sector - GVA Estimates At Constant Prices (2011-12) from 2014-15 to 2016-17 (AE)



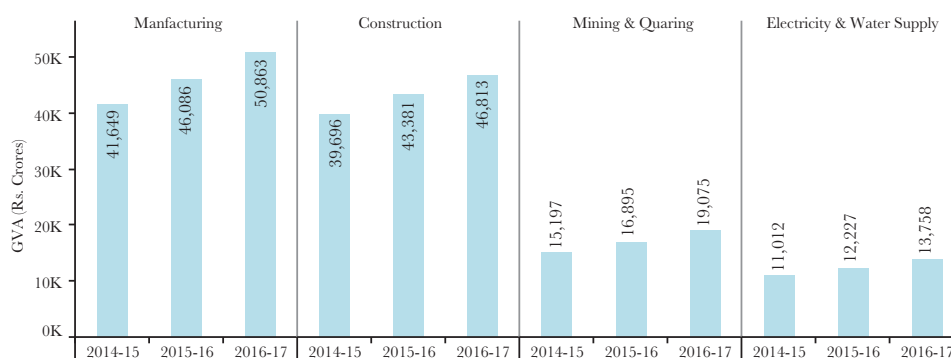
## MACRO ECONOMIC AGGREGATES

## Industry Sector:

Industry sector comprises of Mining & Quarrying, Manufacturing other utility services, Electricity, Gas, Water Supply and Construction. As per the Advance Estimates for the year 2016-17 at Constant (2011-12) prices, the

Industrial sector is estimated at Rs.130509 crore, registering a growth rate of 10.05% percent over the previous year. Mining & Quarrying, Manufacturing and Electricity sectors registered double digit growth rates during 2016-17.

## Industry Sector - GVA Estimates At Constant Prices (2011-12) from 2014-15 to 2016-17 (AE)

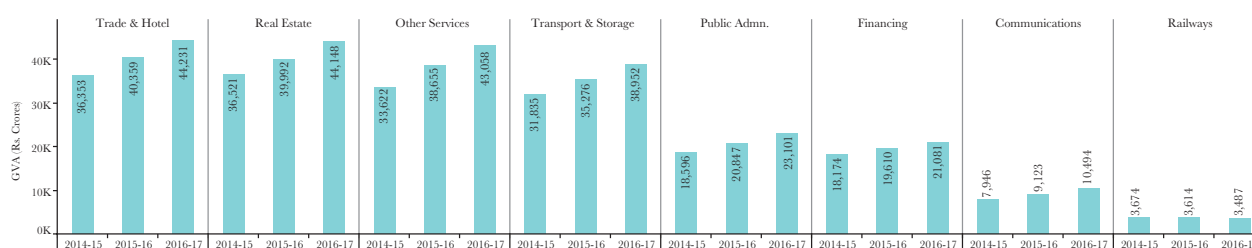


## Services Sector

Services sector, with its consistently surging share in the State GVA, continued to be the engine for pushing the overall growth. Services sector comprising of Trade, Repairs, Hotels & Restaurants, Transport by other means & Storage, Communications, Banking & Insurance, Real

Estate & Business Services and Community, Social & Personal services registered a growth rate of 10.16 percent over the previous year. The Advance Estimates for the year 2016-17 is estimated at Rs.228551 crores as against Rs.207477 crores in 2015-16 (FRE).

## Services Sector - GVA Estimates At Constant Prices (2011-12) from 2014-15 to 2016-17 (AE)



## Estimates of GSDP at Current Prices

The GSDP at Current Prices for the year 2016-17 (Advance Estimates) is compiled by adding Product taxes and deducting Product subsidies to the GVA at current basic prices and estimated at Rs.699307 crore as against Rs.609934 crore for 2015-16 (FRE).

for the year 2016-17 are derived by using the Implicit Price Deflators (IPD) at sectoral level from the relevant price indices is estimated at Rs.641697 crore as against Rs.557219 crore of 2015-16 (FRE).

## Estimates of GVA at Current Basic Prices

The GVA of Advance Estimates at Current Basic Prices

The contribution from the Agriculture sector to the GVA at current prices is Rs.203860 crore, from the Industry sector it is Rs.142651 crore and the service sector contributed Rs.295186 crore.



## GVA Estimates At Current Prices

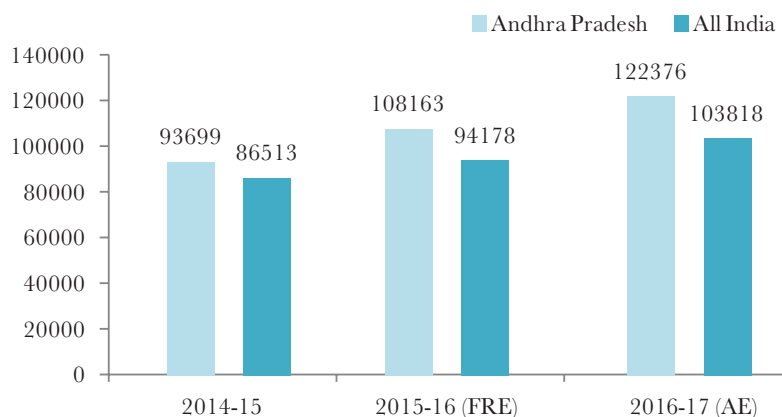
Sector	Sub-sector	2014-15	2015-16	2016-17
Agriculture & Allied	Live stock	43,091	51,555	59,796
	Horticulture	38,212	44,902	52,489
	Agriculture	40,724	41,541	44,682
	Fishing	22,707	31,864	43,538
	Forestry	3,462	3,406	3,355
Industry	Manufacturing	46,723	50,787	57,408
	Construction	46,649	49,862	54,677
	Mining & Quarring	14,843	16,331	17,576
	Electricity & Water Supply	11,517	12,519	12,989
Services	Other Services	42,154	52,486	61,802
	Real Estate	44,054	50,923	59,424
	Trade & Hotel	42,334	45,777	51,746
	Transport & Storage	37,241	42,761	49,913
	Public Admn.	22,009	25,949	30,397
	Financing	19,009	21,255	24,154
	Communications	9,288	10,935	13,296
	Railways	4,242	4,366	4,454

### Per Capita Income:

The Per Capita Income is an indicator of the standard of living of the people. As per the CSO guidelines, the PCI is estimated by dividing Net State Domestic Product (NSDP) with midyear projected State population. As per the Advance estimates of 2016-17, the Per Capita Income

(NSDP) of Andhra Pradesh at current prices increased to Rs.122376 from Rs.108163 in 2015-16 (FRE) registering a growth of 13.14 percent. The Per Capita Income (NSDP) at constant (2011-12) prices, has also gone up from Rs.86118 in 2015-16 (FRE) to Rs.95566 in 2016-17 (AE) registering a growth rate of 10.97 per cent.

### Per Capita Income (Rupees) at Current Prices in new base (2011-12)



## MACRO ECONOMIC AGGREGATES

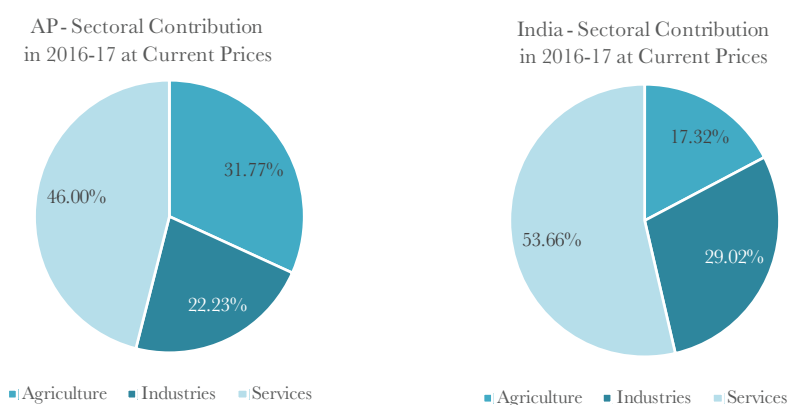
Per Capita Income (PCI) at Current Prices of All India & Andhra Pradesh is tabulated below

Year	PCI (NNI) of India (in Rs.)	PCI (NSDP) of Andhra Pradesh (in Rs.)
2011-12	63460	69000
2012-13	71011	74688
2013-14 (TRE)	79146	82870
2014-15 (SRE)	86513	93699
2015-16 (FRE)	94178	108163
2016-17 (AE)	103818	122376

### Sectoral Composition

The sectoral composition of GVA in 2016-17 (AE), the share of Agriculture in the GVA at Current prices was 31.77%, Industry 22.23% and Services sector 46.00%. The Sectoral Composition in 2016-17 of Andhra Pradesh & India is presented below.

### The Sectoral Contribution in 2016-17 (AE) of AP& India at Current Basic Prices



Estimates of GVA by the Economic Activity, GSDP, NSDP, Per Capita Income and growth rates both at Current and Constant (2011-12) prices of Andhra Pradesh from 2011-12 to 2016-17 (Advance) are shown in Annexures – 2.1 to 2.6

The Estimates of GVA by Economic Activity of Andhra Pradesh from 2011-12 to 2016-17 (AE) at Current & Constant (2011-12) Prices are given in the following table

#### GVA by Economic Activity at Current Prices

(Rs.in crores)

Sector		2011-12	2012-13	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
Agriculture	Value	94008	111864	128956	148194	173267	203860
	Growth Rate		18.99	15.28	14.92	16.92	17.66
Industry	Value	112660	101687	107408	119732	129499	142651
	Growth Rate		-9.74	5.63	11.47	8.16	10.16
Services	Value	143086	165925	190359	220331	254452	295186
	Growth Rate		15.96	14.73	15.75	15.49	16.01
GVA at Basic Prices	Value	349753	379477	426722	488257	557219	641697
	Growth Rate		8.50	12.45	14.42	14.12	15.16

## GVA by Economic Activity at Constant Prices

(Rs.in crores)

Sector		2011-12	2012-13	2013-14 (TRE)	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
Agriculture	Value	94008	97831	108353	112600	121753	138833
	Growth Rate		4.07	10.75	3.92	8.13	14.03
Industry	Value	112659	97387	99345	107554	118589	130509
	Growth Rate		-13.56	2.01	8.26	10.26	10.05
Services	Value	143086	155796	167887	186723	207477	228551
	Growth Rate		8.88	7.76	11.22	11.11	10.16
GVA at Basic Prices	Value	349753	351014	375585	406877	447819	497894
	Growth Rate		0.36	7.00	8.33	10.06	11.18

Estimates of GVA by the Economic Activity, GDP & PCI of All India at Current & Constant (2011-12) Prices from 2011-12 to 2016-17 (AE) are shown in Annexure- 2.7 to 2.12

## GSDP of Andhra Pradesh and GDP of India - A Comparative Scenario

The GSDP of Andhra Pradesh and GDP of India at Current & Constant (2011-12) prices are shown in the following Table

Rs. in Crores

Year	Andhra Pradesh				All India			
	GSDP at Current Prices	Growth %	GSDP at Constant (2011-12) Prices	Growth %	GDP at Current Prices	Growth %	GDP at Constant (2011-12) Prices	Growth %
2011-12	379402		379402		8736039		8736039	
2012-13	411404	8.43	380629	0.32	9946636	13.86	9215125	5.48
2013-14	464272	12.85	407114	6.96	11236635	12.97	9817822	6.54
2014-15	526470	13.40	441741	8.51	12433749	10.65	10522686	7.18
2015-16 (FRE)	609934	15.85	490134	10.95	13675331	9.99	11357529	7.93
2016-17 (AE)	699307	14.65	547021	11.61	15251028	11.52	12165481	7.11

### Recent Demonetization – State’s proactive measures

The state Government has been advocating demonetization of high denomination currency notes. It is indeed, a welcome move by the Union Government to announce the demonetisation of Rs.1000 and Rs.500 notes on 8th November 2016. This decision is expected to go a long way in flushing out black money from our national economy and cleanse our political system of slush money.

The state has taken several initiatives to alleviate the temporary hardships of the people due to the non - availability of cash after the high value notes were no longer legal tender. The government has turned a difficult situation into an opportunity and encouraged people to switch over to digital transactions by incentivizing digital payment. The state plans to achieve significant progress towards less cash economy in coming days. It is strongly believed that low transaction costs for digital payments in comparison to cash transactions will give encouragement to digital economy.

It is important to note that there was initially a huge speculation that the demonetization of Rs.500 and Rs.1000 value currency by the Union government would impact the growth possibilities of the Nation / States economy adversely. However, as a great relief, the advance estimates of India for 2016-17 released by the CSO have indicated that the impact of demonetization of high value currency notes on the economic performance was not significant.

### Mandal Domestic Product:

Going below the district level, the state has embarked on computation of Mandal Domestic Product (MDP) and has successfully completed in all the districts with the new base year (2011-12). Based on MDP 2014-15 Constituency Domestic Product also estimated to identify backward constituencies.

### Constituency Domestic Product:

Andhra Pradesh is the first state to have initiated computing economic aggregates at sub-district level. i.e, Mandal level. In this process, with a view to assess the inter mandal/constituency disparities and development status of the mandal/constituency, for the first time, Constituency Domestic Product (CDP) has been calculated for the year 2014-15 in current prices with available data sets based on MDP estimates.

This is going to facilitate adoption of programmes/best practices specific to that constituency that ideally suit the local requirements in the context of their relative strengths and deal with backwardness.

The GVA of all the Constituencies in the State are given in the Annexure-2.13.



CHAPTER  
**3**  
PUBLIC FINANCE

HIGHLIGHTS

Own Tax Revenue in 2016-17 (RE)

**49,282 Cr.**

# PUBLIC FINANCE

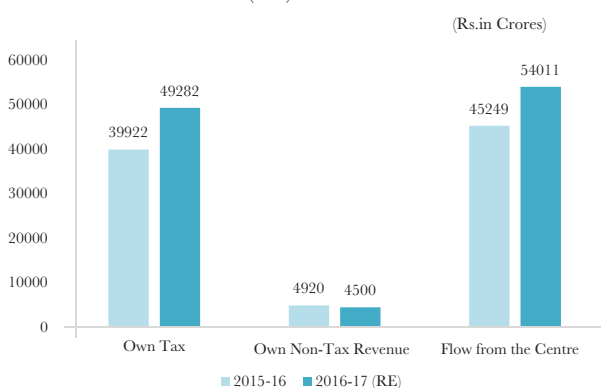
## Introduction

The economy of the State of Andhra Pradesh is growing at an unprecedented impressive rate and is amongst the top performers of the Country despite all the difficulties and unfavorable conditions, the State suffered as result of bifurcation. The Government through its visionary leadership and efficient management by its executives has been striving continually with a focused vision of transforming the state into Swarna Andhra - which will be attained through inclusive, equitable and sustainable development.

## The State's Revenue

The revenue for the state in Financial Year 2015-16 stood at Rs.39,922 Crores from Own Tax sources, Rs.4,920 Cr. from Own Non Tax sources and Rs.45,249 Cr. of Central Transfer. The details of the State's Own Tax Revenue, Own Non Tax Revenues and Resource flow from the Centre for the Financial Year 2016-17 (RE) with the Financial Year 2015-16 is given in Chart 3.1. The details of the same are given as Annexures 3.1, 3.2 and 3.3 respectively.

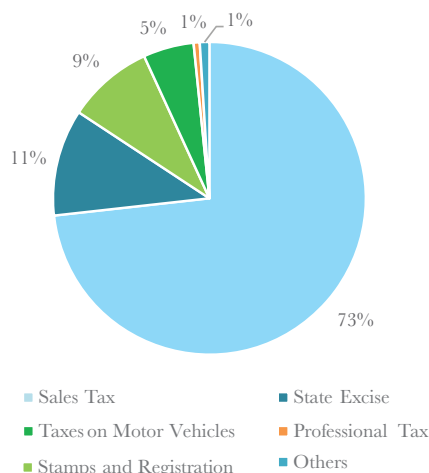
Chart 3.1 State's Revenues for Financial Year 2015-16 to Financial Year 2016-17 (RE)



## State's Own Tax Revenue

The total Own Tax Revenue was Rs.39,922 Crores in Financial Year 2015-16 and Rs.49,282 Crores in Financial Year 2016-17 (RE). The composition of individual components of Own Tax Revenue for Financial Year 2016-17 (RE) is shown as Chart 3.2. It is to note that Sales Tax accounted for 73 percent of the State's Own Tax Revenue for Financial Year 2016-17 RE. The State's own tax revenue for the Financial Year 2014-15 (2nd June 2014 – Mar 2015) to Financial Year 2016-17 (RE) have been detailed in Annexure 3.1.

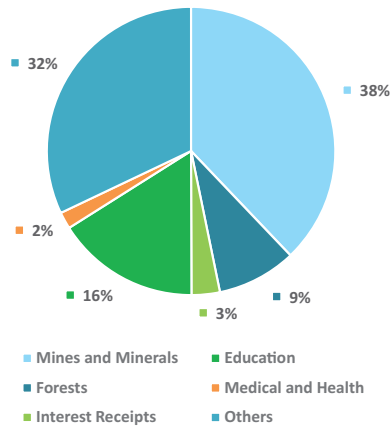
Chart 3.2 Composition of State's Own Tax Revenue – Financial Year 2016-17 (RE)



## State's Own Non Tax Revenue

State's Own Non Tax Revenue was Rs.4,920 Crores in the Financial Year 2015-16 and was Rs.4,500 Crores in Financial Year 2016-17 (RE). The main contribution towards the State's Own Non Tax Revenue included the Mines and Mineral, Forests, Education and Other revenue sources. The composition of these revenue sources are given in Chart 3.3. Mines and Minerals, Forests and Education sector contributed 25%, 20% and 21% respectively towards the State's Own Non Tax Revenue in the FY 2015-16. The details of the same for the FY 2014-15 (2nd June 2014 – Mar 2015) to FY 2016-17 (RE) are given in Annexure 3.2.

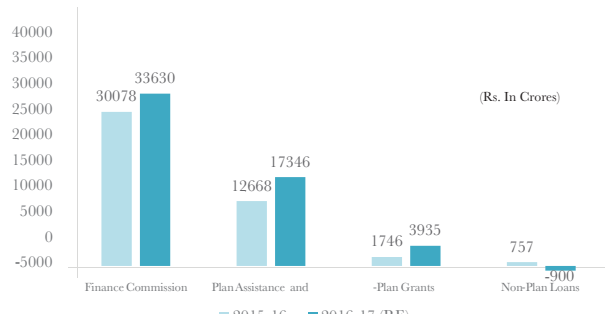
Chart 3.3 Composition of State's Own Non Tax Revenue – Financial Year 2016-17 (RE)



### Central Transfers

Resource flow from the Centre was Rs.45,249 Crores in the Financial Year 2015-16 and was Rs.54,011 Crores in Financial Year 2016-17 (RE). Finance Commission allocation constituted a major portion of this Central Transfers, which was Rs.30,078 Crores in the Financial Year 2015-16 and Rs.33,630 Crores in Financial Year 2016-17 (RE). The central transfers for the Financial Year 2015-16 and Financial Year 2016-17 (RE) are elaborated in Chart 3.4. The details of the same for the FY 2014-15 (2nd June 2014 – Mar 2015) to Financial Year 2016-17 (RE) are given in Annexure 3.3.

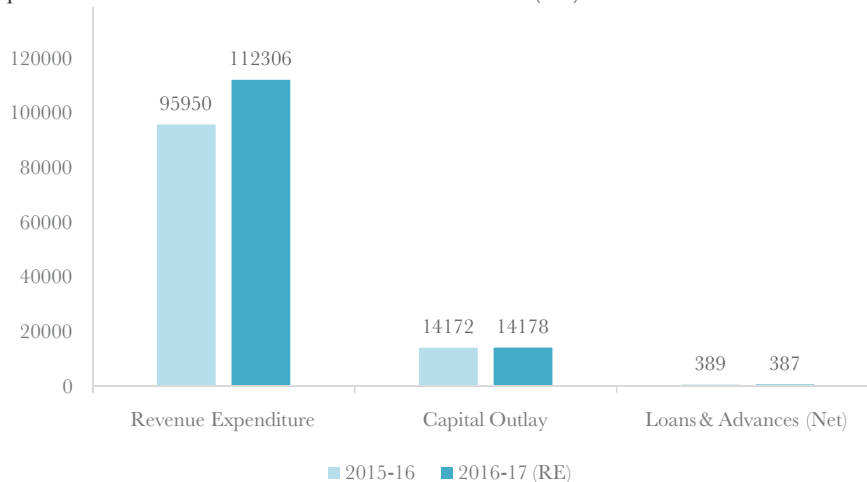
Chart 3.4 Central Transfers for Financial Year 2015-16 and Financial Year 2016-17 (RE)



### The State's Expenditure

The Total Expenditure by the State excluding ways and means advance was Rs.1,10,510 Crores in the Financial Year 2015-16 and was Rs.1,26,871 Crores in Financial Year 2016-17 (RE). The revenue expenditure was Rs.95,950 Crores in the Financial Year 2015-16 and was Rs.1,12,306 Crores in Financial Year 2016-17 (RE). It is important to mention that in its strive to build a developed Andhra Pradesh, the state spent Rs.14,172 Crores on its Capital Outlay in Financial Year 2015-16. This was mainly spent on capital works like irrigation, roads and infrastructure. Revenue expenditure through welfare schemes like subsidy rice, power subsidy, pavala vaddi, old age pensions, housing programs etc. The state expenditures for the two financial years are compared in Chart 3.5. The details of the same are given in Annexure 3.4.

Chart 3.5 State Expenditure for Financial Years 2015-16 and 2016-17 (RE)



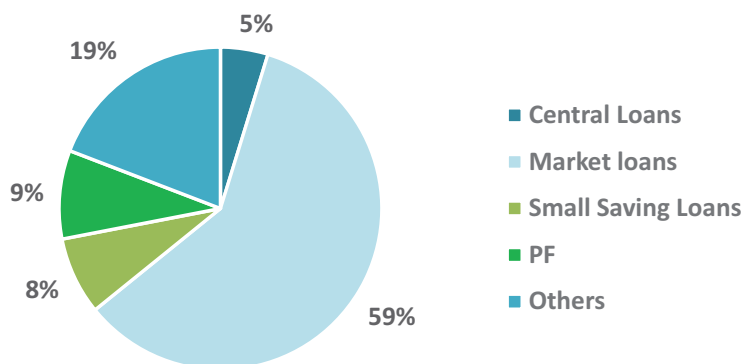
PUBLIC FINANCE

### Debts and Interest payments

The Total Debt by the State was Rs.1,73,854 Crores at the end of the Financial Year 2015-16 and was Rs.1,92,984 Cr. at the end of Financial Year 2016-17(RE). The outstanding debt includes the un-apportioned amount of Rs.33,478 crores between two States of Andhra Pradesh and Telangana. The composition of debt sources like Market Loans, Central Loans, Small Saving Loans, PF and other sources. The Market borrowing outstood at Rs.94,926 Cr. in the Financial Year 2015-16 and at Rs.1,14,658 Crores in FY 2016-17 (RE). The state paid Rs.12,208 Cr.

as interest towards its debts in the Financial Year 2016-17 (RE) wherein it had paid Rs.9,848 Crores towards interest payments in the Financial Year 2015-16. The Debt outstanding as percentage of GSDP was 28.50 percent in Financial Year 2015-16 which came down to 27.60% in Financial Year 2016-17 (RE). This is because of the greater GSDP growth in the state during this period. Chart 3.6 shows the composition of outstanding debt in the state for the FY 2016-17 (RE). The details of the same are given in Annexure 3.5 and Annexure 3.6.

Chart 3.6 Composition of State’s Debts – FY 2016-17 (RE)



### Revenue and Fiscal Deficits

In the Financial Year 2015-16, Andhra Pradesh faced a Revenue Deficit of Rs.7,302 Crores and a Fiscal Deficit of Rs.21,863 Cr. Due to focused and planned management of

the state’s finances, these deficit numbers could be brought down to Rs.4,598 crores and Rs.19,163 crores for the Revenue deficits and Fiscal deficits respectively for the FY 2016-17 (RE). The details are given in Annexure 3.6.





CHAPTER **4** PRICES  
WAGES AND  
PUBLIC DISTRIBUTION

## PRICES WAGES AND PUBLIC DISTRIBUTION

## Prices

Demand as well as supply, both factors are responsible for change in prices of essential commodities. It is therefore important for the government to have a periodic check on the movement of prices of essential commodities since a change in price level is likely to have an impact on the pattern of consumption of the common man. Apart from increasing population which itself is a major cause of rising demand, changing food habits also give push to demand

pull inflation. Prices will also be impacted by various activities resulting in a spike in consumption of certain products. Similarly, there are supply side concerns resulting in the short supply of commodities consequently pushing the prices up. The Directorate of Economics & Statistics collects prices of essential commodities.

Monitoring of prices of six essential commodities from selected centres across the state on daily basis is being done for tracking the changes. The state average daily retail prices of essential commodities are shown in Table 4.1.

Table 4.1 : State average daily retail prices of essential commodities (Rs./Kg)

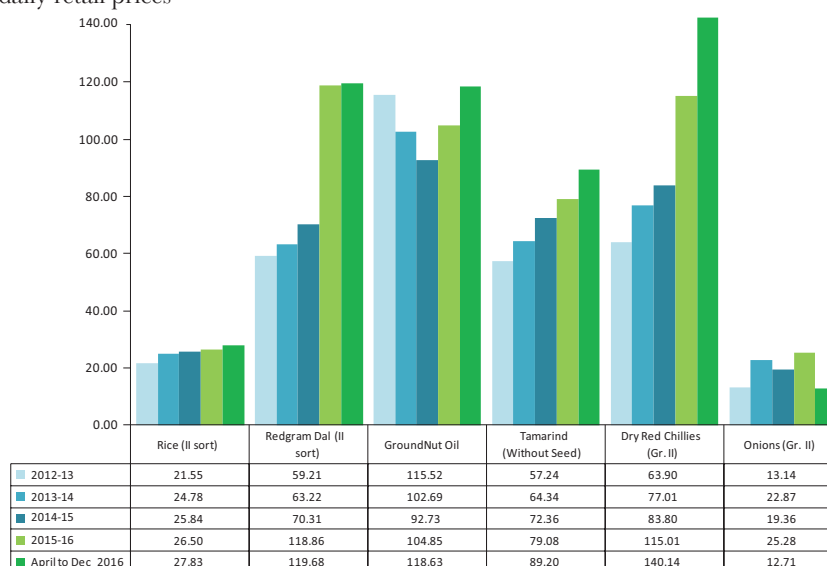
Commodity	2015 -16 (Apr to Dec 2015)	2016 -17 (Apr to Dec 2016)	Variation (%) of Apr – Dec 2016 over Apr - Dec 2015
Rice (II sort)	26.40	27.83	(+) 5.42
Redgramdal (II sort)	117.25	119.68	(+) 2.08
Groundnut Oil	104.48	118.63	(+) 13.55
Common Tamarind (Without seed)	78.05	89.20	(+)14.29
Red Chillies Dry (Gr II)	107.78	140.14	(+) 30.03
Onions(Gr II)	28.35	12.71	(-)55.14

Source: Directorate of Economics and Statistics, Hyderabad.

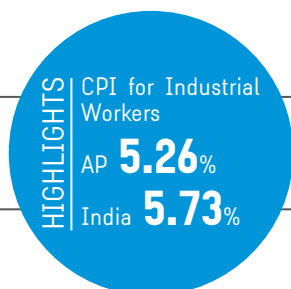
Recent price trends indicate that the average daily retail prices of essential commodities have shown an ascendancy. Out of the six essential commodities, except Onions (Gr.II), five commodities have shown increasing trend during the period from April to Dec 16 compared to the corresponding

period of last year. The year-wise average daily retail prices of six essential commodities from 2004-05 to April to Dec 16 are shown in Annexure - 4.1. and from 2012-13 (Aprl to March) to April to Dec 2016 are shown in the following chart 4.1.

Chart 4.1. Average daily retail prices



Source: Directorate of Economics and Statistics, Hyderabad



## Price Index- an economic barometer

Price Index is a statistical tool for measuring the relative change in price level with reference to time, geographical location and other characteristics. It is also considered as a barometer of economic activity..

Consumer Price Index is of great relevance for this purpose and is used as a device for measuring changes in the level of retail prices of goods and services consumed by different population segments. Industrial workers and agricultural labour, rural labour from the main population groups are usually covered by these indices.

## Consumer Price Indices for Industrial Workers

The Consumer Price Indices for Industrial Workers (CPIIW) are being constructed and compiled at the new base 2001=100. The data is collected from from seven centres selected in Andhra Pradesh under central and state series based on Industrial workforce.

The CPIIW related centres are: 1.Visakhapatnam 2.Guntur 3.Vijayawada 4.Vijayanagaram-Chittivalasa 5.Kakinada-Rajahmundry 6.Jaggaiahpet and 7.Tirupati – Renigunta. Labour Bureau, Simla compiles the index for the first three centres since they come under central series, while the State Directorate of Economics and Statistics compiles the indices covering the remaining four complex centres in Andhra Pradesh.

Consumer Price Indices for Industrial Workers grew by 5.26% and 5.73% in the State and All India level respectively during the period from April, 2016 to Oct,2016 over the corresponding period of previous year. Details about the Consumer Price Indices for Industrial Workers from 2006-07 to 2016-17 and growth of indices during the period from April, 2016 – October, 2016 over the corresponding period of previous year are shown in Table 4.2 below.

Table 4.2 : Consumer Price Index Numbers for Industrial Workers (Base : 2001 =100)

Year	Andhra Pradesh	All India
2006-07	125	125
2007-08	132	133
2008-09	147	145
2009-10	168	163
2010-11	185	180
2011-12	198	195
2012-13	219	215
2013-14	239	236
2014-15	257	251
2015-16	269	265
2016-17 (Apr to Oct)	280	277
Growth rate (%) April to Oct'2016 over April to Oct,2015	5.26	5.73

Source: Labour Bureau, Simla

Note:CPI-IW from 2006-07 to 2010-11 is for combined AP

## CPI Numbers for Agricultural Labour

The Consumer Price Index Numbers for Agricultural Labour (CPI- AL) with 1986-87 as base year are compiled by the Labour Bureau, Simla, The Table 4.3 given below gives the indices during April, 2016 to November, 2016 and the data relates to the combined state of Andhra Pradesh. The Consumer Price Index Numbers for Agricultural Labour increased by 5.74% in the State(Combined AP) and 4.96% for All India compared to the corresponding period in the previous year.

**HIGHLIGHTS**  
 CPI for Agricultural Labour  
 AP **5.74%**  
 India **4.96%**

Table 4.3 Consumer Price Index Numbers for Agricultural Labour (Base : 1986-87 =100)

Year	Andhra Pradesh	All India
2009-10	534	513
2010-11	589	564
2011-12	654	611
2012-13	711	672
2013-14	805	750
2014-15	860	800
2015-16	914	835
2016-17(Apr to Nov)	956	870
Growth rate (%) April to Nov'2016 over April to Nov'2015	5.74	4.96

Source: Labour Bureau, Simla.

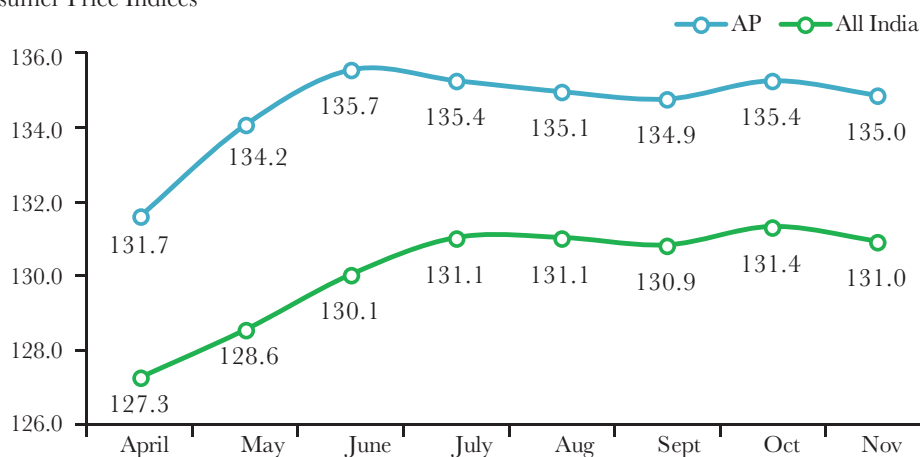
### CPI Numbers - Rural, Urban and Combined

Since the Consumer Price Index (CPI) Numbers reflect the fluctuation in retail prices pertaining to specified segments such as industrial workers, agricultural labourers and rural labourers only and do not encompass all segments of the population, these numbers do not capture the holistic picture of price behavior in the country. Thus, in order to reflect changes in price levels of various goods and services consumed by respective population groups in rural and urban areas, a new series of CPI for the entire urban population, viz. CPI (Urban), and CPI for the entire rural population, viz. CPI (Rural) are compiled.

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation has revised the base year of the Consumer Price Index (CPI) from 2010 to 2012 with effect from 2015 for release of indices and the new base is being followed by the States & UTs.

The average indices for the period April to November, 2016 in AP and All India are shown in Chart 4.2, Table 4.4 and month wise index given in Annexure 4.2.

Chart: 4.2 Consumer Price Indices



Source: Directorate of Economics and Statistics

Table 4.4: Average Consumer Price Index Numbers for Rural, Urban and Combined

(Base: 2012 =100) (Apr.-November.2016)

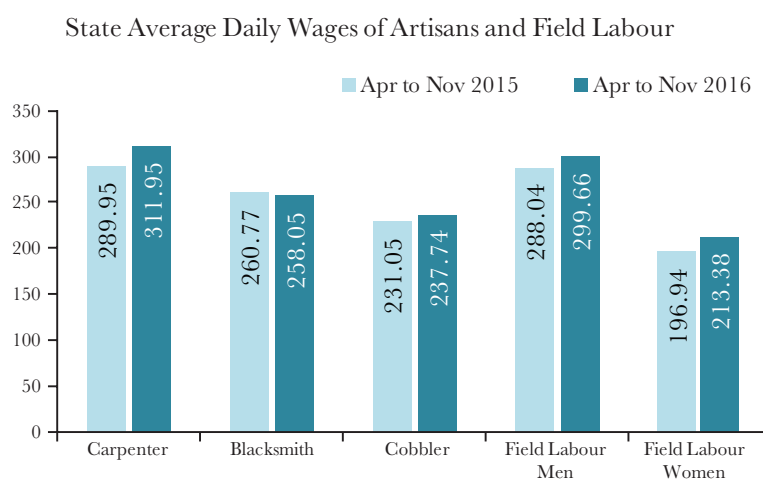
Year	Andhra Pradesh	All India
Rural	136	132
Urban	132	128
Combined	135	130

Source: CSO, New Delhi, Note: Index is for AP (13 districts)

### Wholesale Price Index

Wholesale Price Index (WPI) serves as an important determinant in formulation of trade, fiscal and other economic policies by the government. It is also used by banks, industry and business circles. It is released on monthly basis by the office of the Economic Adviser, Ministry of Commerce & Industries, GOI. It covers 676 commodities, of which 102 are from 'Primary Articles' group, 555 from 'Manufactured Products' group and 19 from 'Fuel and Power' group. WPI for 'All Commodities' increased from 177.8 in Apr 2016 to 183.1 in Nov 2016. It increased from 251.9.6 to 259.4 for Primary Articles group and from 155.5 to 157.9 for Manufactured Products and from 175.4 to 190.7 for Fuel & Power group during the same period.

Chart: 4.5 Average daily wages(Rs.) of artisans and field labour



Source: Directorate of Economics and Statistics

## Wages

Agricultural labour and artisans constitute the weakest segment of rural labour force in the un-organized sector. 'Wage' data is collected from 44 centres spread over the State covering 42 divisions and 23 occupations. Average daily wages of artisans and field labour in the State are presented in Table 4.5 and depicted in the Chart 4.6 below.

Table 4.5: State average daily wages (Rs.) of artisans and field labour

Category	April to Nov 2015	April to Nov 2016
Carpenter	289.95	311.95
Blacksmith	260.77	258.05
Cobbler	231.05	237.74
Field Labour		
Men	288.04	299.66
Women	196.94	213.38

Source: Directorate of Economics and Statistics

The Average Daily Wages of Artisans and Field Labour (both men and women) in general, except Blacksmith category, have increased during April - Nov 16 compared to the corresponding period of previous year.

## Public Distribution

### Fair Price Shops

29,054 Fair Price (FP) shops are functioning in the State as on 31.12.2016. On an average, each shop serves 450 cards/ families. There is one shop for every 1,725 persons in Andhra Pradesh vis- à-vis the Government of India's norm of one shop for every 2,000 persons. There are about 141.99 lakh cards in the state, of which, 99.87 lakh are in Rural areas and 42.12 lakh are in Urban areas.

### Subsidy Rice Scheme

At present a quantity of 2.17 lakh MTs of Rice (0.32 Lakh MTs for AAY families & 1.85 Lakh MTs to priority house hold families) is being allotted every month for distribution at subsidized rates @ Rs.1/- per Kg to cater to the need of 1.41 crore BPL families. Government is attaching highest importance to provide food and nutritional security in human life cycle approach, by ensuring access to adequate quantity of quality food at affordable prices to people to live a dignified life.

Government of India is allocating 31796.42 MTs of rice per month under AAY @ Rs.3,000/- per MT, 122351.62 MTs of rice under priority category @ Rs.3,000/- per MT and 1838.97 MTs of rice under Tide over category @ Rs.8,300/- per MT for distribution to all the eligible card holders under NFSA,2013.

119 MTs of rice is being supplied to beneficiaries under Annapurna scheme for distribution @ 10 kgs. per beneficiary per month free of cost. In addition to Rice, the following commodities are supplied to the BPL card holders, every month.

Sl No	Name of the Commodity	Quantity @ 1 packet per each BPL card	Consumer price per each packet (in Rs.ps)	Quantity allotted (in MTs)
1	Sugar	½ kg	6.75	7100
2	Wheat	1 kg	7.00	14199
3	Wheat Atta	1 kg	16.50	
4	Redgram dal to the BPL card holders in ITDA areas	1 kg	40.00	217
5.	Kerosene	4Lts. in Municipal Corporations. 2Lts. in Mandal Headquarters & Municipalities. 2Lts. in Rural areas. 1 liter for LPG & Deepam holders in all areas	Without LPG Rs.15.00 per liter. With LPG Connection Rs.19.00 per liter	17,040 (KLs)

Source: Civil Supplies Dept.

### Kerosene

17,040 KLs of Kerosene is being allocated per month for distribution to all BPL cardholders.

### Ration Cards

Category-wise ration cards in existence in the State during the month of February, 2017 are given in the following Table 4.6 and district wise card position is given in Annexure 4.3.

Table 4.6 : Ration Cards Position(number)

1	White ration cards	132.63
2	Annapurna	0.12
3	Antyodaya Anna Yojana Cards	9.24
	Total	141.99

Source: Civil Supplies Dept.

### National Food Security Act,2013

The State Government is implementing the National Food Security Act, 2013 enacted by the Government of India with effect from 01.04.2015. In all, 2.68 crore persons are identified under NFSA and Holograms stickers were affixed to the ration cards of all identified households under NFSA, 2013.

### Integrated Child Development Services (ICDS) Scheme

Integrated Child Development Services (ICDS) Scheme is a unique early childhood development programme aimed at addressing health, nutrition and development needs of young children, pregnant and nourishing mothers. Under Supplementary Nutrition Programme to Anganwadi Centers, essential commodities like Rice, Dal and Oil are being procured from various sources.

The Government (Women, Children, Disabled & Senior Citizen Department) issued orders to procure and supply of Rice, Dal and Oil to the Anganwadi Centers from the Civil Supplies Department through the F.P. Shop network directly to the Anganwadi Centers through ePoS.

### End-to-end Computerisation of TPDS Operations

The Government of India has taken up modernization including 'End-to-end Computerisation of Targeted Public Distribution System (TPDS) operations' with a view to address challenges such as leakages and diversion of food grains, fake and bogus ration cards, inclusion and exclusion errors, lack of transparency, weak grievance redressal & social audit mechanisms, etc.

Andhra Pradesh is the first State in the country to implement FP Shops Automation under the Scheme "End-to- End Computerization of TPDS Operations". Out of the total, 29,054 F.P. Shops, 28,445 F.P.Shops are functioning through ePoS Devices-cum-Electronic Weighing Machines. 28,422 Iris readers were also integrated to ePoS devices for authentication whenever biometric authentication is not successful. With the implementation of FP Shops Automation, the savings in essential commodities noticed are shown in Table 4.7

Table 4.7 Savings after Implementation of e-PoS

Sl. No.	Commodity	Qty saved (in MTS)	Value of savings noticed (Rs. in crores)
1	Rice:	314522.286	957.65
2	Sugar	14224.766	22.60
3	Wheat	7518.287	11.65
TOTAL:		336265.339	991.90

Source: Civil Supplies Dept.

### Installation of Global Positioning System

The State Government is implementing GPS/GPRS-based vehicle tracking system to monitor the movement of essential commodities from MLS Points to FP Shops (Stage II movement) to prevent diversion of essential commodities and for ensuring greater transparency in distribution of ECs under PDS.

### F.P. shops Portability within district

To leverage of technology to the benefit of BPL cardholders, government has introduced F.P. shops portability system in the state in May, 2015. Under this system, the ration cardholder can draw essential commodities from any ePoS enabled F.P. shop irrespective of having his / her ration card number in Dynamic Key Register of a particular ePoS enabled F.P. shop.

## PRICES WAGES AND PUBLIC DISTRIBUTION

## Aadhaar SCHEME (Unique Identification Authority of India (UIDAI))

This scheme is being implemented by the Government of India in coordination with the State Governments. The Consumer Affairs, Food & Civil Supplies Department is one of the State Registrars appointed by the UIDAI. 507.01 lakh UIDs are generated so far.

## Kaizala – A Messaging and Productivity Application

Kaizala, a Microsoft Garage Project, is a messaging and productivity App that helps to get the work done quickly with built-in actions while chatting. Whether it is a small business team or a community with a large number of people, Kaizala helps to achieve results faster. No need to have a computer or laptop for use of Kaizala app.

Kaizala provides following capabilities:

- Setup hierarchy of groups for the community to broadcast messages to everyone as well as enable chatting among members;
- Create, send and respond to actions to complete common tasks quickly;
- Get information at the finger steps with built-in summary on action cards;
- Chat privately in a small group, in a mega-group or 1:1 with colleague.
- Android 4.4 and above Version smart phone with at least 2G Internet connection

Kaizala Application of Microsoft is being used in Civil Supplies department and A.P. State Civil Supplies Corporation Limited by forming different groups of officials including F.P. Shop Dealers for the monitoring of day-to-day activities

## Cash less Transactions

Aadhaar enabled cashless transactions has been taken up from 1st Dec, 2016 in all FP shops functioning with ePOS devices to facilitate the card holders by avoiding hardship for purchase of essential commodities with smaller denominations. Cashless Aadhaar Enabled Payment

System is being implemented in 21,349 FP shops. No Service charges are being collected by the bankers in the process of cashless transactions. The shops/ cardholders who are not ready to implement cashless transaction, ECs are distributed on credit basis for the month of December and the credit to be recovered in ensuing month.

## Market Intervention Scheme

Whenever there is abnormal hike in prices, review of prices of selected essential commodities, their availability and measures to be taken up to control prices and to ensure availability of commodities at affordable prices, is taken up through market intervention by government under the scheme..

## Redgram dal and Urad dal

Government of India has allotted 11,421.844 MTs of Redgram (Tur) @ Rs.66/-per kg. for retail distribution of the Redgram dal not more than Rs.120/- per kg. The Government issued orders for distribution of Redgram dal to the Tribal Families in Agency Areas @ (one) 1 kg per family at the rate of Rs.40/- per kg from November 2016. onwards. So far 365 MTs of Redgram dal has been distributed. Orders issued for distribution of Urad (Blackgram dal) to the BPL families @ Rs.70/- per kg. So far 81 MTs of Urad dal has been distributed.

## Chandranna Christmas Kanuka 2016/ Sankranthi Kanuka 2017

Government has supplied (6) commodities i.e., Redgram Dal ½ kg, P.Oil ½ liter, Chana dal ½ kg, Jaggery (in tin) ½ kg, Wheat Atta 1kg, and Ghee 100 ml, in a carry bag as festival Special Gift Pack to all 1.41 crore BPL families at free of cost on the eve of Christmas / Sankranthi festivals. The commodities under Chandranna Christmas / Sankranthi Kanuka are supplied through ePoS devices in a packed form in the presence of Janmaboomi Committee members.

## Deepam

There are 40.49 lakh Deepam connections in the state





CHAPTER 5 AGRICULTURE  
AND ALLIED ACTIVITIES

HIGHLIGHTS  
Area under food grains (2016-17)  
**41.34**  
lakh ha.

## Agriculture

Transforming the Agriculture into a dynamic, high growth sector which would be the real power house of primary sector in next eight years, remains the prime target for this government. In the process, the plan is to double the contribution of Agriculture sector to GSDP from its current level by 2021-2022. The Government has charted clear vision to increase the farm productivity as part of achieving Sustainable Development Goals 2030.

*Net Area Sown* **62.08** lakh ha.

*Rainfall during the South West Monsoon*  
(2016-17) **534** mm

*Rainfall during the North East monsoon*  
(2016-17) **85** mm

*Cropping intensity (2015-16)* **1.24%**

The role played by the agriculture sector in the economy of Andhra Pradesh, remains crucial, despite its volatility centring around unpredictable weather conditions, huge farm expenditure and non-profitability continues to be the mainstay for millions of population in the state. Making the agriculture sector more resilient and helping the farming community is the most important priority for the state of Andhra Pradesh.

The State is committed to transform the Primary Sector with an aspirational goal of making Andhra Pradesh as one of the three top leading states in India through Sunrise Andhra Vision by 2029. The focused areas under the Primary Sector are:

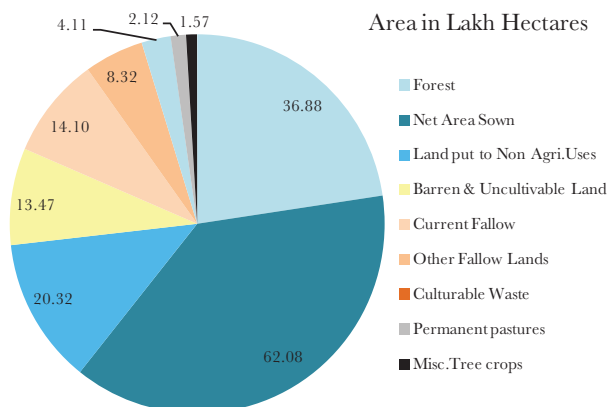
- increasing productivity
- mitigating the impact of droughts through water conservation and micro-irrigation;
- postharvest management to reduce wastage; and
- establishment of processing, value addition capacity and supply chain of the identified crops.

Making agriculture sector drought-proof, the state has come out with various strategies that not only mitigate the distress in agriculture but will substantially enhance the incomes of farmers. Deploying Rain guns during Rabi season and ensuing Kharif as a yield protection measure by placing their services based on the soil moisture assessment is one of the key strategies of the government. Ensuring food security and provision of gainful employment continues to be the essential premise of socio economic development.

### Land Utilization

Of the total geographical area of the state of 162.97 lakh hectares, 38.09% is under net area sown (62.08 lakh hectares), 22.63% under forest (36.88 lakh hectares), 8.65% under current fallow lands (14.10 lakh hectares), 12.47% under land put non-agricultural uses (20.32 lakh hectares), 8.27% under barren and uncultivable land (13.47 lakh hectares), 7.63% (12.43 lakh hectares) is under other fallow, cultivable waste lands like permanent pastures and other grazing lands and the remaining land under miscellaneous tree crops and groves are counted for 2.26% (3.69 lakh hectares). The Land utilisation particulars from 2008-09 to 2015-16 are given in the Annexure 5.1 and district wise land utilisation particulars during 2015-16 are given in Annexure 5.2. The following Chart. 5.1 depicts Land utilisation details for 2015-16.

Chart 5.1 : Land Utilisation in Andhra Pradesh 2015-16



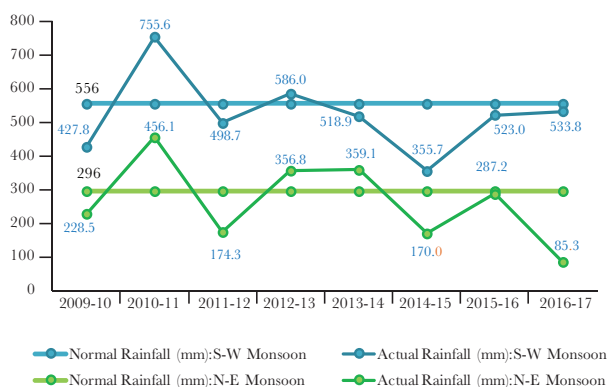
Source: Directorate of Economics & Statistics department

## Rainfall

534 mm of rainfall was received in the State during the South West Monsoon period of 2016-17 as against the normal rainfall of 556 mm-- a deficit of 4 %. The deficit is even higher(71%) in the North East monsoon period as only 85 mm rainfall as against the normal rainfall of 296 mm is recorded during this period.

Season wise and region wise rainfall details are given in the Annexure 5.3 and district wise rainfall is given in Annexure 5.4. Rainfall trend over the past 8 years is depicted in chart 5.2.

Chart 5.2: Rainfall during South-West Monsoon and North-East Monsoon



Source: Directorate of Economics & Statistics

## Soil Types

There are various types of soils and the formation of a soil is primarily influenced by major factors - climate, altitude and composition of bedrock etc. Disproportion in the distribution of rainfall in the country and excessive heat contribute special characters to the soils. Most of soils in the State are made up of a combination of three basic types, namely, Sand, silt, and clay. Category wise soils are given in Annexure 5.5. Of the 22 categories of soils adding to the total geographical area of the state, six types are predominant and together account for over 88% of the area.

## Area and Production (Kharif and Rabi Season – Second Advance estimates 2016-17)

As per the Second advance estimates, the area under food grains showed a marginal decline of 0.02 lakh hectare. The total area under food grains is estimated at 41.34 lakh hectares in 2016-17 as against 41.36 lakh hectares in 2015-16. However, despite decline in area, the total food grains production in 2016-17 is estimated to register an impressive increase of 9.09% from 143.78 lakh tonnes in 2015-16 to 156.85 lakh tonnes in 2016-17. Significant increase in the production of Paddy during Kharif season together with productivity improvement in some of the crops through adoption of best practices largely contributed to this improved production.

### Kharif-2016-17

The area under food grains in Kharif 2016-17 is estimated at 21.53 lakh hectares while it was 19.86 lakh hectares in 2015-16 showing an increase of 8.41%. Similarly, the production of food grains in Kharif 2016-17 is estimated at 87.10 lakh tonnes while it was 68.12 lakh tonnes in 2015-16, showing an increase of 27.86%. The area under Paddy in Kharif 2015-16 is estimated at 15.20 lakh hectares while it was 13.99 lakh hectares in 2015-16, showing an increase of 8.65%. Similarly, the production of Paddy in Kharif 2016-17 is estimated at 79.04 lakh tonnes while it was 61.59 lakh tonnes in 2015-16, showing an increase of 28.33%.

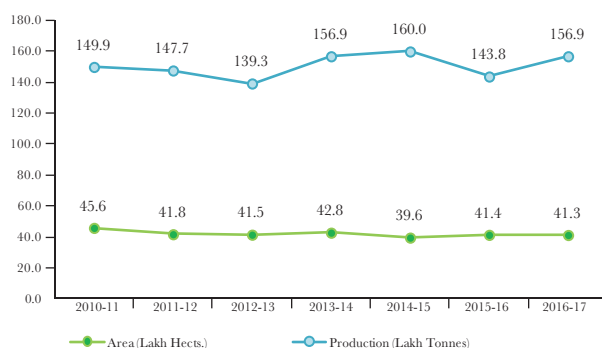
### Rabi – 2016-17

The estimated area under food grains in Rabi 2016-17 is expected to be 19.81 lakh hectares while it was 21.50 lakh hectares in 2015-16 showing a decrease of 7.86%. Similarly, the estimates also indicate a fall in production under food grains in Rabi 2016-17 from 75.66 lakh tonnes in 2015-16 to 69.75 lakh tonnes in 2016-17, a decline of 7.81%. The decline in production in food grains in Rabi is largely accounted by fall in Paddy production, which is attributable to deficit rainfall in certain districts.

The estimated area under Paddy in Rabi 2016-17 is expected to be 6.20 lakh hectares while it was 7.62 lakh hectares in 2015-16, showing a decrease of 18.64%. Similarly, the production under Paddy in Rabi 2016-17 is estimated at 41.29 lakh tonnes while it was 50.74 lakh tonnes in 2015-16, showing a decrease of 18.62%.

Details of the area and production of food grains from 2010-11 to 2016-17 are given in Annexure 5.6. Season wise area, production and productivity of selected crops are given in Annexures 5.7, 5.8 and 5.9 respectively. Area and production of food grains details are depicted in chart 5.3.

Chart 5.3: Area and Production under food grains



Source: Directorate of Economics & Statistics

## Cropping Intensity

The cropping intensity (the ratio of gross cropped area to net cropped area) is one of the indicators of assessing efficiency of agriculture sector. The cropping intensity for the year 2015-16 is 1.24.

## Gross and Net Area Irrigated

The gross area irrigated in the State decreased to 35.47 lakh hectares in 2015-16 from 38.86 lakh hectares in 2014-15. The net area irrigated in the state is registered as 27.43 lakh hectares in 2015-16 as against 29.27 lakh hectares in 2014-15, showing a decrease of 6.29 percent.. The source-wise district wise gross and net area irrigated in the state from 2008-09 to 2015-16 are given in Annexures 5.10, 5.10 A and 5.11, 5.11A respectively.

## Land Holdings

The data on land holdings is being collected since 1970-71 through a quinquennial census of land holdings, the latest available data relates to 9th Census and the 10th Census with reference year 2015-16 is under progress. The average size of land holdings in the state has marginally declined to 1.06 hectares during 2010-11 from 1.13 hectares in 2005-06. The number of holdings has increased from 72.16

lakh in 2005-06 to 76.21 lakh in 2010-11. Distribution of land holdings and area according to size classes are given in Annexure 5.12 and District wise distribution of land holdings and area according to size classes are given in Annexure 5.13.

## Agriculture Extension Programmes - Mission based approach

The priority of the State is to double the farm income with double digit inclusive growth strategy contributing to higher Gross State Domestic Product (GSDP). The government is working in a mission mode to attain sustainable agricultural production duly competing with the best performing states in the country with minimum cultivation cost, targeting higher net returns to farmer.

It is aimed to transform the Agriculture sector in the state into a dynamic, high growth sector, which would be a agri-powerhouse in the next eight years. Thus, the target is to devise strategies to double the contribution of Agriculture to the GSDP to Rs.60000 Cr by 2021-22 from the current level of Rs.31961 Cr (constant prices 2015-16). The Government has got clear vision to increase the food grain productivity from 2641 Kgs/Ha to 4409 Kgs/Ha, marching towards achieving Sustainable Development Goals 2030.

The following strategies are being adopted for making the mission a reality:

- Involvement of marginal and small farmers in crop diversification and food security are the important aspects to be addressed in accelerating crop diversification in the state.
- Empowering the farmer with advance agricultural practices i.e., promotion of intercropping and location specific crop sequence.
- Promoting poly crop system in the rain fed areas of the state to ensure sustainable income to the farmer in the event of drought situations also which is a common phenomenon of Rayalaseema districts of the state.
- Promoting pre Kharif sowings with pulses in NSP and Krishna Delta.
- Increasing cropping intensity through seasonal discipline especially in Godavari Delta areas where the farmers can take three crops in a year (Paddy – Paddy - Pulse).
- Ensuring timely input supply and new seed varieties.

- Promotion of self- reliance in seed production among farmers.
- Regulation of inputs and quality control.
- Soil test based fertilizer recommendation and Soil Health Management.
- Promotion of Integrated Crop Management through INM, IPM, efficient water management.
- Correcting micronutrient deficiency.
- Promotion of Green Manure crops on a Mission mode.
- Training and awareness programme through Polam Pilusthondhi.
- Involvement of ANGRAU and other National and International Institutes.
- Periodical crop advisories to the farmers through crop specific committees formed both at state and district level.
- Promotion of organic farming to meet the demand of World Market.
- Calamity Management in the event of drought, floods, hailstorms etc.
- Drought mitigation through Rain guns.
- Farm Mechanization – for cost effective farming practices with special emphasis to promote CHCs.
- Provide day-to-day information to farmer on crop production, input supply, and marketing through Internet Services and AGRISNET portal.

## Agro Climatic Zones

The following are the Six Agro climatic zones in the State.

Sl. No.	Name of the zone	Districts
1	North coastal zone	Srikakulam, Vizianagaram, Visakhapatnam
2	Godavari zone	East Godavari, West Godavari
3	Krishna zone	Krishna, Guntur, Prakasam
4	Southern zone	Chittoor, Kadapa, Nellore
5	Scarce rainfall zone	Kurnool, Anantapur
6	High altitude & tribal areas zone	High Altitude & tribal areas of Srikakulam, Visakhapatnam, East Godavari districts

## Major Initiatives:

- Primary Sector Mission.
- Separate Agriculture budget.
- Chandranna Rythu Kshetram to demonstrate the best practices at village level.
- Focus on farm mechanization.
- Enhancing Agriculture productivity by improving Soil Health by massive soil samples collection by using GPS technology and development of soil fertility maps.
- Special project for supply of micro nutrients.
- Strengthening of agriculture extension.
- Crop specific committees both at state and district level.
- Organic/ Natural farming.
- Empowerment of farmers through Rythu Sadhikara Samsta
- Extensive usage of ICT in agriculture
- Development of drought proofing techniques and implementation in rainfed cultivated areas.

## Primary Sector Mission inclusive Double Digit Growth:

Primary sector mission is launched by the state government targets increased productivity in the primary sector, mitigating the impact of droughts through water conservation and micro-irrigation, post-harvest management. It aims to reduce the wastage and establishment of processing, value addition capacity. Action plans have been prepared in collaboration with ICRISAT, keeping in view of double digit growth.

## Extension Activities

### Polam Pilusthondi:

The main objective of the scheme is to strengthen the extension reach at farmers' doorstep for increasing productivity, profitability, sustainability and explore the possibilities of value addition to increase the income of the farmers.

### Strategies:

The key strategies to foster rapid and sustainable agricultural growth and raise increased farm income are: strengthening local service providers, community participation, providing

## AGRICULTURE AND ALLIED ACTIVITIES

effective extension services, promoting farmer led extension, promoting scientific approach.

### Conduct of the programme:

The Polam Pilusthondi programme is being conducted for two days in a week along with the officials of the allied departments and scientists of the Agricultural, Horticultural and Veterinary universities with involvement of the people representatives. Grama sabha is organised followed by Farmer-Scientist Interaction programme and field visit. These proceedings of Polampilusthondi are captured through Tablets by the Extension Functionaries to address the same on priority basis. A total no. of 35,891 visits to the villages have been made, sensitizing 9.77 lakh farmers during Kharif 2016.

### Trainings and workshops:

In view of the rapid changes occurring in agriculture sector, it is necessary to upgrade the skills and knowledge of the farming community. The basic objective of the trainings is to transfer the latest agricultural technologies to the farmers, farm women and RMGs for their capacity building in agriculture and also to promote women's participation in the overall agricultural development and thereby increasing their income levels.

The trainings will cover all the aspects based on the critical interventions identified in the village action plans with special reference to 1/3<sup>rd</sup> villages identified in each mandal. During the year 2016-17, it is planned to conduct 2000 trainings with a financial allocation of Rs.100.00 lakhs, about 1, 00,000 farmers. 932 trainings were organized covering 46,600 farmers during Kharif 2016,

Monthly workshops are held regularly at the identified research stations of ANGRAU in all districts on first Saturday of every month. Departmental officers and scientists of ANGRAU discuss the problems and formulate production recommendations for the ensuing month in a structured and systematic way with a definite agenda including field visits to research stations. All the Joint Directors of Agriculture will participate along with extension staff for interaction with scientists. The extension staff will give feedback to ANGRAU scientists and obtain crop wise recommendations on all aspects for coming month, which in turn will be informed to the farmers. ANGRAU has

organized Zonal Research Extension Advisory Council Meetings (ZREAC) for both Kharif and Rabi seasons in all the Agro-climatic zones for the year 2016-17 in the months of March & April 2016.

### Chandranna Rythu Kshetralu (CRKs)

In Andhra Pradesh important crops like Paddy, Pulses Coarse cereals, Oil seeds and cotton are cultivated in considerable area. The production and productivity in majority of crops is below the possible potential. There is very need to motivate and sensitize the farmers regarding the best management practices and the importance of location specific critical interventions for achieving enhanced productivity in different crops. In order to enhance the productivity of these crops, special programme involving the gross root level functionaries and farmers, Chandranna Rythu Kshetralu-(CRKs) are being conducted on farm demonstrations with latest technological interventions.

- Chandranna Rythu Kshetralu is the new on Farm demonstration programme implemented in the farmers field itself to promote best agronomic and farm management practices for achieving increase in productivity and reducing cost of cultivation.
- CRK is an on Farm demonstrations of 10 Ha each cluster at field level with an subsidy of Rs 5000/- per Ha.
- CRK demonstration will be selected based on the major crop grown in the village/ Mandal and division. It is proposed to organize a total of 5500 CRKs in all the 13 districts in the State in all the major crops i.e., Rice, Groundnut, Pulses, Maize, Cotton and Sunflower.

### Multi Purpose Extension System

The Government introduced Multi Purpose Extension System in place of Adarsha Rythus for every 1000 ha. of cultivable area. 3905 Multi Purpose Extension Officers (MPEOs) are working in the State.

### Objectives:

- To facilitate effective extension reach to the farming community.
- To address the immediate needs of the farmers during the season in case of unfavorable seasonal conditions.
- Sensitize the farmers on measures to be taken up to enhance the productivity Levels.

The Performance of MPEOs is being assessed on monthly basis based on the Key Performance Indicators and MPEOs are graded based on the marks obtained viz. The MPEOs who have obtained Grade C & D are provided with an opportunity time of 4 months and 3 months respectively to improve the performance and in case of non-improvement, the concerned MPEO will be terminated from service.

### Padi Pantalu Monthly Magazine

The Telugu Monthly magazine 'Padi Pantalu' is printed and distributed every month to farmers and local public representatives by the department. The department wise latest technical information on various schemes, objectives, guide lines, subsidy pattern and suggestions to the farmers related to the concerned season/ month are being published.

### Soil samples analysis and soil health cards

Soil sampling and soil testing program is organized in a systematic manner to evaluate the fertility status, identify soil problems and for facilitating optimal soil productivity, improving fertility and reclaiming problematic soils. 16 Soil Testing Labs (STLs), 1 Regional Soil Testing Lab at Bapatla, Guntur district, 9 Mobile Soil Testing Labs and 30 Mini Soil Testing Labs in AMCs are functioning at in the State.

The departmental Soil Testing Laboratories are equipped to analyse 12 parameters i.e., PH, EC, OC, N, P, K, S, Zinc, Iron, Copper, Magnesium and Boron. The results of the soil analysis are being communicated to the respective farmers in the form of soil health cards. Fertilizer recommendations on the available nutrient contents on soil fertility status are to be given to the farmers in the soil health cards. During 2015-16 and 2016-17, 10.43 Lakh Soil samples analysed and 42.38 lakh Soil Health cards were distributed to the farmers. 3rd phase of soil sample collection and analysis is under progress. So far 50,764 samples were collected & 34,309 samples were analysed during 3rd phase. By June 2017, every farm holding (76 Lakhs) in the State will be provided with Soil Health Card.

### Soil Health Management - National Mission for Sustainable Agriculture (NMSA)

Soil Health Management in a sub mission under NMSA, which aims to increase soil nutrient status and thus enhance

crop productivity for ensuring food security and sustaining rural development. Integrated Nutrient Management Techniques have been found to be useful to increase nutrient use efficiency by integrating and balancing the nutrient dose in relation to nutrient status and crop requirements.

### Project for enhancing Agricultural productivity

Analysis of soil samples has indicated that 42% of soils in Andhra Pradesh are potentially deficient in Zinc(Zn), 22% in Iron(Fe), 7% in Manganese (Mn), 3% in Copper (Cu), 19% in Boron(B) and 11% in Molybdenum(Mo). Basal application to soil of Zn, B, and Mo., and foliar sprays of Fe and Mn have been recommended as the most suitable methods for correcting such deficiencies which has shown significant effect on crop yields. Also analysis studies revealed that 20-24% of soils in AP are deficient in Sulphur. These large scale deficiencies of multiple nutrients such as micro and secondary nutrients are reducing the response to added N, P, K nutrients also. It was planned to take up a massive programme in the districts, where micronutrient deficiencies are high wide. These are: publicity on correction of micronutrient deficiency through local media, Polam Pilustondi, wall poster and pamphlets, Hoardings and moving media etc.. All the micro nutrients are being positioned and distributed on saturation mode.

During 2015-16, 6833 MTs of Zinc Sulphate, 258 MTs of Boron and 33232 MTs of Gypsum were supplied to farmers on 50% subsidy covering an area 7.52 lakh ha respectively in all major crops. Yield impact studies taken up under the project, showed 5-10% yield increase over the control plots.

During 2016-17, it is targeted to cover 15.53 lakh ha of micronutrient deficient area in major crops cultivated in the State. An area of 6.75 lakh ha. was covered in Kharif 2016 and planned to cover 6.43 Lakh ha during Rabi 2016-17.

### Information and Communication Technology:

Agriculture Department ranked number one position under Farm Mechanization transactions in India. The Government has promulgated the Agricultural Resources Information Systems NET work. (AGRISNET) in the country. AGRISNET envisages promotion of e-Governance by use of Information & Technology. Efforts are being made to this portal (AGRISNET [www.apagrisnet.gov.in](http://www.apagrisnet.gov.in)) to link to Dash Board with real time data base.

## AGRICULTURE AND ALLIED ACTIVITIES

### Online soil health card generation system- <http://45.127.101.32:8080/OLMS>

Farmers can download soil health card online, using unique number allotted to each sample. The GPS co-ordinates of soil test samples collected from farmers' fields are captured. All the results are plotted on Google map at GPS co-ordinates. By clicking on the tag, Soil Health Card can be viewed on Google map. A facility is provided to send the soil test based fertilizers recommendation as SMS to the farmers' mobile phone, as and when the analysis is completed.

The Soil Health Card portal allows for registration for collection of soil samples along with testing in the approved Soil Testing Labs. The important aspect of the portal is that it not only gives an assessment to a farmer about use of major fertilizers but also the deficiency status of micro nutrients in his fields and which must be added for a balanced soil health. The information is given for different crops. So far 42.38 lakh Soil Health Cards were distributed to the farmers in two phases and by June 2017 every farmer in the state will be supplied with Soil Health Card.

### Online input license management system of seeds, fertilizers & pesticides <http://137.59.201.87:8080/OLMS>

This application provides online licenses to the input dealers/manufacturers of fertilizers. Thereby the dealers/manufacturers can apply for license freshly or renew and amend online.

### e- Seed Distribution: (D-Krishi)

D-Krishi is a simple, sustainable, secure and standard solution for farmer's welfare through digitization. Farmers or any one of their family members are the main beneficiaries. Land Records, Aadhaar and family database (ration card) are integrated. Based on the land ownership data of the farmers linked to his Aadhaar ID, the area of land and associated eligible seed quantity shall be calculated by the system. The farmer gets the seeds. The system keeps records of each farmer wise seed distributed and the stock.

The agriculture department has been distributing subsidized seed through biometric system using the Aadhar, web land and ration card databases with the technical support from NIC. Through this project, the department has distributed

Ground nut seed in Ananthapuramu in Kharif-2016 and Bengal gram seed in Ananthapuram, Kurnool, Kadapa, Prakasam & Guntur during Rabi-2016-17 successfully. Based on these experiences, department is planning to distribute all kinds of subsidy seeds through this Android application from ensuing Kharif season.

### Village Action Plan Software: [www.agrivap.com](http://www.agrivap.com)

Village Action Plan is the collection of information on village level statistics, requirement of inputs, identification of agricultural problems, analysis, identifying suitable measures and understanding the growth in the sector, and a capable tool for decision making. The software has been developed in the perceptive of the farming situations in the villages and provides information on village profile, farming situation, types of soils, crop area, production and productivity, seed requirement, cropping pattern, nutrient requirements, consumption, good agriculture practices, availability of farm machinery and GVA,.

### e-Agriculture- Crop Booking- Android Application: <http://45.114.143.89/E-Agriculture>

The Department has been doing crop booking using e-Agriculture tab based android application since Rabi-2015. Based on the experiences in Rabi, department is planning to add some more features to the software to assess the work quality like addition of survey number wise soil health report, micro nutrients supplied, subsidy seed availed position, fertilizers supplied, category of the farmer, status of the farmer, source of irrigation etc. This software was integrated with CM Dash board to show the real time dynamic crop coverage area of the state. In kharif Season, 40 lakh ha crop was booked through this Software application and created 32 lakh farmer data base for the department.

### Agriculture Videos

A tab based application is used as a repository of all agriculture related videos in one site. Field staff also can upload videos on latest technology implemented in their jurisdiction. Users can give their reviews, comments, rating on the uploaded videos.



## Vaddi Leni Panta Runaalu

The process of payment of interest amount waived off on farmers' crop loans is automated and is implemented. The interest amount is credited to respective banks through Nodal branches based on details of principal loan amount repaid by the farmers.

## MPEO Performance Evaluation Software:

MPEO Evaluation software is developed to monitor the performance evaluation of each MPEO which will be evaluated by MAO, ADA(R) & JDA based on the marks and grading system. Evaluation is being done based on the dynamic quantitative and qualitative criteria. MPEO's Performance & Extension system have been strengthened due to this software application.

## Subsidy Seed Distribution

A quantity of 7.58 lakh Qtl. of various crops seed was distributed during Kharif 2016-17 with a subsidy of Rs.16385.77 lakhs in co-ordination with the seed supplying nodal agencies i.e. APSSDC, OILFED and MARKFED. It is planned to distribute 6.22 lakh Qtl. of various crop seeds on subsidy to the farmers during Rabi 2016-17. Of this 3.23 lakh Qtl. has been distributed with a subsidy value of 121.27 Lakhs.

## Fertilizers

Fertilizer consumption during the year 2015-16 in terms of product was 35.89 LMT (Kharif 16.48 LMT and Rabi 19.41 LMT) and in terms of nutrients (N, P, K), it was 16.98 LMTs (7.75 LMT during Kharif 2015 and 9.23 LMT during Rabi 2015-16). The consumption during the year Kharif 2016 in terms of product is 15.63 LMT and in term of Nutrient (NPK) is 7.39 LMT. Fertilizer consumed in kharif -2016 was 15.63 Lakh MTs for an extent of 39.76 Lakh Ha. Reduction in per Ha Fertilizer consumption of Kharif-2016 over Kharif – 2015 is 17.88%. Details of consumption of Fertilizers and in terms of nutrients are given in Annexures 5.14 and 5.15 respectively.

## Nutrient Based Fertilizer Policy

The department is implementing NBS Policy for P&K fertilizers, a fixed rate of subsidy (in Rs. per Kg basis) is

announced on nutrients namely Nitrogen (N), Phosphate (P), Potash (K) and Sulphur (S) by the Government on annual basis. The fertilizer companies will decide MRPs based on the prices of the raw materials in the international market and cost of production of finished goods, based on demand and supply. The Government of India communicated per kg subsidy fixed on nutrients for the year 2015-16 w.e.f from 01.04.2015 viz. Nitrogen, Phosphorous, Potash and Sulphur and are shown in Table 5.1:

Table 5.1 Details of nutrients

S. No	Nutrients	NBS per (Rs. Per Kg of Nutrient)
1	N	20.875
2	P	18.679
3	K	15.50
4	S	1.677

## Pesticides

The consumption of chemical pesticides during Kharif 2016 was 1100.67 MTs of active ingredient and it was 1180.30 MTs during Kharif-2015. The chemical pesticide consumption decreased compared to last year's consumptions i.e., 2015-16 due to the awareness created among the farming community by the Agriculture department under Integrated Pest management Practices through Chandranna Rythu Kshetralu, Polambadi, Polampilusthondi, usage of bio-pesticides, change in cropping pattern etc., The pesticide consumption particulars from 2010- 11 to 2016-17 (up to Sept 2016) is shown in Table 5.2.

Table 5.2: Utilization of Pesticides

Year	Pesticide Consumption(Active Ingredient)- MTs
2010-11	4410
2011-12	4882
2012-13	4249
2013-14	4253
2014-15	4050
2015-16	2713
2016-17 (up to Sept 2016)	1101

Source: Agriculture Department

## AGRICULTURE AND ALLIED ACTIVITIES

## Farm Mechanization Scheme

High proportion of female workforce both in the cultivation and processing stages of farming is an emerging trend in Indian agriculture. Studies indicate that reducing drudgery, improving efficiency by saving on time and labour, improving productivity, minimizing wastage and reducing labour costs, require attention and are possible through introduction of better equipment for each farming operation. Thus, ergonomically designed tools and equipment for reducing drudgery, enhancing safety and comfort and also to suit the needs of women workers would help in better adoption of technologies in agriculture.

Farm mechanization scheme involves judicious application of inputs by using agricultural machinery/ equipment e.g. hand tools, bullock drawn equipment, power driven machines including the prime movers for performing various operations required for crop production activities. The mechanization includes introduction of better equipment for each farming operation in order to reduce drudgery, to improve efficiency by saving on time and labour, improve productivity, minimize wastage and reduce labour costs for each operation. Another important aspect in our agriculture sector is the high proportion of female workforce in both the cultivation and processing stages of farming. Therefore, tools and equipment suitable designed and also to suit the needs of women workers would help in better adoption of technologies in agriculture. Farm equipment like land preparation, sowing equipment, plant protection equipment, self-propelled machinery, power tillers, tractors, inter cultivation equipment etc., which are used in farming operations and post-harvest equipment are supplied under subsidy and the expenditure is being met under SDP, RKVY, SMAM during 2016-17. The subsidy is increased from 50% to 70% to SC and ST farmers on farm mechanisation components except tractors and combined harvesters.

Online application system was introduced to help farmers to avail the equipment on time and also for effective monitoring of farm equipment supplies in a more transparent manner. The achievements under Farm mechanization scheme are shown in Table 5.3.

Table 5.3 : Farm mechanization

Year	Beneficiaries		Subsidy expenditure (Rs in lakhs)	
	Target	Achievement	Target	Achievement
2013-14	84990	54109	15540.63	7209.02
2014-15	122182	87990	16591.47	15784.00
2015-16	153401	124386	18688.25	18440.58
2016-17 (upto Oct2016)	88442	48455	27657.62	14663.48

Source: Agriculture Department

1176 Custom hiring centers are established for the crops Paddy, Maize, Groundnut, Cotton, Tobacco and Sugarcane at village and marginal high cost machinery available to small and marginal farmers. Capacity building trainings were also being conducted to train rural unemployed youth on the machinery to mitigate shortage of skilled workers to work on the machines.

## Crop Insurance

Presently 3 crop insurance programmes are under implementation in the State

1. Pradhan Mantri Fasal Bima Yojana (PMFBY)
2. Weather Based Crop Insurance Scheme (WBCIS)
3. Unified Package Insurance Scheme (UPIS)

### Pradhan Mantri Fasal Bima Yojana (PMFBY)

To extend more benefit to the farming community, Govt. of India announced new crop insurance policy namely "Pradhan Mantri Fasal Bima Yojana" in place of NAIS & MNAIS from Kharif 2016 season onwards. It incorporates the best features of all previous schemes and at the same time, all previous shortcomings/weaknesses have been removed. The major improvements made are:

- Farmer's premium contribution in Kharif 2% and in Rabi 1.5% for Food Crops and Oilseed Crops. Annual Commercial & Horticulture crops – farmer premium share will be maximum of 5%.
- Premium subsidy will be paid by the Central and State Governments on equal proportion (50:50).
- Cover for inundation apart from Hail storm and Post-harvest crop damage.
- Action plan to cover 50% of the area under Crop Insurance.

## Kharif- 2016

Under PMFBY scheme, Paddy Crop is covered under “Village Insurance Unit” in 12 districts, Red gram in Ananthapur District and other 18 crops covered under as Mandal Insurance Unit. As per the PMFBY operational guidelines of GOI, 13 Districts have been grouped into two clusters with balanced risk profile and sum insured by Agricultural Insurance Company (AIC) and ICICI Lombard. The results of the CC Experiments are being compiled through online system for quick settlement insurance claims. District wise Crops notified under Pradhan Mantri Fasal Bima Yojana (PMFBY) during Kharif 2016 season in Cluster-I & Cluster-II are shown in Table 5.4 & 5.5

Table 5.4 Crops notified under Pradhan Mantri Fasal Bima Yojana (PMFBY) during Kharif 2016 - Cluster-I

SL. No	District	Crops
1	Srikakulam	Rice(village made as insurance unit), Bajra, Groundnut(UI), sugarcane(P), sugarcane(R)
2	East Godavari	Rice(village made as insurance unit), Bajra, Cotton (UI), Sugarcane(P), Sugarcane®
3	Guntur	Rice(village made as insurance unit), Blackgram, Castor, Redgram, Sugarcane (P), Sugarcane (R), Turmeric
4	Prakasam	Rice(village made as insurance unit), Bajra, Maize, Redgram, Castor, Chillies(I), Chillies(UI),
5	Nellore	Rice(village made as insurance unit), Bajra, Groundnut(I), Sugarcane(P), Sugarcane(R)
6	Ananthapuramu	Redgram (village made as insurance unit)Rice, Jowar, Bajra, Maize, , sunflower, chillies(I), Cotton (UI)
7	Chittoor	Rice(village made as insurance unit),Jowar, Bajra, Redgram, Sugarcane(P), Sugarcane(R)

Table 5.5 Crops notified under Pradhan Mantri Fasal Bima Yojana (PMFBY) during Kharif 2016 Cluster-II

SL. No	District	Crops
1	Vizianagaram	Rice(village made as insurance unit), Bajra, Maize, Groundnut(UI), Sugarcane(P), Sugarcane(R), Cotton (UI)
2	Vishakhapatnam	Rice(village made as insurance unit), Bajra, Maize, Red gram, Groundnut(UI), Sugarcane(P), Sugarcane(R)
3	West Godavari	Rice(village made as insurance unit), Sugarcane(P), Sugarcane®
4	Krishna	Rice(village made as insurance unit), Maize, Green gram, Red gram, Chillies (I),Cotton (UI), Groundnut (UI), Sugarcane (P), Sugarcane (R)
5	Y.S.R(Kadapa)	Rice(village made as insurance unit),Jowar, Bajra, Red gram, Cotton(I), Cotton(UI), Sunflower, Turmeric, Sugarcane(P), Sugarcane(R)
6	Kurnool	Rice(village made as insurance unit),Jowar, Bajra, Red gram, Sunflower, Chillies(I), Chillies(UI), Cotton (I) Cotton(UI), castor, Sugarcane(P), Sugarcane(R), Korra.

## Rabi 2016-17

- Under PMFBY, Paddy Crop is covered under “Village Insurance Unit” in 5 Districts ( East Godavari, West Godavari, Krishna, Nellore & Chittoor, Bengalgram in 3 districts (Prakasam, Kurnool & Kadapa), Maize in Guntur District and 10 crops ( Rice, Maize, Jowar, Greengram, Blackgram, Bengalgram, Groundnut, Sunflower, Red Chilly, Onion covered under Mandal Insurance Unit.
- As per the PMFBY operational guidelines of GOI, all the districts have been grouped into two clusters with balanced risk profile and sum insured by Agriculture Insurance Company of India Ltd., and ICICI Lombard General Insurance Company Ltd.

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Notification of districts along with crops notified during Rabi 2016-17 season in Cluster-I & Cluster-II are shown in Table 5.6 & 5.7

Table 5.6 Crops notified under Pradhan Mantri Fasal Bima Yojana (PMFBY) during Rabi 2016 - Cluster-I

Sl. No.	District	Crops Notified
1	Vizianagaram	1. Rice 2.Maize 3.Greengram 4.Blackgram 5.Groundnut 6.Red Chilly
2	Vishakapatnam	1. Rice 2. Red Chilly
3	East Godavari	1. Rice (Village Insurance Unit)2.Maize 3.Jowar (UI) 4.Red chilly 5. Blackgram 6. Greengram
4	Guntur	1. Rice 2.Jowar (UI) 3.Maize (Village Insurance Unit) 4.Greengram 5.Blackgram 6.Bengalgram 7.Groundnut
5	Prakasam	1.Rice ,2.Bengal Gram(Village Insurance Unit), 3.Black gram,4. Red Chilly 5.Green gram, 6.GroundNut, 7.Jowar(UI), 8.Maize, 9.Sun flower
6	Ananthapuramu	1.Rice 2.Jowar(UI) 3. Bengalgram 4.Groundnut 5. Sunflower
7	Kurnool	1.Rice 2.Jowar(UI) 3.Bengalgram ( Village Insurance Unit) 4.Groundnut 5.Sunflower 6.Onion

Table 5.7 Crops notified under Pradhan Mantri Fasal Bima Yojana during Rabi 2016 - Cluster-II

Sl. No.	District	Crops Notified
1	Srikakulam	1. Rice 2. Blackgram 3. Greengram 4. Groundnut 5.Red Chilly 6. Onion
2	West Godavari	1. Rice (Village Insurance Unit)2.Maize 3.Greengram 4.Blackgram 5. Red Chilly

Sl. No.	District	Crops Notified
3	Krishna	1. Rice (Village Insurance Unit) 2.Maize 3.Greengram 4.Blackgram
4	SPSR Nellore	Rice(Village Insurance Unit),2. Black gram, 3.Red Chilly 4. Green Gram, 5.Groundnut
5	YSR Kadapa	Rice 2.Jowar (UI) 3. Bengalgram (Village Insurance Unit) 4. Groundnut 5.Sunflower 6. Onion
6	Chittoor	1.Rice(Village Insurance Unit) 2.Groundnut 3.Red Chilly

## Weather Based Crop Insurance Scheme (WBCIS)

### Kharif - 2016:

Under Weather Based Crop Insurance Scheme, Groundnut crop is covered in 4 Districts of Rayalaseema region. Cotton, Redchilly, Oil palm, Sweet lime, Tomato crops are having insurance coverage facility in selected Districts. The structure of farmer's premium under WBCIS will be at par with the proposed PMFBY i.e., 2 % for Kharif crops & 1.5 for Rabi Crops. (Horticulture/Comml. Crops - farmers share is upto 5% only). As the proposed crops under WBCIS are limited in the selected districts, one cluster is formed under this scheme. Final claim settlement of Kharif 2016 is under process and it is expected to be completed by the end of December 2016 for Groundnut crop.

### Rabi 2016-17:

- Under Weather Based Crop Insurance Scheme Mango, Banana, Cashewnut, Acid lime and Tomato crops are covered in insurance coverage facility in selected districts.
- As the proposed crops under WBCIS are limited in the selected districts, one cluster is formed under this scheme.

Season wise, district wise crops notified under W.B.C.I.S. are shown in Table 5.8

Table 5.8 Notified crops under W.B.C.I.S

Season	Crops	Districts
Kharif, 2016	Groundnut	Kurnool, Anantapur, Kadapa and Chittoor
	Cotton	Guntur and Prakasam.
	Redchilly	Guntur
	Oil Palm	West Godavari
	Sweet Lime	Kadapa
	Tomato	Chittoor , Kurnool, Prakasam
Rabi, 2016-17	Mango	Srikakulam, Vizianagaram, Vishakapatnam, East Godavari, West Godavari, Krishna, Prakasam, Kadapa, Kurnool, Chittoor
	Banana	Srikakulam, Vizianagaram, East Godavari, Kadapa, Kurnool, Guntur, Ananthapuramu
	Cashewnut	Srikakulam, Vizianagaram
Rabi, 2016-17	Acid Lime	Nellore
	Tomato	YSR Kadapa, Kurnool, Chittoor, Ananthapuramu

### Unified Package Insurance Scheme (UPIS) (Pilot scheme)

Apart from PMFBY & WBCIS, GOI has also announced “Unified Package Insurance Scheme (UPIS) on pilot basis during 2016-17.

- Ananthapuramu district is selected to implement UPIS during 2016-17 on pilot basis.
- The pilot scheme includes seven sections viz., 1. Crop Insurance (PMFBY/WBCIS), 2. Personal Accident Insurance (PMSBY), 3. Life Insurance (PMJJBY) 4. Building & Contents Insurance (fire and allied perils), 5. Agriculture Pump Sets Insurance (Upto 10 HP), 6. Student Safety Insurance, 7. Agriculture Tractor Insurance
- Out of these seven sections Crop Insurance (PMFBY / WBCIS) is compulsory. However, farmer can choose at least two sections from remaining six to avail applicable premium subsidy under PMFBY/WBCIS.

### Enrollment of farmers

- Around 14.60 lakh Loanee and 68,000 of Non-Loanee farmers were enrolled under PMFBY & WBCIS during Kharif, 2016 season.

- RABI, 2016-17- action plan for enrollment of non loanee/tenant farmers prepared in co-ordination with P.D.(DRDA) SERP
- Wide Publicity is being given through All India Radio, T.V.Channels (scrolling), News Papers, Paadipantalu journals, Advertisements (Hoardings) on APSTRTC Busses etc under PMFBY, WBCIS during Rabi, 2016-17.
- Certificates of cultivation are being issued by MAO to the Non-loanee farmers who are not having LEC cards for increasing the Non-Loanee enrollment.
- Utilizing the service of SHGs to take up the Non-Loanee/Tenant farmers enrollment by authorizing the SERP as Service Provider.
- Village level meetings are being conducted with PRI representatives, VO members, farmers by the trained SHG Woman & MPEO and visit door to door of the farmers to sensitize them on the scheme benefits and also identify the Non-loanee/Tenant farmers.
- All the Insurance Companies (AIC, ICICI, Bajaj) are advising to coordinate the SHG Women/ MPEOs / Officials and provide the material required.

Crop Insurance Claim details under different schemes from 2005-06 to 2015-16 are given in Annexure – 5.16.

### Agricultural Credit

The Annual Credit Plan for the year 2016-17 was Rs.83,003 cr. towards Agriculture Credit. Rs.43125.44 cr. (51.96 %) was disbursed up to Sept. 2016 under Agriculture Credit. An amount of Rs.34001.30 crores (56.67%) was disbursed under crop loans (short term loans) against the target of Rs.59999.95 crores and an amount of Rs.9124.14 crores (39.66%) was disbursed against the target of Rs.23003.44 crores under Agriculture Term Loans including allied activities. The disbursements upto September 2016 under agriculture are finalized by the State Level Bankers Committee (SLBC). Details about Agricultural Credit disbursement during 2016-17 (upto 30-09-2016) are given in Annexure 5.17.

The Annual Credit Plan 2015-16 for the State was Rs.65272 crore towards Agriculture Credit Rs.75448 crore (116%) was disbursed under Agricultural credit. An amount of Rs.57085 crore (119%) was disbursed under crop loans as against the target of Rs.48067 crore and an amount of

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Rs.18363 (107%) crore disbursed as against the target of Rs.17205 crore under Agriculture Term Loans including Allied activities.

### Credit to Land Licensed Cultivators (Tenant farmers):

The State Government has taken up a major initiative to facilitate financing to the land licensed cultivators (tenant farmers) through passing an act named the “Andhra Pradesh land licensed cultivators Act No 18 of 2011” to provide loan and other benefits eligibility cards to land licensed cultivators (tenant farmers).

During 2015-16, Loan Eligibility Cards (LECs) were issued to 5,00,275 (Fresh & Renewal) Land licensed cultivators by the Revenue department. An amount of Rs.243.41 crores was issued under crop loans to 1,00,431 LEC holders. During 2016-17, the Revenue department has issued Loan Eligibility Cards (LECs) to 5,90,708 (Fresh: 1,80,847 and Renewal: 4,09,861) Land Licensed cultivators (Tenant farmers) in the state. An amount of Rs.182.12 crores was given to 71,940 LEC holders. Details are given in Annexure 5.18.

### Issue of “Certificate of cultivation” to tenant farmers:

- The SLBC sub-committee on “Tenant Farmers & suicides” has resolved that the banks can extend the finance to “Certificate of Cultivator” (tenant farmers) upto Rs.1.00 lakh on hypothecation of crop and without insisting on collateral security as per the existing norms, basing on the certificate of cultivator details provided by the Agriculture department.
- The certificate of cultivators will facilitate more number of tenant farmers in getting bank loans. The certificate of cultivator’s details will be issued by the Agriculture Department.
- The Sub Committee members, NABARD, SLBC and major banks have discussed the modalities for issue of Certificate of Cultivators” on 13.6.2016 and finalised the modalities for issue of Certificate of Cultivators.
- So far 38,401 Certificates were issued to the tenant farmers and loaning started. Till date, an amount of Rs 6.26 Crores was disbursed to 1846 no. of farmers.
- The Department has also initiated necessary steps to maintain the online data base of the Tenant farmers

issued with Certificate of Cultivators on AP AGRISNET portal <http://www.apagrisnet.gov.in/> for easy access to the bankers.

### Vaddileni Runalu and Pavala Vaddi Scheme on Crop Loans

To mitigate the financial burden of the farmers, the Government has announced Rythu Sri (vaddileni panta runalu/pavala vaddi) scheme on crop loans disbursed. The Government has announced Interest free crop loans to all the farmers up to Rs.1.00 lakh and pavala vaddi for crop loans from Rs.1.00 lakh to Rs.3.00 lakhs if repaid in time (maximum period of one year).

During 2015-16, an amount of Rs.31.10 Crores was settled under Vaddileni Runalu and Rs.0.87 crores was settled under Pavala Vaddi. During 2016-17, an amount of Rs.172 cr has been allocated against which Rs.119.23 crores have been settled to 8,67,082 farmer’s accounts under Vaddi leni Runalu and Rs.5.00 Cr was allocated against which Rs.3.16 Cr. has been settled to 44,598 farmers accounts under Pavala Vaddi (as on October 2016), and the settlement of claims is under progress.

### Rythu Sadhikara Samstha

Agricultural Debt Redemption Scheme to farmers:

Under this scheme, redemption amount of Rs.7565 crores has been released in all the districts towards 1st installment ADRS and the number of accounts redeemed are 54.98 lakh accounts. Out of this, an amount of Rs.4456 Cr has been adjusted to 23.46 lakh accounts towards One Time Settlement.

### II Instalment

Runa Upasamana Arhatha Patram given to each family of beneficiaries which contain name of the farmer, account number, amount redeemed and balance amount to be redeemed. They are printed farmer wise on a tamper proof paper with good security features and cannot be duplicated or copied. Amount as indicated by banks through NIC portal is analysed and amount is being released on the same day from Rythu Sadhikara Samstha to Nodal banks. Banks are advised to credit the amount to accounts of farmers on the same day.

Interest is calculated @ 10 % on II Instalment redemption amount for the period from 01.04.2015 to 31.03.2016 and paid along with II Instalment amount. An amount of Rs.3303 Cr is to be released to 36.39 lakh accounts towards II installment including 10% Interest. The process of releasing of II installment amount to farmers' accounts is under progress. As on 09.11.2016, an amount of Rs.2977 Cr has already been released and adjusted to 27.83 lakh accounts of the beneficiary farmers online towards II installment along with 10% interest. Details of debt redemption data is given in Annexure 5.19.

### Horticulture Debt Redemption

Under this scheme, horticulture crop loans are redeemed @ Rs.10,000/- per acre up to maximum of Rs.50,000 covering 5 acres per family, with in the overall ceiling of Rs.1.50 lakhs which is applicable in the agricultural crop loans, subject to the limit of outstanding loan balance as on 31.12.2013. An amount of Rs 384.47 crores has been released and 2.22 lakh farmer accounts are redeemed.

### Girijan Cooperative Corporation

An amount of Rs 1.88 Cr has been released to GCC towards redemption of 2771 loan accounts of Tribal Farmers.

### Grievances Processing and Releases

After the issue of certificates and release of II instalment amounts under ADRS, several grievances are received from the farmers in the offices of Rythu Sadhikara Samstha. All the grievances are processed and necessary corrections are being done in NIC Portal. As on 06-03-2017, an amount of Rs 58.86 Cr has been released to 27879 loan accounts towards redemption amount under Phase V, VI,VII&VIII Grievances processing.

### Important initiatives:

#### Rashtriya Krishi Vikasa Yojana – A GoI Initiative

Rashtriya Krishi Vikas Yojana (RKVY) is one of the flagship programme of Govt. of India with Central and State sharing 60:40. The scheme is being implemented by departments of Agriculture and Allied sectors. The State

Level Sanction Committee (SLSC) has sanctioned projects worth of Rs.416.02 crores during 2016-17, of which Rs.158.12 crores has been sanctioned to Agriculture Sector.

The state government is also implementing several initiatives as follows:

### State Initiatives:

#### 1. Organic Farming/Natural Farming

- The Programme is in implementation in 131 clusters @ 10/11 clusters per district.
- In each cluster 300 farmers are identified to adopt exclusively organic/natural farming. In Kharif 2016, 33422 farmers have adopted Organic/Natural farming.
- In each cluster 1MPEO, 1CA, 2CRPs & 30 Master farmers will act as a team to promote natural farming.
- 231 Farmer experts who are the best practicing farmers work for 18 - 21 days in each round and train farmers on need based inputs i.e.,Preparation of botanical extracts, Ghana/Drava,Jeevamrutham etc. & promote NADEPs, SRI cultivation, RFSA methods etc.
- To meet the immediate requirement of farmers, the 300 farmers in the cluster are provided assistance as follows.
- Establishment of NPM shops on 50% subsidy @ Rs.50,000/- unit
- Procurement of Cows on 50% subsidy limited to Rs.10000/-unit.
- Establishment of Custom Hiring Centers (CHCs)on 50% subsidy @ Rs.2 lakh/unit
- New mode of extension with the help of Digital Green Foundation for production of Videos on botanical extracts, soil fertility management, success stories etc., and disseminate in villages with the help of Pico Projectors.
- Institution Building by organizing farmers into Rythu Mitra Groups (RMGs), Village Level Federations and Cluster Level Federations to bring sustainable improvements in the quality of life of farmers in 131 Organic Clusters of A.P through OrvakalMandalPodupu Lakshmi Ikya Sangham (OMPLIS), Orvakal(V&M), Kurnool District.

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- The Village farmers' federation (VFF) will federate at cluster level into a Farmer Producer Organization (F.P.O) representing 1500-2000 farmers.

## 2. National Food Security Mission

The National Food Security Mission is under implementation in the State. Maize and Commercial Crops (Cotton, Jute and Sugarcane) is part of NFSM from 2014-15. 5 districts are identified for implementation of NFSM Rice, 7 districts for Coarse cereals and all the districts for pulses and certain districts are identified for commercial crops during 2016-17.

### i. NFSM – Rice

#### a) Direct Seeding/Drum Seeding/MSRI:

Promoting Direct Seeding/drum seeding/MSRI for cost reduction and timely sowing. It is targeted to cover 20% of the total paddy area i.e. 5,00,000 ha during 2015-16 and covered in an area of 4,21,892 ha. During this year, the targeted area for direct seeding in Kharif is 353175 ha and covering in an area of 292975 ha and a target of 176801 ha under direct seeding has to be covered during Rabi 2016-17.

#### b) New High Yielding Varieties:

- Adoption of flood and lodging tolerant rice varieties (IRRI) like Swarna Sub-I, Samba Mahsuri Sub-I and CR 1009 Sub-I
- Drought resistant varieties like Sahbagi Dhan and IR 64 drt.
- Saline resistant variety BINA 11.
- Popularization of recently released varieties like NLR 34449, MTU 1075, MTU 1061, BPT 2231, NLR 3041 and pre released cultures like MTU 1121 (Resistant to BPH & Blast).

### ii. NFSM – Pulses

#### a) New High Yielding Varieties

- Popularization recently released YMV resistant variety PU 31 & LBG 787 in Black gram
- Introduction & popularization of ICRISAT Red gram varieties ICPL-99050, ICP-7035, ICPL-14002, ICPL-161, ICPL-14001
- Popularization of Jaki-9218 in Bengalgram

#### b) Summer Pulses: Encouraging summer pulse by

providing supply of water saving devices on subsidy like oil engines, water carrying pipes & sprinklers.

#### c) Redgram: Encouraging Redgram on Rice and Commercial Crop field bunds and covered an area of 88905 ha during Kharif-2016.

#### d) Promotion of Redgram as inter crop in Ground nut, cotton, millets etc.

### iii. NFSM – Coarse Cereals

To increase the area, production & consumption of millets a “Comprehensive Revival of Millets Programme” has been initiated during 2015-16. The scheme will be continued for 5 years to achieve the targeted goals on sustainable manner.

#### a) New High Yielding Varieties: Popularization of recently released high yielding varieties

#### b) Double / Poly cropping system: Expansion of area under poly cropping system under rainfed with Pulses/Oilseeds and also Rice fallow during Rabi.

#### c) Organic farming: Encouraging organic farming in Tribal and High Altitude mandals.

#### d) Post harvesting & processing for value addition.

### iv. NFSM – Commercial Crops

#### • Front line demonstrations are being conducted for popularization of improved agronomic practices.

#### • Seed Village Programme in Mesta to ensure availability of quality seed.

#### • Frontline demonstrations on production technologies ensure location specific improved technology on nutrient use efficiency, weed management, efficient use of water along with the new varieties.

#### • Discouraged cotton area in light and red soils due to low productivity and high input cost. i.e., cotton area is decreased from 6.66 lakh ha (2015-16) to 4.51 lakh ha.

#### • Pink Boll worm incidence is noticed in Bt Cotton in Andhra Pradesh during 2015-16 in all major cotton growing districts. During 2016-17, for effective management of pink boll worm, 6.68 Lakh Pheromone Traps with Lures & Sticky liners were supplied to Cotton growing farmers.



- Demonstrations on Inter-cropping and single bud/ bud-chip technology in sugarcane to increase the income of the Farmer with lower input cost.

v. Dry Spell or Drought Mitigation:

Government of Andhra Pradesh had taken steps to mitigate crop yield losses occurred due to continuous drought or prolonged dry spells during the past few years. The State government has procured 13,334 Rain guns, and equal number of Sprinklers, 3,33,350 water carrying pipes & 7641 oil engines with an outlay amount of Rs.160.54 Crores. For this, mapping of district wise drought prone mandals based on past 12 years historic data & Geo tagging of water resources in drought prone mandals was done. An extent of 1,87,781 Ha was given protective irrigation in the first spell in the districts of Rayalaseema, Prakasam, Guntur and Krishna districts and an extent of 57,389 Ha. during the second phase is shown Table 5. During 3<sup>rd</sup> phase, protective irrigation with rainguns is being given in Ananthapuramu district in an extent of 9,966 Ha. till November, 2016.

## Extension Reforms - Agriculture Technology Management Agency

Under the scheme “Support to State Extension Programmes for Extension Reforms” (ATMA), the entire state of Andhra Pradesh is covered with 60:40 central and state share. The Extension Reforms (ATMA) component has been included in the National Mission on Agricultural & Extension Technology (NMAET) as Sub Mission on Agricultural Extension (SMAE).

### Objectives of the programme:

- To develop an efficient, effective, demand driven, research integrated and financially sustainable public extension system
- To revitalize the Agricultural technology Generation Assessment refinement and Dissemination Systems
- Reforming Public Sector Extension. Promoting private sector to effectively complement, supplement and wherever possible to substitute public extension.
- Mainstreaming Gender Concerns in Extension.

- Capacity Building/ Skill up-gradation of farmers and extension functionaries.
- Increase the Quality and Type of Technologies being disseminated by the Extension System.
- Strengthen Research-Extension-Farmer (R-E-F) Linkages

ATMA is a district level autonomous institution having membership of all key stakeholders involved in agricultural activities. It has the flexibility to receive funds directly. It has the key responsibility of disseminating all technology activities at the district level, having linkages with all the line departments, research organizations, non-governmental organizations and agencies associated and farmer organizations. Research and extension units within the district, such as KVKs, Department of Agriculture, Horticulture, Animal Husbandry, Fisheries, Sericulture, Marketing, etc. are its constituent members.

ATMA is supported by a Governing Board (GB) and a Management Committee (MC). Block level Farm Information and Advisory Centers (FIACs) have been created which are operated by a Block Technology Team (BTT) of technical advisors and a Farmer Advisory Committee (FAC), a group exclusively of farmers. Commodity oriented Farmer Interest Groups (FIGs) are being promoted at block / village level to make the technology generation / dissemination farmer driven and farmer accountable. In order to provide needed HRD support in innovative areas of extension delivery, a State Agricultural Management and Extension Training Institute (SAMETI) has also been established in the project states.

### Strategic Research and Extension Plan (SREP):

One of the first tasks of ATMA is to facilitate preparation of Strategic Research and Extension Plan (SREP) of the district. The SREP is prepared through participatory methodologies such as Participatory Rural Appraisal (PRA) involving all the stakeholders and farmers. The SREP contains detailed analysis of all the information on existing farming systems in the district and research – extension gaps required to be filled-up. It also prioritizes the research – extension strategies within the district. It becomes the basis for development of work plans at blocks/ district level.

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All the ATMA districts have developed their respective Strategic Research and Extension Plans. As the validity of SREPs is five years, the State has already initiated the revisiting of the SREPs.

### State Extension Work Plan (SEWP):

Based on the research-extension strategies given in the SREPs, the Block / district level plans for the year 2016-17 were developed by all the (13) ATMA districts as per the revised ATMA scheme guidelines and cost norms. The consolidated State Extension Work Plan for the year 2016-17 was developed at state level with an outlay of Rs.3591.61 Lakhs. The District Action Plans developed under the scheme should be processed consistent with Article 243 ZD of the Constitution.

GOI has given administrative approval for Rs.3591.61 lakhs for the year 2016-17 and released an amount of Rs 560.86 lakhs as Central Share (State has also released an amount of Rs.373.91 lakhs towards Matching State Share) as 1st spell duly revalidating the unspent balance amount of Rs 1553.03 lakhs for implementation of the activities. Accordingly the districts are organizing the need based activities like farmer trainings, demos, exposure visits, Kisan melas, field days, farmer scientist interaction etc.

### Major activities during 2016-17:

- Fortnightly Agricultural Market Committee Level workshops with Block level Farmers Advisory Committee (BFAC) members, progressive farmers and Scientists on 1st & 16th of every month on crop condition and emerging issues.
- Demos organized on farm mechanization and Silage making.
- Direct seeding of paddy through drum seeder/SRI/SMSRI/ Machine Planting.
- Weed management in Direct sown/drill sown paddy.
- Demos on soil test based fertilizer recommendations.
- Low cost technology in Sugarcane (Frontline Demos) at RARS, Anakapalli.
- Demos on Poly cropping under innovative activities.
- IPM in Cotton for pink boll worm management.
- Promotion of Banana skirting, Short duration varieties

of Sweet corn, Pulses and ID crops cultivation, Millets cultivation etc.

- Red gram yield improvement demonstrations.
- Introducing new high yielding varieties i.e., Karizama, Raja, Asha (ICRISAT), Arjun, Mahalaxmi, Sidharda, Pinky (local variety matchalakandi) etc.
- Promotion of Drip Irrigation in Red gram and inter cropping in Red gram with Cotton.
- Modified row system in Red gram, promotion of transplanted Red gram.
- Application of Zinc, Gypsum and Boron in paddy & Ground nut.
- Wilt Management in Bengal gram by Trichoderma viridi.
- Avoid indiscriminate use of chemical fertilizers.
- Crop diversification from Tobacco to Pulses/Millets.
- Trainings organized on Pulses development, encouraging hybrid Red gram, Redgram as Inter – crop in BT Cotton for avoiding pink boll worm.
- Demos on Ragi with varieties PPR-1012, PPR-2885 and Vakula.

Component wise targets and achievements during the year 2015-16 and 2016-17 (upto October,2016) are given in Annexure 5.20.

## Cooperation

Cooperatives have traditionally been promoted and organized in a democratic structural frame work for achieving social and economic betterment of the people. Different types of cooperatives are organized essentially to provide agricultural credit to member-farmers so as to enhance employment to its members and for alleviating rural poverty. Co-operative movement has completed over 100 years of service to farmers and other weaker sections of the society.

The department is mainly concerned with the administration of Cooperative Laws. The department has been pursuing a liberal policy towards Cooperatives to enable them function as autonomous and independent bodies. Cooperative week is celebrated every year starting from 14<sup>th</sup> November to promote better understanding of the principles and

philosophy of cooperation duly highlighting achievements of various sectors of the Co-operative movement. The website initiated GIS mapping of all societies with layered information for dynamic data access and spatial decision support systems. All the District Officers, convergence departments like APCOB, MARKFED, NABARD, NCDC etc. shall be given credentials to upload and access the website.

### Mee Sahakara Seva

Mee Sahakara Seva, implementation of e- Governance in Cooperation department, is a World Bank project pending with Department of Electronics and Information Technology (Deity), Government of India with an estimated cost of Rs.617.16 Lakhs and approval is expected from Deity. The project provides for IT Infrastructure, system software for data centre, disaster recovery and provision of IT infrastructure for department offices at different levels and development of integrated software application for providing the services electronically.

### E – PACS (Core Banking Solution)

E-PACS is a project for computerization of PACSs in selected 3 Districts with the assistance from Good Governance & Best Practices Projects under Digital India through Department of Electronics and Information Technology (Deity), Government of India, New Delhi. The Project Cost is Rs.33.66 Lakhs and approval from Deity is expected shortly. The project is proposed to be implemented in 600 Primary Agriculture Co-operative Societies at 3 Districts viz., West Godavari, Guntur and Prakasam Districts.

### Computerization of PACS:

APCOB is to initiate the process for computerization of all the 2050 PACS under 13 DCCBs in the state. The main project objective is to develop a centralized PACS software solution that will significantly improve the PACS administration and operations in the State. Pilot in some selected PACS has been taken up by APCOB.

### Rural credit co-operatives

The Rural credit co-operative structure is a three-tier structure currently with the Andhra Pradesh State Co-

operative Bank at the APEX level with 13 District Co-operative Central banks (DCCBs) at the district level and with 389 branches located in district headquarters and small towns and semi urban areas and 2050 Primary Agricultural Credit Co-operatives at the Village Level. Kisan Credit Cards have been issued to 15.52 lakh farmer members of the PACS. The total financial assistance received so far under revival package for Rural Cooperative Credit Structure is Rs.935.00 crore, including the State Government share of Rs.146.31 crore. The PACS are also actively participating in distribution of Agricultural inputs and also doing other Non-Credit business. The PACS are to provide more services to their members and generate income for themselves. NABARD is providing assistance to develop PACS as Multi Service Centres. So far 224 PACS have been converted into Multi Service Centres by utilizing the assistance from NABARD.

### Loaning Programme 2016-17

A.P. State Co-operative Bank provided Rs.4844.76 crore (Kharif-Rs.4527.46 crore and Rabi-Rs.317.26 crore) as production credit to farmers through the Primaries and the District Co-operative Central Banks during the year 2016-17 (upto December,2016). Of this total amount, loans were distributed under Seasonal Agricultural Operations (SAO).

### Long Term Loans

APCOB has refinanced an amount of Rs.534.92 crore to the DCC Banks under Long Term Agricultural Credit as against the loaning programme of Rs.637.00 crore allotted to all the 13 DCCBs during the year 2016-17.

### Integrated Cooperative Development Projects

The ICD Project was implemented earlier in 11 districts of the State (except prakasam and West Godavari) with an amount of Rs.15119.31 lakhs.

In Phase-I, the ICD Projects under phase-I in (2) districts i.e Prakasam and West Godavari are completed by 31.12.2016 with an outlay of Rs.1854.52 lakhs and Rs.2721.31 lakhs respectively.

After completion of 8 years from the date of closure of the earlier ICD Project, the District will be eligible

## AGRICULTURE AND ALLIED ACTIVITIES

for implementation of the project under phase-II. For implementation of ICDP under phase-II, an amount of Rs.8.16 crores has been provided in the Budget 2016-17 in anticipation of the approval from the NCDC. The detailed project reports of the (3) districts i.e Kurnool, East Godavari and Chittoor districts were approved by the SLCC for an amount of Rs.186.60 crores, Rs.201.61 crores and Rs.242.45 crores respectively and submitted for onward recommendation to NCDC, New Delhi.

### Marketing Co-operative Societies

There are 13 District Co-operative Marketing Societies (DCMSs), which undertake procurement of agricultural produce to enable farmers get minimum administered prices for their produce. The DCMSs procure seed on behalf of AP Seeds Development Corporation and also undertake procurement activities on behalf of MARKFED in addition to carrying on local business activities like sale of Fertilisers, Seeds, Consumable articles, Stationary items etc., to various departments located in the districts. The performance status of DCMSs is given in Table 5.9.

Table 5.9 : Performance of District Cooperative Marketing Societies

(Rs.in Lakh)

	2015-16	2016-17 (upto Nov,2016)
Share Capital Contribution	382.53	404.02
Business Turn over	35955.14	23978.63
Profit	376.59	297.97
Loss	52.47	388.98
Accumulated losses	121.14	27.30
Assets	9697.59	9335.98
Liabilities	10101.01	9350.79

Source: Cooperative Department

### A.P. MARKFED

MARKFED is an apex organization for the Co-operative Marketing Societies (CMS) in the state for supplying agricultural inputs, cattle feed, fertilizers, gypsum, provisions and other requirements to private run institutions and government hostels. Subsequent to introduction of

single window system in the state in 1987, MARKFED offers its services through PACS at the primary level and DCMS in the district level. It undertakes procurement of other commodities under commercial account every year depending upon the market situation.

### AP State Co-operative Union

APSCU is an Apex Cooperative institution in the field of Cooperative Education and Training. There are four Co-operative Training Centres (CTCs) located at Vijayawada, Rajahmundry, Ananthapur district and Y.S.R. Kadapa district in the State working under APSCU offering Diploma in Co-operative Management and Computer Applications. The APSC Union is also publishing a Cooperative monthly magazine titled as "Sahakara Samacharam" for awareness building and propagation of Cooperative Principles and Cooperative Movement in the State.

### Andhra Pradesh State Cooperative Rural Irrigation Corporation Ltd.

The Andhra Pradesh State Cooperative Rural Irrigation Corporation Ltd., undertakes drilling of in-well bores, surface bores, lift Irrigation schemes and construction of check dams etc. in Agricultural sector. The State Horticulture Mission / Horticulture department has identified the APSCRIC Ltd. as the "Nodal Agency" for construction of Farm ponds in Horticulture fields.

### Rural electricity supply cooperative societies

The key objective of the Rural electric supply cooperative societies is to purchase electricity in bulk from the nearest DISCOM and distribute it to domestic, industrial and agricultural consumers in their area of operation. Three RESCOs are working under the administrative control of Cooperative Department viz., RESCOs at Kuppam (Chittoor district), Anakapalle RECS Ltd, Kasimkota (Visakhapatnam district) and RECS Cheepurupalli (Vizianagaram district).

### Cooperative Tribunal, Vijayawada

There were two Cooperative Tribunals in the State located at Visakhapatnam and Vijayawada .Section 76 of the

Andhra Pradesh cooperative Societies act, 1964 provides two different forums for appeal on the orders passed by the officers under the provisions of the APCs Act, 1964. Tribunals were constituted to hear the appeals against orders, decisions, awards etc passed under APCS Act, 1964 and they have original jurisdiction over the disputes filed under AP MACs Act, 1995. As per the orders of the Government, the Cooperative Tribunal, Visakhapatnam was closed by 30.09.2016 and the cases were transferred to the Cooperative Tribunal, Vijayawada. 422 cases pending at the end of 31.12.2016.

### Consumer Cooperative Stores

Consumer Cooperatives have been assigned an important role in distribution of good quality consumer articles at competitive prices to control price line in both urban and rural areas. About 221 Consumer Cooperative Societies are functioning in the State. Consumer Cooperative Societies are also undertaking distribution of textbooks, notebooks, cloth, crackers and supply of various stationary items and provisions to Government hostels etc.

### Labour Contract Cooperative Societies

Labour contract Cooperative. Societies function in a 3 tier structure i.e., Primary, District and State Level-1923 LCCS with 59072 members in the state, now all the District Level Federation and State Level Federation are under liquidation.

### Cooperative Joint Farming Societies

Joint Farming Cooperatives also work in a three-tier structure i.e., Primary Level- 1,452 CJFS and membership of 1,35,334; District Level-13 District Federations of Cooperative Joint Farming Societies and State Level-Andhra Pradesh State Cooperative Joint Farming Societies Federation Ltd.

### Audit

There is a separate audit wing for audit in cooperative department. During 2015-16, 19063 cooperative societies were programmed for audit, of which 5778 are under aided category and remaining 13285 are under unaided category.

## Horticulture

The agrarian state of Andhra Pradesh is heading towards a value addition platform from the conventional production approach. 'Horticulture' sector has been recognized as an essential component for food and nutritional security in the State. Efforts are being made to make Andhra Pradesh maintain its supremacy in the production of Oilpalm, Papaya, Citrus and Chillies, Mango and Tomato. Micro irrigation through drip and sprinkler mechanisms have proved effective both in terms of cost and output. The government is implementing strategies to make Rayalaseema as a Horticulture hub. It is targeted to cover one million farmers in next three years under Farmer Producer Organisations for Agriculture & Allied sectors in order to establish forward and backward linkages and to promote the products of Andhra Pradesh to global standards. It contributes about 8.18% of the State GVA and is moving towards value enhancement in addition to focus on production. The Government is keen to encourage horticulture in a big way and it is expected that value addition from this sub-sector will soon cross the agriculture share

Wide range of agro-climatic conditions of Andhra Pradesh are conducive for growing a large variety of Horticultural crops, including, root and tuber crops, ornamental crops, plantation crops like coconut, cashew and cocoa etc. During the year 2016-17, the Government has set a target of 20% growth in output and to achieve this, there is need for new initiatives, new interventions and implementations with the support and coordination of farmers and entrepreneurs.

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*Rain gun technology for drought mitigation in drought prone districts*

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*Area covered under micro irrigation: 6.93 lakh ha.*

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*AP stood 1<sup>st</sup> rank in Oilpalm Cultivation*

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*Promotion of Horticulture Activities*

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## AGRICULTURE AND ALLIED ACTIVITIES

The strategy of convergence with MGNREGS for better utilization of labour, resources and empowerment of backward communities, is aligned with the horticulture development in the state. Horticulture has emerged as an indispensable part of Agriculture and is providing opportunities for sustaining large number of agro-industries which have created employment avenues to semi-skilled and unskilled labour force.

Promoting Post-Harvest Management practices through establishment of Pack houses, Cold storages, Ripening Chambers and Processing units to reduce Post-Harvest losses are fast emerging as the key instruments targeting horticulture exports.

### Growth of Horticulture

Horticulture crops were grown in an area of 15.28 lakh hectares and production was 198.45 lakh tonnes during the year 2015-16 as per final estimates. Details about the area and production of horticulture crops during 2015-16 and 2016-17 (A) are given in Annexure 5.21. The details about the principal horticultural crops area and production in 2016-17 (1st Advance Estimates) are given in Table 5.10 below.

Table 5.10: Horticultural Crops – Area and Production during 2016-17(A)

Crop Category	Area (lakh ha.)	Production (lakh MTs)
Fruits	5.76	106.63
Vegetables	2.28	55.69
Flowers	0.19	1.64
Plantation Crops	4.58	26.10
Spices	2.37	12.44
Medicinal & Aromatic Plants	0.01	0.005
Total	15.41	202.50

Source: Horticulture Department.

### Important Programmes

Several farmer oriented activities are being taken up to encourage adoption of modern technologies, evolving sustainable farming practices, provision of post-harvest infrastructure facilities and supplying knowledge inputs to the farming community.

Schemes are being implemented by the Department include: Pradhana Mantri Krishi Sinchai Yojana (PMKSY) APMIP, Mission for Integrated Development of Horticulture (MIDH), Rashtriya Krishi Vikas Yojana (RKVY), National Mission on Oilseeds and Oilpalm Program under Mini Mission-II (NMOOP) and Promotion of Horticulture Activities

### Pradhana Mantri Krishi Sinchai Yojana (PMKSY) APMIP

AP Micro Irrigation Project (APMIP) is a first comprehensive and unique project being implemented in a big way in Andhra Pradesh for enhancing crop productivity by improving water use efficiency through Micro-irrigation systems to benefit the farmers. It is an ongoing project and 6.93 lakh ha. has been covered under Micro irrigation in all the districts in the State, benefiting 6.25 lakh farmers.

The aim of the Project is to improve the economic conditions of the farmers by conserving water, bringing additional area into cultivation with the available water resources and also enhancing the crop productivity, quality, judicious usage of ground water, conserving ground water resources, saving in power consumption and saving in cost of cultivation.

In view of deficit Rainfall, Rain shadow regions, unpredictable rains and considerable depletion of ground water, drip irrigation is a viable option for farmers. To achieve the concept of “More crop per Drop”, Micro irrigation is being taken up particularly in the districts of Rayalaseema, which are most drought prone and backward areas.

From 2015-16 onwards, Micro Irrigation is being implemented under PMKSY with funding pattern of 60:40 between central and state Government. Government of India (GOI) allocated Rs.260.00 Crores for implementation of Micro Irrigation in an area of 1.50 lakh ha. during the year 2016-17. So far, an area of 52,094 ha. has been covered under the scheme under Micro Irrigation. Andhra Pradesh Ranks 2nd next to Gujarat in implementation of Micro Irrigation programme.

### Outcome of Micro Irrigation:

NABCONS Consultancy Services and Agriculture Finance Corporation (AFC) India Ltd., have conducted 3rd party

## AGRICULTURE AND ALLIED ACTIVITIES

verification and evaluation of Micro Irrigation system installed during 2012-13 to 2014-15. The impact of Micro Irrigation on Crop yield and Net Income per ha. and savings in water and savings in energy, as revealed by the reports are shown in Table.5.11, 5.12 and 5.13 respectively.

Table.5.11 Production on Impact of Micro Irrigation

Sl. No	Name of the crop	Crop yield Tons per Ha.		
		Before MI	After MI	% of increase
1	Mango	10	12	26
2	Sweet Orange	13	16	27
3	Acid lime	10	13	25
4	Guava	10	13	25
5	Banana	45	55	22
6	Papaya	72	87	21
7	Vegetables	22	27	22
8	Tomato	28	36	28
9	Sugar cane	64	82	29
10	Maize	9	11	22
11	Mulberry	30	37	23

Source: Horticulture Department

Table.5.12 Net income per ha on Impact of Micro Irrigation

Sl. No	Name of the crop	Net Income per Ha (Rupees lakhs)		
		Before MI	After MI	% of increase
1	Mango	0.49	0.73	50
2	Sweet Orange	1.88	2.37	27
3	Acid lime	1.80	2.25	25
4	Guava	2.00	2.50	25
5	Banana	2.81	4.00	42
6	Papaya	7.00	8.88	27
7	Vegetables	1.02	1.42	40
8	Tomato	1.41	1.97	39
9	Sugar cane	0.57	0.93	64
10	Maize	1.33	1.62	22
11	Mulberry	0.63	0.88	40

Source: Horticulture Department

Table.5.13 Savings in water and Energy on Impact of Micro Irrigation

Sl. No	Crop	Water Saved in (mm) per ha per season				Energy Saved (kwh) per ha			
		Flood Irrigation	Drip Irrigation	Net saving	% of saving	Flood Irrigation	Drip Irrigation	Net saving	% of saving
1	2	3	4	5	6	7	8	9	10
1	Sweet Orange	1136	530	606	53	1307	610	697	53
2	Sugarcane	1634	748	886	54	1881	861	1020	54
3	Pomegranate	1363	663	700	51	1569	763	806	51
4	Brinjal	891	408	483	54	1026	470	557	54
5	Papaya	2196	1060	1136	52	2528	1220	1307	52
6	Mango	1114	520	594	53	1283	599	684	53
7	Tomato	994	504	490	49	1145	580	564	49
8	Chilli	994	480	514	52	1145	553	592	52
9	Banana	2196	1087	1109	51	3033	1501	1532	51

Source: Horticulture Department

AGRICULTURE AND ALLIED ACTIVITIES

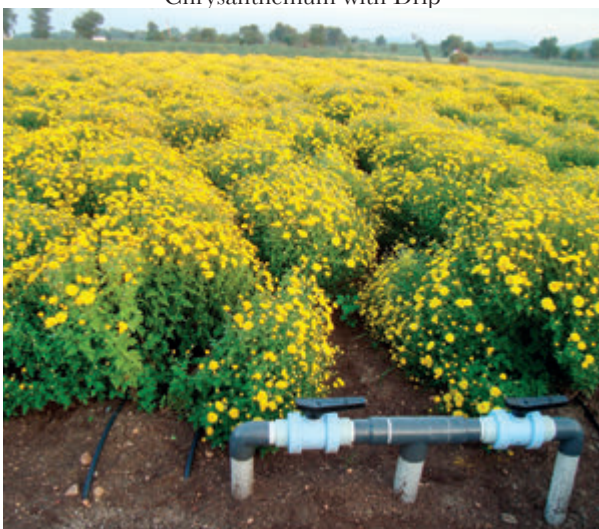
So far 1.51 lakh farmers have registered their application in Mee-Seva Centers covering an area of 1.82 lakh ha as against the target of 1.50 lakh ha. and the achievement is 0.52 lakh ha.

During the year 2016-17, Rain gun technology for drought mitigation was implemented in drought prone districts of Ananthapuramu, Chittoor, Kadapa, Kurnool, SPS.Nellore, Prakasam, Guntur and Krishna and provided protective irrigation in an area of 4.00 Lakh acres during Kharif 2016 for crops like groundnut, pulses etc. The same are being used for Redgram and Pulses during Rabi 2016-17.

Cabbage with Drip



Chrysanthemum with Drip



Bittergourd with Drip



Coconut with Drip



Rain guns



**Mission for Integrated Development of Horticulture (MIDH)**

Mission for Integrated Development of Horticulture (MIDH) is a Government of India scheme being implemented by subsuming six schemes on Horticulture development including NHM as per the revised cost norms and pattern of assistance. MIDH is being implemented with an outlay of Rs.106.72 crore with the GoI and GoAP share in the ratio of 60:40 basis during the year 2016-17.



The major components covered under MIDH are:

- a) Area expansion (Perennial and Non-Perennial crops),
- b) Rejuvenation of senile orchards,
- c) Protected Cultivation,
- d) Post Harvest Management,
- f) Creation of Water Resources (Farm Ponds),
- g) Farm Mechanisation and
- h) Capacity Building.

### State Horticulture Mission:

A Centrally Sponsored Scheme – the Horticulture Mission, is being implemented in the State by the State Horticulture Mission. The Mission was launched to promote holistic growth of horticulture sector through an area based regionally differentiated strategies. The focus of the programme is to provide comprehensive development of all the sub-sectors of horticulture so as to provide additional income to horticulture growers. This programme is under implementation in 9 districts (Srikakulam, West Godavari, Guntur, Prakasam, SPS Nellore, Chittoor, YSR, Ananathapuramu, and Kurnool) and two tribal areas of Rampachodavaram of East Godavari and Paderu of Visakhapatnam districts. Andhra Pradesh, with its high growth trajectory, a large population, significant dependence on agriculture and horticulture and an extensive coastline is likely to become a significant player in production and marketing of Horticultural produce.

### Production of Quality Plant Material

Quality plant material plays a vital role in sustainability of gardens especially perennial fruit crops. Small and model nurseries were encouraged to produce quality plant material by providing assistance for infrastructure under NHM to cater to the requirement of plant material for bringing additional areas with improved varieties and rejuvenation programmes.

Fifteen Horticulture farms were established producing around 10.00 lakhs of quality plant material. Nursery Act was introduced for regulation of supply of quality plant material to farmers.

### Post-Harvest Management

Horticulture crops are highly perishable and require special attention on harvesting, handling, packaging, storage and processing operations. The focus was on providing pre-harvest tools and development of post-harvest infrastructure facilities like pack houses, cold storages, refer vans, ripening chambers etc. During 2016-17 (up to October, 2016), assistance was provided for 8 cold storage units, 4 ripening chamber, 8 low cost ripening chambers and 336 pack houses. post-harvest management activities like reduction of losses and improvement of the quality of horticultural produce is important for enhancing value of the produce.

Several measures were taken up under MIDH to preserve the quality of various horticultural products and for primary handling, storage and transportation. Particularly, establishment of ripening chambers for Banana, which helped realize better price at the farm gate. Establishment of Cold storages with NHM subsidy is catering to agriculture produce as well as horticulture produce fetching better market price to the farmers. Pollution-free new technologies in Cashew processing like Steam boiling method, which increase the quality of the produce, were also encouraged.

Shadenet House



Poly House



## AGRICULTURE AND ALLIED ACTIVITIES

## Rashtriya Krishi Vikasa Yojana

Rashtriya Krishi Vikasa Yojana (RKVY) aims to increase public investment in infrastructure etc., and provide flexibility and autonomy in the process of planning and executing schemes in the horticulture sector. RKVY scheme in Andhra Pradesh is proposed to implement major activity in non-SHM districts viz., Krishna, East Godavari, Visakhapatnam and Vizianagaram while the projects under integrated vegetable production which are not covered in SHM are being implemented in all the districts.

Rastriya Krishi Vikas Yojana (RKVY) aims at achieving 4% annual growth in the agriculture sector by ensuring a holistic development of Agriculture and allied sectors. Under RKVY, in Horticulture, the activities that are being taken up are;

- Production and distribution of good quality plant material to meet the requirement for bringing new area under fruit plantation.
- Encouragement of structures like pandals and trellis for quality production in case of Gourds and Tomato.
- Encouragement of nurseries and cultivation of high cost intensive cultivation of summer vegetables in Shade net houses to overcome the High temperatures.
- Encouragement of post-harvest structures and implements to reduce post-harvest losses and promote new technologies to ensure continuous supply of Horticulture produce.
- Conservation of natural resources by adopting Good agricultural practices in production of horticultural crops.

During 2015-16, an amount of Rs.30.86 Crores was utilized for implementation of horticulture activities under RKVY and an amount of Rs.61.67 Crores was allocated during 2016-17.

Permanent Pandals



Trellies



## National Mission on Oil Seeds and Oilpalm Programme

Andhra Pradesh ranks 1st in cultivation of Oilpalm with 1.49 lakh Ha with 1.04 lakh farmers in 8 districts of the state and spreading over in 225 mandals. The average productivity of bearing plantations is 19.81 tons Fresh Fruit Bunches (FFB) per Ha., Out of 1.49 lakh Ha., the bearing area is 1.12 lakh Ha from which the production is 11.47 lakh MTs of FFB with 1.93 lakh MTs of COP during last year. West Godavari district has highest area under Oilpalm i.e., 78427 Ha.

13 Processing units were established by Oil Palm Companies with Capacity of 240 MT/Hr., which are working with Government under this programme. The companies have a buy-back arrangements for purchase of Fresh Fruit Bunches (FFB's) from farmers in the factory zones allotted them at the rate fixed by the Government.

During 2015-16, the approved outlay was Rs.57.70 Crores with 60:40 funding pattern between Central and State Governments. Under Oilpalm area expansion programme an area of 5284 Ha. has been covered with 41 16 beneficiaries and incurring an expenditure of Rs.30.62 Crores.

An amount of Rs.58.20 Crores has been allocated for the implementation of NMOOP Programme with GoI & GoAP share in the ration of 60:40 basis for the year 2016-17. An area of 6323 Ha was identified with 3458 beneficiaries upto 31st October 2016 and an area of 2407 Ha was covered so far and 1859 farmers benefited.

Oilpalm plantation with Intercrop



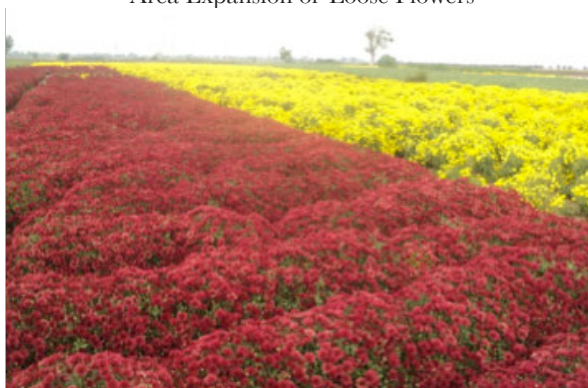
Area Expansion of Papaya



Oilpalm plantation with Drip



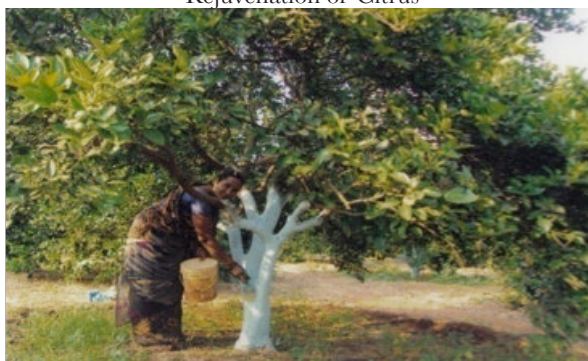
Area Expansion of Loose Flowers



### Promotion of Horticulture Activities (State Plan)

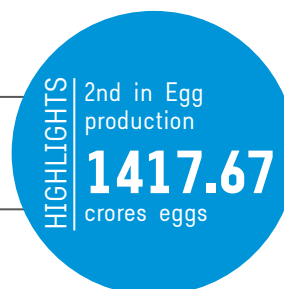
Under Primary Sector Mission lot of emphasis has been given to Horticulture sector as it has been identified as best growth engine for overall development of the primary sector. Under “State Development Plan”, an amount of Rs.100.48 Crores utilized during the year 2015-16 and an amount of Rs.100.00 Crores is allotted for the year 2016-17 for innovative schemes like Area Expansion (Cultivation of Cocoa in Coconut, Loose Flowers, T.C. Banana, Papaya, Pineapple, Pomegranate, Potato and Cashewnut), Canopy Management in Cashew, Protected Cultivation (Green houses, Shadenet houses), Creation of water resources (Farm Ponds), Integrated Pest Management (IPM) in Fruits & Vegetables, Post-Harvest Management (Pack Houses, Onion Storage Structures, Refer Vans, Ripening Chambers, Cold Storages, Silapauline Sheets, Chilli Dryers, Plastic Crates etc.,) and Human Resource Development.

Rejuvenation of Citrus



Creation of Farm Ponds





## Animal Husbandry

*4th in Meat production (5.66 lakh Metric Tons)*

*5th in Milk production (108.17 Lakh Metric Tons)*

*No. of Veterinary Institutions--3119*

The livestock sector has emerged as an alternative and dependable source of income generation even during the times of severe drought. This is the sector where the poor contribute to growth directly instead of getting benefit from growth generated elsewhere. Animals provide nutrient rich food products, draught power, dung as organic manure and domestic fuel, hides & skin, and are a regular source of cash income for rural households. They are a natural capital, which can be easily reproduced to act as a living bank with offspring as interest, and an insurance against income shocks of crop failure and natural calamities.

Livestock have been an integral component of India's agricultural and rural economy since time immemorial, supplying energy for crop production in terms of draught power and organic manure, and in turn deriving their own energy requirements from crop byproducts and residues. The progress in the sector results in balanced development of the rural economy particularly in reducing the poverty amongst the weaker sections. Livestock provides stability to family income especially in the arid and semi-arid regions of the State. Livestock are the best insurance against the vagaries of nature due to drought, famine and other natural calamities.

### Growth in livestock - inclusive and pro-poor

Most of the animal farming activities such as fodder collection, feeding, watering, healthcare, management, milking and household-level processing, value addition and marketing are performed by women. The growth in livestock sector is demand-driven, inclusive and pro-poor. The rate of return on investment from Livestock sector is comparatively

very high. Livestock sector apart from contributing to the state economy in general and to agricultural economy in particular, also provides employment generation opportunities, asset creation, coping mechanism against crop failure and social and financial security. Livestock is the main source of animal protein for the population. Demand for animal food products is responsive to income changes, and is expected to increase in future.

### Milk, Meat and Egg - the key growth drivers

The Animal Husbandry, from a humble beginning of backyard poultry, has grown into a dynamic industry. Milk and Meat production has also made a quantum leap with the production increasing substantially. Andhra Pradesh has some of the richest livestock resources in the country and is one of the most advanced states in Livestock sector. The State attained a prominent position in the country in Livestock Sector over the years because of its increasing livestock resources, gradual enlightenment of farmers and the dedicated and sustained efforts of the Government. The State Government identified Livestock Sector as the most promising sector and Milk, Meat and Egg are the key Growth Engines. Milk is the single largest commodity contributing highest economy to the State.

Effective veterinary and animal husbandry services are critical in achieving the significant production levels. Welfare schemes implemented by the Government for dairy, sheep and poultry units helped the rural masses enormously in bridging income gaps. This besides conserving domestic biodiversity has become a means of producing food in dry lands without depleting ground water resources. A sizable number of families owning sheep and goat have already been covered with livestock insurance.

The key objectives of the government include building the health of the Nation by increasing the availability & quality of Animal origin foods like Milk, Meat and Eggs to the human population through scientific breeding, feeding and health management of livestock & poultry. Efforts are being made to improve the wealth of the nation by providing necessary technical support to Livestock bearers there- by improve livelihoods of farm families.

The state stands 2<sup>nd</sup> in Egg production (1417.67 crores), 4<sup>th</sup> in Meat production (5.66 lakh Metric Tons) and 5<sup>th</sup> in Milk

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production (108.17 Lakh Metric Tons) in the country as per the estimates of GoI during 2015-16.

### Popular breeds – pride of the state

Andhra Pradesh takes pride in the country in having famous world renowned Livestock breeds like Ongole and Punganur in cattle, Godavari Buffaloes, Nellore in sheep and Aseel in poultry. As per Livestock Census 2012, 62.54 lakh out of 126.65 lakh (49.38%) households in the state are engaged in Livestock / Livestock related rearing activities. The Livestock resources in the state include 47.16 lakh Cattle, 64.62 lakh Buffaloes, 135.60 lakh Sheep (1<sup>st</sup> in country), 44.96 lakh Goats, 1.57 lakh pigs, 0.13 lakh other Livestock, 294.03 lakh total Livestock & 805.83 lakh poultry (3<sup>rd</sup> in country).

The government will implement the fodder security policy, which is first of its kind in the country, having various components to provide quality feed and fodder to the Livestock.

### Support to the livestock sector

Animal Husbandry schemes have been formulated to attain well-laid National policies aimed at improving livestock production, fighting protein hunger, improving nutritional standards of human population and provision of technical support for the maintenance and improvement of livestock.

With sustained efforts, the state government is providing fodder to livestock at the doorsteps of the farmers below poverty line (BPL) with 50% subsidy ensuring fodder security under Kutumba Vikasam. The government endeavours to insulate the farmers from the vagaries of agriculture by focus on livestock sector to ensure that every household has a monthly income not less than Rs.10,000.

### Growing contribution to GSDP

The contribution of Livestock Sector to the Gross State Domestic Product (GSDP) is Rs.59,796 Crores at Current Prices, which is 9.32% of the GSDP as per Advanced Estimates of 2016-17. There is an increase of 15.99% over 2015-16. The GVA from Livestock Sector surpassed that of Agriculture for the first time during 2015-16.

Livestock population as per 2012 Census is shown in Table

5.14. District wise Livestock population as per 2012 Census is given in Annexure 5.22.

Table 5.14 Livestock population in A.P

(No. in lakh)

Category	As per 2007 census	As per 2012 census
Cattle	54.73	47.16
Buffaloes	82.30	64.62
Sheep	121.20	135.60
Goat	48.24	44.96
Pigs	2.06	1.57
Poultry	745.37	805.83

Source: Directorate of Animal Husbandry

Though there is reduction in the total Cattle and Buffalo Population, the production and availability of nutritious food and supplemental income to farmers has increased due to perceptible increase in Crossbred Cattle and Graded Murrah Buffalo population especially female / Milch animals as per the latest Livestock Census, 2012.

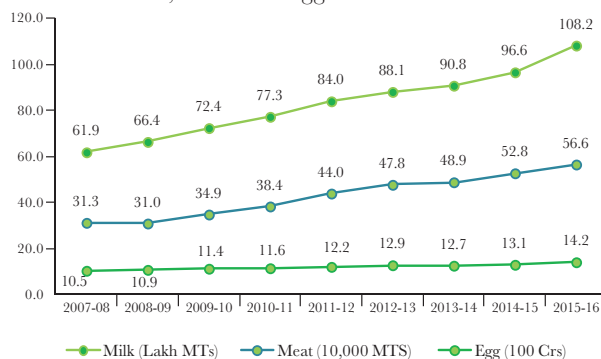
The production of Milk, Eggs and Meat is shown in the following Table 5.15 and chart 5.4.

Table 5.15: Production of Milk, Meat & Eggs

Growth Engine	Unit	2014-15	2015-16	2016-17 (upto Sep 2016)
Milk	L.MTs	96.56	108.17	59.57
Growth	%	6.31	12.02	---
Meat	L.MTs	5.27	5.66	3.14
Growth	%	7.77	7.40	----
Eggs	cr.Nos	1309.58	1417.67	778.72
Growth	%	2.90	8.24	---

Source: Animal Husbandry Department.

Chart 5.4: Milk, Meat and Egg Production



Source: Animal Husbandry Department

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Production estimates of milk, meat and eggs from 2004-05 to 2016-17 (upto September 2016) are shown in Annexure 5.23 and district wise production are given in Annexure 5.24. Details of district wise Veterinary institutes are given in Annexure 5.25.

### State Plan Schemes 2016-17

#### 1. Cattle & Buffalo Breed Development

##### a) New Artificial Insemination Centres

This is a new scheme meant for expansion of breeding operations involving NGOs with experience in implementation of livestock projects. The Integrated Livestock Development Centres will be established in uncovered areas where there are no established facilities for breeding operations by the Department. 1000 Breedable cattle will be covered per each centre which may increase or decrease marginally as per ground feasibility. This will be implemented through MOU approved by the Government. An amount of Rs.200.00 Lakh is allocated for this purpose.

##### b) Promotion of Indigenous Breeds:

This is an existing scheme under which breed improvement activity will be taken up for conservation of Desi / Indigenous cows and promotion of sustainable Organic farming will be promoted in a big way. An amount of Rs.10000/- per animal is provided towards transportation and insurance premium for Indigenous Animals (GIR, Shahiwal etc.) purchased by the farmers. The Financial Out lay for this component is Rs.200.00 Lakh.

##### c) Interest Subsidy for Dairy farms:

This is a new scheme designed to promote entrepreneurs in dairy farming for establishment of new Dairy farms / expansion of existing Dairy farms in the State. Interest subsidy will be provided over and above 3% interest charged by the banks. The Financial Out lay for this component is Rs.50.00 Lakh.

##### d) Sexed Semen/Sexed semen Lab/ ET lab:

This is a new scheme to be implemented in selected pockets of the State involving AP livestock

Development Agency (APLDA). 5000 doses of sexed semen will be procured and piloted to produce additional female calves. Subsidy on each dose of sexed semen is 75% and the remaining 25% of the cost of sexed semen will be borne by the concerned beneficiary. Sexed Semen will be supplied to farmers on first cum first serve basis. The funds allocated to this activity are also meant for training the staff within or outside the state for implementation of the activity. The funds can also be utilized for import of superior quality embryos (HF, Jersey etc.) and also for Establishment of Sexed semen lab/ Embryo Transfer Technology (ET) lab. The implementing agency is Andhra Pradesh Livestock Development Agency (APLDA) with Financial Out lay of Rs.50.00 Lakh.

#### 2. Feed and fodder Development Programme:

The fodder security policy, which is first of its kind in the country, having various components to provide quality feed and fodder to the Livestock will be implemented.

##### i. Promotion of Silage

This is an ongoing scheme with the objective to make availability of nutritious green fodder to the livestock throughout the year. Through this activity, the department will promote silage production activity in the form of bales / pit silage / tower silo / Bunkers etc., The activity will be implemented through involvement of farmers / entrepreneurs / NGO / SERP / PPP partners/any other agency. To increase the scope of activity, the programme will be implemented in convergence with other schemes. It will be promoted in PPP mode wherever possible. The existing subsidy pattern will be followed and the beneficiary contribution @ Rs.2/- per kg silage will be borne by the beneficiary.

##### ii. Hydroponics & Azolla

This is an ongoing scheme. The Hydroponics technology will be promoted to enable the farmers to produce green fodder where there is constraint for land to grow fodder. Azolla, an algae will be promoted as an alternative to replace oiled cakes in the concentrate feed to some extent to reduce cost of production in the Livestock Production. 75%

subsidy for Hydroponics units and 90% subsidy for Azolla units will be extended to the beneficiaries as per the provisions of Fodder Security Policy and the remaining non-subsidy component will be borne by the beneficiaries.

iii. TMR Fodder blocks

This is an ongoing scheme. It enables farmers to get access to the balanced / complete ration to their animals in the form of blocks, particularly those farmers who do not own land (for fodder production) to enable them confidently take up dairying activity. The concept is known to reduce production costs. This will be promoted in PPP mode. The existing subsidy pattern will be followed and the beneficiary contribution @ Rs.3.50 Ps per kg of TMR Fodder block will be borne by the beneficiary.

iv. Convergence with MGNREGS to match for material cost

This is a new scheme. The scheme is meant to promote large scale fodder production in convergence with Rural Development Department. The AH department will provide matching funds of material component over and above the 40% material cost involved under MGNREGS.

v. Ration Balancing Programme(RBP)

This is a new scheme. This will be promoted to create awareness amongst the milk producers for optimization of milk production by efficient utilization of locally available feeding resources. This will be implemented involving entrepreneurs / Gopalamitras / Department staff /NGO/ any other agency.

vi. Fodder Seed Supply

This is an ongoing scheme. Improved fodder seed will be supplied to the farmers to take up large scale fodder production to meet the fodder requirement of high yielding animals. The fodder seed will be supplied on 75% subsidy to the farmers. The Financial Out lay is Rs.500.00 Lakh.

vii. Fodder Banks

This is an ongoing scheme. Storage facilities for fodder will be created in strategic locations

to supply fodder to livestock farmers in scarcity periods. Infrastructure facilities will be provided by the Department through RIDF / MGNREGS in convergence with Rural Development Department) under State Development Plan. The Financial Out lay is Rs.200.00 Lakh.

viii. Feed and fodder supply

This is an ongoing scheme. Under this program, feed and fodder of different categories will be supplied to the farmers / Goshalas on subsidy basis @Rs.2/- per kg of Silage @Rs.3/- per kg of dry fodder and @ Rs.3.50/- per kg of TMR fodder blocks and Rs.4/- per kg of concentrate feed irrespective of their procurement cost throughout the year / critical period as part of initiative to achieve Double Digit Inclusive Growth in Livestock Sector. Preference will be given for supply of silage bale / TMR fodder block / Silage bales / TMR blocks / Concentrated Feed / Dry fodder to Livestock Farmers / Goshalas on subsidized cost to prevent distress and also to Government Livestock Farms on reimbursement basis during critical periods. The Financial Out lay is Rs.1613.00 Lakh.

### 3. Implementation of Livestock Development Programmes Management / Health Care

i) Pregnant and Lactating Animal care (Ksheerasaagar)

This is an ongoing scheme, designed to reduce Inter Calving Period in milch animals and to increase the life time milk production. The feed & fodder, healthcare and insurance support including other logistics will be given for a period of six months (Last 3 months of pregnancy and first 3 months of lactation). Implementation of this scheme will result in an additional 360 litres of milk and one extra calf can be obtained from each animal in its life time. The scheme will be implemented on 75% subsidy. The logistics including data entry will be on 100% subsidy. Financial Out lay for this program is Rs.1000.00 Lakh.

ii) Animal Hostel

This is an ongoing scheme. Common infrastructure facilities required for animal management, dung & urine management will be provided free of cost, working capital in the form of revolving fund will

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also be provided. This will be implemented in convergence mode with RD department involving SHGs/ unemployed youth/ Dairies/ NGOs, etc., The Financial Out lay for this component is Rs.50.00 Lakh.

## iii) Suphalam

This is an ongoing scheme. The objective of the program is to get one calf once in 15-18 months from milch animals /heifers through fertility Management of infertile animals. The provision available under this sub-component can also be utilised to tie-up medicines required for the animals covered under Ksheerasaagar scheme and to meet logistics. All infertile animals available in the target villages will be identified through screening of animals and appropriate treatment package will be given under the supervision of a graduate Veterinarian till the animal is conceived or advised for culling.

## iv) Organization of Janmabhoomi – Mavooru programme

Animal Health Camps will be conducted in all the Gram Panchayats / Wards of the State. The activities will be deworming, vaccinations, fertility management, treatment of sick animals, technology transfer, capacity building, plantation of fodder trees in all possible locations under neeru-chettu / Polam Pilustondi etc.

## v) Mobile Veterinary Services (NTR Sanchara Pashu Vydy Sevalu)

This is a new scheme. The Mobile Veterinary Services (NTR SPS) will provide service to the farmers in the state, at the rate of one each per Animal Husbandry division for 45 divisions in the first phase. This number can gradually be extended to (180) erstwhile blocks based on the feedback on the utility of the scheme. This innovative program will be implemented involving entrepreneurs/ NGO/ any other agency in PPP mode. The amount earmarked for this activity will also be used to assist NGO/PPP partner as grants-in- aid to operate the scheme.

**4. Infrastructure support to Dairy/Sheep/Poultry Sector:**

The government is assisting the large population under livestock sector in a big way and is supporting them through implementation of various schemes including infrastructure support to dairy/sheep/poultry activities. The key schemes being implemented are:

- BMCU in potential villages,
- Milk processing units/equipment,
- Support to Farmer Producer Organisation (FPO),
- Milk Market Outlets Breeding rams production/ replacement and exchange,
- Avikabandhu,
- Sheep Shelters,
- Interest subsidy for setting up of new Sheep / Goat farms,
- Feeding support to pregnant ewes,
- Meat Market Outlets/ Meat Processing Unit/ Mobile Sheep Health Care Units,
- Interest Subsidy for setting up of big Poultry farms,
- Ultra-Modern Laboratory for Disease Diagnosis,
- Support to small vendors and EDEG,
- RBP Hatchery (Rural Backyard Poultry),
- Power Tariff,
- Cold storage facilities/egg powder/Chicken breast processing units/Establishment of modern slaughter house / Export facilities,
- Support to other activities,
- Calf Rearing Programme (NSP), Vaccine production /purchase/testing/disease diagnosis and control,
- Strengthening of Hospitals & Dispensaries,
- Strengthening of data base and networking of all the Veterinary Institutions through outsourcing of the data entry work/software development & ministerial assistance,
- Capacity Building–Training of farmers/Field staff, Support to Training centres,
- Establishment of Para Veterinary and Allied Board/ Council, Infrastructure support to Field Veterinary Institutions



## Livestock Health Care Measures

- Important programmes taken up during the year 2016-17 includes HS, BQ and ET vaccinations, FMD-CP, NCPPPR, Brucella control Programme and NADRS.
- A total of 47.61 lakh doses of HS vaccine, 6.80 lakh doses of BQ vaccine and 59.47 lakh doses of ET vaccine were utilized & vaccinations conducted during the year 2016-17 in the state.
- Under FMDCP 1st round, 92.71 lakh animals were vaccinated with FMD vaccine and 92.24% was achieved. All the eligible Cattle, Buffaloes and Pigs in organized farms, in all districts are being vaccinated twice a year (every 6 months) during the year 2016-17.
- Under FMD \_CP during the year 2016-17, in first instalment an amount of Rs.1910.23 lakhs was released in that, 60% central share (Rs.1146.14) and 40% state share (Rs.764.09). In second instalment an amount of Rs.305.00 lakhs (Central Share Rs.183 Lakhs + State share Rs.122 lakhs) released.
- During the year 2016-17, 52,330 Brucella vaccinations were conducted. Pooled milk samples, followed by +ve sera samples, Individual animals will be screened and vaccination of female calves (4-8 months) was taken up after screening of animals. Brucellosis is an economically important disease of livestock which is also zoonotic in nature. Mostly the Animal Husbandry staff, farmers, Shepherds, milk and meat handlers and common public is also affected due to consumption of unpasteurized milk and milk products.
- During the year 2016-17 in Andhra Pradesh state out of 670 nodes, 640 nodes are active. Daily on an average of 220-230 nodes are reporting the Daily incidence cases online in the state.
- Veterinary Biological & Research Institute, Samalkot, East Godavari district is producing various types of poultry viral vaccines i.e. R.D'F', R.D 'K', Fowl pox

for backyard poultry & Duck plague in Ducks for immunization of backyard poultry in the state.

The details on outbreaks of various diseases during 2016-17 (upto October 2016) in different districts of Andhra Pradesh are shown in Table 5.16.

Table 5.16 outbreaks of various diseases

Sl. No.	Name of the disease	No. of OBRs	No. of Villages	No. of Attacks	No. of Deaths	No of VOB
1	Anthrax	11	11	45	45	31065
2	Blue tongue	3	3	960	154	14800
	Grand total	14	14	1005	199	45865

## Livestock Breeding Activities: Artificial Insemination Centers

6058 Artificial Insemination Centers are available in the state to more than 80% Breedable Cattle and Buffaloes, of which 3043 Animal Husbandry Department Institutions, 2577 Gopalmitra Centers, 438 other Institutions (Dairy Union, BAIF, RASS, JK Trust & Veterinary College) Centers.

## Performance of AI Centers

41.78 lakh Artificial Inseminations were conducted and 15.50 lakh Improved Progeny born during the 2015-16. 20.65 lakh Artificial Inseminations were conducted and 9.00 lakh Improved Progeny born during the 2016-17 upto 30th October, 2016. Details of Artificial Inseminations are given in Table.5.17

Table.5.17 Institution wise AI Centers, AI Done & Calves Born

Institution	AI Centers		AI Done Ach		Calves Born	
	2015-16	Upto Oct. 2016	2015-16	Upto Oct. 2016	2015-16	Upto Oct. 2016
AHD	3043	3043	1905230	951767	733694	445696
APLDA	2634	2577	2086893	1060311	776097	448519
Others	476	438	0	52790	0	5874
	6153	6058	3925289	2064868	1467325	900089

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## Performance of Frozen Semen Bull Stations

Andhra Pradesh Livestock Development Agency (APLDA) maintains three (3) Frozen Semen Bull Stations at Nandyal, Banavasi and Visakhapatnam producing Frozen Semen with total capacity of 219 Bulls. 57.43 lakh Frozen Semen Doses produced during the year 2015-16 and 48.78 lakh Frozen Semen Doses supplied to the District Livestock Development Associations (DLDA) in the state which interned supplied to the field Artificial Insemination centers as per the demand. 24.06 lakh Frozen Semen Doses are produced and 27.75 Frozen Semen doses distributed during the year 2016-17 up to October'2016.

## Organization of Fertility Camps

Every year 2400 Fertility Camps are being organized at Gopalamitra Centers and treating infertility animals and bringing them to conception under supervision of Technical guidance of local Veterinarian.

Institution	2015-16	2016-17 (upto Oct. 2016)
No. of GM Centers	2634	2577
No. of Camps organized	2358	628
No. of animals treated	73879	11006

## Livestock Insurance Scheme (LIS)

This is a Centrally Sponsored Livestock Insurance Scheme. Under this scheme 125495 animals were insured during 2016-17 (upto Oct.16)

National Project on Cattle & Buffalo Breeding (NPCBB-II)

The key components include:

- Strengthening LN transport and distribution system,
- bull production programme,
- procurement of breeding bulls for natural service,
- strengthening field AI network,
- manpower development (gopalamitra),
- strengthening / establishment of training centers,
- assistance to private AI workers and
- sexual health control programme

## National Policy for Bovine Breeding (NPBB )

The policy envisages achievement of the following as objectives:

- Arranging quality Artificial Insemination services at farmers' door step.
- To bring all the breedable females under organized breeding.
- To conserve, develop and proliferate selected indigenous bovine breeds of high socio economic importance.
- To provide quality breeding inputs in breeding tracts of important indigenous breeds so as to prevent the breeds from deterioration and extinction.

## Progeny Testing Programme (PTP)

APLDA has been identified as End Implementing Agency (EIA) for implementing the Sub Project Plan on "Production of High Genetic Merit Crossbred Jersey bulls through Progeny Testing" under National Dairy Plan-I during the years 2013-14 to 2017-18.

## Status of implementation of the Sub Project

The sub project is being implemented in Chittoor district of Andhra Pradesh. There are 107 PT centers in Chittoor District covered by 107 Gopalamitras, 14 Exclusive Milk Recorders and 13 Supervisors. The fourth set of test bulls have been introduced from the month of November, 2016 and so far 86 bulls are put to test and 147702 test A.I. have been done till now.

So far, 12528 female have born and are registered. Milk recordings are under progress and so far 4586 crossbred Jersey cows are put to milk recording. Two milk component analyzers have been installed at Chittoor and Tirupati and analysis for milk components like protein, fat, lactose etc., is being carried out. Elite animals are identified for nominated AI and 2565 nominated AI have been done for bull calf production and procurement.

Bull calf procurement is the ultimate aim of the project and so far 70 HGM CBJY bull calves have been procured from the field after parentage testing and disease screening and sent to rearing station at BBC, Nekarikallu. Among 70

HGM bulls 33 bulls have already been distributed / allotted to different agencies by the Bull Distribution Committee. 36 bulls are under rearing and one bull was culled.

### Civil works

An amount of Rs.100.00 Lakhs has been allotted under civil works for construction of New Quarantine Station at Tripurapuram and Strengthening of rearing station at BBC, Nekarikallu. The civil works are under progress and will be completed by December' 2016.

### National Dairy Plan Phase-I (BANAVASI)

APLDA is the End Implementing Agency (EIA) by the National Dairy Development Board for Strengthening of Semen Stations, Banavasi under NDP-I to produce about 30.00 lakh Frozen Semen Doses per annum by end of 2017-18 with a financial outlay of Rs.652.17 lakh by the end of the Project.

### National Kamadhenu Breeding Centre (NKBC)

National Kamadhenu Breeding Centre (NKBC ) is at Cattle Livestock Farm (CLF), Chintaladevi, SPSR Nellore District with an aim to preserve and conserve the native indigenous breeds of India with a financial assistance of Rs.25.00 Crores from the Government of India.

The objectives of NKBC are to conserve, preserve & Development of Indigenous Cattle & Buffalo breeds, to enhance production and productivity in Indigenous Breeds, to upgrade genetic merit, to supply certified elite germplasm and to protect threatened breeds from extinction.

The components and core activities of NKBC are include: Establishment of Nucleus herd of all Indigenous Breeds, establishment of Semen Station establishment of ETT Lab, Urine Distillation Plant, Bio Gas plant, Veterinary Dispensary, Chaff Cutter and other Peripheral Activities like training and extension wing, Bulk Milk Cooler.

### Feed & Fodder Development Activities

Fodder Seed: To promote fodder production 38070 Qtls of fodder seed has already been distributed to the farmers

on 75% subsidy covering 76140 hectares under fodder production with an estimated fodder yield of 7.60 LMTs.

Chaff cutters: To minimize wastage of fodder, (1608) No of 2 HP, 330 No of 3 HP and 75 No of 5 HP chaff cutters were distributed to the farmers on subsidy with an amount of Rs.4.27 Cr.

Cattle Feed: 41995 MTs of Cattle feed has been distributed to the farmers @ Rs.4/- per kg covering 3.49 lakh productive animals.

Silage Production: 27805 MTs of silage has been produced and distributed to the farmers @ Rs.2/- per kg so far covering 62900 animals.

TMR fodder : 7325 MTs of TMR Fodder has already been produced and distributed @ Rs.3.50/- per kg. To reduce the cost of production of concentrated feed replacing oil cakes with Azolla, 12172 Azolla production units were distributed to the farmers on subsidy with an amount of Rs.3.95 Crore. 498 Hydroponic units were distributed to the farmers on 75% subsidy with an amount of Rs.1.65 Cr

### Pashu Graasa Kshetralu

The target is to produce 3.00 LMTs of green fodder and 0.75 LMT of conserved fodder over a period of one year. Harvesting and selling of green fodder to the consumers at Rs.1.00 per Kg at the farmer's door step. 2024 villages have been identified, 35560 consumers enrolled, 1938 entrepreneurs and 6305 acres of area identified for fodder production

### Sheep and Goat Development Activities Implementation of NCDC Scheme

The National Co-operative Development Corporation has sanctioned Financial Assistance of Rs.35.74 crores under Integrated Small Ruminants Development (ISRSD) to be implemented by the Federation in Prakasam and Chittoor Districts through the District Unions. 146 shepherd families of Prakasam district and 115 of Chittoor district were benefited with the 1st installment of NCDC amount of Rs.265.20 lakhs.

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## Physical performance of NCDC

Sl No	Project Components	Prakasam		Chittoor	
		Target	Achievement	Target	Achievement
1	20+1 Units	272	272	17	5
2	50+2 Units	70	70	50	24
3	100+4 Units	31	31	25	15
4	500+20 units	-	-	1	1
	Total	373	373	93	44

During the 2nd phase 373 shepherd families of Prakasam and 44 shepherd families of Chittoor district were benefitted.

## Butchers Training Programme

The Butchers Training Programme which is first of its kind on collaboration with NRC, Meat, APSGDCFL is imparts, hands on training on wholesome meat production and how to carve and present various types of meat, animal carcasses into larger, primal cuts and then to smaller and retail-sized cuts.

## Shepherd Sadassus

Shepherd Sadassus are being conducted to impart training to the sheep rearers about rearing of sheep in semi-intensive system/intensive system, modern techniques of breeding, feeding and management & preventive vaccination schedule, advantages of de-worming & de-ticking and also create awareness on exchange of Breeding Rams, sale cum exhibition of Breeding Rams, innovative practices adopted in their areas, etc. Federation has organized training programme to Executive Directors of 13 Districts on Legal Aspects in coordination with Institute of Cooperative Management, Hyderabad for effective functioning of Sheep Cooperatives.

## Distribution of Mini-Sheep &amp; Goat units

Government is of the view to develop the state as a prominent State for meat production in the country through ensuring sustainable growth in small ruminant sector for economic prosperity and nutritional security. Distribution of Sheep & Goat units is identified as one of the major components.

593 units (NSP-441 and TSP-152) were distributed with a subsidy of Rs.96.55 lakhs upto Nov,2016.

## Supply of Total Mixed Ration(TMR)

TMR is a worldwide accepted best practice in feeding livestock. The practice of mixing green fodder or silage with dry fodder and concentrates along with all other nutrients enables a complete ration that increases digestibility and enable utilization of nutrients at optimum level. The product of TMR is to be supplied to the eligible farmers on subsidy basis @ Rs.3.50/- per Kg as against full cost of Rs.9.99/-per Kg under State Development plan 2016-17. 1739.68 MTs supplied up to November, 2016 with a subsidy of Rs.112.90 lakhs.

## Sheep &amp; Goat Deworming

The departments conducted 1st round Mass Sheep & Goat deworming from 5.8.2016 to 12.8.2016 covering about 180 lakh sheep & Goat present in the state by spending Rs.4.52 cr.

## Poultry Development Activities

The Government is implementing centrally sponsored scheme "Rural Back Yard Poultry Development" under National Livestock Mission-2016-17 The budget allocation is from NLM. The scheme is implemented in convergence with SERP.

Under this programme;

- The state government encourages Rural Livestock holds to adopt Low input technology backyard poultry like Vanaraja/Gramapriya birds for supplementing the income as well as to improve the nutrition standards.
- 4 week old chicks were purchased from GoI approved firms and supplied with proper vaccination were handed over to the beneficiaries of BPL families. Each beneficiary will be provided with 45 chicks, @ 25 and 20 chicks at an interval of 10 weeks. Each beneficiary gets a subsidy @ Rs.50/-chick and a night shelter with an amount of Rs.1500/- on 100 % subsidy.
- 10,000units are allocated in 13 Districts of APRIGP/ DPMU Mandals in Andhra Pradesh. Out of which so far 3,311 units have been grounded. Remaining are in progress.

- Farmer will contribute Rs.810/- per unit as beneficiary contribution. This amount will be collected by APM's, CC's of DRDA.

### ITE & C Activities taken up

The Department has provided 8300 Tablet Pcs to all the field functionaries including Gopal Mitras in the State to capture real time data on various welfare activities implemented by the Department. Various Android and Web Applications have been prepared by the Department which are as follows :

- Aadhar Integrated Livestock Population and Milk Production Data
  - o Livestock possessed by the farmer and milk production details (29 parameters) are integrated with Aadhar Number, Mobile Number and Bank Account details to capture real time data
- Foot and Mouth Disease Control Program
  - o Android App and Web versions are in use for realtime data capture of vaccinations linked to CMs Core Dashboard. About 90 Lakh Bovines are vaccinated and 14 Lakh farmers are benefitted first time in the country
  - o The Government of India decided to replicate the same model to all other States in the Country
- Ration Balancing Programme
  - o Software (Android App) prepared in Telugu is in use by farmers, this helps the farmers to improve the milk production of 5 Lakh milch animals using locally available feed ingredients
- Other Applications
- Animal Husbandry Institutions Management and Services App (AHIMSA) to track real time work done at Veterinary Institutions which will be linked to Core Dashboard will contain real time data on the following parameters :
  - o Treatment of sick animals
  - o Deworming of animals
  - o Preventive Vaccinations
  - o Artificial Inseminations
  - o Calves Born
  - o Castrations done
- Online data availability on implementation of Welfare Schemes and feed and fodder development activities (Silage/TMR/Fodder Seed etc.)
- Online tracking of Key Performance Indicators (KPIs) upto last functionary level
- Action Plan to establish common platform
  - o Android Apps to collect realtime data on resource mapping (Geotagging) of Veterinary Institutions and human resources will be prepared on common platform
  - o Livestock disease capture from various places of jurisdiction – from farmers on real time basis and integrating with Toll Free number 1962
  - o Veterinary Infrastructure facilities mapping
  - o Veterinary Medicines Usage and analytics
  - o Various inputs management and beneficiary/input subsidy tracking
  - o Livestock details updation from time to time.
  - o Livestock Survey at designated intervals of time on various parameters.
  - o Survey on epidemics in animals as per the need.
  - o Maintenance and Repair to assets.
  - o Attendance of the employees at all Veterinary Institutions on realtime basis

### Animal Husbandry Day

First Saturday of every month is being observed as Animal Husbandry Day as part of Publicity & Extension which is designed to bring all the departmental activities to the door step of the farmer and create awareness among the livestock owners. The overall objective of the programme is to enhance the productivity of livestock that can ultimately influence the living standards of each family dependent on live stock in the adopted village through increased income levels.

### AP Centre for Advanced Research on Livestock PVT LTD (APCARL)

The Government issued orders for changing the nomenclature of the scheme “ Assistance for establishment of Indira Gandhi Centre for Advanced Research on Livestock Private Limited at Pulivendula” as “Assistance

for establishment of Andhra Pradesh Centre for Advanced Research on Livestock Limited at Pulivendula”. Six partners have Signed MOU to invest and work with (IGCARL) on different livestock related themes.

The performance indicators pertaining to the Animal Husbandry department are given in Annexure 5.26.

## Fisheries

‘Fisheries’ as a subsector of agriculture and allied sectors is gaining prominence in the recent past. The state government envisages development in fisheries sector with a multipronged strategy. The essential objectives include of the development strategy include: Increase of fish production and ensure sustainable development, Development of fisheries value chain and boost exports, Promote investment to create infrastructure, promote welfare of fishers and Set up institutions to build skills.

### Growth enabler and employment generator

Fisheries, occupies an important place in the Socio-economic development of sunrise Andhra Pradesh State. Fisheries, as one of the vibrant sub-sectors of the Primary Sector, is identified as one of the growth engines. It is a significant employment generator and a source of proteinous food and foreign exchange earner for the State. AP ranks 1st in total fish and shrimp production and contributes more than 70% of cultured shrimp produced in the country. AP ranks 3rd in Global shrimp production (0.3 million tons), 6th in aquaculture production (1.57 million tons) (FAO Report 2012). AP contributing 1.19% of global and 20.77% of national fish production (2014-15).

Fisheries sector is supporting employment to 14.5 lakh persons and contributing significantly to the State’s economy. The state government has initiated plans to make Andhra Pradesh the ‘Aqua Hub’ of the World.

About 1.40 million people are directly or indirectly employed in the State in this sector. The A.P. Fisheries Policy, 2015 envisages 42 lakh tonnes of fish production with GVA of Rs.80,000 crore by 2019-20

Sustainable development of Fisheries can only be achieved through improvement of the quality inputs, technical skills and management of human resource in the Sector.

The broad development Vision envisages to:

- Promote “Blue Revolution” through a multipronged approach including introduction of alternate species in aquaculture.
- Develop a policy framework for allotment of marine areas and large reservoirs for cage culture through fishermen cooperatives/private participation or by consortium.
- Establish SPF Brood Stock Multiplication centres and Aquatic Quarantine Centres for *L.vannamei* for production and supply of SPF brood stock to hatcheries to supply quality seed.
- Examine opportunities for reduction of cost of production of fish/shrimp in areas of power, feed and others.
- Through PPP mode, establish and manage more fishing harbours and Fish Landing Centres at all feasible coastal villages.
- Build better skills for women for more productive role in fisheries sector through Matsya Mithra Groups/ Fisherwomen Cooperative Societies in fish marketing and fish processing.
- Creating more technical man power in fisheries sector by establishing universities and polytechnic colleges
- Create an enabling policy environment bringing about necessary legislations and policy guidelines.

### Prawn Production

18.58 lakh tonnes of fish and prawn were produced in the state in 2016-17 (upto November, 2016) as against the target of 27.00 lakh tonnes. The Fisheries sector contributes 6.78% to the GVA as per advance estimates of 2016-17. 23.52 lakh tonnes Fish and Prawn production was achieved in the year 2015-16. Details of Fish and Prawn production are shown in Table 5.18 and given in Annexure 5.27.

Table5.18: Fish and Prawn Production

(Lakh Tonnes)

Year	Marine	Fresh Water	Brackish Water Shrimp	Total Production	Growth Rate %
2011-12	3.79	9.67	0.56	14.03	-1.49
2012-13	4.14	11.04	0.70	15.88	13.24
2013-14	4.38	12.43	0.88	17.69	11.35
2014-15	4.75	13.98	1.05	19.78	11.86
2015-16	5.20	16.01	2.31	23.52	18.91
2016-17 (upto Nov, 2016)	3.30	13.02	2.26	18.58	

Source: Commissioner of Fisheries

Production of fish /prawn in the state has increased from 8.14 lakh tonnes in 2005-06 to 23.52 lakh tonnes in 2015-16, and 18.58 lakh tonnes in 2016-17 (upto Nov, 2016) registering double digit growth rate on year to year basis from 2012-13 to 2015-16. This became possible because of the entrepreneurship skills of farmers, proactive role of Government and timely interventions of the Department.

### Registration of Coastal Aquaculture

As per the Government of India Coastal Aquaculture Authority Act and rules 2005, land within a distance of two kilometers from high tide line (HTL) of seas, rivers, creeks, and back waters comes under the purview of Coastal Aquaculture Authority (CAA).

The District Level Committee (DLC) recommends the applications directly to the CAA for consideration of registration under intimation to the State level committee for Farms up to 2 ha. water spread area. DLC has to recommend applications for farms above 2 ha water spread area, to State Level Committee for further recommendation to CAA for consideration of registrations. As of now, CAA has issued registrations of certificates to 22034.64 ha of 17,571 farmers in 9 coastal districts, which includes farms both below and above 2 ha area up to Nov. 2016.

### Registration of Fresh Water Aquaculture

Fresh water aquaculture can be taken up by interested farmers duly obtaining permission from the department of Fisheries. Registration certificates were issued to 34,044 farmers covering an area of 95703.01 ha area of Fresh water aquaculture in the state up to October, 2016.

### Important schemes and programmes

#### Relief to Marine fishermen during ban period

Every year, fishing in the marine waters is banned from April 15th to June 14th (61 days) under MFR Act as a conservation of fishery wealth in the sea and also for promoting responsible fisheries. During ban period, the crew members of the mechanized and motorized fishing boats are provided relief @Rs.4000/- to each crew member by Direct Cash Transfer. About 75000 fishermen are covered under this scheme during 2016-17

All the Fishing Crafts of Mechanized (Upto 20Mts OAL), Motorized and Traditional are being registered under MS Act 1958/APMFR Act 1994 and license on annual basis. So far 1985 Mechanized, 15943 Motorized and 15570 traditional are registered through online (RealCraft) by 30-11-2016. The Department has also supplied Biometric ID cards to all coastal fishers of above 18 years age group under CSS Programme with the technical support of ECIL, Hyderabad for ensuring Coastal Security

#### Dissemination of cyclone warning and PFZ information to coastal fishers:

The Department has developed strong communication network and disseminating the cyclone warnings through voice message with the support of Reliance Foundation and Dr.M.S.Swaminathan Foundation to all coastal fishers. The Department with the support of INCOIS is also communicating Potential Fishery Zone Information through voice messages and Digital Display Boards in the coastal Districts

## AGRICULTURE AND ALLIED ACTIVITIES

### Subsidy (Exemption of Sales Tax) on HSD Oil

This scheme meets the State commitment on exemption of Sales Tax on HSD oil used by mechanized and motorized fishing crafts. The ceiling limit of HSD oil is 3000 litres per month in case of mechanized boats and 300 litres per month in case of motorized boats. The subsidy on sales tax is Rs.6.03 per litre.

### Supply of OBM/IBM engines

Out Board Motor Engines / In Board Motor Engines are supplying to traditional Fishing Craft under the Scheme of Motorization of Traditional Crafts under CSS Programme. Unit cost is Rs.1.20 lakhs and subsidy is 50% of unit cost or 60,000/- whichever is less.

### Promotion of Deep Sea Fishing

The objective of the scheme is to promote deep sea fishing particularly Tuna fishery which is under exploited and scope for potential catches through mechanized and motorized boats. Tuna longlines and gill nets are providing on 50% subsidy on the unit cost of Rs.4.00 lakhs and 1.00 lakh respectively

### Supply of Sea Safety and Navigational Equipment

Sea Safety and Navigational equipment like Life Jackets, Life buoys, G.P.S., Echo sounder, VHF Sets and DATs are providing on 75% Subsidy for all categories of sea going fishing vessels so as to promote safety at sea for fishers and facilitative to catch more fish with aid of navigational equipment.

### Supply of Marine Fishing Inputs

About only 1/5<sup>th</sup> of coastal fishermen are possessing their own fishing inputs in the state. Hence, the fishing Inputs consisting of FRP Boat, Engine and Nets with the unit cost of Rs.5.00 Lakhs are supplying to Individual / Group of Fishermen belonging to BPL families on 50% Subsidy for their better livelihood.

### Establishment of Infrastructure facilities to Marine Fishermen

Marine infrastructure facilities like Fishing Harbours, Fish Landing Centers, dry platforms, additional Shore based facilities, markets, are providing to Marine Fishermen community for promoting Hygienic handling of fish and shrimp and to reduce post harvest fishery losses

### Housing Scheme for fishers

Under National Scheme of Welfare of Fishermen of GOI and NTR Rural Housing Programme of GOAP, the fishers are providing with pucca houses with unit cost of Rs.1,87,500/- in the State

### Training and Capacity Building to fishers:

Various training programmes, awareness camps, exhibitions are being conducting regularly with technical support of State Institute of Fisheries Technology (SIFT- A State institute of Fisheries department) to upgrade the professional skills among fishers, aqua farmers, fisherwomen, technocrats, academicians, entrepreneurs in the fields of Capture, Culture and Post harvest fisheries sectors in the state.

### Scheduled Castes Sub-Plan

An amount of Rs.5931.00 lakhs is allocated under this plan for the year 2016-17. The important activities proposed under this scheme are supply of three / four Wheelers for fish marketing, Supply of Boats/FRP boats and nets cycles with nets or nets to reservoir / riverine/ tank fishermen, supply of ice boxes to fishers, Cage culture in Reservoirs, supply of Reefer vans , establishment of fish retail kiosks, supply of two wheelers with ice box, freezer mounted Mopeds for fish vending and / or shrimp seed transport, supply of fish seed transport vans, providing subsidy to SC entrepreneurs for establishment of fish processing units under AP Fisheries Policy, 2015.



### Tribal Sub-Plan

An amount of Rs.2041.00 lakhs is allocated under this plan for the year 2016-17. The important activities proposed under this scheme are supply of three / four wheelers for fish marketing, supply of Boats/FRP boats and nets cycles with nets or nets to reservoir / riverine/ tank fishermen, supply ice boxes to fishers, supply of Reefer vans and establishment of fish retail kiosks.

### Fisheries Development schemes

The important sub - schemes under this scheme are: establishment of BMCs, AQFs Larval and Post Larval rearing centers for L. vannamei shrimp, Hatcheries for Seabass and Mud crab, revolving fund assistance to fisherwomen,, supply of fibre boats to marine fishermen,supply of boats to inland fishermen, supply of nets to inland and marine fishers, training and extension to departmental officers, farmers and fishers, honorarium to MPFEAs, consultancy, ICT, branding and publicity, establishment of aqua labs, Chandranna Bima for fishers, purchase and maintenance of relief boats, maintenance of shore Stations, promotion of deep sea fishing,assistance to MMGs/ SHGs for marketing, capacity building to Farmers producer organisations and cage culture in water bodies

### Chandranna Bima :

Previously, active fishers in the State were covered under Group Accident Insurance Scheme (GAIS) of Centrally Sponsored Scheme. Now, the Department of Fisheries is enrolling the fishers under the Chandranna Bima Scheme, which is more beneficial compared to GAIS. As the maximum amount insured under GAIS is Rs.2.00 lakh. The fishermen expressed their satisfaction on Chandranna Bima Scheme as the insurance amount is Rs 5.00 lakhs for Accidental Death; Rs 3.62 lakhs for Partial/ Permanent Disability, for Rs 0.30 lakhs for natural death provision for Scholarships for Education.

### Blue Revolution:

The GOI have issued guidelines under CSS “Blue Revolution : Integrated Development and Management of Fisheries” in which all the sectors of fisheries – inland, marine, welfare, post harvest fisheries etc., are covered.

GOI assistance is restricted to 50% of the unit / project cost. Under this CSS scheme, GOI have sanctioned Rs.13.97 crores during 2016-17 to the State. The important schemes being implemented during 2016-17 are establishment of feed mills of both large and small, fish landing centres in inland sector, ice plants, supply of crafts and gear, installation of green energy based solar wind hybrid freezing plants and drying unit etc.

### Schemes under RKVY

Under RKVY 2016-17, Rs.37.52 crores was sanctioned for fisheries sector in the state. The schemes implemented under RKVY are fish seed stocking in tanks and reservoirs by providing assistance to FCSs, establishment of fish brood bank at Kovvali, West Godavari dist., establishment of AQF, BMC for L.vannamei in Visakhapatnam district , mud crab and sea bass hatcheries in Guntur district, establishment of mobile / stationery diagnostic aqua labs, construction of fish markets in GPs and Municipalities. Assistance to fish vendors for setting up kiosks etc.,

### Infrastructure projects under RIDF

Governments have sanctioned 67.29 crores under RIDF XX Tranche for taking 47 works in the state. The works of fish seed farms, shore based facilities, fish landing centers, labs, approach roads etc. are taken up by the engineering wings of the PR dept, APEWIDC. Some of the works are completed and the remaining projects are under various process of execution Stage.

### MGNREGS

Infrastructure and community assets building activities are proposed under this scheme. The initiatives planned through MGNREGS in fisheries sector for 2016-17 include: Construction of shrimp ponds for SCs , STs in 100 ha, Desilting & deepening of earthen ponds in 50 department Fish seed farms, De-silting of drains and creeks in aquaculture areas, Fish Drying Platforms in coastal villages, excavation in Seasonal water bodies for Development of fisheries (Captive seed nurseries),Fish landing centres in 100 reservoirs / tanks, gravel roads to fishermen habitations, inputs in farm ponds for raising fish culture , and labour component in construction of fish market earth work.

## AGRICULTURE AND ALLIED ACTIVITIES

Recent Initiatives taken by department for development of fisheries:

- Re structuring of the department has been initiated in Nov 2016
- Networking of Aqua laboratories are in progress
- Permitting Aquaculture in assigned lands
- Task Force Committee was constituted to promote aquaculture and to position AP as Hub of Aqua Production and processing in India
- Implementing orders issued imposing ban on usage of slaughter waste in aquaculture
- Allowing Aquaculture in DKT lands
- Regulation of shrimp hatcheries for quality seed production
- Implementing Coastal Security measures by covering left over fishers of 77250 for issuance of MFID cards and 65 card readers supplied by GOI for authentication of bio-metrics
- Preparation of DPRs for new fishing harbours at Juvaladinne, Nellore district, Vodarevu, Prakasam district Uppada, East Godavari district and Phase-II Development at Nizampatnam, Guntur district, Machilipatnam, Krishna district and released Rs.5.04 crore as mobilisation advance
- Coverage of Chandranna Bima for active fishermen
- Implementation of housing scheme with unit cost of Rs.1,87,500/- dovetailing funds under NTR housing programme.

### Organization of Fishermen Cooperative Societies

The Government has given great importance to cooperative societies in fisheries sector to empower fishermen to manage their own affairs. As a matter of policy, tanks are given on nominal lease to these cooperative societies for exploitation of fishery wealth and also provided assistance for inputs like fish seed stocking, feed, boats and nets on subsidy. While so far 2.61 lakh fishermen have been organized into societies, a large number of fishermen still remain to be brought under the fold. This is a continuous process and wherever fishermen are coming forward to form cooperative societies, they are being registered. Details are shown in Table 5.19:

Table 5.19 Fishermen Co-operative Societies

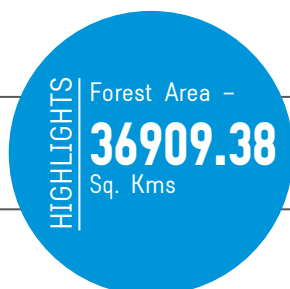
Type of Societies	Nos	Members
Inland Fishermen Coop.Societies	1397	134001
Marine Fishermen Coop. Societies	423	85,113
Brackish water Fishermen Coop. Societies	9	1058
Fisherwomen Coop. Societies	494	39227
Fishermen marketing Coop. Societies	5	2415
<b>TOTAL</b>	<b>2328</b>	<b>261814</b>

Source: Commissioner of Fisheries

## Forest

The forests in the state prove to be a great respite for the ones bored with city life. Packed with an abundance of rich flora and fauna life, the forests around Andhra Pradesh make for highly rejuvenating getaways. Tourists often head to the forests near Andhra Pradesh to experience jungle safaris. The famed wildlife in Andhra Pradesh is mainly scattered across these forests. While the benefits from dense forests are numerous, the tangible benefits like Timber, Bamboo, Fuel wood, Fodder, Non-Timber Forest Products etc., are quantifiable. Intangible benefits like maintenance of ecological balance, conservation of soil and moisture, regulating the water flow, sequestering carbon-dioxide from the atmosphere etc., are not quantified but are of great significance.

Forest cover has been recognized as critical for a living environment as it influences the quality and quantity of air and water. The role of forests as carbon sinks endows them added recognition as an important environmental factor. With the responsibility of management of forests vested with the State Forest administration, the Central interventions are directed essentially towards reinforcing the capacity of States to undertake the National Policy mandates towards conservation and sustainable use of resources. The core objective of forest sector development strategy is to enhance green cover by integrating it with livelihood opportunities.




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*Very Dense Forest-650.76 Sq. Kms*

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*Moderate Dense Forest Area-11798.58 Sq. Kms*

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*Open Forest -10961.70 Sq.Kms*

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*Scrub Forest-9310.37 Sq. Kms*

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*Non-Forest -3815.84 Sq. Kms*

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*Water Bodies -372.13 Sq. Kms*

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As per the forest records, the state ranks 9<sup>th</sup> in India having forest cover area of 36909.38 Sq. Kms which amounts to 23.04%. Out of 36909.38 Sq. Kms of forest area, the Very Dense Forest is 650.76 Sq. Kms the Moderate Dense Forest is 11798.58 Sq. Kms, Open Forest is 10961.70 Sq. Kms Scrub Forest is 9310.37 Sq. Kms Non-Forest is 3815.84 Sq. Kms and Water Bodies is 372.13 Sq. Kms. District wise forest area is shown in Annexure 5.28.

As per goals and directives set in the National Forest Policy 1988, the 1993 and the revised 2002 State Forest Policy, Vision 2020 of Andhra Pradesh, the forest department implements various development schemes to protect and develop existing forests, to improve its productivity and economic value. The main objectives of programmes like Community Forest Management (CFM), Centrally Sponsored National Afforestation Programme (NAP) through Forest Development Agencies, RIDF Projects, Soil & Moisture Conservation, Social Forestry, Wildlife Development and Human Resource Development are enriching existing low density forests and alleviating rural poverty.

Forest resource surveys of industrial catchments were undertaken from 1965 to 1975 and most of the important forest zones of the state were covered under schemes sponsored either by the Government of India or by the State.

Under RIDF projects and other schemes the department has set a programme having provision for soil and moisture conservation with the financial assistance of NABARD for construction of various types of water harvesting structures such as Check dams, Contour Trenches Rocks fill dams,

percolation tanks etc. in forest areas. These structures help recharge ground water, and improve forest vegetation besides stabilizing the status of agriculture in adjoining fields.

The Silvi-cultured research for improvement of natural forests has assumed great significance. Keeping in view recent trends in forest research, the department has laid special emphasis on Forest research to conduct experiments, improve nursery and plantation techniques, vegetative propagation, seed development and natural forest management etc.

26.96 lakh hectares of additional non-forest land is to be brought under tree cover by taking up tree plantation both inside and outside forest under Green India Mission programme to achieve 3200 ha. of area under tree cover by the end of March,2017.

Monitoring of vegetation (Forest) Canopy Cover Density, Forest Fire Risk Zonation Mapping, mapping all forest areas with site suitability, Kolleru lake restoration, re-locating & demarcating forest boundaries and Inventory of forest resources are some of the major and important activities taken up by the department using latest information technology.

Almost all programmes/schemes of the Forest department are being implemented through participation of local people, 67 numbers of Vanamahostvam was celebrated on 29-07-2016 and Eco-Development Committees (EDCs) have been created in Protected Areas and Watershed Development Committees constituted in River Valley Project.

## Forest Produce

The Departmental Extraction of Timber, Fuel and Pulp Wood, Faggot Wood, Long Bamboo and Bamboo Industrial Cuts (BIC) from natural forests as well as plantations was introduced from the year 1976-77, after disbanding the previously existing contractor system.

At present there is a moratorium on extraction of timber from natural forests except for bamboo from overlapping bamboo forests. The major activity comprises harvesting timber and poles from matured plantations of Teak, Eucalyptus, Casuarinas etc. and long bamboos and BIC from bamboo coupes as per prescriptions of the working plan of respective divisions. The physical targets and achievements of Departmental Extraction of Forest

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Produce of Timber, Fuel, Poles and Bamboos details are given in Table-5.20.

Table 5.20 Forest Produce extraction

Species	2015-16		2016-17 (upto Nov 2016)	
	Target	Achievement	Target	Achievement
Timber (cmt)	8881.27	4030.29	3998.33	2633.27
Fuel (cmt)	136407.1	9743.27	44652.66	1439.07
Poles (Nos)	123957	26202	85744	6865
Bamboo (lakh Nos)	89.84	37.70	74.93	9.15

Source: Forests Department

## Forest Revenue

Forest products in the state include Timber, Bamboo, Firewood & Charcoal etc. The income accrued from forestry sector in the State was Rs.19.34 crore in 2016-17 (upto Nov, 2016). Details of the value of forest produce in the State are given in Annexure-5.29. Sale of red sanders is under process during 2016-17.

## Production

There is no supply of raw material from the Forest department to all the three major wood based industries in the state. Forests are looked as “Green Capital” and are no more valued as raw material resources for the industries. Industrial requirements are met from other sources like imported pulp, agricultural wastage and plantations raised by farmer with buy-back arrangements.

Forest department is supplying Bamboo Industrial Cuts to the Paper Mills in Andhra Pradesh. There is no supply of Bamboo Industrial cuts to the paper mills during 2012-13 to 2015-16 seasons.

## Forest Development Authority

Forest Development Agencies are federations of all VSS within a Territorial / Wildlife Forest Divisions under the Societies Registration Act. It operates in a 3-Tier system with the State Forest Development Agency (SFDA) at the State Level, Forest Development Agency (FDA) at divisional level and Vana Samrakshana Samithi (VSS) at village level.

20 FDAs were functioning out of the sanctioned 25 by Government of India in Andhra Pradesh. They are implementing Centrally Sponsored Schemes like National Afforestation Programme, Green India Mission, National Medicinal Plantation Board (FDA Component) and Hudhud schemes, subject to release of funds by Government of India from 2015-16, the Government of India decided the sharing pattern for Core Schemes under CSS including National Forestation Programme (NAP) would be 60:40 (Central & State) Share.

FDAs take up various Plantations activities, Soil and Moisture Conservation works, Fencing, Entry Point Activities, Awareness Raising, Training and Capacity Building etc., through the Vana Samrakshana Samathis.

## Social Forestry

The State Government has launched a massive people's movement involving general public and farmers in a big way to increase tree cover outside reserve forests to improve environment and to provide gainful employment to thousands of unemployed youth. Public distribution of seedlings, raising community land plantations/ avenue/ shelter belt plantations; and raising of institutional plantations have been done under Social Forestry programme.

## Vanamahostavam-Vanam-Manam

The Government has launched a massive campaign called “Vanam-Manam” on 29.07.2016 being 67<sup>th</sup> vanamahostavam day and planted one crore plants on the same day in all the Districts of Andhra Pradesh. Programmes and functions have been organized on various themes and aspects of forestry and every third Saturday will be observed for implementing programme titled ‘Prakruthi Pilusthondi’.

Planting on vacant Government lands, Forest lands, Endowment lands, Social and Tribal Welfare Hostels, Schools and College premises, Railway lands, Housing Colonies, Farm lands in the form of block planting and bund planting are planned. Series of Plantation programmes in housing colonies, Green Run, Cycle Rallies and Eco walks on different days, Elocution competitions for school children and college students on environment and forests. Quiz competition among school children,

Lectures and discussions on climate change concerns, environment and biodiversity conservation issues, Screening films and documentaries on forests and wildlife conservation in various schools and theatres, 'Essay writing' and 'On the spot painting competition' in all Districts at various places,

It is planned to take up planting 128 Lakh seedlings in 19,949 Villages and 105 Municipalities in 646 Mandals covering 906 Schools, 12,103 Institutions, 435 Industries in addition to planting in 5299 Ha of degraded forests. Arrangements are made for geotagging to these locations.

### Vanamahotsavam

67<sup>th</sup> Vanamahotsava 2016 was celebrated on 29.07.2016 at Bathulavarigudem Reserve Forest, Sunkolu Village limits, Nuziveedu Mandal of Krishna District. Vanamahotsava celebrations were simultaneously conducted at all the District Headquarters throughout the State. Total 1.5 crores seedlings have been planted on single day during the Vanamahotsava on 29.07.2016. The participants in the Vanamahotsava Programme included the elected people representatives, VSS numbers, NGOs, School and College Students, Government officials and General public. The Forest Department had procured miscellaneous plants viz. Vepa, Usiri, Maredu, Raavi, Ramaphal, Seethaphal, Kadamba, Badam, Neredu and Thellamaddi for planting. The Forest Department has also made elaborate arrangements for taking up planting in Lakhs of plants raised in 13 divisions in Andhra Pradesh in Vanamahotsava day for distribution to the General public and planting in Government waste lands.

### Karthika Vanamahostavam

In addition to the Vanamahotsava, the Karthika Vanamahotsavam celebrations were held throughout the State from 14.11.2016 to 20.11.2016. Karthika Vanamahostavam function was organised at Central nursery near Diwan Cheruvu Reserve Forest, Rajahmundry. Forest Department has made elaborate arrangements for taking up planting of seedlings in each District involving Andhra Pradesh Green Corps, Public representatives and District officials to co-ordinate with other agencies like School Head Masters, Industry Managements for success of Karthikavanam celebrations. About 1855 events were

conducted with the participation of (1,80,694 no. of people) All the political members of the State and Central, other government officials, Green Corp voluntaries, employees of Industries and VSS members are participated and 1.92 lakh seedlings are planted on this auspicious occasion of Karthika Pournami.

### Seed dibbling:

Forest Department has collected 2400 Metric Tonnes of seeds of native species. Out of this 2067 Metric Tonnes is being utilised for dibbling in identified patches of degraded forests. The main species raised for public distribution and planting in public lands are Teak, Red Sanders, Bamboo, Amla, Seethaphal, Casuarina, Eucalyptus seedlings for planting.

### Planting:

21.73 crore seedlings have been planted in the State i.e., 5.94 crores by various Government agencies and 15.79 crores by paper mills.

### Mahathma Gandhi National Rural Employment Guarantee Scheme Neeru-Chettu Performance

Activity wise performance is given in Table 5.21.

Table 5.21 Performance of Neeru-Chettu (2016-17)

Name of the indicator		Unit	Target	Achievement	
Name of the Component	Chettu	Block Plantation (Inside RF)	Ha	5966	5966
		Distribution of seedlings	Lakhs	807	807
		Raising of Nursery for 2016-17	Crore	15.60	15.60
		Seed dibbling	Mt	1500	1991
		Bio fencing to schools	RMT	350766	350766
Neeru	Continuous Contour Trench (CCT)	Nos	440400	703118	

Source: Forest Department

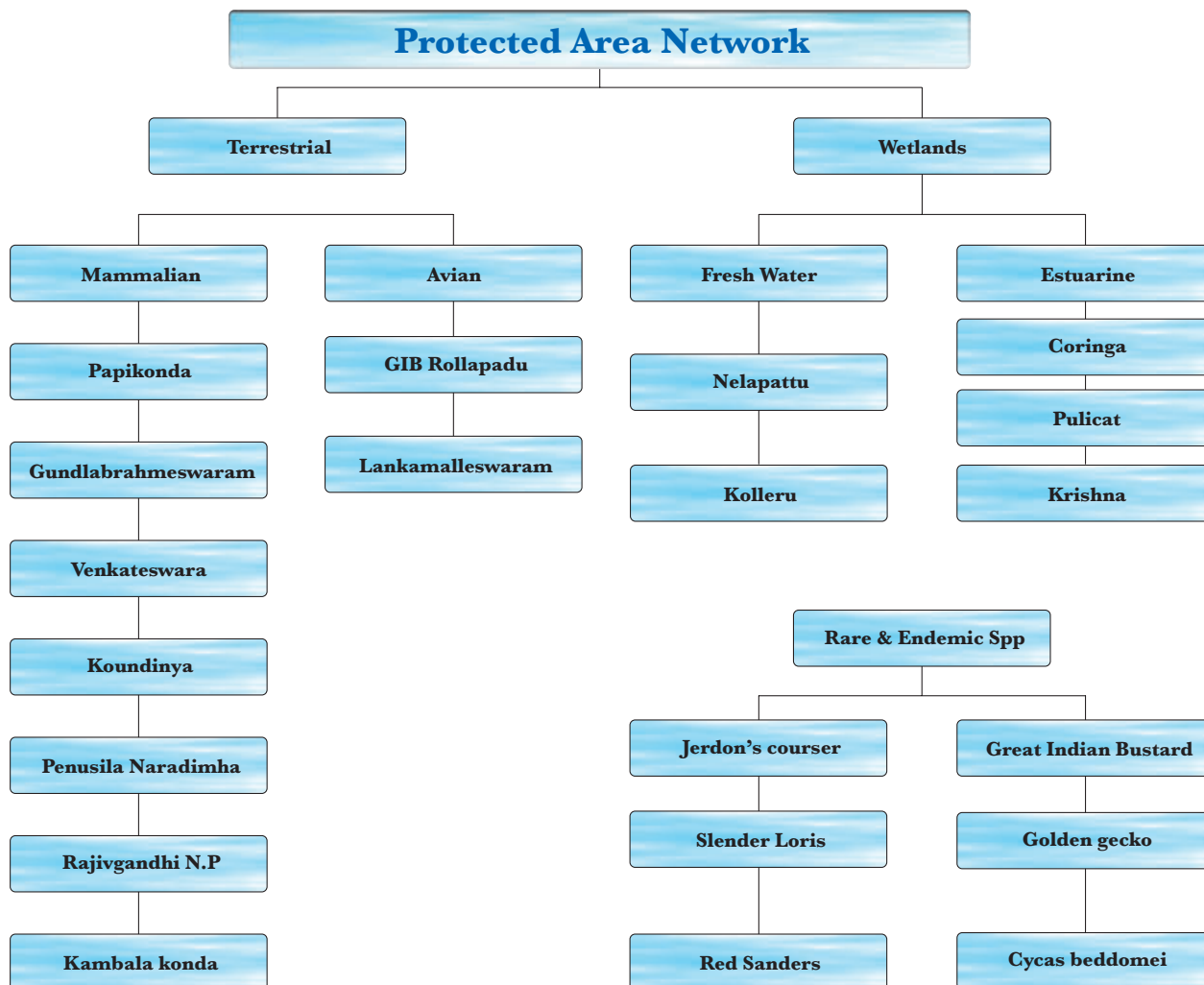
AGRICULTURE AND ALLIED ACTIVITIES

### Wildlife Conservation

As of now the State has 13 wildlife Sanctuaries and 3 National Parks covering an area on 8139.89 SqKms which is 22.53% of the State’s Forest area and 4.448% of the State’s Geographical area

There are 1 Tiger Reserve, 1 Elephant Reserve (Koundinya Sanctuary and Rayala Elephant Reserve), 1 Biosphere Reserve (Seshachalam) 3 National Parks and 13 Wildlife Sanctuaries in the State. The State has 2 Zoological Parks, 2 Deer Parks under Government control, 2 Deer Parks under Private Control and 2 Animal Rescue Centers for Ex-Situ conservation. One in SVZP, Tirupati and one in IGZP, Visakhapatnam with the Assistance of Zoo Authority of India. Critically endangered wildlife habitats of species like Jerdon’s Courser, Great Indian Bustard, and wetlands.

This involves conserving the wildlife in their natural habitat by giving proper protection and managing the habitat to meet the requirements of the wild animal species found naturally in the area. Areas which are potentially suitable for this type of conservation were identified and notified as Wildlife Sanctuaries and National Parks. Wildlife management involves conservation of wildlife outside its natural habitat in places like in Zoo Park, Deer Park and Rescue Centers. The purpose of this type of conservation is to breed the wild animals in such areas to build up their population. The population so built-up is trans-located back to the natural habitat and released for improving densities in the areas. Apart from conservation breeding, ex-situ conservation is also helpful in education, research and recreation.



## Zoological Parks in Andhra Pradesh

The 2 zoological parks in the state Indira Gandhi Zoological Park, Visakhapatnam and Sri Venkateshwara Zoological Park, Tirupati are rated among the best zoos of the country with excellent facility for display of animals, conservation breeding, visitor amenities, and conservation education etc.,

## Deer Parks

There are 2 deer parks in the state i.e., Kandaluru Deer Park at Kandaluru Dam, Nellore district with an area of 25 ha. and Chittoor RF Deer Park at Chittoor district with an area of 3.25 ha. Kottapakonda Deer Park in Guntur district is under development.

## Management of Protected Areas

It has been experienced that lack of sufficient water holes and fodder within the Protected Areas and Reserve Forests along the fringe areas that are subjected to over use by the local people result in straying of wild animals outside the forests. There is an urgent need to concentrate on these areas and improve the fodder resources as well as water resources through special initiatives. Currently, it is proposed to develop artificial water holes and improve water resources on priority in the fringe forest areas with the funds available under different Schemes. This initiative needs extension over entire state to reduce the adverse effects on the eco-systems due to biotic interference.

## Protection of Wildlife outside Protected Areas:

It is contemplated to revive the anti-poaching squads, one for each region of north coastal Andhra, South coastal Andhra and Rayalaseema kept under the control of independent divisions. These squads need to be provided with vehicles, weapons, wireless sets and other necessary equipment. As per the recent amendment to Wildlife (Protection) Act, 2006 Government of India called for a Special Cell at the state level to work in co-ordination with the Central Wildlife Crime Control Bureau. Implementing the instructions of Government of India in letter and spirit is a task ahead.

Protected areas of the forest department in the State is given in Annexure 5.30

## Conservation of Endangered Marine fauna

Hunting of endangered marine fauna like Sea turtles, Dolphins, Whale sharks and ray & shark fish which are listed in Schedule I of Wildlife (Protection) Act, 1972 is increasing in recent times along the Andhra Pradesh coast. A special scheme for conserving endangered marine fauna and to conduct studies for declaring Marine Protected Areas is an urgent need.

## Protection of Migratory birds

Though the important and prioritized wetlands like Kolleru Lake, Pulicat Lake, Nelapattu tank are notified as Wildlife Sanctuaries, there are still many areas like Naupada swamps and Telinelapuram in Srikakulam district, Uppalapadu in Guntur district, Talamudipi tank in Kurnool district, Punyakshetram in East Godavari District, which are identified by the Bird Watchers Society of Andhra Pradesh and SACON, are being declared as Wetlands of Ecological significance.

## Wildlife education and awareness

The National Wildlife Action Plan has identified 'Conservation Awareness and Education' as one among the thirteen important strategies to be adopted for implementation of wildlife conservation programme. To inform and involve the media on issues surrounding wildlife conservation and to highlight the connections between destabilized ecosystems and the failing quality of human life. To explain the connection between healthy ecosystems and India's water and food security. Launch mass awareness campaigns through print and electronic media. Provide central assistance to disseminate nature education packages through Government and non-government sectors. Separate Wildlife Circles at Srisailem, Tirupathi have been formed in the State to intensively manage the network of 16 Protected Areas.

## AGRICULTURE AND ALLIED ACTIVITIES

### East Godavari Riverine Estuarine Ecosystem (EGREE) Foundation

An initiative of the GoI-UNDP-GEF-GoAP Godavari Project a cross sectoral institutional mechanism established to achieve the goal of “Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors” operations in “East Godavari Riverine Estuarine Ecosystem”, Andhra Pradesh, India

The EGREE Foundation was constituted under the Andhra Pradesh Societies Registration Act, 2001 represent by Government officials. As the members of the foundation including District officials of East Godavari District. Main aims of the EGREE Foundation are to mainstream biodiversity conservation into the production sectors of EGREE through: (1) Cross-sectoral planning in the EGREE that mainstreams biodiversity conservation considerations, (2) Enhanced capacity of sector institutions for implementing biodiversity-friendly sector plans, (3) Improved community livelihoods and sustainable natural resource use.

### Seshachalam Biosphere Reserve

With an area of 4756 Sq.Kms (approx.) the only Bio-Sphere Reserve in the State has been notified. The local level management committee and State level management committee has been formed and is under implementation. The plan has been approved by GOI and will be implemented.

### Conservation measures for Sea Turtle along cost line of Andhra Pradesh

To protect Sea Turtles from predators all along the coast line of Andhra Pradesh. A rapid survey was conducted along the coast of A.P. to identify potential nesting sites and NGOs & local communities are involved in protection of nests by In-situ and Ex-situ methods. Efforts have been made to protect Sea Turtles from predators all along the coast line of Andhra Pradesh and nearly 5579 nests and 6,87,177 Hatchlings were released successfully in to the Sea between 2011-15. During 2015-16, 198437 hatchlings released into the sea.

### Man-Animal Conflict

To reduce the Man-Animal Conflict, steps are taken to ensure prompt compensation for crop loss, cattle kills and for human deaths. Apart from that measures like creating more water sources in the fringe areas, developing animal rescue teams with full-fledged equipment, and creation of awareness in the public. To mitigate the migratory Elephant problems in Chittoor district immediate special compensation packages are given for crop loss, human injury and death. Elephant proof trench is excavated and solar pulsating current fence are also being put in place to prevent elephants to enter into the agricultural fields and habitations. During 2015-16 as a special measure Elephant Proof Trench has been excavated over 197 Kms so far by incurring expenditure of Rs.331Lakhs. Details are shown in Table 5.22

Table 5.22 Man-Animal Conflict

(Rs. in Lakhs)

S. No	Year	Deaths		Injuries		Crop Damage		Cattle Kill	
		No of Cases	Compensation	No of Cases	Compensation	No of Cases	Compensation	No of Cases	compensation
1	2011-12	5	4	26	3.25	73	5.49	16	1.88
2	2012-13	6	1.78	117	5.04	399	20.21	233	5.95
3	2013-14	4	2.28	26	0.11	439	15.18	46	2.97
4	2014-15	1	6	13	5.08	1966	110.18	41	5.12
5	2015-16	3	12	8	3.69	1613	123.42	160	25.04
	Total	19	26.06	190	17.17	4490	274.48	496	40.96

Source Forest department



## Eco Tourism

Ecotourism Planning should be ecologically acceptable, economically viable, socially desirable and aesthetically satisfactory. 50% revenue for maintenance and development of the facility. 30% for VSS / EDC members. 20% for CBET members as incentive.

## Community Based Eco-Tourism (CBET)

“Responsible travel to natural areas that conserves the environment and improves the well-being of local people.” Minimize impact. Build environmental and cultural awareness and respect Provide positive experiences for both visitors and hosts Provide direct financial benefits for conservation Provide financial benefits and empowerment of local people by ensuring their direct stake in conservation of local culture, ecology and environment.

The existing CBET circles in the state are: Maredumilli CBET (Rajaumundry Circle), Kambalakonda CBET (Visakhapatnam Circle), Coringa EDC (Rajaumundry Circle), Talakona CBET (WLM Tirupathi Circle), Mamanduru CBET (WLM Tirupathi Circle), Ubbalamadugu CBET (WLM Tirupathi Circle)

## Eco-Tourism Centres Developed by Forest Department during 2016-17

Bairluty EDC (Jungle Camp & Safari) (NagarjunaSagarSrisailam Tiger Reserve), Tummalabyalu EDC (Jungle Safari) (NagarjunaSagarSrisailam Tiger Reserve), Paccherla EDC (GundlaBrahmeswaram Wildlife Sanctuary) (Kurnool Circle), Maredumilli Jungle Star (Rajaumundry Circle)

## Forest Protection Schemes Intensification of Forest Management Scheme

The objectives of forest protection scheme include prevention and control of fire, survey and maintenance of boundaries, preparation of working plans, development of infrastructure and protection of forests and wildlife.

## Implementation of Scheduled Tribes & other traditional forest dwellers (ROFR) Act-2006

Under this scheme 150345 Individual claims with an extent of 3,36,577 acres and 4493 Community claims with an extent 652780 acres are received. 83874 title certificates issued for Individual claims with an extent of 198633 acres and 1,319 title certificates issued for Community claims with an extent of 4,34,355 acres upto October 2016.

## Information Technology (Geomatics)

The list of IT projects completed under GIS and MIS are as follows:

### GIS

- Authentication of DGPS surveyed data of proposed Forest land diversions, CA areas of CRDA and APIIC etc.,
- Mapping of Eco sensitive zone for wildlife protected areas.

### MIS

- Integration of plantation, Nursery and Red sanders offence cases details with CM Core Dash board.
- Implementation of online Tree felling permission (EODB).
- Geo tagging of all plantations ( Since 2010)
- Digitization of Forest Protection offence cases and Nursery raising and utilization.
- Decision support system for Working Plan inventory
- Development of Financial Module- CAMPA
- Decision Support system to estimate the growing stock in TOF and for Red Sanders.

## Forest Research & Development

There are (6)Centres in Andhra Pradesh State under the control of (2) Research Divisions located at Tirupathi and Rajahmundry. The main objectives of these Divisions are to attend to forestry problems in their respective jurisdiction and take up activities mainly to establish experimental plots, improved Nursery Technology, Seed Collection, Vermi Compost/Organic Compost production and Tree Breeding programs etc. An expenditure of Rs.40.30 lakhs that formed 26.86% of the Budget released in 2016-2017 was incurred for Research schemes

## AGRICULTURE AND ALLIED ACTIVITIES

## Forest Conservation Act: 1980 Compensatory Afforestation

Forests are a vital component to sustain the life support system on Earth. Forests whether Government, village or private sub-serve the entire community and represent a community resource that meets the need of millions of rural people especially the tribals. Article 48A of the Constitution of India requires that the State shall endeavour to protect and improve the environment and to safeguard the forest and wildlife of the country. Under Article 51A, it is the duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.

As per the Forest (Conservation) Act 1980, whenever forest land is to be diverted for non-forestry purpose usually conditions relating to transfer, mutation and declaration as Reserve Forest/ Protected Forest the equivalent non-forest land for compensatory afforestation and funds for raising compensatory afforestation etc are to be imposed. Such funds were to be used for natural assisted regeneration, forest management and protection, infrastructure development, wildlife protection and management, supply of wood and other forest produce saving devices and other allied activities.

Details of Progress on Compensatory Afforestation under Forest (Conservation) Act 1980 in the state for the years 2014-15, 2015-16 and 2016-17 (up to September) are shown in Annexure 5.31.

## Andhra Pradesh State Bio-Diversity Board The broad objectives of the State Bio-Diversity Board are:

- Advise the State Government subject to any guidelines issued by the central Government on matters relating to conservation of biodiversity, sustainable use of its components and equitable sharing of the benefits arising out of the utilization of biological resources.
- Regulate by granting of approvals or otherwise, requests for commercial utilization or biodiversity and bio utilization of any biological resource by Indians.
- Perform such other functions as may be necessary to carry out the provisions of this Act or as may be prescribed by the State Government.

## Activities:

The Andhra Pradesh State Biodiversity Board has formed Expert Committees to give suggestions on various issues where in decisions are to be taken by the Board. (Rule 12) Expert Committees formed on the subjects of Agri-Biodiversity, Animal and Fish Biodiversity, Wildlife Conservation and Protection, Traditional knowledge associated with Medicinal Plants, Conservation and Bio-prospecting, Legal matters relating to IPR, Awareness and capacity building, Declaration of Biological Heritage Sites Access and Benefit Sharing.

## Biodiversity Management Committees (BMCs):

The Biological Diversity Act, 2002 and Biological Diversity Rules, 2004 and A.P. State Biological Diversity Rules 2009 direct the implementation of the provisions through the local bodies in the State of Andhra Pradesh. As per sec 41 of the Act, every local body shall constitute Biodiversity Management Committee (BMC) with in its area for;

- Promoting conservation biological diversity.
- Sustainable use of biological diversity.
- Documentation of biological diversity & Habitat (PBR).
- Conservation of land races.
- Folk varieties and cultivation.
- Domesticated stocks & breeds of animals & microorganisms
- Chronicling of knowledge relating to biodiversity.

Since formation of Biodiversity Board, it has constituted total 2338 BMCs at panchayat level, two at District level, 5 at Municipality level and 27 at Mandal Level. The total number of BMCs in the State is 348 from April 2016 to November 2016.

Peoples Biodiversity Registers (PBRs) are prepared by (23) BMCs at their local bodies' level and 53 PBRs are under process.

## Biological Heritage Sites:

As per the Biological Diversity Act 2002, in consultation with the local bodies and other key stakeholders, the Board shall take necessary steps to facilitate setting up of

## AGRICULTURE AND ALLIED ACTIVITIES

areas of significant biodiversity importance as Heritage Sites. Following the recommendation from the Board after consultation with the Central Government, the State Government shall issue notification to this effect.

In case of 1.Veerapuram and 2.Timmamma Marrimanu proposals were submitted to the Government for notification as Biological Heritage Sites. Srisailam, Tirumala Hills, Kolleru and Talakona proposals to recommend them as BHSs are under consideration.

### Biodiversity Parks:

Ex-situ conservation initiatives; Biodiversity Park established by Dolphin Conservation Society in Visakhapatnam recognized as first ex-situ biodiversity park of A.P.

### Andhra Pradesh Forest Development Corporation

#### The objectives of the Corporation:

To raise large scale plantations to meet the demands of forest based industries with species such as Eucalyptus, Bamboo, Tropical pines, Coffee, Cashew, Casuarina etc. To generate gainful employment to the landless poor, particularly in remote and agency areas. To undertake

consultancy services to the industries to raise and maintain plantations in their vicinity. Details about plantations raised by APFDC 2016-17 (upto Nov, 2016) are shown in Table 5.23.

Table 5.23 Plantations raised by APFDC 2016-17

(Area in Hectares)

Sl. No	Species	Area (upto Nov 2016)
1	Eucalyptus (Seed origin)	4614.279
2	Eucalyptus (Clonal)	31273.39
3	Bamboo	2447.48
4	Cashew	5832.67
5	Coffee	4010
6	Teak	813.95
7	Medicinal plants	581.52
8	Casuarina, Pines and other Misc. species	211.79
	Eco-Tourism Projects	201.32
	Total	49986.39

Source: Forest Department

Achievements, Projections upto Nov, 2016 are given in Table 5.24

Table 5.24 Achievements under APFDC

S. No.	Activity	Achievements during		During 2016-17	
		2014-15	2015-16	Projections	Actuals upto Nov. 2016
1	Raising of Clonal Eucalyptus plantations-Ha	1804.00	997.81	800	795.00
2	Raising of Bamboo plantations -Ha	65.00	63.61	35	37.00
3	Raising of Teak plantations -Ha	95.00	50.00	43.6	32.85
4	Harvesting of Eucalyptus pulpwood – MTs- @	13491	0	234000	2592 #
5	Harvesting of Long Bamboo – Nos.	795388	356171	844600	810039 #
6	Harvesting of Bamboo Industrial Cuts – MTs.	325	67	732	395 #
7	Harvesting of Raw Coffee – MTs.	358.437	322.349	430	375 #
8	Harvesting of Pepper- MTs.	2.80	6.419	40	Harvesting not started

Note :@ Harvesting of Eucalyptus Plantations during 2014-15 and 2015-16 seasons is not taken up as the sale of resultant pulpwood is deferred due to bifurcation of State. Hence shortfall / Nil progress in harvesting of Eucalyptus Pulpwood.

# In Progress

Source: Forest Department

## AGRICULTURE AND ALLIED ACTIVITIES

### Plantation Activities:

#### **Eucalyptus Plantations:**

The APFDC has been raising Eucalyptus Clonal plantations and with 31273 Ha, it is the single largest grower among PSUs in India. There are proposals to raise another 3000-4000 Ha in the next 3 to 4 years. Due to improved site preparation, use of quality planting material and management practices, optimum yields are obtained from the plantations.

#### **Bamboo Plantations:**

Bamboo plantations are raised over an area of 2447 ha. The Corporation is intending to expand the Bamboo plantations over an area of 400 Ha in the next 3 to 4 years to ensure more supply of raw material per annum to the Paper Industries besides raw material to the artisans.

#### **Coffee Plantations:**

The Corporation is maintaining about 4,010 ha. of existing coffee plantations in the agency areas of Visakhapatnam and East Godavari Districts with intensive cultivation practices, by following scientific methods. These plantations are generating about 5.00 lakh mandays of employment to the tribals all-round the year

#### **Pepper Cultivation**

APFDC has 4.09 lakh Pepper standards in its Coffee Estates in the agency areas of Visakhapatnam and East Godavari Districts comprising of high yielding varieties like Panniyur-I, Purnima, Sreekara, Subhakara, Panchami, Panniyur-5.

#### **Cashew Plantations:**

The Corporation has got cashew plantations over an area of 5833 ha, along the coastal belt in Prakasam and Nellore districts and in the inlands of West Godavari and Chittoor districts. Presently, the older plantations are being replanted with high yielding Cashew varieties using scion banks.

#### **Eco-Tourism:**

A.P. Forest Development Corporation Ltd. has developed Rajeev Eco Park at Idupulapaya of YSR Kadapa district and the same is already opened to the public.

#### **Other Activities:**

The Corporation has diversified its activities with several

schemes such as providing consultancy services in afforestation to the industries such as NTPC, HPCL etc., and supplying high quality Eucalyptus clones to the public and institutions.

It is also acting as agent to the Govt in carrying out the export of Red Sanders wood.

#### **Employment Generation:**

The Corporation is providing employment to the tribals and Srilanka repatriates almost round the year. In the other areas the employment is provided to the land less and poor during regeneration and harvesting activities.

About 9 lakh man-days of employment (3.00 Lakh mandays in raising and maintenance of plantations 3.50 Lakh mandays in Coffee plantations and 2.50 lakh mandays on harvesting of plantations) per annum are provided to the poor, tribals and Sri Lanka repatriates.

## Sericulture

Sericulture in Andhra Pradesh is a sustainable farm-based economic enterprise positively favouring the rural poor in the unorganized sector because of its relatively low requirement of fixed capital, and higher returns at frequent intervals on the investment. It yields regular returns in 4 to 5 splits from one acre of mulberry.

Andhra Pradesh stands second in the country in silk production next only to Karnataka. The rain fall in Rayalaseema districts is very low when compared to the state average rain fall. Unlike coastal districts sericulture is predominant in the Rayalaseema districts. The State has also got strong industrial base besides traditional Silk handloom pockets like Dharmavaram, Peddapuram, Uppada, Venkatagiri etc., which are nationally renowned silk handloom weaving centers, encouraging the growth of Sericulture industry in the State.

In the recent past, the department is emphasizing more on Bivoltine Raw silk Production with implementation of CDP due to which on Farm & Non-Farm Sectors have gained momentum in the State. The goal of the department is to produce International 2A and above grade Bivoltine Silk production duly sanctioning of ARMs in the State

under private sector. The Dept. is also concentrating on strengthening of marketing system duly providing incentives on production of Bivoltine and CB cocoons to the farmers.

### Vision

- To place Andhra Pradesh as one of the leading states in silk production, by first meeting domestic requirements and catering to exports of silk and silk garments later
- To promote sericulture as an alternate and viable option to meet the challenges of agrarian crisis
- To promote rural livelihoods for employment creation and poverty alleviation through sericulture sector in the state

### Initiatives

Prioritize production of Bivoltine Silk, improve quality and quantity of Mulberry silk, focus on production of Bivoltine Silk through Cluster approach and integrate both on Farm and Non-Farm activities within the cluster/ district. Leaf to cloth approach for development of Bivoltine Silk production in East Godavari, Ananthapuramu and Chittoor districts are showing good results. The department adopts Life cycle approach for balanced growth of farmers, reelers and silk weavers. Eco-friendly production process in Mulberry cultivation to help to reduce the climate change. The Government is striving to achieve higher productivity through focus on Bivoltine cocoon production, area expansion of Mulberry cultivation, encouraging low cost silk worm rearing sheds, strengthening extension efforts through training and publicity and Convergence approach for maximizing results. Linking with NABARD, RKVY, ATMA, MG-NREGS, APMIP and other schemes.

### Catalytic development programme (CDP):

The department of Sericulture has implemented Catalytic Development Programme (CDP) for development of sericulture by supporting infrastructure, technical up gradation and financial improvement of Sericulture farmers. The Govt. Of India, Ministry of Textiles had discontinued the CDP schemes from 2015-16 and the CSB has restructured on going central sector schemes as RCS (Re structured Central Schemes) and released assistance

under RCS scheme from 2015-16 to 2016-17. Under RCS schemes the financial assistance is being provided to strengthen seed sector, post Cocoon sector, Vanya sector, Capacity building and R&D schemes.

In Andhra Pradesh during 2016-17 much emphasis is given for promotion of components under SCSP/TSP sector with 90% subsidy. Out of total release of Rs.804.44 lakhs of Central share as on date, an amount of Rs.422.85 lakhs were released to SCSP (Rs.360.57 lakhs) and TSP (Rs.62.28 lakhs) sectors to improve financial status of SC/ST sericulture farmers. The financial support is extended to the reelers/ weavers for establishment of Filature/ Multi-end/ Automatic Reeling Machines / Twisting units and Weaving Units so as to increase marketing for Bivoltine cocoons and produce International 2A and above grade Raw Silk in the State.

### Cluster Promotion Programme (CPP):

In Andhra Pradesh, much emphasis is being given for the promotion of Bivoltine hybrid programme through cluster approach. The following 13 Clusters have been established in 8 potential districts of the State and the programme is being implemented with the coordination of CSB and State dept. officials/ staff for technical guidance to the farmers. The financial assistance is being provided from CDP/CS schemes.

### Supply of 100% chawkie worms:

The Success of Bivoltine crops depends upon the supply of BVH Chawkie worms to the sericulture Farmers. In order to supply Chawkie worms to the farmers, Special attention is paid on strengthening 47 Govt. Seed Farms and also by encouraging the farmers for establishment of Chawkie rearing Centres under private Sector for better productivity of Bivoltine Cocoons. During the year 2016-17, full equipped Chawkie rearing centers with incubator were newly sanctioned 2 for Ananthapur and 3 for Chittoor in addition to already existing CRCs . The Chawkie rearing equipment is also sanctioned to the existing Pvt. CRCs. Hence all CRCs existing under private sector and Government sector shall meet the requirement of Chawkie worms to the farmers during 2016-17 and ensure 100% Chawkie worms supply.

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### Rastriya Krishi Vikas Yojana

The Dept is availing financial assistance under Rastriya Krishi Vikas Yojana (RKVY) for development of infrastructure as well as for improvement of soil health under both Govt. and Private sectors. Funds are sanctioned to the Govt. Farms for Farm mechanisation under RKVY. 50% (i.e Rs.750/- for 100 DFLs) subsidy to BVH Chawkie charges is also being released under the said scheme to the farmers to encourage Chawkie concept. During 2014-15, subsidy was provided to the farmers for constructions of verandas to their existing rearing sheds. Solar Lighting Units, supply of additional neetrika to bivoltine farmers are also sanctioned with 50% RKVY subsidy.

### MG-NREGS:

The department is providing financial assistance to the farmers under MG-NREGS towards plantation of Mulberry for the first year and maintenance of the garden for second and third years also. The construction of silk worm rearing sheds are also taken up under MGNREGS from 2016-17 onwards. The unit cost per acre is Rs.1,54,136/- for (3) years put together. Providing financial assistance to the tribal beneficiaries for Tasar Rearings is also under active persuasion under MG-NREGS.

### Development of Non-Farm Sector

#### Providing incentives on silk production

- Rs.130/- per kg for bivoltine silk produced on multi-end silk reeling units and Rs.150/- per kg for the silk produced on Automatic Reeling Machines.
- Rs.80/- per kg for Multi-voltine silk produced on multi-end silk reeling units
- Rs.30/- per kg for motorized charka, backend Italian model charka & cottage basin silk in the state.
- An amount of Rs.40.87 lakhs was released under Raw Silk incentive to the reelers against the production of 78.28 M.Ts Raw Silk during 2016-17 (upto October 2016) under State Plan.
- 50% subsidy on the cost of reeling sheds
- Digital display boards are established in the Government cocoon markets of Hindupur (Anantapuramu dist) and

Kuppam (Chittoor dist.) for market rates awareness to the farmers with update information of A.P Markets and Karnataka Markets.

- Establishment of silk exchange in Proddutur of YSR District and Hindupur of Anantapuramu district for dupion and raw silk trading.
- Establishment of Automatic Reeling Machines (ARM) in the State during this year for enhancement of the International Grade Bivoltine Raw silk production.

Inspired by the policies of the state, One Entrepreneur is establishing one 400 end ARM in Madanapalli, Chittoor dist by meeting himself the total unit cost.

### Impact of Initiatives

The Bivoltine cocoon arrivals increased from 1392.667 Mts to 1743.826 MTs upto October,2016 in the cocoon markets of A.P through incentives to the farmers. Hitherto most of the cocoons produced in the state were purchased by Karnataka state and got converted to silk in Karnataka State. With implementation of cocoon incentive scheme, a quantity of 1743.826 MTs of cocoons was consumed by the local reeling units in the state up to December, 2016.

### Status of Sericulture industry

32560.88 M.Ts of CB Cocoons and 4530.79 M.Ts of BVH Cocoons were produced during 2015-16 . During 2016-17, a quantity of 20123.12 M.Ts of CB Cocoons and 2973.07 M.Ts of BVH Cocoons are produced up October 2016. The productivity for 100 DFLs (Cocoon production) is increased to 68 Kgs. Necessary steps are being taken for further increase in productivity more than 68 kgs per 100 dfls by ensuring 100% supply of chawkie worms to the farmers and organising exposure visits to Tamil Nadu state where the productive levels are 72 Kgs.

### State schemes

- Supply of HYV Mulberry Saplings.
- Supply of quality disinfectants to increase the productivity.
- Providing Rs.100/- Assistance on cost of 100 BVH DFLs and Rs 150/- per 100DFLs towards chawkie Charges.
- Providing Assistance to the farmers for Farm

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mechanisation to purchase like secatures, brush cutters, power sprayers etc., with a maximum assistance of Rs 10,000/- (or) 50% of the unit cost whichever is less.

- Assistance for construction of rearing sheds and supply of rearing equipment.
- Incentive to reelers against production of raw silk on improved multi end and improved cottage basin silk reeling units.
- Production incentive for the reeling cocoons produced by farmers including Tasar cocoon Production.
- Providing assistance to Charka reelers for conversion in to 6 basin reeling units.
- Integration of charka/ MERU reeling units to twisting units.
- Yarn support price to silk weavers who are outside Co-operative fold
- Implementation of e-governance projects.
- Share capital assistance to SERIFED.
- Providing assistance to Tasar Grainages.
- Providing assistance for maintenance of Tasar chawkie gardens.

### Yarn support price to silk weavers:

On purchase of 4 Kgs of Silk Yarn by an individual weaver outside the co-operative society, assistance of Rs.150/- for 4 Kgs of silk yarn, per month will be provided. Rs.43.25 crore yarn subsidy during 2016-17 has been paid to 35069 nos. of weavers.

### Research and Development

Andhra Pradesh State Sericulture Research and Development Institute, Hindupur was established with the main intention of evolving new races, to the condition suitable to A.P climatic conditions and capable of producing International grade Cocoons/ Silk. A new project namely "Identification of DNA markers" for baculovirus resistance in Silkworm was presented to DBT, New Delhi for financial sanction. Six new Silk Worm hybrid races were developed by the institute and submitted for National Silk Worm Race Authorisation. Bivoltine hybrids with disease resistance races are under field trials. In addition, certain eco-friendly disinfectants such as Seri-Gold, Seri-Clean, Seri- Plus, Shakthi and Abhya etc., are released in the field

for increase in Cocoon production from 5 Kgs to 10 Kgs for 100 DFLs. Achievements and status during 2015-16 (upto Oct, 2016) are shown in the Table 5.25 details of district wise achievements made under Sericulture sector is given in Annexure 5.32.

Table 5.25: Sericulture - Achievement during 2016-17 (up to Oct, 2016)

Sericulture		
Area under Mulberry- cumulative area in Acres		79377.07
Cocoon Production (MTs)		23096.20
Raw silk production MTs		3268.18
Tasar Cocoon production (lakh No.)		7.50
On-Farm Sector:		
Mulberry Acreage as on 31.10.2016		79377Acres.
No. of farmers covered ( by the end of 31.10.2016)		66037 Nos.
Ave. Cocoon Production per year		31,098 M.Ts.
Ave. Raw Silk Production per year		4,212.48 m.Ts.
Ave. Productivity per 100 DFLs		68 Kgs.
Ave. Net income per acre/ year		Rs.75,000/-
Employment generation in both On Farm & Non Farm activities		3.968lakh Nos.
Non-Farm :		
1 Reeling Sector:		
a)Total Reeling basins required to convert the Reeling Cocoons into Raw Silk locally		15,500 Nos.
b)Existing Reeling Basins:		
i) Charkas		716
ii) Cottage Basins		152
iii) Multiend Reeling Basins		1440
iv) Automatic Reeling Basins		120
Total existing Basins		2,428
Additional Basins required		14,070
2 Twisting Sector:		
a) No. of Twisting Spindles Required to convert the Raw Silk in to twisted yarn locally		15,72,500
b) Existing Twisting Spindles		3,95,525
c) Potential available for additional Spindles		11,76,975

Source: Sericulture department

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### Incentive on BVH & CB Cocoon and Raw Silk Production:

The details of production incentive on Cocoon production and Raw silk production:

S. No	District	Production incentive/Kg on Cocoons	
		CB(in Rs.)	BV(in Rs.)
1	Anantapur & Chittoor	10/-	50/-
2	Other Districts	20/-	50/-

S. No	Grade of Silk produced	Production incentive per Kg(in Rs.)	
		Multi end Reeling Units	Automatic reeling units
1	2A and below(BV)	130/-	130/-
2	Above 2A Grade(BV)	130/-	150/-
3	CB Silk	80/-	80/-
4	Silk Yarn CB or BV	35/- on the silk produced on Charkha, Cottage basin & backend reeling units	

### E-governance initiatives:

- Benefits to farmers / silk reeler / weavers are transferred through online banking system.
- Cocoon rates are made available through SMS by sending message to Seri\_CB/Seri\_BV to 9704742555.



## Agricultural Marketing

Marketing is a key link in the supply chain. Markets functioning effectively are essential for driving up the growth in the agriculture sector and for generating employment and economic prosperity in rural areas. Agricultural marketing infrastructure plays a pivotal role in the fostering and sustaining the tempo of rural economic development and is critical for better performance of the agriculture sector as a whole. Effective marketing infrastructure is essential for cost effective marketing, to minimize post-harvest losses.

*Market Yards -324*

*Revenue collected by Market Committees  
-Rs. 470.06 crore in (2015-16)*

*Under Rythu bandhu padhakam 1715 of  
farmers were benefited (upto Oct 2016)*

*Rythubazars-84*

It is envisaged that large investments are required for development of post harvest and cold chain infrastructure nearer to the farmers' field. With rapidly changing production-consumption trends, the requirement of cold storages in markets has increased manifold more so in case of perishable commodities. Successful marketing requires learning new skills, new techniques and new ways for obtaining market price information. With a view to provide dynamism and efficiency into the marketing system, the government has undertaken several measures in the recent past.

The State has 191 Agricultural Market Committees managing 324 market yards including sub-yards, of which 98 are functioning, which consists of 19 members viz., 12 members from growers, 3 from traders and the other four from representatives of local bodies and Government departments. The Committee is headed by a Chairman



from grower members. All members are nominated by the Government. Every Market Committee has a Secretary, who is the executive authority of the Market Committee. All the staff of the Market Committee is appointed by the Market Committee/ Director of Marketing /Government as per AP (AP & LS) Markets Rules, 1969 as amended from time to time.

The Market Committees levy and collect market fee at the rate of 1% Ad-Valorem on sale and purchase of notified agricultural produce payable by purchasers of produce. Market fee is the only source of income for Market Committee. The market fee is utilized mainly for development of markets and creation of facilities to users of markets i.e., growers and traders and other functionaries. The Agricultural Marketing department under takes various activities such as regulation of trade in market yards, management of markets, facilitation for procurement operations under Minimum Support Price (MSP), providing loans to the farmers under Rythu Bandhu Pathakam, Market Intervention, Management of Rythu Bazars etc., The Market Committees collected Rs.470.06 crore in 2015-16 and Rs.257.98 crore during 2016-17 (up to November 2016) towards market fee. The details of district wise collection of market fee are given in Annexure 5.33.

## Initiatives

- 18 Markets are the new functional markets.
- Purchase transactions are being conducted through Electronic Platforms (Unified Market Platform) in 22 Agricultural Market Committees (e-Trading).
- 22 New Godowns with a capacity of 0.39 Lakh MT. have been constructed during the year 2016-17 and 30 godowns with a capacity of 0.65 Lakh MT are under construction.
- Covered 5 platform with 2.00 Lakh Sft., 212 trading shops and 36 Ripening chambers with a capacity of 675 MTs was constructed.
- Onion Storage facility at 3 places in Kumool District with 1800 M.Ts capacity with a cost of Rs.3.50 Crores has been developed. Another 3 storage units with 1500 MTs are under construction.
- 3.23 lakh seedlings are planted in the agricultural market yards in the state during Vanam-Manam Programme during, 2016-17.

## Rythubandhupathakam :

Under this scheme, an amount of Rs.33.42 crore loans were distributed to 3414 farmers during year 2015-16 and an amount Rs.21.09 Cr. are distributed to 1715 farmers during 2016-17 (upto Nov-2016). The details of loans are given in Table 5.26

Table 5.26 Loans given to farmers

Year	Loan Amount (Rs in cr)	beneficiaries
2010-11	10.77	2593
2011-12	8.38	1240
2012-13	10.94	1862
2013-14	15.33	2194
2014-15	26.01	3145
2015-16	33.42	3414
2016-17 (upto 11/16)	21.09	1715

Source: Commissioner, Agricultural Marketing

## Market Reforms

The Government has adopted A.P. Agricultural Marketing Policy 2015 to improve the transparency and efficiency of the Markets and create competitive, credible and hassle free primary marketing system in the State and elimination of barriers to participation in markets. As part of this policy, the A.P (Agricultural Produce and Live Stock) Markets Act, 1966 has been amended vide Act No.14 of 2015. The Government has launched e-trading in 10 Agrl. Market Committees. Viz. 1. Anakapalli 2. Eluru 3. Duggirala 4. Guntur 5. Kurnool 6. Adoni 7. Yemmiganur 8. Kadapa 9. Hindupur and 10. Kalyanadurg.

The Government of India sanctioned 12 markets in the State under National Agricultural Market (NAM) through Agri-Tech infrastructure fund (ATIF) for a common e-Market Platform. The markets are located at 1. Palamaner, 2. Madanapalli, 3. Punganur, 4. Kalikiri, 5. Gurrankonda, 6. Podalakur (AMC, Rapur) 7. Dacheppalli (AMC, Piduguralla), 8. Pattikonda, 9. Ananthapuramu, 10. Denduluru, 11. Gopalapuram and 12. Tenali

e-trading is going on in the above markets. A Direct Purchase Center (DPC) license has been issued to Archer Daniel Midland (ADM) India Agro Industries, Latur & Vizag Private Limited for procurement of Maize, Oilseeds and Pulses as per the provisions of Sec 7(7) of the amended Markets Act read with Rule 48-A of amended A.P. Markets Rules.

## AGRICULTURE AND ALLIED ACTIVITIES

### Link Roads:

20% of market fee collected during 2014-15 to be utilized for developing link roads from agricultural fields to market yards in convergence with MGNREG Scheme. So far proposals of link roads pertaining to 128 AMCs (out of 191 AMCs) covering 2446 link roads with cost of Rs.13437.24 Lakhs (Rs.6718.62 Lakhs of AMC+ Rs.6718.62 Lakhs of MGNREGS) sanctioned.

### Market Intervention

The Department taken up Onion Market Intervention during February to May 2016 - procured 2678 MTs of Onions in Kurnool district and arranged sales through Rythu Bazars in the State at no profit no loss basis. Onion Market Intervention was again taken-up during September and October, 2016 and procured 2747 MTs of onions in Kumool District (about Rs.2,20 Crores) and arranged sales through Rythu Bazars at no profit and no loss basis. Coconut Market Intervention was taken up from 3rd April to end of May, 2016 and procured about 3 lakh coconuts in E.G. District and arranged sales in Rythu Bazars of the State. Details of godowns are given in Annexure 5.34



### Rythu Bazars:

There are 84 Rythu Bazars across the state. 11 New Rythu Bazars are under construction. They are; Tiruvuru, Kuchipudi, Payakapuram, Gannavaram, Velpur, Tekkali, Kotabommali, Kaikaluru, Koyyalagudem,

Chinthalapudi and Kotarubilli New Rythu Bazars 9 Nos sanctioned :Tanuku Jangareddygudem, Tadepalligudem, Nidadavolu Lingapalem, Nallajerla, Buttaigudem, Gopalapuram and Pedapadu. Renovation, improvement and facelift works have been carried out in 51 Rythu Bazars. Action is taken to improve the functioning of Rythu Bazars. Farm 2 Home programme is introduced at Guntur and Rajahmundry where farmer groups are selling vegetables directly to consumers through Retail outlets and Mobile Rythu Bazars



### Maintenance of Storage Facilities

Presently 1055 godowns with 7.98 lakh MT storage capacity are available in AMCs in the state. From 2011 onwards godowns are being constructed with upgraded technology. Due to this, roof panels of godowns are mechanically seamed (Inter-locked) and they are free from holes, nuts, bolts, overlaps, ensures zero maintenance and also resistant to extreme weather conditions and 100% leak proof roofs. 33 Godowns are sanctioned in 13 Districts with 62500 MTs capacity, with an estimate cost of Rs.3710.00 Lakhs. All the godowns are at different stages of execution. Accreditation and Registration of the Godowns of Agricultural Market Committees with Warehousing Development and Regulating Authority (WDRA) has been taken up for making them fit for scientific storage. Repairs and upgradation works have been taken up in 210 Godowns and secured Certificate of Accreditation. 302 Godowns are identified for taking up works for Accreditation.



CHAPTER 6 INDUSTRIES

## INDUSTRIES

## Industries

The new state of Andhra Pradesh despite being a predominantly agrarian economy, especially after state re-organisation, while strengthening the agriculture sector to make farming a profitable occupation also started undertaking structural reforms to give impetus to accelerate industrialization. To create a good ecosystem for investments, the government has come up with an innovative industrial policy coupled with attractive fiscal incentives. Sector specific policies put in place by for developing different segments like food processing, textiles, electronics hardware, automobiles, aerospace, defence, tourism and others are creating opportunities for entrepreneurs and generating employment.

During the last two decades, Indian manufacturing has expanded steadily and grown almost at the same pace as India's overall economy. Despite this encouraging growth, dashing hopes of an economy based on manufacturing-led growth, the relative share of manufacturing in the Indian economy has remained unchanged. Meanwhile, several economies have increased their share of manufacturing to above 20 percent of their GDP. This shift of manufacturing capacities from developed nations to rapidly developing economies is likely to continue.

As part of the low skill and labour intensive focus, the state government is devising strategies to develop opportunities in agro-processing, garments, leather, furniture, induce private investment in target sectors, develop cost-effective infrastructure and logistics support and Regulatory and policy support to anchor large units.

Post bifurcation, the MSME profile of the state has changed significantly towards capital intensive industry. The government has identified competitive MSMEs as a central theme for developing the MSME sector and to make MSMEs a central part in the global value chain and becoming the flag bearer of Brand Andhra Pradesh

### District Industries Centres

District Industries Centres were established in 1978 to serve as nodal agencies in the District to assist entrepreneurs for establishment of Industries. These centres provide all required approvals/ clearances for setting up Industries under a Single

Window. The District Industries Centres are implementing agencies of MSMED Act and issue Entrepreneur Memorandum (EM) for Micro, Small and Medium Enterprises (MSME) besides maintaining effective liaison with various financial institutions in arranging required credit facilities. The information pertaining to Industrial development of districts is maintained in these centres.

### Industrial Investment Promotion Policy 2015-20

The State Government of Andhra Pradesh has come up with an Industrial Investment Promotion Policy 2015-20 with various Incentives/Concessions to new industries set up in the State. The Government is striving towards creation of quality infrastructure coupled with congenial industrial environment in the State to make Andhra Pradesh an attractive destination for both foreign and domestic investors.

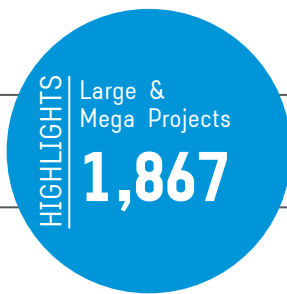
As a part of facilitation through e-Governance, sanction of industrial incentives pertaining to industries department are processed through online submission of applications.

Special emphasis is given for establishment and enhancing production capacities of Micro, Small & Medium Enterprises with huge employment potential. In order to create hassle-free environment for the investors, Government of Andhra Pradesh is effectively implementing Single Window Act and arranging various industrial clearances within the set time frame period through online submission of applications.

Andhra Pradesh is the first State in India to take up the initiative in bringing A.P. Single Window Clearances system under e-Biz project of National e-Governance plan of Government of India. This provides efficient, convenient, transparent and integrated electronic services to investors and industrialists covering 40 services, of which 13 are Central Services, 21 are State Common Services and 6 State specific services, covering 18 Departments.

### Single Window Act

The Single Desk Policy aims to create a conducive ecosystem to provide all clearances required to setup industry within 21 working days. The main focus for attracting investments is the strategy of "Ease of doing Business".



### A. State Level Nodal Agency

During the period from April to September 2016, 321 Large and Medium Enterprises with investment more than Rs.5.00 Crore on plant & machinery have filed their proposals with the State Level Nodal Agency for 589 clearances/approvals from various departments. 515 cases were given clearances/ approvals by different Competent authorities, 22 proposals were rejected/returned and 52 cases are in process with an investment of Rs.14308.08 Crore providing employment of 63,523 persons.

### B. District Level Nodal Agency

During the period from April 2016 to September 2016, 2650 Micro & Small Enterprises with investment below Rs.5.00 Crores on plant & machinery filed their proposals with the District Level Nodal Agency for 4656 clearances / approvals from various Departments. 4264 cases were given clearances / approvals by various competent authorities and 12 proposals were rejected / returned and 20 cases are in process with an investment of Rs.1928.11 Crores, providing employment to 41758 persons.

## Large & Mega Projects

1867 Large and Mega Projects with an investment of Rs.86893.93 crore have gone into production creating employment to 4,67,642 persons as on December, 2016. During 2016-17 (upto Dec 2016), 57 Large and Mega industrial projects are established with an investment of Rs.5051.04 Crore and employment generation of 23756 persons. The details of district wise Large & Mega industrial proposals, investment and employment are given in Annexure 6.1.

## Micro, Small & Medium Enterprises

Investment limits were enhanced with the enactment of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006. Micro, Small and Medium Enterprises (MSMEs) Sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs contribute to approximately 8% of the Country's GDP, 45% of the manufacturing output and 40% of exports. MSMEs provide the largest share of employment after agriculture and hence, the development of MSME sector can contribute enormously to the socio-economic development of the country.

The MSME sector in Andhra Pradesh manufactures a variety of products with a high concentration of Micro and Small units belonging in the Sectors of food, mineral and building materials, drugs and pharmaceuticals, fabricated materials, trading and service sector. Andhra Pradesh has identified development of MSMEs as a catalyst for job creation and balanced regional development.

Government of Andhra Pradesh has introduced the MSME policy 2015-20 to provide a holistic frame work for sustainable development of MSMEs in the State and to make them globally competitive. The policy offers incentives, infrastructure development, technology up-gradation, skill development and marketing support, simplification, administrative reforms and rehabilitation of sick industries in the State. Government of India has introduced Udyog Aadhaar Memorandum (UAM) in place of Entrepreneur Memorandum Part –I & II. UAM registration is on-line and user friendly and is filed on self-declaration basis and no supporting documents are required.

During 2016-17 (upto Dec) 6849 Micro, Small and Medium Enterprises were established, providing employment to 89,128 with an investment of Rs.2542.30 Crores. District wise details are given in Annexure 6.2

## AP Micro, Small Medium Enterprises Facilitation Council

The Micro, Small and Medium Enterprises Development Act 2006, provides for constitution of Micro and Small Enterprises Facilitation Council by State Governments in their State for redressal and recovery of amount due to delayed payments. APMSE Facilitation Council, a quasi-judicial body, provides impetus towards facilitating the payments to MSEs from their buyers.

## Prime Minister's Employment Generation Programme

The PMEGP is a Central Sector Scheme funded by the Ministry of Micro, Small and Medium Enterprises. The scheme is implemented by KVIC in association with KVIBs and State Governments through District Industries Centres. The subsidy component under the scheme is placed at the disposal of participating banks by the KVIC with regard to

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targets that will be allocated to DICs. The scheme envisages 16.2% reservation for SCs, 6.6% for STs, 27% for OBCs, 5% for Minorities 1% for Ex- Servicemen, 3% for physically handicapped and 30% for Women (overall).

### Objectives

The objective of the Prime Minister's Employment Generation Programme is to generate employment opportunities in rural and urban areas through self-employment ventures and to increase wage earning capacity of artisans and contribute to increase the growth rate of Rural and Urban employment, Self Help groups (including those belonging to BPL provided that they have not availed benefit under any other scheme) are also eligible for assistance under PMEG, Beneficiary's contribution is 10% of project cost for general categories and 5% for Special Categories (including SC/ST/OBC/Minorities / Women, Ex-servicemen, Physically handicapped, NER Hill and Border area etc.). Margin Money (rate of subsidy) for general categories is 15% in urban, 25 % in rural areas. For special categories, it is 25% in urban and 35% in rural areas and is 'one time assistance' and Normal rate of interest shall be charged. Re-payment schedule ranges between 3 to 7 years.

The persons should possess at least VIII standard pass educational qualification for setting up projects costing above Rs.10.00 lakh in manufacturing (Industry) sector and above Rs.5.00 lakh in Business/ Service sector. The maximum cost of the project/unit admissible under manufacturing (industry) is Rs.25.00/ Rs.10.00 lakh under Business/ Service sector.

During the year 2015-16, 302 units were established with a margin money assistance of Rs.924.86 lakhs and provided employment to 3237 persons. During the year 2016-17 (upto December, 2016), 288 units were established with a margin money assistance of Rs.1066.90 lakh and provided employment to 3666 persons as against the target of 1009 units, and financial assistance of Rs.1018.61 lakh and providing employment of 8072 persons.

### New MSME Policy 2015-20

New Micro, Small and Medium Enterprises (MSME) Policy 2015-20" had been introduced in July 2015, with fiscal benefits covering the categories of (a) Micro and Small Enterprises (b) Medium Enterprises (c) Service Sector

Enterprises (d) Swachh Andhra Initiatives (e) MSME Parks (f) Marketing assistance (g) Awards & Recognitions (h) Sick Units Revival.

### Industrial Incentives

Policy of State Incentives/ facilities announced by the State Government will be in operation from 01.04.2015 to 31.03.2020.

- a) Industrial Development Policy (IDP) 2015-2020
- b) Automobile & Automobile Components Policy 2015-2020
- c) Textile & Apparel Policy 2015-2020.
- d) Biotechnology Policy 2015-2020
- e) MSME Policy 2015-2020.
- f) Aerospace & Defence Manufacturing Policy 2015-2020

### Eligible Industrial Enterprise

Any industrial undertaking and servicing enterprise/ industry, other than those run departmentally by Government of India / State Government or having equity of State Government / GoI.

### New Industrial Enterprise:

An Industrial Enterprise which has been established in the State with new machinery and commenced commercial production on or after 01.04.2015 and before 31.03.2020 holding valid approvals from the concerned authorities. Micro Industries, Small Industries, Medium Industries and Large Industries/Enterprises means in which Investments on plant and machinery is up to the limit as defined by the Government of India from time to time.

### Mega Projects:

Mega Project means the Industrial Enterprise, which is set up with a capital investment of Rs.500 crore and above or the Industrial Enterprise which creates direct employment to more than 2000 persons.

### Biotechnology Industries:

Projects with capital investment of Rs.50 crore and above or creating local employment for 200 people will be accorded mega project status.

**Textile Industries:** Projects with capital investment of Rs.125 Crore and above or providing employment to 2000 people or more, will be accorded mega industry status.

### Mega Integrated Automobile Project:

Automobile projects that will have engine plant, press shop, body shop, transmission line, assembly line, paint shop etc. either on its own or as consortium or joint venture mode in the same location with investments over and above Rs.1500 crore. and which will bring ancillary units of a minimum of Rs.500 crore investment within 3 years, will be accorded mega Integrated Automobile Project.

Scheme wise incentives sanctioned from April to September, 2016 (2005-10 and 2010-15 schemes) are shown in Table 6.1

Table 6.1 Scheme wise Incentives sanctioned during 2016-17 (upto Sept, 2016)

Sl. No.	Type of incentives	2016-17	
		No. of cases	Amount (Rs. in Cr)
1	Power Cost reimbursement	1874	298.19
2	PavalaVaddi (interest subsidy)	1021	62.75
	General Incentives	0	0
3	Cleaner Production	0	0
4	Interest Subsidy	0	0
5	Investment Subsidy	675	89.15
6	Land Conversion	14	0.24
7	Land Cost	15	0.75
8	Mortgage Duty	8	0.10
9	Sales Tax	326	137.00
10	Stamp Duty	114	2.80
11	Quality Certification	1	0.03
	Total	4048	591.01

Source: Industries Department

### SC Sub Plan and Tribal Sub Plan

460 claims with Rs.34.72 crores under SC sub Plan and 63 units with Rs.4.07 crore under Tribal Sub plan were sanctioned during 2016-17 upto November, 2016.

### Cluster Development Programme

#### MSME Cluster Development Programme

Government of India has adopted the cluster development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their collectives in the country. Clustering of units also enables providers of various services to them, including banks and credit agencies, to provide their services more economically, thus reducing costs and improving the availability of services for these enterprises.

### Objectives

To support the sustainability and growth of MSEs by addressing common issues such as improvement of technology, skills and quality, market access, access to capital, etc., to build capacity of MSEs for common supportive action through formation of self-help groups, consortia, up gradation of associations, etc., to create/upgrade infrastructural facilities in the new / existing industrial areas / clusters of MSEs and to set up common facility centres (for testing, training centre, raw material depot, effluent treatment, complementing production processes, etc).

40 Cluster proposals are under active consideration. Of which, 4 Infrastructure Development (ID) Projects are under active consideration by DC-MSME, 2nd instalment was released to ID-Project i.e. JRD Tata Industrial Estate in Vijayawada, Krishna District. 4 Common Facility Centres are under active consideration by DC-MSME. 12 Diagnostic Study Reports (DSRs) / Soft Interventions (SIs) are under consideration by the State Level Project Steering Committee (SLPSC).

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## Industrial Infrastructure Scheme

Clusters/Industrial locations were identified for development based on the diagnostic study on providing physical infrastructures as identified in the cluster. Priority was given to develop clusters having small industry concentration. The Scheme is implemented on a public-private-partnership initiative i.e. user driven with the support of the Government.

The salient features of the Scheme are

- a) Physical Infrastructure.
- b) Common facilities for fuel/gas supply system, ETP & Solid waste disposal.
- c) Information and Communication Technology Infrastructure.
- d) R & D Infrastructure.
- e) Quality Certification and Benchmarking Center.
- f) Common Facilities Center.
- g) Information dispersal /International Marketing infrastructure
- h) Small Industry Cluster Development Programme.

## Partnership Summit 2016

The Government had organised Partnership Summit in the year 2016 and 328 projects committed MoUs with an investment worth Rs.4,67,577 cr. and employment of 9,58,896. Of these projects the Industries Department with its 115 projects worth Rs.1,90,101 cr. investment and 3,58,361 employment contributed majorly. Some marquee investments were Foxconn, Colgate Palmolive, Hareon Solar, Hindustan Coca Cola, Britannia, Bharat Forge, Rashtriya Ispat Nigam Limited etc. The major focus sectors were Aerospace and Defence, Food Processing, Pharmaceuticals, Mining etc.

## Partnership Summit 2017

During the Partnership Summit held in Visakhapatnam on 27–28 January 2017, 665 Memorandum of Understandings (MoU) were signed with an investment of Rs.1,054,594 cr and an employment potential of 2,234,096. Of these almost 109 MoUs were worth more than Rs.1000 cr investment in

total. Some marquee investments were signed by various department of GoAP, such as IOCL, ONGC, Apollo Tyres, Wipro etc. with the Industries Department; Patanjali Ayurveda and Parle by the Food Processing Department; GMR, Gamesa, IL & FS Energy Development with the Energy and I&IDepartment; BPCL, Torrent Power, Tata Power with APCRDA; VIT, Amity, SRM University, IFMR University, Amrita University, Edibon International with Higher Education; Emami Cement, Chettinad Cement, Shree Cement with Mines and Geology; NSL Mining, Xingrong with EDB; Gokul Das Exports, Shahi Exports Pvt. Ltd. with Textiles & Handlooms; People Tech, Karvy, VTech Web, Indo American Society with IT Department; Air BNB Homestays, Feedback Group, BNR Infrastructure, G&C Group with Tourism Department and LEPL Ventures Pvt. Ltd., Raaga Mayuri Builders Pvt. Ltd with APTIDCO. Some of the major focus sectors were Aerospace and Defence, Electronics, Pharmaceuticals & Biotechnology, Food Processing, Automobiles and Tourism.

## National Investment and Manufacturing Zones (NIMZ)

The Government of India (GoI) has announced a National Manufacturing Policy, 2011, with the objective to enhance the share of manufacturing in GDP to 25% within a decade and creating 100 million jobs. As per the Policy, “NIMZs was developed as integrated industrial townships with state-of-the art infrastructure and land use on the basis of zoning; clean and energy efficient technology, necessary social infrastructure; skill development facilities, etc.” Government of Andhra Pradesh proposed to develop NIMZs in Chittoor and Prakasam Districts for which in-principle approval was already accorded by GoI.

APIIC engaged IIDC Limited (An IL&FS Group Company) for preparation of TEFS report cum development plan and final application and the same were submitted to Govt. for final approval. Subsequently, APIIC has received the final approval for NIMZ in Prakasam. APIIC has initiated land acquisition for NIMZ Prakasam and is in the process of appointing a Master Plan consultant for the project. For NIMZ, Chittoor the final approval from Govt of India is awaited.



## Chennai Bangalore Industrial Corridor (CBIC)

CBIC is one of the mega infrastructure projects of Government of India which passes through the State with the main objective to increase the share of manufacturing sector in the GDP of the country and to create smart sustainable cities which will have world-class infrastructure, convenient public transport power management and an efficient water and waste management system.

Sectors of focus include general manufacturing; automobiles & auto ancillary, agro and food processing, metals and metallurgical products; biotech and services sector.

The Japan International Cooperation Agency (JICA) has agreed in principle to support the Chennai- Bangalore Industrial Corridor (CBIC).

The Department of Industrial Policy and Promotion (DIPP) and the Japan International Cooperation Agency (JICA) through their consultants M/s. Nippon Koei Limited and PWC have prepared a Comprehensive integrated Master Plan (CMP). The study team has completed the Part-A of CMP for CBIC region and selected 3 potential Industrial nodes – (1) Krishnapatnam in Nellore District, (2) Kalikiri in Chittoor District and (3) Hindupur in Ananthapur District.

Under CBIC project, three Nodes have been identified in Phase-I: One node each in Andhra Pradesh, Tamilnadu and Karnataka. Each node is to be developed as an industrial township. In Andhra Pradesh, Krishna Patnam Node has been selected for development in Phase-I. Draft Final Report (DFR) covering the critical gap assessment along with concept master plan and development plan is prepared for Krishna Patnam node.

Krishna Patnam Industrial Node (KPTIN) is a planned area located in south of Krishnapatnam port as industrial development of around 12,000 ha. The estimated project cost for the development of Infrastructure in KPTIN is around Rs.13,716 Crores in 3 phases spanning around 25 years. Proposals for considering Krishna Patnam Node as NIMZ and to form the Special Purpose Vehicle (SPV) are under process. The Conceptual Master Plan for CBIC has been completed and presented to DIPP along with all state stakeholders workshop in New Delhi on 21st August 2015.

DMICDC has also been engaged as Nodal agency for expediting environmental impact assessment study and also for carrying out detailed engineering plan for the identified 3 Nodes in CBIC. CBIC project has reached implementation stage. The formation of SPV has been started in the CBIC project. Government of Japan has been asked to indicate their financing support for this project.

A total of 26 priority projects across various sectors have been identified for debottlenecking in the CBIC region, out of which 2 following projects pertain to AP state (Roads sector) and Sanction is awaited from Ministry of Road Transport & Highways (MoRTH).

- 4 Laning of NH-18A from Chittoor to Renigunta and SH-61 (now NH-71) from Renigunta to Naidupeta (Estimated cost Rs.600 Crs).
- 4 Laning of NH-4 from Km 133/360 to 216/916 in the State of A.P. (from Karnataka/ AP border to AP/ Tamilnadu border via Chittoor - Estimated cost Rs.1214 Crs).

Out of (11) Additional Projects-A under CBIC, two projects are concerned to A.P State i.e (1) Chittoor Drinking Water Supply (Implementing Agency is INCAP) and (2) 6 Lane access road to Krishnapatnam (Implementing Agency is GoAP/Private). Project is under process

Out of (08) Additional Projects-B under CBIC, two projects are concerned to A.P State i.e (1) Sewage Recycle and Industrial Wastewater Recycle in Andhra Pradesh (Implementing Agency is APIIC) and (2) Power Plant/ Transmission project in Andhra Pradesh (Implementing Agency is GoAP/Private). Project is under process

Each node is envisaged to be implemented by a Special Purpose Vehicle (SPV) set up as a joint venture between the GoI (to be represented through the Fund/Trust) and the concerned State Government. It is to state that about 60-65% of the infrastructure projects are proposed to be implemented on PPP basis and rest relating to trunk infrastructure on assistance from Government .

The Govt. of India has appointed DMICDC as a technical advisor for the CBIC project. APIIC and DMICDC have jointly prepared and finalized the State Support Agreement (SSA) and Stake Holders Agreement (SHA) for the

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project which is under process of approvals and signing. As per the broad terms of the SHA, Govt of India shall be contributing Rs.5,000 crores as its equity contribution and soft loan funding for the development of the requisite project infrastructure. GoAP shall contribute the land required for the project as its equity.

### Vizag Chennai Industrial Corridor (VCIC):

The VCIC is a key part of the planned East Economic Corridor and India's first coastal corridor and the extent of it is considered from Pydibheemavaram in Srikakulam district to Chennai in Tamilnadu. It has Influence area about 1,10,000 sq. km, (3.5% of India's area). It is estimated that it attracts about Rs.1,00,000 Crores and generates employment to about 110 Lakh persons. The corridor contributes to 5% of national GDP and has potential to increase GDP in the Corridor by 6 times. Food processing, Chemical & Petroleum, Textiles, Electronics, Metallurgy, Pharmaceuticals, Automobiles & auto ancillary etc. are the focus sector of Industries proposed.

VCIC is poised to play a critical role in driving India's economy and to further integrate the Indian economy with the dynamic global production networks of east and south-east Asia. Greater connectivity and economic integration between South and Southeast Asia is likely to contribute to significant benefits for both sub-regions and foster regional cooperation. The key objectives of VCIC are:

- Increase the manufacturing sector's contribution to state and national output
- Increase employment opportunities in formal sector
- Increase labour productivity & wages
- Promoting dynamic SMEs
- Integrating India and the VCIC region in global production networks, particularly East and Southeast Asia

In traditional framework, an economic corridor has three complementary components: (i) a trade and transport corridor, (ii.) production clusters producing goods for both consumption in surrounding region and for global trade, and (iii.) urban centers along the corridor. VCIC corridor's long coastline and strategically located ports provide

it with an opportunity to create multiple international gateways to connect India with vibrant global production networks of Southeast and East Asia that forms the bedrock of global manufacturing today. The VCIC is proposed as a node centric development platform with four nodes: (i) Vishakhapatnam node, (ii) Kakinada node, (iii) Gannavaram-Kankipadu node, and (iv) Yerpedu – Srikalahasti node. Some of the critical industrial sectors shortlisted for achieving the targeted outcomes are textiles, food processing, metallurgy, chemicals and petrochemicals, electronics, pharmaceuticals, and automobiles.

As a part of the VCIC project, several projects have been identified across various infrastructure sectors for debottlenecking and enhancing ease of doing business that would make VCIC more competitive in attracting industrial investments. Asian Development Bank, through its Vizag Chennai Industrial Corridor Development Program (VCIC DP) is partnering with Government of Andhra Pradesh in developing the industrial corridor. The VCIC loan comprises: (i) a Policy-based loan to support policy reforms, and institutional development in the state's industrial sector; and (ii) a Project loan for priority infrastructure projects within the Visakhapatnam-Chennai Industrial Corridor (VCIC). The Policy loan will provide budgetary support to the GoAP to promote accelerated industrial development through policy, institutional, and governance reforms. The Project loan will support investments in physical infrastructure in industrial infrastructure, urban infrastructure, roads, and power sectors. Sector wise Project Preparatory Status and Project Cost & Financing Mechanism are as follows:

Source	Amount (\$ million)			Share of Total (%)
	Programme	MFF	total	
Asian Development Bank	125	500	625	74.40%
Government of Andhra Pradesh	0	215	215	25.60%
Total	125	715	840	100.00%

The Department of Economic Affairs (DEA), Government of India has given in-principle approval for funding plan of USD 715 million (Multi tranche Financing Facility –

MFF loan from ADB of USD 500 million and GoAP share of USD 215 million) on June 28, 2015. Revised proposal for approval of Program loan of 200 Million USD has been submitted to the DEA, GoI on 01.10.2015. The Regional Perspective Plan (RPP) of the Corridor is under preparation.

### Progress on VCIC Development Program

The chronological progress achieved on VCIC-DP is set out below.

As stipulated by Department of Industrial Policy and Promotion (DIPP), Government of India, GoAP is mandated to prepare three documents with regards to VCIC – i) Conceptual Development Plan, ii) Regional Perspective Plan and iii) Master Plan. PricewaterhouseCoopers Private Ltd. was appointed by ADB to prepare the Conceptual Development Plan (CDP) and Regional Perspective Plan for VCIC. The draft Regional Perspective Plan was submitted to Govt. of Andhra Pradesh and Asian Development Bank by PwC in March, 2016. In January 2016, a consortium of Jurong Consultants and KPMG was appointed for preparation of Master Plan of the 4 nodes of VCIC.

A number of infrastructure projects are planned which would link various manufacturing clusters and gateways such as ports and airports to a central spinal road, rail and utilities infrastructure in the Corridor area.

The Department of Industrial Policy and Promotion (DIPP) and the Asian Development Bank (ADB) have appointed PWC as the Consultant to prepare a comprehensive integrated master plan. The potential nodes along with clusters are shown in Table 6.2:

Table 6.2 Clusters

Sl. No	Node	Cluster	District
1	Visakhapatnam (1st Phase)	Pydibhemavaram	Srikakulam
		Atchuthapuram	Visakhapatnam
		Nakkapalle	
		Bheemunipatnam	
2	Kakinada	Kakinada	East Godavari

Sl. No	Node	Cluster	District
3	Srikalahasti-Yerpedu (1st Phase)	Srikalahasti-Yerpedu (1st Phase)	Chittoor
		Sri City	
4	Gannavaram-Kankipadu	Gannavaram	Krishna
		Kankipadu	

Source: Industries Department

Out of above 4 nodes, Visakhapatnam and Srikalahasti-Yerpedu nodes are prioritized in the 1st phase of the project. Through the Conceptual Development Plan (CDP), ADB has identified several infrastructure projects. The identified infrastructure projects by CDP include debottlenecking and capacity augmentation of existing assets and also some greenfield infrastructure projects for future economic growth in the state. Of the identified ones, selected high impact projects have been planned to be developed with financial assistance from ADB.

1. As a part of ADB loan approval process, the ADB project team needs to submit a project proposal to the board of ADB for their approval.
2. The PMSC will support the PMU in day to day activities of the VCIC – DP. The selection of the PMSC is envisaged to be completed by November 2016. 18 expressions of interest were received by May 22, 2016.
3. Loan negotiations between DEA (Govt. Of India), ADB, and GoAP for Tranche I of Project Loan, entire Policy Loan and the grants funding under Technical Assistance and UCCRTF were held on July 5, 2016.
4. On 6th August 2016, premier institutes were invited to send their financial quotes for providing support to Govt. of Andhra Pradesh in evaluation of the submitted EoIs for PMSC and subsequent RFP submissions. In response, 3 institutes (IIM Calcutta, Administrative Staff College of India, and IIM, Ahmedabad) submitted their financial quotes. Administrative Staff College of India (ASCI, Hyderabad) was selected on the basis of its low price quote and unconditional offer.

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List of Projects identified for financial assistance under ADB

Implementing agency	Tranche – I	Tranche – II	Project cost (Rs.Cr)
APIIC (Industrial Infrastructure)	Construction of Common Effluent Treatment plant at Atchutapuram and Construction of Common Effluent Treatment plants at Naidupet.	1. Augmenting utility services for Atchutapuram Industrial cluster (Summer storage and bulk water supply); and providing bulk water facility and summer storage in Naidupet Industrial cluster	904.3 (156)
APRDC	Upgrading of ‘Samarlakota-Rajanagaram’ Section of ‘Kakinada – Rajanagaram’ Road to ‘2 Lane Dual Carriageway Standard’ - Kakinada	Upgrading of ‘Kakinada to Samarlakota’ Section of ‘Kakinada– Rajanagaram Road’ to ‘Dual 2 Lane Carriageway Standard’ – Kakinada 2. Upgrading of Atchutapuram - Anakapalle Road section and to ‘2 Lane Dual Carriageway Standard’ -Visakhapatnam 3. Upgrading of road from Krishnapatnam port to Nellore via Muthukur to ‘2 Lane Dual Carriageway Standard’ – Nellore	1141.7 (175)
APTRANSCO	Augmenting power distribution capacity for meeting Industry demand at: 1. Kappulapada, Ozone Valley, Achutapuram and Mangalagiri /AIIMS locations (Laying of power cable and associated civil works) 2. Rachagunneri and Yerpedu (substation, cable, transmission lines and associated civil works)	Augmenting power distribution capacity for meeting Industry demand at Nakapalle/ Chandanada, Pydibhimavaram, Naidupeta and Kakinada SEZ locations (substation, cable, transmission lines and associated civil works)	1201.9(190)
GVMC	Distribution Network improvements for NRW reduction and 24x7 supply in GVMC area	Supply and Laying of water supply pipeline along Raiwada canal to Visakhapatnam City	665.7 (101)

## Industrial Infrastructure

The state government is readying an ambitious plan for extensive infrastructure creation including integrated development of port-based infrastructure, using the state’s 974-km-long coastline, part of East Coast which faces progressive south eastern nations, and industries that help the state emerge as a logistics and cargo hub.

The AP government developing the new ports—through the public private partnership (PPP) route —modernize

existing minor ports and set up port-based industries along the coastal corridor. The state is also working on building a strong inland waterway system that is linked to ports through national highways.

The Special Economic Zones (SEZs) Policy was announced in April 2000 under Export & Import Policy to make SEZs an engine for economic growth supported by quality infrastructure complemented by an attractive fiscal package, both at the Centre and the State level, with the minimum possible regulations. It is designated as duty free enclave and to be treated as foreign territory for trade operations and duties and tariffs.

## Objectives of the SEZ Act

- Generation of additional economic activity
- Promotion of exports of goods and services;
- Promotion of investment from domestic and foreign sources;
- Creation of employment opportunities;
- Development of infrastructure facilities;

## Initiatives

- Government intends to exploit the SEZ concept for impacting the State's socio-economic fabric through

enhanced job opportunities and industrial development. APIIC has already taken the lead in developing SEZs across various districts in Andhra Pradesh.

- The State has decided to formulate the SEZ Policy to provide a comprehensive frame work for establishment, operations and sustainability of the SEZs in the state.
- Andhra Pradesh is the first State in the country to announce an exclusive state SEZ policy with special package of incentives and concessions and finalized the Visakhapatnam Special Economic Zone in an area of 3,500 acres of land. Details of the SEZs are shown in Table 6.3.

Table 6.3: Status of Operational Special Economic Zones as on December 2016

Description	No. of SEZs	Investment made (including FDI) (Rs. in Cr.)	Employment generated (No.)	Physical Exports from SEZs for during 2015-16 as on 31.12.2016 (Rs. in Cr.)
APIIC	6	3,415.67	13,908	2,057.40
APIIC,JVs	3	3,944.81	5,646	793.30
APIIC Assisted	5	8,100.11	34,665	2,517.04
Private Developers	8	4,828.79	13,916	4,459.00
VSEZ	1	1,239.96	4,647	972.17
Total	23	21,529.34	72,782	10,798.92

Source: VSEZ

Out of 23 SEZs 4 were IT/ITES SEZs, 6 Multi Product SEZs, 4 Pharmaceuticals SEZs, 2 Textile and Apparel SEZs, 1 Biotech, 1 Paper Based, 1 Building Products SEZ, 1 Leather Sector SEZ, 1 Footwear SEZ, 1 Alumina / Aluminium Refining SEZ and 1 Food Processing SEZ. District wise status of SEZs and area are given in Annexure 6.3.

## AP Gas Infrastructure Corporation

Andhra Pradesh Gas Infrastructure Corporation (P) Ltd (APGIC) is a joint venture of APIIC and APGENCO with equity participation at 51:49 respectively. APGIC was incorporated on 2nd September, 2009 under the provisions of Companies Act. The authorized share capital is Rs.100 crore and paid up capital is Rs.40 crore upto December 2015.

### Objectives:

The two key objectives of the Corporation are 1. Exploration and Production activities particularly in KG Basin and 2. Make Andhra Pradesh a gas based economy. In the light of these objectives, in the New Exploration

Licensing Policy (NELP) VIII. APGIC has won four blocks in KG Basin along with other consortium partners in NELP VIII round bidding conducted by Directorate General of Hydrocarbons. APGIC has 10% equity in all these four blocks. Out of these four blocks, three are Shallow Water Blocks and one is Deep Water Block. ONGC is the operating partner for the three Shallow Water Blocks, and British Gas is the Operating Partner for the Deep Water Block.

### A.P. Gas Distribution Corporation Ltd.:

Andhra Pradesh Gas Distribution Corporation Limited (APGDC) is a joint Venture of APGIC and GAIL Gas Limited, wholly owned subsidiary of GAIL (India) Limited. APGDC is keen to participate in the business of CGD Networks, Trunk Pipelines, Regional Grids, CNG and import of LNG and its Re-gasification.

A.P. Gas Distribution Corporation proposed to form SPV with M/s. GDF Suez LNG UK Limited for establishment of FSRU Project in Kakinada Deepwater Port. APGDC

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is jointly held by Andhra Pradesh Gas Infrastructure Corporation (APGIC) and Gail Gas Ltd., a subsidiary Company of GAIL (India) Ltd. APGDC has selected M/s. GDF Suez LNG UK Limited as their strategic partner to develop the LNG Terminal using FSRU. The estimated cost of the project is Rs.5,000 crore. The annual handling capacity is 3.50 MMTPA. Orders were issued on 19.07.2014 for induction of M/s. Shell in proposed SPV with 26% Equity at par. The Project has been included in the list of projects to be completed on Top-priority, to overcome the gas shortage being faced by the State. Public hearing for environmental clearance for the project was conducted on 11-12-2014.

### Petronet LNG facility at Gangavaram Port

Gangavaram Port Ltd. is proposed to setup a Liquefied Natural Gas (LNG) Terminal at Gangavaram Port through a joint venture with Petronet LNG Ltd. The Joint Venture Company will have equity contribution from Petronet LNG Limited (PLL), Gangavaram Port Ltd. (GPL) and other parties. The estimated cost of the project is Rs.4500 crore. The capacity of the terminal is 5 MMTPA with a provision to expand upto 10 MMTPA. The tentative schedule of the project is to start the initial operations of LNG by setting up an FSRU by 2014 and commencement of operations of LNG Terminal from 2016. Orders were issued according approval for establishment of LNG terminal, Gangavaram on 28.7.2014. As ascertained from M/s. Petronet LNG Ltd., all statutory clearances have been received from Govt. of India and they are in correspondence with APGDC for having pipeline connectivity from Kakinada to Srikakulam.

## Index of Industrial Production

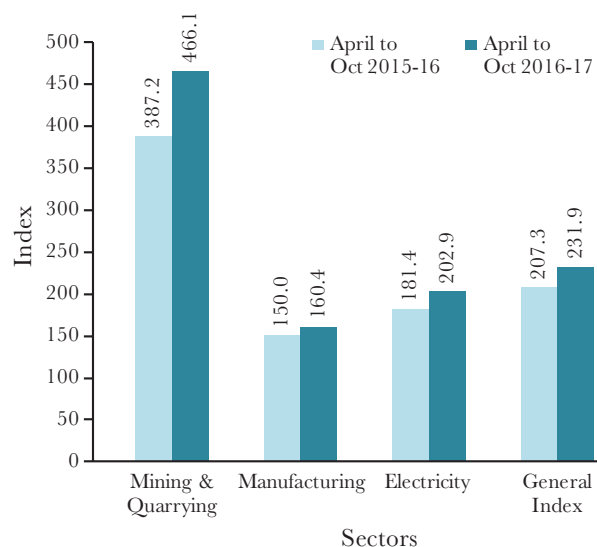
The Index of Industrial Production (IIP) is a yardstick for measuring industrial growth. It includes the relative change of physical production in the field of Industry during specific period as compared to the previous period. The IIP is estimated monthly by collecting data from selected units of Manufacturing, Mining, Quarrying and Electricity. The main objective is to estimate the contribution of Industrial

sector to the Gross State Domestic Product. IIP in the State is being compiled with base year 2004-05 for 22 industrial classifications at 2-digit level under manufacturing sector.

As per Quick estimates of IIP, the Mining and Quarrying, Manufacturing and Electricity sectors (at NIC 2 digit level) registered growth rate of 20.4%, 6.9% & 12.0% respectively during the period April to Oct 2016 over April to Oct 2015. The indices of IIP of the State are given in Annexure - 6.4.

The Industrial Production in terms of IIP is shown in chart 6.1. The IIP (General Index) for the period from April to October 2016 in Andhra Pradesh stands at 231.9 against 207.3 observed in the same period of April to October 2015.

Chart 6.1 Index of Industrial Production



### Annual Survey of Industries

The Annual Survey of Industries is the principal source of Industrial Statistics in the State. It provides Industrial statistical information to assess and evaluate the changes in the growth, composition and structure of organized manufacturing sector comprising activities related to manufacturing processes, repair services, gas and water supply and cold storage. The ASI conducted once in a year to collect the data from the Organised Manufacturing units registered under the section 2 m(i) [10 or more workers with power] & 2m(ii) [20 or more workers without power] of the Factories Act, 1948 and units registered under Beedi and Cigar (condition of employment) Act, 1966.

The main objectives of Annual Survey of Industries are:

1. Estimation of the contribution of manufacturing Industries as a whole and of each type of Industry to the State Income.
2. Systematic study of the structure of the Industry as a whole and each type of Industry.
3. Analysis of various factors influencing Industries in the State.
4. Provision of comprehensive, factual and systematic basis for formulation of Policy.

The data for 16 principal characteristics based on Annual Survey of Industries from 2008-09 to 2013-14 is given in Annexure-6.5.

### Highlights of ASI 2013-14

The number of factories increased from 12,503 in the year 2012-13 to 12,941 in 2013-14, registering a growth rate of about 3.50%. The factories in the state generated employment to 5.22 lakh persons by the end of 2013-14 registering a growth of 3.66%. The Gross value added is decreased by 13.48% in the year 2013-14 over the previous year 2012-13 and the Net value decreased by 21.81% at the end of the year 2013-14.

## State Level Public Enterprises

There are 44 State Level Public Enterprises (SLPEs) functioning in the state (Combined State). As per the working results of these SLPEs, the performance during the year 2013-14 can broadly be summarized as:

### Capital Employed

The capital employed by all the state level public enterprises was Rs.51,683.89 crore. The top five State Level Public Enterprises with the highest 'Capital employed' are A.P.GENCO, APSRTC, APTRANSCO, APSPDCL and APSFC. The capital employed by the top five SLPEs constitute 83.15 % of the capital employed by all the SLPEs in the state.

### Turnover

The total turnover (including other income) made by all the 44 public enterprises was Rs.47,475.65 crore. The top five state level public enterprises whose turnover is highest are - A.P.GENCO, APSRTC, APSPDCL, APEPDCL and APSHCL. The turnover achieved by the top five state level public enterprises to total turnover works out to 83.38%.

### Profit

22 SLPEs, out of the total 44, made a profit of Rs.2098.96 crore during 2013-14. Out of these following top five SLPEs made a profit of Rs.1798.32 crore, accounting for 85.70% of the total profit made by all the 22 profit making SLPEs.

- APSHCL-----Rs.655.88 crore
- APGENCO-----Rs.555.76 crore
- APMDC-----Rs.287.06 crore
- APFDC-----RS.176.80 crore
- APSWC-----Rs.122.82 crore

### Mines and Geology

Minerals & Agriculture are one of the main sources of revenue to Andhra Pradesh with minerals forming the major contributor for the economic growth of the State. Andhra Pradesh is well known globally for variety of rocks & minerals and called Ratna Garbha. Minerals form a major contributor to the economic growth of the State. Andhra Pradesh is a mineral rich state containing a vast variety of mineral wealth particularly industrial minerals. The State is a house for various minerals specifically Crude Oil & Natural Gas, Barytes, Bauxite, Heavy Mineral Beach Sand, Manganese, Limestone, Dolomite, Quartz, Feldspar, Silica Sand, Semi-precious Stones, Ball Clay, Laterite, Iron Ore, Gold & Diamonds, Mica, Asbestos, Calcite, Uranium, Lead, Zinc, Shale, Pyrophyllite, Steatite, Serpentine, Graphite, Kyanite, Vermiculite, Clays, Ochre, Black & Colour Granites, Limestone Slabs, Fullers Earth, Marble, Road Metal/Building Stone/Ballast, Gravel/Earth, Mosaic Chips and Ordinary Sand.

The State is focusing on inventory of mineral resources, key issues of legislation, objective and strategies in tune with the National Mineral Policy for accelerating growth leading to overall development of the mining sector.

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The main aim of State Mineral Policy is to serve as a guiding force to translate the State's mineral potential into reality with eco-friendly and sustainable mining.

### Mineral Resources

- The areas of Agnigundala, Bondalamottu in Guntur district are famous for mining of Copper, Zinc, Silver and other base metals.
- The alkaline and ultra-basic rock formations in Guntur and Prakasam districts are enriched in Nepheline Syenite.
- The State contains huge Uranium deposits in Thummalapalli, YSR district. The Department of Atomic Energy, GoI already started exploitation of the resources through M/s. Uranium Corporation India Ltd, a Public Sector Undertaking.
- The Dharwar Super Group Meta sediments contain rich deposits of Iron Ore confining to Bellary Reserve Forest and surrounding areas in Anantapuramu District.
- The State is endowed with a number of scattered low grade iron ore deposits in Prakasam, Krishna, Kurnool and YSR districts.
- The State is well known for exclusive Granite varieties - Chimakurthy Black Galaxy, Steel Grey, Ocean Blue, Black Pearl in Prakasam, Srikakulam Blue in Srikakulam, Vizianagaram Green in Vizianagaram, River White, Kashmir White & Moon White in Visakhapatnam, Yellow Granite in East Godavari, Silver Pearl, Indian Labrador, Blur Paradise, Copper Green, Platinum Blur in Guntur, Viscon White, Tiger Black, Kuppam Green English Teak in Chittoor, Pista Green in YSR Dist, Chilli Red in Anantapur and Chocolate Brown in Kurnool Districts.

### Departmental Functions/Activities

The department of mines and geology looks after promotional and regulatory functions for overall development of mineral sector and also collection of mineral revenue for the state exchequer. The department is responsible for processing of mineral concession applications, grant of leases for minor minerals, approval of mine plans, inspection of mines, curbing of illicit mining and transportation, vigilance, monitoring of mineral production, survey and demarcation of areas, mineral revenue collection, mineral investigations and explorations and dissemination of mineral information.

### Leases and Mining

There are 10 prospecting licenses and 437 mining leases for major minerals (industrial minerals), 1761 quarry leases for cut and dressed blocks of granites and 1037 quarry leases for other minor minerals and 4617 Quarry leases for other Minor Minerals (Construction Minerals) during 2015-16.

Mining for Limestone, Barytes and Natural Gas falls under large scale mechanized sector, while Granite, Dolomite, Quartz, Feldspar, Clays etc all under semi mechanized medium sector and the other minerals fall under semi mechanized small sector. Nearly 90% of the Mines fall under small sector and remaining 10% under medium and large sectors.

### Mineral Based Industries

Both Public & Private Sectors established large and medium scale mineral based industries for manufacture of Cement, Steel, Sponge Iron, Ferroalloys, Glass, Ceramics, Refractories, Chemicals, Granite, Marble & Limestone cutting & polishing units, Slate cutting units, Gem Cutting & faceting units, Granite monuments manufacturing units, Pulverizing units, stone crushers, Mosaic & Ceramic tile units, Lime Kilns, and Manufactured Rock sand units in the State.

The Mining Sector is identified as one of the growth engines and certain minerals have been identified as focus minerals viz. Bauxite, Heavy minerals, Beach Sand, Limestone, Gold, Diamond, Dolomite, Oil & Natural gas, Uranium, Garnet, Granite, Titanium, etc. for establishment of Cement, Gas based Thermal Plants, Oil Refinery, Cutting & Faceting, Mining & Refinery, Steel & Sponge, Alumina Smelter and Aluminium Refinery etc., as focus industry for overall development of the Mining Sector in the State.

### Mineral Production and Value

Mineral consumption is increasing due to promotion of various industries and manufacture of Mineral based products. The State produces about 43 million tonnes of industrial minerals and 156 million cubic meters of dimensional stones building materials with a value of Rs.14633 crores during 2015-16. The production of Crude Oil, Natural Gas and Limestone is given in Annexure 6.6.



## Revenue

The State Mineral and Mining sector contributed Rs.1496.05 crore of Mineral Revenue to the state exchequer during 2015-16 and Mineral Revenue during 2016-17 (upto Oct, 2016) earned Rs.859.67 Crore. The percentage growth compared to last year during the same period was 55%. Details of Mineral revenue achievements are shown in Table 6.4. District wise mineral revenue from 2012-13 to 2016-17 (upto Oct, 2016) is given in Annexure 6.7.

Table 6.4 Mineral Revenue Achievement (Rs. in Crore)

Year	Achievement	Growth over Previous Year (%)
2012-13	1068.68	2.67
2013-14	884.64	-17.22 (due to agitation)
2014-15	966.11	9.20
2015-16	1496.05	55
2016-17 (up to Oct 2016)	859.67	

Source: Director of Mines & Geology

## Vigilance

The Department controls illicit mining and transportation of minerals. There are 9 Vigilance offices in the Districts and 5 Regional Mobile Squads stationed at 5 Regional Dy. Directors of Mines & Geology and operating at Srikakulam, Vizianagaram, Guntur, Kurnool and YSR. There are two integrated check posts at Tada and Naraharipet and observation check posts at Ibrahimpatnam Krishna District, Piduguralla, Guntur Dist. Bugga, Bethamcherla, & Dhone, Kurnool Dist. for effective vigilance to curb illegal mining & transportation of minerals. The department has booked 9953 cases and collected Rs.29.06 crore as penalty.

## Task Force

Government of India advised the State Governments to constitute State Level, Central level and District Level Task Forces for effective vigilance to curb illegal mining and transportation of minerals in respective states. The Government constituted a State Level Task Force committee and similarly a District Level Task Force was constituted.

## Mineral Projects

The Department took up initiative for grounding of Bauxite mining project and establishment of Alumina/ Aluminum project with an investment of Rs.40,000 crore. M/s. Anrakh (Andhra Pradesh & Govt. of Rasal Khaima) has already established Alumina Smelter at Makavarapalem, Visakhapatnam. M/s Jindal Southwest Holdings acquired lands at Batwada Village, Vizianagaram for establishment of Alumina Smelter and Aluminium Refinery. Besides this, National Aluminium Company (NALCO) also proposes a similar project for exploitation of Bauxite in East Godavari district in the State. Uranium exploitation project is already commenced at Thummalapalli, YSR District by the Department of Atomic Energy through Uranium Corporation of India Ltd. The extraction of heavy minerals from Beach Sand deposits along the coastal line is presently under private sector by M/s Trimax Sands Pvt. Ltd. M/s APMDC Ltd. is obtaining Mining Lease for Beach Sand Minerals and Planning setup value additional units through Joint Venture (JV). Basing on the availability of huge deposits of Cement Grade Limestone a number of green field projects are proposed in the area in addition to the expansion by the existing Cement plants with Rs.3,000 crore.

## Participation in Exhibitions

### Participation in 22<sup>nd</sup> Partnership Summit:

The Government in partnership with CII & DIPP organized 22nd partnership summit and the 1st Sunrise Andhra Pradesh Investment Meet, from 10th to 12th Jan'2016 at Visakhapatnam. The Department has actively participated in Summit and signed "27" MOU's for investment of Rs.8955 crores and to generate employment for 12890 members.

### Policy Initiatives:

- Revised the rates of Seig. fee and Dead Rents for 17 Minor Minerals and 31 Major Minerals which were declared as Minor Minerals by the Ministry of Mines, GoI.
- Enacted DMF Trust Rules 2016 establishing District Minerals Foundation in all 13 District of the State, as per the said Rules, All Mining and Quarry lease holders shall pay 30% on Royalty/Seig. fee in addition to the Royalty/Seig. fee, the Manner of working and receipt of contributions thereto, in mineral bearing districts, for the

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interest and benefit of persons and areas of affected by the mining related operations and for purposes connected therewith.

- Issued Punitive measures have been taken to control illegal Mining and transportation of Minor Minerals by issuing amendments to Rule 26 & 34 of APMMC Rules, 1966.
- Government of India has established “The National Mineral Exploration Trust (NMET)” as per MMD&R amendment Act, 2015. The Objective of the Trust is to use the funds accrued to the trust for the purpose of Regional and detail explanation of major minerals. As per said act all the Mining lease holders shall pay to the trust, a sum equivalent to 2% of the royalty as per the II-Schedule of the Act. Accordingly, the department is collecting 2% amount on royalty from the mining lease holders and transferring the same to the Central Account of the NMET by every month.
- Re-Christened the DMRTUF trust as MERIT (Mineral Exploration, Research and Innovation Trust) and framed Rules for collection of 2% of amount on Seig.fee as contribution fund to merit from minor mineral lease holders on par with NMET for research and exploration of new reserves.
- The Government announced “New Sand Policy-2016” in January, 2016. As per new sand policy the sand shall be made available to the public without charging any fee from 2nd March from 2016.
- The Government announced Manufactured Sand Policy-2016 in March, 2016 for promotion of manufacture of sand in place of river sand as alternative to the river sand in construction activity in view of the increase in demand of sand of domestic consumption as well as the scarcity of river sand. According to the said policy priority shall be given to the entrepreneurs who are interested to establish manufactured sand units.
- The collection of royalty/Seig.fee, NMET, MERIT, DMF and all other payments is integrated with the mineral e-permit system and collecting through online only.

## Other Initiatives

- State pursued with Central Geological Agencies for exploration of Diamond, Gold, Base Metals, Rare Earths, Beach Sand minerals, Volcanic Ash, Granites.
- Identification of exclusive quarry zones around Vijayawada, Visakhapatnam, Guntur & Chittoor districts.
- The Department encouraged the Andhra Pradesh Mineral Development Corporation & other Private Sector entrepreneurs for mining & establishment of Beach Sand Mineral Separation Units, Titanium Slag & downstream industry at Vizianagaram & Srikakulam districts.
- The Department encouraged APMDC for establishment of Low Grade Iron Ore beneficiation Plant at Ongole (Prakasam District) and large scale mining of Galaxy Granite (Prakasam District).
- The Department has taken initiative in establishment of cement plants at Krishna, Guntur, Kurnool, and Anantapur & YSR Districts.
- The Government through APMDC intends to enter into Oil and Natural Gas exploration. The Department requested the Government of India to allocate on-shore Oil and Natural Gas blocks to APMDC for exploration on nomination basis so as to cater the needs of the State.

## Future Activities

- Utilization of Limestone slab quarry waste dumps in Kurnool, Kadapa, Guntur and Ananthapuramu Districts for manufacture of Cement and Building lime.
- Onetime settlement of pending cases related to illegal mining, storage, transportation and consumption etc., to realize long pending locked up mineral revenue arrears.
- State Mineral Development Policy’15 is under examination before the Govt.,
- Detailed study on value addition on various minerals and its export potential by appointing consultants to promote mineral based industry in the state.
- Implementation of e-office in the department.
- e-auction of mineral blocks for both major and minor minerals.

## Action Plan for Achieving Double Digit Growth during 2016-17

### A. To utilize information technology for improving Revenue administration

#### B. Grant of new leases:

- Identification of new mineral blocks for auction Chigurugunta Gold block, Chittoor, is proposed for auction in 2016-17. NMET committee recommended for auction.
- Feasibility study in progress for auction of Ramagiri Gold block.
- Assessment of 9 Limestone blocks for auction is under progress.
- Identification of Manganese and Iron ore blocks in Vizianagaram District.
- Exploration work for coal in West Godavari and Krishna Districts by MECL
- NoCs received will be processed further for grant of lease.

#### C. Technology Implementation:

E-permit system for royalty collection and online lease application system developed and implemented, the collection of contribution fund to NMET, DMF and MERIT is integrated with the Mineral e-permit system, online mineral data bank & lease tracking application under development, Implementation of e-office, integration of the departmental website and information with E-pragati., mobile based application under testing for real time data uploading from inspection site, Geo-referencing of leases for lease area monitoring - Mines Surveillance System for major and NRSC system for minor minerals, Satellite-based monitoring system, Identify illegal mining activity, Geo-referencing of mining lease area, superimposing of Remote Sensing Satellite images Triggers will be generated if any mining like activity takes place in the vicinity of approved mining lease area, field verification will be done to identify illegal mining, if any, mobile app is under development, implement drone / laser surveys for 3D Mine Mapping to track production. To use drone based 3D Mapping to monitor mines production and mineral stock in the mine. Pilot study initiated to evaluate applications specific to mining industry using Drone in limestone mine, Nandigama and 4 sq. km area was covered

#### D. Operationalize non-working Mines:

- 1900 mines covering 18000 Ha in the state are non-operational
- Identification of reasons and focus on operationalizing the mines
- Efforts to be directed towards larger lease with area >20 Ha
- Necessary action will be taken for cancellation of nonworking leases

#### E. Vigilance activities:

- Keep constant vigil on illicit prone areas to prevent revenue leakage.
- Onetime settlement mineral revenue dues of Rs.451.22 Crores by the builders

#### F. Value addition:

- Allocation of leases on priority basis for value addition in the State
- Promotion of ceramic industry in the State
- Players with firm investment plans in ceramic industry: Jet Granito (Morbi), Sokri Tiles, Spartex Ceramics, Lotus and Balaji Agro Products
- Glass industry potential in Nellore/Kurnool is under study
- Policy development under pipeline for allocation of mining leases with priority to value addition industry

## Important Mineral-wise Targets

### Barytes

- Increase in Production (2015-16)-1 Million tons to 3 Million tons in 2016-17.
- Better price realization in this year.
- Commencement of beneficiation (2 lakh ton per annum)
- Commercial exploitation of Dolomite.
- Promotion of Barium based chemical industry.

### Granite

- Increase in production from 915575 CBM (2015-6) to 1.2 million CBM in 2016-17
- Exploitation new reserves of Black Galaxy Granite in Ongole (State High Way)

### Heavy Mineral Beach Sands

- GoI issued for integrated HMBS development in (3) reaches.
- Separate policy is under pipe line giving priority to grant mineral concessions to those giving value addition.

## INDUSTRIES

## Commerce and Export Promotion

The Exports from the state have recorded as Rs.29629.65 crore in the first half of the year 2016-17 (from April 2016 to September 2016). The Major exports from the state are Drugs & Pharmaceuticals, Marine, Agriculture and Agro based products, Handicrafts, Minerals and Mineral products and Software products are shown in Table 6.5.

Table 6.5 Value of Exports (Amount Rs.in crores)

Sl. No.	Product Group	2015-16	2016-17 (Up to Sep)
1	Agriculture & Agro based and Forest Products	11830.29	5570.36
2	Leather, Animal and Marine Products	8707.89	6245.56
3	Mineral & Mineral Products	13021.25	2333.27
4	Handloom & Textiles	6169.06	2007.90
5	Handicrafts & Carpets	707.64	4220.66
6	Drugs & Pharmaceuticals and allied Chemical Plastics.	17008.56	6847.32
7	Engineering Items	8199.86	1660.97
8	Electrical & Electronics parts	1069.67	505.70
9	Misc. (Mfg Goods)	5981.62	18.39
10	Software (IT & ITES)	477.93	219.52
	Total	73173.77	29629.65

Source: Commerce and Export Promotion Department (DGCIS, Kolkata) and Software exports (ITE&C)

## India International Trade Fair (LITF)

National and international trade promoted by participating in fairs conducted by India Trade Promotion Organization (ITPO) and other agencies every year in New Delhi. The products particularly of MSME sector, Self Help Group (SHG) manufactured in the State are exposed to domestic and international market at New Delhi during this event.

## Pravasi Bharatiya Divas

Pravasi Bharatiya Divas (PBD) is celebrated on 9th January every year by Govt. of India to mark the contribution of Overseas Indian community in the development of India. These conventions provide a platform to the overseas Indian community to engage with the government and people of

the land of their ancestors for mutually beneficial activities. These conventions are also very useful in networking among the overseas Indian community residing in various parts of the world and enable them to share their experiences in various fields. PBD is going to be held at Bangalore. During the event, individuals of exceptional merit are honored with the prestigious Pravasi Bharatiya Sanman Award to appreciate their role in India's growth. The event also provides a forum for discussing key issues concerning the Indian Diaspora.

The Commissionerate of Industries, Commerce and Export Promotion is organizing State's participation in the above annual event by organizing AP Pavilion for showcasing the strengths and investment opportunities in Andhra Pradesh State.

## Industrial Relations

Industrial peace is a prerequisite for the growth and development of Industries. Work stoppages due to industrial disputes between employers and workmen and consequential loss of man-days in a given period are an important indicator of labour management relations in Industries. Government through its conciliation machinery has been making efforts to settle disputes amicably and promote industrial peace for congenial work environment. Efforts are being made by the department to promote productivity- linked settlement in order to make Industries more competitive.

The number of workers involved and man-days lost due to work stoppages decreased this year compared to the corresponding period in last year. Details about industrial relations are shown in Table 6.6.

Details about the number of strikes, lockouts, workers involved, and man-days lost from April 2016 to September, 2016) are shown in Annexure 6.8.

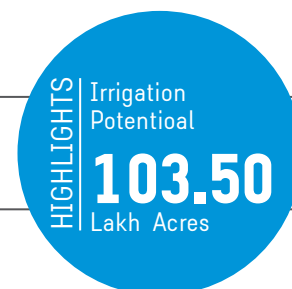
Table 6.6 Industrial Relations

Item	2015	2016 (up to Sep)
Strikes (No.)	1	2
Lockouts (No.)	13	3
Workers involved (No.)	15500	6023
Man-days lost (lakh No.)	23.94	4.83

Source: Labour Department.



CHAPTER  
**7**  
ECONOMIC  
INFRASTRUCTURE



Andhra Pradesh state is aspiring to grow into a competitive economy that creates opportunities for everyone, to foster the growth of productive firms, farms and people through putting necessary infrastructure – both physical and social in place. Proper infrastructure facilitates growth and the multiplier effect of the physical infrastructure such as irrigation projects, dams, roads, bridges, ports, airports and communications enhance growth opportunities and ultimately help for reducing poverty. The government takes cognizance of the changing patterns of government regulation worldwide and is transforming into a strategic, value-enhancing force which besides striving to fulfill basic needs of people also directing them into a lane of fast-paced growth. The government is focused upon facilitating the conversion of more ideas into enterprises, promoting the growth of small businesses and also linking them to larger ones.

The Sunrise state of Andhra Pradesh is moving forward with coast/port led growth strategy and is keen to improve the infrastructure and logistics.

## Irrigation

Andhra Pradesh called a “River State” and blessed with major river systems like the Godavari, Krishna, Pennar, Vamsadhara and other rivulets, is giving utmost importance for Irrigation development as well as its management. The State of Andhra Pradesh is allocated 512.040 TMC of Krishna Waters under the existing Projects. The existing utilization under Godavari is to the extent of 308.703 TMC.

### Utilisation of Water for Irrigation:

River basin wise utilization of water under existing and ongoing irrigation projects is shown in Table 7.1.

Table 7.1 Utilisation for Irrigation

Sl. No	River Basin	Utilization for Irrigation (in TMC)	
		Existing Projects	Ongoing Projects
1	Krishna River	512.040	150.50
2.	Godavari River	308.703	431.688
3.	Pennar River	130.536	58.120
4.	Vamsadhara	28.605	12.142
5.	Other Rivers	322.839	32.082
	Total	1302.723	684.532

Source: Water Resources Department

### Irrigation Potential created:

Creation of Irrigation Potential continued to be the most prioritized area. So far 103.50 lakh acres of irrigation potential has been created up to Nov 2016 under major anicuts on Krishna, Godavari and Pennar rivers, Projects like NagarjunaSagar, Telugu Ganga, Somasila, SRBC, Vamsadhara, Medium Irrigation projects and Minor Irrigation schemes. The details of sector wise irrigation potential created up to November, 2016 are shown in Table 7.2 and district-wise irrigation potential created in the state are given in Annexure 7.1.

Table 7.2 : Sector Wise Irrigation Potential created up to November, 2016

Sector	Ayacut (lakh acres)
Major Irrigation	65.00
Medium Irrigation	5.52
Minor Irrigation	25.60
APSIDC	7.38
Total	103.50

Source: Water Resources Department

### Contemplated Irrigation Potential:

Completion of present 57 projects (28 Major +18 Medium + 4 Flood Banks + 7 Modernisation), will create 48.431 lakh acres of new ayacut Irrigation Potential under Major, Medium irrigation projects besides stabilization of 21.189 lakh acres.

### Priority projects:

The Government has decided to complete 7 ongoing projects on priority basis providing early irrigation facilities in the drought prone Rayalaseema and Prakasam districts and backward districts of Srikakulam and Vizianagaram.

### Seven Priority projects

- a) Polavaram Right Main Canal including Pattiseema LIS
- b) Polavaram Left Main Canal.
2. Thotapalli Barrage project
3. Handri Neeva Sujala Sravanthi project
4. Galeru Nagari Sujala Sravanthi Phase I
5. BRR Vamsadhara Project (Stage II- Phase II)
6. PoolasubbaiahVeligonda Project
7. Gundlakamma Reservoir

### Project completion targets:

Thotapalli, Polavaram RMC, GNSS, HNSS, Vamsadhara Stage-II, Phase-II and Polavaram Left Main Canal are programmed to be completed by June 2017. Polavaram Head Works are programmed to be completed by June 2018.

Polavaram irrigation project is treated as National project as per the AP State Reorganization Act-2014. Accordingly, Central Government has tied up with NABARD for financial assistance. First installment of Rs.1981 crores was released to Andhra Pradesh on December 2016.

### Modernization of existing systems:

Due to occurrence of frequent cyclones and consequent damage to crops, modernization of the following river systems was taken up to stabilize the existing ayacut of 46.36 lakh acres. Modernization of delta systems and other projects has been taken up at a cost of Rs.12840 crore. Scheme wise details are shown in Table 7.3

Table 7.3: Ayacut area under modernization of delta system

Name of the Scheme	Ayacut (in lakh acres)
Godavari Delta	10.38
Krishna Delta	13.08
Pennar Delta	2.47
Nagarjuna Sagar project	14.71
TBP HLC & LLC	4.64
Yeleru Reservoir Scheme	0.68
Nagavali System	0.40
Total	46.36

Source: Water Resources Department

### Support for completion:

Financial assistance from World Bank, JICA, NABARD and from Government of India is being obtained and the works are in progress for the early completion of ongoing projects. Most of the sites suitable for gravity irrigation schemes have already been exhausted and upland areas which cannot be irrigated by gravity flows are planned to be developed under Major Lift Irrigation schemes. The Government has programmed the following special lift irrigation schemes:

- A. Chinthalapudi Lift Irrigation scheme to irrigate 2 lakh acres in upland areas of West Godavari and Krishna districts with a cost of Rs.1701Crore and is under progress.
- B. Babu Jagjeevan Ram Uttarandhra Sujala Sravanthi Project is being taken up with a cost of Rs.7214.00 Crore to create an ayacutof 8 lakh acres in the upland areas of Srikakulam, Vizianagaram and Visakhapatnam districts .The project is yet to be started.

### Accelerated Irrigation Benefit Programme

17 Projects (9 Major and 8 Medium) were included under AIBP with a target to create an Irrigation potential of 5.35 lakh ha. Out of these 17 projects, 8 projects were taken up prior to 2004-05, and 9 projects were taken up after 2004-05. Out of these 9 Projects, 2 projects are covered under Prime Ministers Relief Package (PMRP) and the balance 7 Projects are covered under Normal AIBP. Thus, out of the total 17 AIBP projects, 7 Projects (3 Major and 4 Medium) were completed and 1 project was dropped and the balance 9 Projects are under progress. Out of the 9 Major Irrigation Projects under AIBP, Polavaram Project is now declared as National Project in 2014-15. In all, Irrigation Potential of 2.94 Lakh ha. has been created up to October, 2016 under AIBP. Details of IP created under Major and Medium projects (AIBP) are given in Annexure 7.2.

### Hydrology Project Phase -I&II(HP)

Hydrology Project Phase-I was taken up 50 gauge discharge sites on various minor streams and 22 digital water level recorders at various reservoirs have been established. Further 124 standard rain gauge stations, 56 autographic rain gauge stations, 3 full climatic stations, 9 water quality level I and 2 water quality level II labs were also established. The HP Phase-II project was taken to extend and promote the sustained and effective use of the HIS by all potential users concerned with the water resources planning and management, both public and private, thereby contributing to improved productivity and cost effectiveness of water related investment.

## ECONOMIC INFRASTRUCTURE

## Hydrology Project – III (National Hydrology Project)

NHP is a Central sector scheme with 100% grant to the state/Central Implementing agencies for a period of 8 years from 2016-17. The objective is to improve the extent, quality and accessibility of water resources information, and to strengthen the capacity of water resources management institutions / Departments in India. The Memorandum of Agreement (MOA) is signed between the Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD&GR), Government of India and Water Resources Department, Government of Andhra Pradesh for the implementation of National Hydrology Project (NHP). The project implementation plan, for a total amount of Rs 80.00 Crores is approved by MoWR. The components and respective cost proposed are shown in Table 7.4

Table 7.4 :Component wise Projects

Sl No	Project component	Amount (cr)
1	Water Resources Data Acquisition System	48.00
2	National Water Resources Information System	4.00
3	Water Resources Operation and Planning	12.00
4	Institutions and Capacity Enhancement	16.00
	Total	80.00

.Source: Water Resources Department

## CADA Projects

### APILIP:

Andhra Pradesh Irrigation Livelihood Implementation Project (APILIP) envisages increasing the agricultural production by constructing and rehabilitation of irrigation facilities, improving water management and agriculture practices, enhancing agricultural income, construction of Minor Irrigation Tanks and formation and capacity building of WUAs. It consists of formation of one (1) New Minor Irrigation Tank in surplus river basins with a tentative cost of Rs.2.32 crores to create new Irrigation potential of about 272 acres and to take up Rehabilitation of nine (9) existing medium irrigation projects at an estimated amount of Rs.216 crore to stabilize an ayacut of 49,330 ha. The

cumulative expenditure incurred under this project during 2007-2016 (up to July, 2016) in Rs.250 crores. The project is completed and closed w.e.f 11-07-2016.

### APILIP-II

Andhra Pradesh Irrigation Livelihood Improvement Project (Phase-II) for Rs.2000 crores is under examination with Government of India. The project proposal consists of modernization of 20 medium irrigation projects, restoration of 445 Minor Irrigation tanks and Agri-business component. About 4 lakh acres of ayacut will be stabilized under this project. The project duration is from 2016-17 to 2020-21.

### RRR-II

345 Minor irrigation tanks were covered under Repairs, Renovation and Restoration (RRR-II) of minor tanks with an estimated cost of Rs.112.36 crore apart from 3 works taken up in other programmes. Of these, 324 works were completed, and remaining 18 works have been terminated. The expenditure incurred under this project to bridge gap ayacut of 40,807 hectares during 2012-16 and expenditure incurred up to 31-3-2016 is Rs.57.09 crore.

### RRR-III

Under this scheme the proposals are submitted to MOWR for sanction.

SL. No	Name of the Dist.	No. of Tanks	Ayacut in Ha.	Estimated Cost in Cr.
1	Prakasam	122	19321	80.24
2	Nellore	81	11724	48.21
3	Ananthapuram	35	2220	11.45
	Total	238	33265	139.9

## APCBTMP (World Bank Phase-I)

Andhra Pradesh Community Board Tank Management Project (APCBTMP) envisaged increasing the agricultural production by construction and rehabilitation of irrigation facilities, improving water management and agriculture practices, enhancing agricultural income, Modernization of Minor Irrigation Tanks capacity building of WUAs. 975 Minor Irrigation tanks were renovated and 3,01,756 acres ayacut was stabilized. The cumulative expenditure incurred under this project during 2007-2016 (up to Oct, 2016) is Rs.439.24 crores. The project is completed and closed by 31-07-2016.



## APIIATP (World Bank Phase-II)

Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project (Phase-II) funded by World Bank for Rs.1600 crores was cleared by Department of Economic Affairs (DEA) Ministry of Finance, New Delhi. The proposal consists of modernization of 1200 Minor Irrigation Tanks to stabilize an ayacut of around 3 lakh acres. The project duration is from 2016-17 to 2020-21. World Bank Pre-identification Mission visited the state from 8th to 17th August, 2016 Aide Memoire Issued. World Bank Preparatory Mission also visited the State from 15th to 25th November 2016.

## Minor Irrigation

Minor Irrigation deals with investigation and execution of Minor Irrigation Sources of ayacut up to 5000 acres. Minor Irrigation plays an important role in the development of agriculture and livelihoods particularly in drought prone areas and areas outside command of Major and Medium projects. Minor Irrigation is providing irrigation facilities to increase the agriculture production in the existing ayacut of 25.60 lakh acres under 40817 tanks.

The total registered ayacut of 25.60 Lakh Acres is not being irrigated every year and hence the gap ayacut is being increased year by year and the average gap ayacut is approximately 57% of total registered ayacut.

A total amount of Rs.583.37 crores is spent during 2016-17 upto 25-11-2016 which includes expenditure of Rs.352.32 crores under Neeru Chettu, NABARD & SCSP, TSP etc.

## Minor Irrigation Census

As per the 5<sup>th</sup> Minor Irrigation Census 2013-14, there were 10.54 lakh minor irrigation sources in Andhra Pradesh against 9.72 lakh sources as per 4<sup>th</sup> Minor Irrigation Census 2006-07, registering an increase of 8.41%. The statement showing data on Minor Irrigation sources is given in Annexure-7.3.

# Ground Water

The government is targeting water security – drinking water, irrigation and industrial use. With an objective to conserve every drop of water the government is working

towards sustainable ground and surface water management through programmes like Neeru Chettu, Neeru-Pragathi, Panta Sanjeevini (farm pond), Panta Raksha (Rainguns), borewells under the NTR Jala Siri Programme. In addition to these programmes, several schemes are also put in place to provide access to quality drinking water by conservation and sustainable management of water resources.

It is also targeted to drought-proof the state and provide safe drinking water for all the people. Groundwater is one of the major sources of drinking water in both urban and rural areas. In addition, it is also an important source of water for agricultural and industrial sector. Being a critical and integral part of the hydrological cycle, its availability depends on rainfall and recharge of water.

The demand for water has increased over the years led to water scarcity in many parts of the world. During the past two decades, the water levels in several parts have been falling rapidly due to an increase in ground water extraction. The number of wells drilled for providing irrigation to both food and cash crops has rapidly and indiscriminately increased. Intense competition among users viz., agriculture, industry and domestic sectors is driving groundwater table lower.

The National Water Policy calls for controls on exploitation of groundwater through regulation and an integrated and coordinated development of surface and groundwater through conjunctive use.

## Key Functions

- Periodic estimation of groundwater resources of the state on a watershed approach and according clearances to minor irrigation schemes.
- Detailed investigations for delineation of potential zones and selection of well sites, to be implemented by developmental agencies and individuals.
- Investigations for identification of feasible areas and suitable sites for artificial recharge and rainwater harvesting structures.
- Drilling of exploratory – cum production bore / tube wells to study sub surface configuration of aquifers and assess aquifer parameters
- Monitoring of groundwater levels and quality through a network of observation wells, stream flow check points and improved network of piezometers with Automatic/

## ECONOMIC INFRASTRUCTURE

Digital Water Level Recorders with Telemetry for Real Time Ground Water Levels.

- Conjunctive use studies in selected major command areas
- Identification of feasible sites for construction of bore wells under NTR
- Jala Siri II programme for small and marginal farmers in Command areas and also in Non-Command areas of 3 high rainfall north coastal districts.
- Special studies for evaluating groundwater regime through modern tools like, aerial photographs, satellite imagery, Geographical Information System etc,
- Aquifer Mapping and Management studies.

In recent years, the department shifted its focus to management by adopting Community Based Ground Water Management (CBGWM).

### Estimation of Groundwater Resources

The state has been divided into 748 watersheds (Groundwater Basins or Assessment Units) for estimation of groundwater resources. The last estimation was done for the base year 2012-13. Groundwater Resource Estimation for the base year 2014-15 is nearing completion. Categorization of basins/ mandals/ villages is made based on stage of ground water development and long term groundwater levels trends. Details of the availability, utilization and stage of Ground water resources as per GEC -2012-13 are shown in Table 7.5 and Table 7.6.

Table 7.5: Ground Water Development

Ground water Resources	Command Area	Non Command Area	Total
Annual Ground water availability (MCM)	9163	9317	18480
Annual Ground water utilization (MCM)	2754	5350	8104
Balance Ground water availability (MCM)	6409	3967	10376
% of utilization stage of Ground water development)	30	57	44
Category	Safe	Safe	Safe

Source: Ground Water Department.

Table 7.6: Stage of Ground Water Development

Category	Watersheds (No.)	Mandals (No.)
Over Exploited	79	61
Critical	22	17
Semi-critical	62	54
Safe	585	538
Total	748	670
Over exploited villages to be notified under APWALTA- 946 villages.		

Source: Ground Water Department.

In terms of quantity, the total groundwater availability in the state is 18,480 Million Cubic Meters (MCM) out of which 8,104 MCM is utilized for various purposes leaving a balance of 10,376 MCM. The overall stage of ground water development is about 44%. The stage of ground water development in command areas is 30% and the stage of groundwater development in non-command areas is 57%.

### Groundwater Development

A study of the composite hydrographs of the past and present indicates that groundwater development is taking place in the state. It is generally observed that more the recharge more will be the utilization. At present, on an average, about 1.3 hectares of gross area is irrigated per well and on an average a total of 50,000 new wells are commissioned per year due to which the average unit area irrigated per well may decrease. The net groundwater irrigation potential created during 2015-16 was 11.93 lakh hectares and gross area irrigated under groundwater was 16.43 lakh hectares with 15.09 lakh bore wells. It is expected that if, micro irrigation practices are adopted on saturation mode, net irrigation potential through groundwater can reach to a level of 16 lakh hectares with additional recharge to ground water by taking up water conservation works in large scales.

### Investigations

The department is conducting investigation for selection of sites for wells, artificial recharge studies, implement of APWALTA and hydrological clearances etc. During the year 2016-17 (up to Oct 2016) the department has investigated 65,723 sites under various programmes for construction of

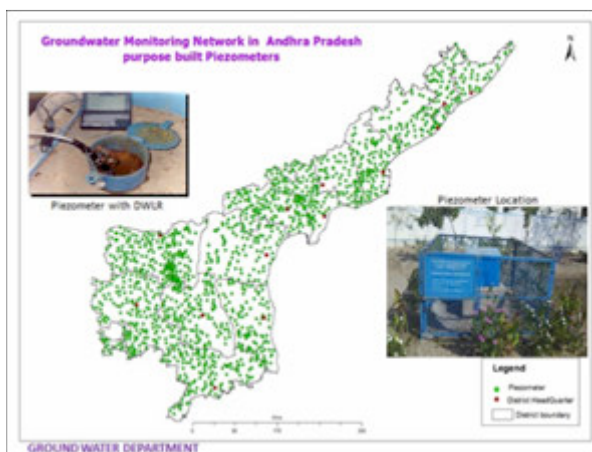
different types of wells under SCSP, TSP, WALTA, Lift Irrigation, Artificial Recharge Structures, Industries, Sand Mining, Drinking water and NTR JalasiriPhase.II etc., Out of which, under SCSP, the department has conducted ground water surveys in 1499 sites and recommended 1004 sites through which 690 hectares of the area is likely to be irrigated, benefitting 993 farmers belonging to Scheduled Castes. Under, Tribal Sub Plan the department has conducted ground water surveys in 1941 sites and recommended 1426 sites through which 2090 hectares of the area is likely to be irrigated, benefitting 1591 farmers belonging to Scheduled Tribes.

### Monitoring of Ground Water Levels

The Department is monitoring the changes in groundwater regime continuously through a network of 1254 Piezometer wells in different hydrogeological and geomorphic units. The water levels are recorded and the fluctuations noticed seasonally and annually are analyzed in relation to rainfall, recharge measures, drought and extraction of groundwater in the area.

### Real Time Monitoring of Groundwater levels:

Digital Water Level Recorders in 1254 Piezometers are functioning for real time monitoring of the ground water levels interval. The real time data is being analyzed with rainfall and reports are being disseminated through CM Coredash board.



### Groundwater Levels Scenario:

In the water year 2016-17, (up to February 2017) the State has received 28% less rainfall against the normal rainfall. Observed a net rise of 0.43 m. from May-16 and net fall of 1.45m from November-2016 water levels.

Coastal Andhra region received 24% deficit rainfall against the normal rainfall upto February, 2017 where as it was 10% excess during the same period in the previous water year (resulted in a net raise of 0.26 m from May-16 and 0.22m from February, 16 to February, 17 water levels).

Rayalaseema region received 33% deficit against the normal rainfall upto February-17 whereas it was 30% excess during the same period in the previous water year and as a result a net fall of 1.99 m. from May-16 and 3.94 m from February -16 to February-17 water levels.

The average groundwater level for the State in February 2017 is 12.54 m., where as it was 11.48m.during the same period in the previous year and observed a net fall of 1.06m. from the same month in the previous year water level.

Because of the failure of North East Monsoon and more utilization of groundwater for Rabi crops, the groundwater levels are being drastically falling. When compared the present water levels with November month water levels, almost in all districts fall in water levels is observed. Nellore district (the fall is ranging from 0.84m to 2.69m) and in the state as whole average fall is 1.45 meters from November, 2016 ( it is equal to about 150 TMC of additional groundwater usage from November month)

### Monitoring of Water Quality

The department collects water samples during pre-monsoon [May] and post-monsoon [November] from all monitoring wells and also during investigations. These water samples are being analyzed in the 4 Chemical Laboratories of the department. During 2016-2017 (upto January, 2017), 5875 water samples were collected/analyzed against the annual target of 5,524.

## ECONOMIC INFRASTRUCTURE

### Drilling

Under the programme, the department is constructing borewell/tubewells in the SC/ST lands to study the lithology and aquifer parameters and handing over to SC/ST beneficiaries. Against the annual target of 200 wells under drilling, 296 bore/tubewells wells have been drilled under Scheduled Castes Sub-plan in 2016-17. Against the annual target of 100 wells under drilling, 64 bore/wells and 296 tube wells have been drilled under Tribal Sub-plan in 2016-17.

### Command Area Development

The department takes up studies under four major project commands viz., Nagarjunasagar Right Canal Command, Nagarjunasagar Left Canal Command, Srisailem Right Branch Canal Command, Tungabhadra Project Complex Command area to study the impact of excessive irrigation, delineate areas already water logged and prone to water logging, recommend conjunctive use of both surface and ground water and to suggest other suitable remedial measures to improve productivity.

Monitoring of Groundwater levels is being carried out six times a year through 759 Command area observation wells to know the impact of canal releases on groundwater regime. The changes in chemical quality of groundwater are being monitored twice a year and detailed hydro geological and geophysical surveys are being carried out to recommend sites for construction of irrigation wells. Groundwater augment in these command areas are underutilized. The present stage of ground water development in various commands reflected varying levels with NagarjunaSagar Right Canal Command Area(7%), NagarjunaSagar Left Canal (26%), Tungabhadra Project Complex Command Area(40%) and Srisailem Right Branch Canal Command Area (32%). The department is also working out different conjunctive use strategies in the four major commands and preparing conjunctive use plans for each district falling under the above commands.

### Conjunctive use management

Ideally there should no need for conjunctive use (i.e., supplementing the irrigation needs from groundwater), but in reality conjunctive use of surface water and groundwater

in the command area necessitated for the reasons are Irrigation system is not able to supply required quantity of canal water at required time to service the designed command are and maintain the irrigation schedule, when the storage in the reservoir is depleted due to low rainfall, when supply of canal water for irrigation use is reduced due to increase in the demand by other competitive uses and to increase the efficiency of irrigation system. The department is arriving at different conjunctive use plans for the 20 Medium Irrigation Projects by Water Resources Department.

### NTR Jala Siri-II Project (implementation of Conjunctive use)

Implementing conjunctive use of groundwater and surface water in a true spirit in a big way. The objective of the scheme is to utilize the dynamically rechargeable groundwater resources in command areas, where the groundwater development is under "SAFE" category and create an additional ayacut of about 6.0 lakh acres in the state. Under this scheme the Department has identified the scope for about 1.24 lakh bore wells in Command areas in the state and high rainfall areas of North Coastal districts. This programme is intended for small and marginal farmers in the state and the total outlay of the project is 1498 crores

So far, the department has conducted feasibility surveys for the selection of bore well sites in 54,603 sites and recommended 36,360 sites for construction of bore wells. The Rural Development Department is executing the drilling of bore wells and energisation etc.

### Geo tagging of all Agriculture Bore Wells

A new initiative first of its kind in India for sustainable groundwater development. The Government has taken up an innovative work of Geo tagging of all 15.09 lakh bore wells in the state. So far 98% of the wells have been geo tagged along with bore well photograph and certain information about the bore well.

## World Bank Assisted Projects

### I Externally Aided Projects:

#### AP Community Based Tank Management Project:

Participatory Groundwater Management aims at empowering the groundwater users in the tank influence zone to wisely manage the dynamic groundwater resources replenished through rainfall, surface water sources and return circulation from irrigated areas. The participatory Ground Water Management comprises of five major activities a) Capacity building of the Stakeholders, b) Participatory Hydrological Monitoring (PHM), c) water Audit and Crop Water Budgeting, d) Crop Planning and e) Crop Adoption.

Under this component 142 tanks have been selected for Participatory Groundwater Management activities, falling in 6 districts and covering 71 mandals. The activities cover the installation of PHM equipment including rainguages, drilling of piezometers, trainings, data analysis and dissemination etc. The Project was completed by July, 2016.

### II) Hydrology Project Phase III

The objective of this project is to improve the scope and accessibility of water resources data and information and to strengthen water resources planning and management across the state. The proposed cost of the project is Rs.80.00 crore and project period is 8 years proposed from 2015-16 to 2023-24. Total cost of Rs.80.00 crore is a grant from Government of India for the year 2016-2017 an amount of Rs.2.219 crore released for 2017-2018. Annual Work Plan for Rs.9.79 crore is approved by Government of India.

### III) Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project

In sequel to Andhra Pradesh Community Based Tank Management Project is approved by the World Bank with an estimated cost of Rs.40.00 Crores and the same will be implemented shortly in all the districts in Andhra Pradesh except Guntur district. The main objective is Participatory Groundwater Management

## Neeru-Chettu/NeeruPragathi Mission

Neeru-Chettu Mission is a sub-mission of Primary Sector Mission. The role of Ground Water Department in the Mission is to provide technical support to the other departments for identification of sites for recharge structures, preparation of conjunctive use plans and impact assessment of Neeru-Chettu activities in the State. The important objectives are additional recharge to groundwater, technical and systematic development of groundwater resources, improvement of groundwater use efficiency in Non-command areas and implementing conjunctive use plan in command area and finally achieve more productivity per unit of water.

### Convergence with other Departments:

The Groundwater department works in convergence with the departments of Rural Development, Forest, Horticulture, Irrigation and Andhra Pradesh Space Application Centre (APSAC).

## Ground Water Sustainability

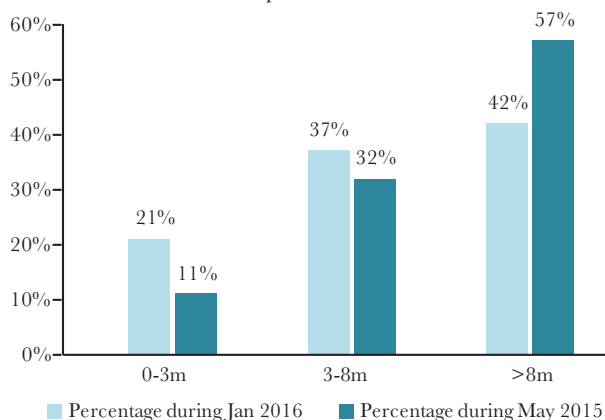
Day by day ground water utilization is getting increased for various needs resulting in the depletion of groundwater levels particularly in Non-command areas in the state. For sustainable development of this valuable resource, the Government is taking up various water conservation and water management measures. The objective is to make the state drought proof and increase the State GSDP in one hand and enhance the groundwater recharge through water conservation works, inter-linking of rivers and transfer of water from surplus basins to deficit basins. The department has set a goal to keep the ground water levels between 3 to 8 meters below ground level. If the water levels are above 3 meters, the crop yields/Productivity/Production can decrease and soil characteristics will also deteriorate. If the water levels are below 8 meters the power consumption will be more, well yields decrease and environmental issues will be more.

Based on the groundwater level data collected from piezometers, it is observed that about 52% of the area in the State is showing water levels more than 8 meters and in about 34% of the area reflected the water levels range between 3 to 8 meters and 14% of area with 0-3 metres ground water level as on February, 2017 in the state.

HIGHLIGHTS | Per Capita Power Consumption  
**987** units

Details of depth of water level ranges are shown in chart 7.1 and district wise depth of water levels are given in Annexure 7.4

Chart 7.1 Variation in depth of water levels



Source: Ground water Department.

## Power

Power sector is one sector that has recorded significant performance in terms of generation, transmission and distribution. An efficient, resilient and financially robust power sector is essential for growth and poverty reduction. The state is going in a big way towards non-conventional energy sources as well. Solar and Wind power will be the focus areas. As a critical infrastructure pushing the state economy upwards, its impact on the agriculture sector has also showed great promise. Various challenges have been faced by the power sector since bifurcation of state and major turnaround has been brought about by the government with apt policy reforms, considerably reducing the AT&C and T&D losses and providing quality power.

From 22.5 million units of power deficit in June 2014, the state was became surplus power state and able to provide Quality power supply to all domestic consumers on a 24X7 basis.

The recent performance of the State Power sector received acclaim from various quarters. The sector has won five national awards for remarkable energy conservation and efficiency parameters. The best practices followed by the

state in the power sector are being emulated by other states.

The Vision of the APTRANSCO is “To Plan, Construct and Maintain the Transmission Network in the State of Andhra Pradesh in line with Demand Growth and Generation Expansion in an efficient manner so as to ensure highest availability and lowest operational costs.”

Details about APTRANSCO are shown in the below.

Table 7.7 APTRANSCO - 2016-17

Parameter	Performance as on 31-10-2016
Installed Capacity (MW)	13885.38
Maximum peak demand met (MW)	7965 (23-08-2016)
Minimum demand met(MW)	3800 (19-05-2016)
Maximum Grid consumption in MU	178.15 (23-08-2016)
Minimum Grid consumption in MU	101.272 (19-05-2016)
Total energy available for use (Grid consumption (MU) during 201617 upto Oct,2016)	31,849.74
Consumers served (Lakh Nos)	169.18
Agricultural services (Lakh Nos)	16.28
Per capita consumption(kwh) 2015-16	987

Source: AP TRANSCO

### Support of Power sector to agriculture

- Government is committed to the welfare of farmers and supplying free power to all agriculture consumers including all the services released. The revised estimated Budgetary subsidy (electricity) provided for agriculture given by the Government during the year 2016-17 is Rs.3366.35Crores.
- During the year 2016-17, it is programmed to release 50,000 new agricultural connections. So far i.e. up to 31-10-2016, 46,295 agricultural services have been released. The total agricultural services in the state as on 31-10-2016 is 16.28 lakhs.

- Government has waived the power consumption arrears relating to agricultural consumers of DISCOMs and RESCOs. As per modified policy, farmers having up to 3 connections in dry land, up to 2.5 Acres land holding in wet land are eligible for free power. The modified policy proposes incentives to promote energy saving measures.

*Per capita consumption (kwh)2015-16 - 987*

*Agriculture Services- 16.28 Lakhs*

## R-APDRP

Restructured-Accelerated Power Development and Reforms Programme (R-APDRP) is a flagship programme of Government of India which aims at achieving actual demonstrable performance in sustained loss reduction. It has two parts – Part-A and Part-B.

## Part-A -I- IT Implementation

This includes projects for establishing of baseline data and IT applications for energy accounting/auditing & IT based consumer service centers. An amount of Rs.188.26 Crores was sanctioned to cover 75 towns in the state with more than 30,000 population (as per 2001 census) (APSPDCL covers 46 towns + APEPDCL covers 29 towns) within five years from the date of sanction of the project.

States are required to provide detailed timelines broken into quarterly targets. These targets shall be reviewed each quarter and in case state fails to achieve targets in two consecutive quarters, the sanction extension in completion period may be withdrawn and conversion of loan to grant would be limited to only towns completed till that time.

In the 7th Power Minister's Conference held on 10th Sep'2013, it was resolved that the State Governments shall complete all works under R-APDRP Scheme by 2016-17. This would include complete implementation of all Part-A (IT) schemes by 2015 and Part-B as well as SCADA Schemes by March 2017.

## Progress of Works

- 75 towns (46 in APSPDCL and 29 in APEPDCL) declared Gone-Live as on 31-03-2015.
- Data Center (DC) at Hyderabad and Disaster Recovery (DR) center at Tirupathi have been established with all servers and are being shared by both AP and Telangana.
- Customer care centers are established in all the DISCOM head quarters and integrated with Data centre.
- An amount of Rs.145.68 Crores (Rs.83.50 Crores in APSPDCL & Rs.62.18 Crores in APEPDCL). Out of total sanctioned amount Rs.188.26 Crores has been spent so far (up to Nov-16).

## Part-A -II- (SCADA/DMS)

The Supervisory Control and Data Acquisition / Distribution Management System (SCADA/DMS) System will provide real time monitoring & control, loss minimization/load balancing and considerable improvement in voltage/VAR profiles. It would also facilitate proper handling of loads while load shedding & restoration, efficient planning of network for future growth by using proven power system planning tools. Scheme consists of installation of Remote Terminal Units (RTU) at each 33/11 KV Sub-stations and integrating these RTUs with centralised control centre to manage Distribution system of the Town. The eligibility criteria of SCADA/DMS system cover urban areas – towns and cities with population of more than 4,00,000 & 350MUs annual input energy. Under SCADA / DMS Visakhapatnam town covered in APEPDCL-1, and 3 towns viz., Vijayawada, Guntur and Nellore towns are covered in APSPDCL. Rs.52.35 Crores was sanctioned by PFC for SCADA/DMS in the above 4 towns (Rs 39.19 crs in APSPDCL and Rs 13.16 crs APEPDCL).

### Progress of Works

- In APSPDCL the scheme was sanctioned in March'2011 is likely to be completed by March 2017, as per the revised schedule.
- In APEPDCL the Visakhapatnam Scheme was sanctioned by Steering committee on 27.9.13 is likely to be completed by March 2017, as per the revised schedule.
- An amount of Rs.9.71 Crores (Rs.4.14 Crores in APSPDCL and Rs.5.57 Crores in APEPDCL) out of total sanctioned amount Rs.52.35 Crores has been spent (up to Oct-16).

## ECONOMIC INFRASTRUCTURE

## Part-B: Distribution System Strengthening:

This includes regular distribution strengthening projects such as renovation, modernization and strengthening of 11KV level substations, transformers/ transformer centers, reconductoring of lines at 11KV level and below, load bifurcation, feeder separation, load balancing, HVDS (11KV), Aerial Bundled Conductor in dense areas, replacement of electromagnetic energy meters with tamper proof electronic meters, etc. In addition, in certain high-load density rural areas with significant loads, works of separation of agricultural feeders from domestic and industrial ones, and of High Voltage Distribution System (11KV) are also taken up. SCADA enabling components are sanctioned under Part-B scheme.

Rs.216.14 Crores was sanctioned for 42 towns with more than 30,000 population (as per 2001 census) and Aggregate Technical & Commercial (AT&C) losses of more than 15% for distribution System Strengthening in the two DISCOMs. DISCOM wise sanctions are APEPDCL: Rs.61.82 Crores. (10 towns) APSPDCL: Rs.154.32 Crores. (32 towns). The original scheme was sanctioned in March'2010. A total amount of 317.07Cr has been sanctioned Under Part-B (Distribution System Strengthening (Rs.216.14Cr) and SCADA/DMS enabling components (RS.100.93Cr). Out of 15 towns originally sanctioned in 2010, works have been completed. 1 town in APEPDCL and 14 towns in APSPDCL). Post verification of town baseline AT&C losses, 27 new towns (AP SPDCL-18, AP EPDCL-9) have become eligible for part-B funding since the town AT&C losses are >15%.

Total Towns for Part-B is 42 (APEPDCL-10, APSPDCL-32). Out of total sanctioned amount of Rs.216.14 Crores, an amount of Rs.166.40 Crores (Rs.119.18 Crores in APSPDCL & Rs.47.22 Crores in APEPDCL) has been spent so far (Up to Oct-16).

### SCADA /DMS enabling components:

In addition to the system strengthening works, an amount of Rs 100.93Cr has also been sanctioned under part-B for providing the SCADA enabling components in the 4 towns where the SCADA project is sanctioned. These towns are not included in the 42 towns covered under system strengthening.

The towns covered under SCADA/DMS Enabling components are One town i.e., Visakhapatnam with Rs21.42Cr in APEPDCL and 3 towns i.e. Vijayawada, Guntur and Nellore with.Rs79.51Crores in APSPDCL. The works would be completed by March 2017. An amount of Rs.17.367Crores (Rs 7.44Cr in APSPDCL and Rs.9.927Crores in APEPDCL) out of total sanctioned amount of Rs.100.93Crores has been spent so far. A total project expenditure of Rs.339.17Crores has been incurred by the DISCOMs under R-APDRP so far.

### Integrated Power Development Scheme (IPDS)

The Government of India have launched the new "Integrated Power Development Scheme" (IPDS).

Components of new IPDS are 1. Strengthening of sub-transmission and distribution networks in the urban area, 2. Metering of distribution/feeders/consumers in the urban area and 3.IT enablement of distribution sector and strengthening of distribution network for completion of the targets laid down under R- APDRP for 12th and 13th Plans by carrying forward the approved outlay for R-APDRP to IPDS. The existing R-APDRP scheme is subsumed in the IPDS scheme as a separate component.

The scope of work under IPDS scheme would be eligible for funding provided it is not covered under any GoI programmes like R-APDRP/RGGVY/ NEF etc., The projects for which any other grant/subsidy from Government of India has already been received/proposed to be received shall not be eligible under this scheme. Distribution Reforms Committee (DRC) should ensure that there is no duplication of works while recommending the projects to the Nodal Agency.

An amount of Rs.650.70 Crores (Rs.300.01 Crores to APEPDCL (29 towns)and Rs.350.69 Crores to APSPDCL (54 towns) has been sanctioned under IPDS scheme.

In addition to the above the smart city project proposals with an estimated project cost of Rs.470.05 Crores, have been submitted to Power Finance Corporation (PFC) are yet to be sanctioned under IPDS.

### Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

Govt. of India has launched DDUGJY for the rural areas with the following components:



- (i) separation of agriculture and non-agriculture feeders facilitating judicious rostering of supply to agricultural & non-agricultural consumers in the rural areas;
- (ii) strengthening and augmentation of sub-transmission & distribution (ST&D) infrastructure in rural areas, including metering at distribution transformers, feeders and consumers end;
- (iii) rural electrification, as per CCEA approval for completion of the targets laid down under RGGVY for 12th and 13th Plans by subsuming RGGVY in DDUGJY and carrying forward the approved outlay for RGGVY to DDUGJY;

The approval for components (i) and (ii) above with a total cost of Rs.43033 Crores including a budgetary support of Rs.33453 Crores from Government of India during the entire implementation period.

The existing programme of Rajiv Gandhi GrameenVidyutikaranYojana (RGGVY) as approved by CCEA for continuation in 12th and 13th Plans are subsumed in this scheme as a separate rural electrification component [component (iii) above] for which CCEA has already approved the scheme cost of Rs.39275 Crores including a budgetary support of Rs.35447 Crores. This outlay will be carried forward to the new scheme of DDUGJY.

The projects under the scheme shall be formulated for rural areas only and will cover works relating to feeder separation, strengthening of sub-transmission & distribution systems including metering of distribution transformers, feeders & consumers and rural electrification component. Out of the total Project Cost, 60% is grant from GoI and 10% from APDISCOMs contribution & 30% loan from financial institutions/banks. In addition to that the maximum grant by GoI including additional grant on achievement of prescribed milestones is 75%. Rural Electrification Corporation Limited (REC) shall be the Nodal Agency for operationalization and implementation of the scheme under the overall guidance of MoP.

#### **Implementation of DDUGJY**

An amount of Rs.922.10 Crores is sanctioned under DDUGJY. Under rural electrification component of Rs.290.22 Crores, under intensive electrification. Out of 9,330 villages, 5,500 villages are covered, out of 19,460

habitations 3,226 habitations are electrified and covering 5,92,670 rural households and works are under progress in the remaining habitations.

The District Electricity Committees were formed in all Districts. M/s.REC was nominated as the Project Monitoring Agency(PMA) for both DISCOMs for an amount of 1% of the approved project cost as consultancy fee.

### **AP Rural HVDS Project**

The High Voltage Distribution System (HVDS) aims at reduction of losses through replacement of the low voltage network with high voltage network and installation of large number of smaller capacity distribution transformers viz., 25 KVA/ 16 KVA DTRs in place of higher capacity distribution transformers viz., 100 KVA/ 63 KVA for supply to agricultural consumers. This system is best suited to meet the scattered low-density loads observed in rural areas in India. Based on the sample studies carried out in Andhra Pradesh, the system loss reduction due to adoption of HVDS system is expected to be around 10%.

HVDS was implemented to 8,22,193 agriculture services at a cost of Rs.3283.95 Crores up to 31.03.2016. In addition, during the year 2016-17, HVDS has been implemented to 14,421 agricultural services at the cost of Rs.80.74 Crores, bringing the total number of agricultural services up to 30-09-2015 at the cost of Rs.849.13 Crores the total number of agricultural services converted under HVDS to 8,36,614 at a cost of Rs.3,364.69 Crores in the state.

The cost of the APRHVDS(ID-P216) project is Rs.294.75 Crores. JICA sanctioned loan assistance to an extent of 85% of the Project Cost, i.e., Rs.252.80 Crores on ODA package at concessional rate of interest of 0.65%. The repayment period would be 40 years (including grace period of 10 years). Power Sector is one of the priority sectors for Japanese ODA Loans.

### **Project preparatory activities**

HVDS Project is taken up with an aim to implement the scheme in a big way in the state where large number of agricultural pump-sets exist. HVDS has already been implemented to 8.36 lakh agricultural pumpsets by availing loans from REC/PFC etc.

## ECONOMIC INFRASTRUCTURE

Under the revised proposed project activities, APRHVDS Project is to cover 46,727 agricultural services in 7 districts of the State at an estimated cost of Rs.294.75 Crores.

The details of Financial benefits likely to accrue due to implementation of the HVDS Project would result in saving of Rs.76.72 Crores per annum is shown in Table 7.8.

Table 7.8 Financial benefits

Sl. No	Savings Category	Savings (Rs. in Crores)
1	Reduction in Energy Loss	12.54
2	Reduction in theft of Energy	18.13
3	Reduction in Peak power loss	45.47
4	Reduction in Transformer failure	0.58
	Total Savings	76.72

The project to be implemented by APSPDCL (Tirupati), would result in saving of Rs.76.72 Crores per annum. It was decided that APSPDCL will repay the loan amount through the benefits accrued by implementation of this project. APSPDCL shall bear the balance portion of the project cost i.e., 15% from their internal sources or through other domestic lending for the successful implementation of the project.

M/s. Voyants Solution Pvt. Ltd, Project Management Consultant would continue to provide services to APSPDCL in the State under the same contract agreement and also communicated addendum to the MoD to the respective executing agencies. The 10 packages in respect of AP SPDCCL works are under progress. An expenditure of Rs.248.03 Crores incurred covering 42,182 agricultural services at APSPDCL. APSPDCL received an amount of Rs.185.21 Crores towards claims.

### APGENCO- Generation Progress: Rayalaseema TPP Stage-IV (1x600MW):

Land acquisition has been completed. 1.4 TMC of water has been allocated for both RTPP stage-III & IV from SPVB Reservoir by water resources department. Ministry of Coal allotted 2.31 MTPA long term coal linkage from M/s.MCL for 500MW. Additional 1.2MTPA coal linkage for enhanced 100MW is awaited.

### Status

- Boiler: Total tonnage of 23,361 MT has been erected.
- Pressure parts: Alignment of Wall Blowers is in progress. Erection of tracing line from HFO skid to header is in progress.

TG: Condenser – A : SS baffle plates welding in progress.

Condenser – B : Stiffener pipes fit up & welding in progress.

Turbine: Inner diffuse plate for LPT erection is in progress.

Generator: Leak test for cooling housing frame is in progress.

ESP: Cumulative Tonnage of 8,439 out of 9,582 MT have been erected. ID Fan outlet to chimney inlet discharge duct welding has been completed.

Rotating equipment: Pre assembly of Journal Shaft Assembly with Journal Head & Trunnion Shaft Assembly for Mills is completed.

FD FAN – A&B : Preparation is in progress for acid cleaning of lub oil piping.

ID FAN –B: Erection of lub oil piping is in progress.

ID FAN A&B: Alignment of fan & motor is under progress.

Arrangements are under progress for spring releasing of fans foundations.

TG Building:

PHB 17.00M Floor Slab: completed in BC bay up to grid 10.

PHB 8.50 M Floor Slab: completed in BC bay up to grid 5.

24.00 M Slab: completed in BC bay from Grid 6 to grid 10.

27.50 M Slab: completed

32.00 M Slab: completed in BC bay from Grid 8 to grid 10.

Chimney civil works: 8 Chimney Corbels and Ring Beam have been completed.

Unit is programmed to commission by March 2017.

### Dr.NTTPS Stage – V (1x800MW), Unit#8

LoI was issued to M/s BHEL for Design, Engineering, Manufacture, Supply including supply of Mandatory Spares and Erection, Testing & Commissioning for coal fired 1x800 MW super-critical Unit and Zero date commenced on 15.12.2015. The unit is programmed for synchronization by 14.03.2019. APGENCO has issued Letter of intent for BOP Packages to M/s BGR Energy Systems Ltd, Chennai. The date of LoI i.e., 06.07.2016 is Zero date for BOP. An advance of Rs 229.987 Crores released to BGRESL.

#### Status:

Rerouting of 220 kv line works by APTRANSCO is completed and final circuit charged on 20.11.2016. BHEL is submitting drawings and engineering is under progress. 4031 MT ESP materials received at site from M/s BHEL/Ranipet. Soil tests completed. Out of 313 about 58 piles for Boiler foundations completed. Earth work excavation for foundations for D1, D3, D5 & D6 blocks in township is under progress. Construction of stores and sedimentation tank is under progress.

### Sri Damodaram Sanjeevaiah Thermal Power Station Stage-II (2X800MW)

LoI for the BTG package of 1x800MW SDSTPS – Stage –II was issued to M/s BHEL on 02.11.2015 for an amount of RS.2307 Crores. Payment has been made for an amount of Rs.198.95 Crores on 15.12.2015. Hence, the Zero date for BTG package commenced from 15.12.2015. M/s Tata Projects Limited has emerged as L1 bidder. LoI issued to M/s TPL for execution of BOP package for an amount of RS.2606 Crores on 06-07-2016. Piling work started at site in ESP area and out of 232 about 61 were completed. Piling work started at site in Boiler area and out of total 236 about 49 were completed. BTP and BOP Engineering activities are under progress.

### Nagarjunasagar Tailpond Dam PH (2x25MW)

Main dam civil works are completed. All major works of power house are completed. Both units are commissioned in the month of January 2017.

Details about power generation and distribution are given in Annexure 7.5.

### Solar and Wind Power Plants

Establishment of 5 MW canal bund solar PV Plant on Polavaram Right Main Canal, West Godavari.

This is a Pilot-cum demonstration project approved by MNRE. The plant successfully commercial operation (CoD) on 19.11.2016.

Establishment of 500 MW capacity Solar Power Plant at Thalaricheruvu, Ananthapuram.

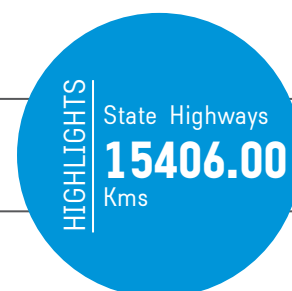
MNRE has accorded approval for setting up of one solar park of capacity 500 MW in Ananthapuram – II Ultra Mega Solar Park- II (500MW) at Talaricheruvu Village, near Tadipatri. Tender were floated in APGENCO e-procurement Website. The Pre Bid Meeting with bidders was held on 03.09.2016. The replies to the pre bid queries were uploaded in APGENCO e-procurement platform on 19.9.2016. The last date for submission of bid is 19.10.2016. The PQ/Technical Bids were opened on 27.11.2016 and evaluation is under progress.

10 MW Ramagiri wind farm, Ananthapuram. Tenders were floated for Repowering of the existing Ramagiri wind farm with a capacity of 7-10 MW on e-procurement platform, based on the estimation of site potential by M/s C-wet, Chennai (now NIWE). The tenders were floated in APGENCO e-procurement platform on 25.10.2016. The Pre Bid meeting is completed on 24.11.2016

## Roads and Buildings

### Roads

Roads are one of the basic modes of transportation system and also an important priority sector of Infrastructure. Systematic development of roads is one of the important pre-requisites for development and acceleration of growth in the economy. Among the different modes of domestic transportation systems, road transport carries more than 80 percent of the Goods and Passenger traffic. The network of roads, particularly from rural to urban facilitates speedy movement of goods and services and ensures higher growth trends, connectivity social integrity and wellbeing of the



society. The productivity and efficiency of road transport is directly linked with the availability and quality of road network.

In view of the high potential in agricultural activity, there has been huge increase in Road network. The total R&B Road network in the state as on 30-04-2016 was 47,002 Kms. Surface wise lane wise and type of roads details are shown in Table 7.9.

Table 7.9 : Status of R&B Roads

Lane	Length of Road (in Kms)	Surface	Length of Road (in Kms)	Type	Length of Road (in Kms)
Four Lane	2418.36	Cement Concrete	2216.89	National Highways	5293.43
Double Lane	11007.01	Black top	47454.57	State Highways	15,406.00
Double lane with paved shoulders	939.90				
Intermediate Lane	2748.74	Metalled & Unmetalled	2624.00	Major District Roads	31596.00
Single Lane	35181.43			-	-
	52295.43		52295.43	52,295.43	

Source: Engineer-in- Chief, Roads and Buildings

## State Roads

Construction and maintenance of roads and bridges on State Highways, Major district roads, rural roads are taken up by the R&B department. Particularly Roads taken over from Panchayat Raj department or other Local Bodies are brought to the required standards and kept in motarable condition. The R&B department maintains a total of 47,002 Km of roads (excluding NH roads) comprising 15,406 Kms of State Highways, 26,038 Kms of Major district roads and 5,558 Kms of rural roads had taken over from PR department and other local bodies.

The State Roads wing maintains the entire State Roads (Non-core net) of 32,280 Km using the State budget grant. There are two types of maintenance works i.e., ordinary repairs (annual maintenance) and the other periodical maintenance on the roads which are ripe for renewal. The repairs are taken up based on the condition of road, year of last renewal, traffic on the road and soil condition.

## Length of Roads

*National Highways 5293.43Kms*

*+1344.30Kms in-principle declared*

*Major District Roads - 31596.00 Kms*

## Length of Roads

*Density of National Highways 10.81Kms per lakh*

*- National average 8.60 km. per lakh*

*Length of 32.82Kms is available for every*

*1,000 Sq. Kms - National average 30.45 km.*

## Specail Repairs Programme (SH & MDR) Works

415 works costing Rs.530.36 Crores are on hand as on 31.10.2016 of which 57 works costing Rs.72.38 Crores are completed. 219 works costing Rs.258.53 Crores in Progress. 139 works costing Rs.199.45 Crores in agreement stage. An amount of Rs.338.66 Crores was incurred expenditure as against the sanctioned amount of Rs.428.90 Crores during 2016-17. Road lengths of 1900 Km and 29 Culverts are improved as against the target of 2345 Km and 35 respectively by the end of October, 2016.

Under State development Plan (SH & MDR), 325 works costing Rs.2509.96 Crores as on 31.10.2016, 102 works costing Rs.395.30 Crores are completed. 106 works costing Rs.1089.92 Crores are in Progress. 54 works costing Rs.403.60 Crores are at tender / agreement stage. 63 works costing Rs.621.14 Crores are at Estimate Stage.

An amount of Rs.289.47 Crores was incurred expenditure during 2016-17 against the sanctioned amount of Rs.284.04 Crores. Road lengths of 542 Km and 2 Bridges are improved/widened against the target of 853 Km up to the end of October, 2016.

### Sanctions under Scheduled Caste Sub Plan

Under Special Castes Sub Plan an amount of Rs.14.00 Crores budget was provided during 2016-17 against which an amount of Rs.3.15 Crores was spent. Road lengths of 2 Km are improved against the target of 5 Km up to the end of Oct, 2016.

At present the SCSP works are various stages of construction. 31 works costing Rs.44.05 crores are on hand as on 31.10.2016, 3 works costing Rs.4.00 crores are completed, 10 works costing Rs.13.35 crores in progress, and 18 works costing Rs.26.70 crores in agreement stage.

### TRIBAL SUB PLAN - (TSP)

Under Tribal Sub-Plan, an amount of Rs.20.00 Crores was provided during 2016-17, against which an amount of Rs.20.30 Crores was spent. Road lengths of 33 Km are improved / widened against the target of 20 Km by the end of October, 2016

At present the TSP works are various stages of construction. 30 works costing Rs.298.44 Crores are on hand as on 31.10.2016, 7 works costing Rs.13.41 Crores are completed, 6 works costing Rs.47.77 Crores are in progress, 5 works costing Rs.39.70 Crores are to be grounded / started, 18 works costing Rs.197.56 Crores are at estimation stage.

### Road Safety Engineering Works

Apart from the above, Road Safety Engineering Works (RSEW) were also sanctioned. At present, 59 works costing

Rs.17.30 crore are on hand, of which 39 works costing Rs.10.50 are completed, 17 works costing Rs.5.28 are in progress and 3 works costing Rs.5.28 crore are at tender stage.

An amount of Rs.6.00 Crore budget was provided during the financial year 2016-17, against which an amount of Rs.3.38 Crore was spent. Road lengths of 27 Km and 20 No of Culverts are improved as against the target of 48 Km and 45 Culverts by the end of October, 2016.

### NABARD Works RIDF & RIAD:

The State Government has taken up infrastructure development in rural areas through financial assistance of NABARD with the funds provided under RIDF (Rural Infrastructure and Development Fund) & RIAD (Remote and Interior Area Development). Since inception of NABARD funding to rural area infrastructure, nearly 9300 km of rural roads have been brought to riding surface with BT and connected to nearby towns.

So far, 1758 road and bridge works in 22 tranches i.e., RIDF II to RIDF XXII (including RIAD Phase I to V) (1996-97 to 2016-17) for Rs.3394.30 crore were taken up. 1612 works were completed with a cost of Rs.2542.47 crore and 103 works costing Rs.611.57 crore are in progress. 42 works costing Rs.237.11 crore are at tender stage.

### Rural Development Fund

Rural development fund works have been taken up in Roads and Buildings department with Agricultural Marketing Committee funds to improve connectivity of rural areas and to transport agricultural produce to nearby market yards. Under this scheme improving non BT road to BT standard and construction of bridge works are taken up.

So far, 1169 works costing Rs 1,626.36 crore for a length of 6003.81 Km + 28 bridges were sanctioned under Rural Development Fund from 2008-09 to 2016-17 and 1037 works costing Rs.1375.63 crore for a length of 5316 Km + 15 Bridges were completed. 115 works costing Rs.214.02 crore for a road length of 647.66 Km and 5 Bridges are in progress. 17 Works costing 36.70 Crores for a length of 40.30 Kms + 8 Bridges are in tender stage.

## ECONOMIC INFRASTRUCTURE

### Works taken up under HUDCO Loan

Under this scheme, 347 works were sanctioned and covering a length of 795 Km, costing Rs.471.92 Crores. 1079 Road safety interventions works with a cost of Rs.92.76 Crores were sanctioned under Road Safety interventions and all the works were completed. The expenditure incurred so far on these HUDCO works is Rs.560.15 Crores.

### Upgradation of NREGS works under TSP:

During 2012-13, 20 works costing Rs 100.22 Cr covering a length of 199.81 Km were sanctioned. Out of this, 13 works are completed, 6 works are pre closed due to delay in getting forest clearance and balance one work in srikakulamdistrict is in progress and will be completed by March'2017. During 2015-16, 8 works costing Rs 22.72 Cr covering a length of 38 Km were sanctioned. Out of this two works are completed, five works are in progress and one bridge work tender is under finalization.

### LWE Works

The work "Construction of High level Bridge across River Sileru including widening to two lane and improvement from Km 0/0 to 10/0 of Chintur -Motu Road in East Godavari District in Andhra Pradesh (Bridge work only) was taken up under RRP-I scheme. The Revised estimate is amounting to Rs.2805.71 lakhs. Under Road Requirement Plan Phase II (RRP-II) in LWE affected areas of AP state , 130 works covering a length of 1290.74 kms with an estimated cost of Rs.1203.68 crores in LWE affected four border districts of Visakapatnam, East Godavari, Srikakulam&Vizianagaram are sent to Ministry of Home affairs , Government of India . The Road development, MORT&H, New Delhi have accorded approval for the lowest bid received and concluded the agreement on 26.11.2016.

### Special Component Subplan - (SCSP)

Rs 10.15 Crores budget was provided for 2016-17 against which proposals were submitted for Rs 50.00 Crs to the Welfare Department for according approval of covering 19 works in Vizianagaram and East Godavari Districts.

### Ruralroads Plan Works

5486.07 kms of Panchayat Raj Roads are transferred to Roads & Buildings Department in which around 1500 kms are having Non BT surface. Hence it is proposed to sanction works for conversion of Non BT roads to BT roads in a phased manner under Rural Roads Plan 2016-17. So far, 154 works costing Rs.315.49 Crores for a length of 592.512 Km + 2 bridges were sanctioned under Rural Road Plan 2016-17, 1 work was completed costing 2.00 Crores. 119 works costing Rs.234.23 Crores are in progress. 29 Works Costing Rs.70.56 crores for a Length of 112.78 Kms + 3 Bridges are in tender stage.

### Centrally Sponsored Programmes:

A Central Road Fund for improvement of roads is being released by the Government of India as per "The Central Road Fund Act 2000, Act No. 54 of 2000". Under CRF act, Government of India introduced diesel and petrol cess at Rs.1.50 on sale of one litre of Petrol / Diesel. The fund so collected is meant for utilization of development and maintenance of National Highways, other State Roads and construction of Roads under (or) over Rail- ways etc.

The Central Government sanctions works under CRF, Economic Importance and Inter State Connectivity with specific guidelines and allocates the fund in the following ratio:

- A. 50% of the cess on High Speed Diesel (HSD) Oil for the Rural Roads.
- B. The balance 50% of cess on High Speed Diesel (HSD) Oil and the entire cess of petrol is distributed as per norms for development and maintenance of roads.

The Government has provided Rs.162.00 crore in B.E 2016-17 and expenditure incurred is Rs.162.00 crore. The above works are intended for improving the condition of the roads for a length of 833.19 kms which benefit large number of population to transport their agricultural produce and other industrial goods which directly/indirectly help the socio economic growth of the state and in turn the country. During 2016-17 the Government of India have accorded approval for 61 works of Rs 619.00 crores for a length of 813.00 kms and entrustment is under process. Further 66 additional proposals are prioritised for Rs.100 crore for a length of 849.59 km.

## Road Over/Under Bridges (ROBs/RUBs)

Road Over/Under Bridges (ROBs/RUBs) railway safety works are constructed mainly in lieu of busy level crossings (manned) where train vehicular units (TVUs) are more than one lakh. The constructions are taken up under cost sharing basis with railways on 50:50 basis as per the norms and approved by the railway board. As per public representations, ROBs/RUBs are being taken up at LC's where TVU's are less than 1.00 lakh, with 100% share from the Government.

At present, 112 ROBs/RUBs (both 50:50 & 100%) are approved by the Railway Board which are at various stages of construction. 58 works costing Rs.1050.41 crore were completed, 20 works costing Rs.693.16 Crore are in progress, 06 works costing Rs.128.45 crore are at estimate stage, 13 works costing Rs.49.70 crore at investigation stage and 15 works costing Rs.664.47 Crores are newly approved by the Railways.

An amount of Rs.50.00 Crores budget was provided during 2016-17 against which an amount of Rs.27.59 Crores was spent. 2 ROBs/RUBs are completed against the target of 10 ROBs up to the end of October, 2016.

## National Cyclone Risk Mitigation(NCRMP)

The National Cyclone Risk Mitigation (NCRMP) Project is taken up in 9 coastal districts. The prime purpose of the project is to provide necessary infrastructure either by new construction or by repairs or improvements to the existing damaged roads to the habitations and cyclone shelters to facilitate evacuation or for transport of relief material in quick and uninterruptedly. Some of the roads near sea coast have un-bridged crossings, or with low level causeways. During cyclones or during heavy / flash floods the people living near the sea coast face difficulty to reach safer places. When the people stay in cyclone shelters etc., it is also necessary to supply medicine, water, food and other relief material to the un-interruptedly. Hence, it is very essential to take up the bridges construction and also to make all weather roads.

The Government sanctioned the following works,

Under Phase -I: 11 works costing Rs.27.29 Crore were completed

Under Phase - II : 12 works costing Rs.143.55 Crore are sanctioned (9 works costing Rs.42.55 Cr. are completed, and 3 works costing Rs.101.00 Crore are in progress)

Under Phase -III : 12 works costing Rs.157.25 Crore are sanctioned.(11 works costing Rs.145.50 Cr. are in progress, and 1 work costing Rs.11.75 Crores at tender)

(Put together, 20 works costing Rs.72.70 Crores were completed, 14 works costing Rs.263.10 Crores are in progress, 1 work costing Rs.11.75 Crores at Tender Stage)

## A.P.Disaster Recovery Project (APDRP)

This project is taken up in 4 Coastal Districts (Srikakulam, Vizianagaram, Vishakhapatnam and East Godavari) of Andhra Pradesh affected by HUDHUD cyclone. The Prime purpose of the project is to finance permanent restoration, reconstruction, strengthening and widening (mostly single-lane to double-lane) of about 250 Km of damaged MDRs including cross-drainage structures, following the IRC and Ministry of Road Transport and Highways (MORTH) Standards. Widened MDRs will help the state to conduct its operations at the time of any such disaster in future. Procurement Plan was approved from the World Bank for 26 works for an amount of Rs.302.50 Crores as per original proposal.

The Government have sanctioned 17 works with an amount of Rs.240.40 Crores as per revised cost in four districts viz. 5 works costing Rs.55.10 Crores in Srikakulam, 4 works costing Rs.49.70 Crores in Vizianagaram, 3 works costing Rs.42.50 Crores in Visakhapatnam and 5 works costing Rs.93.10 Crores in East Godavari district.

Total put together 17 works were sanctioned for Rs.240.40 Crores and are under evaluation out of 26 works proposed and approved by the World bank. Further the revised cost for 26 works is Rs.360.90 Crores.

## National Highways

There are 26 National Highways in the state covering a length of 5293.43 Km of which 2034.36 Kms is four-lane and above, 1929.01Kms two-lane, 939.90 two-lane

## ECONOMIC INFRASTRUCTURE

with paved shoulder, 207.73Kms intermediate lane and 182.43Kms are of Single lanes(as on January 2017). In addition in-principle declared NHs for a length of 1344.30 km for which DPRs under preparation for two lane with paved shoulders The density of National Highways is 10.81Kms per lakh population (2011) in the State as against national average of 8.60 km and in terms of area coverage,

a length of 32.82Kms is available for every 1,000 Sq. Kms in the State as against national average of 30.45 km.

Out of 5293.43Kms, National Highways in the state, a total length of 1813.22 Km are under the control of NHAI for development under NHDP and 462 kms with PIU, Machilipatnam.

Sl. No	Work	From-To	Kms	Remarks
1	Two lanning with paved shoulders	Kathipudi to Digamaru on NH 214 (New NHNo.216)	140	Developed by PIU Machilipatnam, MoRT & H / GoI. Preparation of feasibility reports under progress
2		Vijayawada to Bhadrachalam on NH 221 (New NH No.30)	70.60	
3		Digamaru-Ongole Road, NH 214A	entire length of 255 Kms	
4	Four laning	NH 4 (New NH No. 69&40)	entire length of 84Kms	Handed over to NHAI
5		NH 63 (New NH No. 67)	entire length of 56 Kms-Rs 995.09 crores	Work is being started.
6	Rehabilitation and upgradation of roads	Nagarjuna- sagar Dam to Yerpedu section of NH 565	5 works to a length of 337.00 Kms at a cost of Rs.1403.56 Crore	Works are in progress.
7	Rehabilitation and upgradation of NH 67 to two lane with paved shoulders	1.Mydukur to Dornala T-Junction.2.Dornala T junction to Atmakur.3.Atmakur to Nellore	Three work on NH-67 to a length of 149.50 km at a cost of Rs 790.94 Crore	Works are in progress.
8	Rehabilitation and upgradation of NH42	Karnataka Border to Kuppam	4 works on NH-42 under NH(O) EPC to a length of 253.66 kms at a cost of Rs919.396 crores	Works are in progress.
9	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Muddanuru-Jammalamadugu	One work on NH-67 for a length of 32.15Kms at a cost of Rs 143.87 crores	Work is in progress
10	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Adoni to Madhavaram via Mantralayam	One work on NH-167 for a length of 55.06Kms- Rs.224.83 crores	Work is in progress
11	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Pileru to Rayachoty	One work on NH-40 for a length of 51.85 Kms- Rs.175.03 crores	Work is in progress
12	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Raipur-Visakhapatnam	One work on NH-26 Four lane for a length of 11.60 Kms- Rs.84.12 crores	Work is in progress



## ECONOMIC INFRASTRUCTURE

Sl. No	Work	From-To	Kms	Remarks
13	Construction of 4-lane ROB in lieu of LC No.122	Chittoor-Kurnool road on NH-18 (new No.40) near Ootokuru village	Sanctioned for an amount of Rs.82.72 crores	Work is being started.
14	Four laning of 5.122 km NH9(New NH 65)(1.40km) with NH5(3.60km)	Bhavanipuram to KanakaghudhammaVardhi Junction in Vijayawada City limits	Sanctioned for an amount of Rs 333.22 crores	Work is in progress
15	Construction of High Level Bridge	Ananthapur-Chennai road of NH-205 (new No.42) under NH(O) across Chitravathi River	Sanctioned for an amount of Rs.19.47 crores	Work is in progress
16	Construction of 4-Lane ROB and its approaches in lieu of existing level crossing No.124E/SPL 3@ Km 1.800( New Chainage km 77.805 on NH 205		Sanctioned for an amount of Rs.98.55 crores	Work to be entrusted
17	Construction of 4-Lane ROB and its approaches in lieu of existing level crossing No.23/SPL class @ Km 3.600 of NH 18		Sanctioned for an amount of Rs.109.03 crores	Work to be entrusted
18	Construction of 4-Lane ROB and its approaches in lieu of existing level crossing No.18A/SPL class @ Km 7.800 of NH 18		Sanctioned for an amount of Rs.113.87 crores	Work to be entrusted
19	Construction of 4-Lane ROB and its approaches in lieu of existing level crossing No. 102/3E @ Km 281.200 of NH 205		Sanctioned for an amount of Rs.138.44 crores	Work to be entrusted
20	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Puthalapattu-Pileru sec) of Chittoor-Kurnool road of NH18(New NH-40)	Sanctioned for an amount of Rs.172.53 crores	Work entrusted
21	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Rayachoty-Kadapa Road of NH-18( New NH-40)	51.28 kms -Rs347.40 crores	Work entrusted
22	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Gooty- Tadipatri section of NH 67	63.013 kms-Rs 289.57 crores	Tender process
23	Rehabilitation and upgradation under EPCNH(O) Corridor Approach	Chintakunta to Adoni Section of NH167	58.80Kms-Rs 290.15 crores	Work entrusted
24	Construction of New Bridge parallel to existing bridge	Km 165/4 of Chittoor-Kurnool road NH18(40)	Sanctioned for an amount of Rs 6.9677 crores	Tender process
25	Rehabilitation & up-gradation of NH-340 from section) to two lane with paved shoulders in the State of Andhra Pradesh on EPC mode under NH(O) Annual Plan 2016-17	km 0/0 to km 60/380 (Design Ch. 0/000 to 60/025 excluding Km 55.600 to 57.650 (2.050Km)) (Rayachoty to Angallu	Sanctioned for an amount of Rs 319.28 crores	Tender process
26	Strengthening & Widening to 2 lane with paved shoulders from	Km 552/950 to Km 577/545 of Mangalore -Tiruvanamalai road of NH-234 ( New NH -75)	Sanction awaited.	Tender process

## ECONOMIC INFRASTRUCTURE

## Andhra Pradesh Road Development Corporation

The Road Development Corporation was established in the year 1998 to develop and maintain roads and other allied and incidental activities in the State.

### A.P. Road Sector Project

The project (P 096021) was approved by the Government of India and World Bank for widening and strengthening and maintaining certain important and high traffic roads with an objective of smooth travel and to reduce transport cost. The cost of project is Rs.2245.00 Cr.

### Major Components of the Project

#### A. Road Improvement Components

##### I. Up-gradation and Improvement component

Five roads consisting of 7 packages with a cost of Rs.1060.00 crore of road length is targeted for widening and strengthening in this component.

- a) Road work for Chittoor - Puttur road (CP 01) work is completed
- b) Kurnool – Devanakonda Road (KD-02): Work is under progress.
- c) Mydukur– Jammalamadugu road (MJ-03 & MJ-04): This road consists of two packages i.e., MJ-03 & MJ-04, MJ-03 is nearing completion and MJ-04 is under progress.
- d) Pedana – Nuzivedu – Vissannapeta road (PNV-08 & PNV-09): This road consists of two packages i.e., PNV-08 & PNV-09. PNV-08 package was terminated and re-bidding is in progress. PNV-09 is in progress.
- e) Kakinada – Rajahmundry Road (KR-07): Work is in progress.

##### II. Output Performance Based Road Contracts (OPRC) 3791 Km.

OPRC Project was taken up at a cost of Rs.975.00 Cr. (5 years duration in 2 phases). Under this component, 7 Packages in phase-I covering a length of 1287 Km were completed during 2014,

and 9 Packages in Phase-II have been completed so far and the remaining 10 packages in Phase-II are in progress and will be completed by 2018.

#### III. Institutional Strengthening, Road Safety & PPP Facilitation Support: Cost Rs.79.20 cr.

Institutional Strengthening Action Plan (ISAP): M/s Lea Associates Ltd. Canada in association with LASA, New Delhi, were appointed as consultants for consultancy services on ISAP implementation.

The Consultants submitted inception report for Part A (implementation of ISAP) & Part B (RNMP), draft organization structure, draft report on RDC managed CRN focused Road fund, draft report on baseline settlement and Road Network Analysis. The Road fund aspects were presented before Hon'ble CM on 28.10.2016 and a Committee was constituted to examine the aspects of Road Fund Mechanism and in principle agreed to the proposals on Nov, 2016.

### Road Safety Component

Under this component, Renigunta- Rayalacheruvu Road of 140 Km length was identified as Demo Corridor for improving Road safety with the objective of implementation of Road accident mitigation activities through multi sector approach. Civil works of APRDC completed. Certain enforcement measures are taken up on the corridor. Procurement of certain equipment pertaining to Transport, Police and Medical Dept. is in advanced stage. Certain Black spots on State Highways in 5 districts have been taken up and completed under the Road Safety Project by improving the safety at the identified black spots. Transport Department is the Nodal/Lead department for implementation of Road Safety Action Plan. During implementation stage 40% reduction in accidents is reported in the demo corridor i.e., Renigunta – Rayalacheruvu Road

### Road Management System (RMS):

APRDC has taken up the establishment of Road Management System for optimum utilization of funds towards road improvement and maintenance by using RDBMS and HDM-4 software. By using RMS,

prioritization of roads requiring immediate maintenance and widening for capacity augmentation can be made and based on budget availability prioritized roads may be improved.

RMS involves collection of road asset data like road width, shoulders width, location of electric poles, bridge locations etc., and also road surface details such as potholes, edge breaking, rutting etc., using a Network survey vehicle, which is fitted with requisite equipment to capture all the data on roads.

Configuration & Validation of RDBMS software, data collection is in progress and district-wise rolling out plans are under preparation and likely to be completed by April 2017.

### PPP Scheme

- A second bridge across river Godavari near Rajahmundry including approaches connecting EGK road under (PPP) project costing Rs.808 Cr. was substantially completed and the bridge is in operation.
- Narketpally- Addanki -Medarametla Road connecting Narketpally on NH 65 and Medarametla on NH 16 was taken up and substantially completed at a cost of Rs.1197 Cr. The road is in operation stage and the length of road in Andhra Pradesh is 125 Km.
- Feasibility studies were taken up for 32 roads of length approximately 2000 Km to take up development under PPP.

### Annuity Works

Nine road works of a total length of 163.30 Km at a cost of Rs.393.55 cr. were developed and are in Operation & Maintenance stage.

### Panchayati Raj

Total length of the rural roads-78,282 KM,

CC roads - 2549 KM,

BT roads - 20,461 KM,

WBM roads-- 10,614 KM,

Gravel roads - 20,831 KM,

Earthen roads - 23,827 KM.

### Panchayat Raj Roads

The total length of the rural roads under Panchayati raj Engineering Department is 78,282 KMs in the state as on 01.04.2016. The surface details of the road length are CC - 2549 KM, BT -20,461 KM, WBM 10,614 KM, Gravel 20,831 KM and Earthen 23,827 KM.

During the year 2016-17 (upto Dec, 2016), 1403 KM length of road was completed duly incurring an amount of Rs.515.52 crore. The annual periodical maintenance of rural roads for the year 2016-17 is completed for 1667 KM incurring an expenditure of Rs.60.54 crore.

### Buildings

The present activities of Buildings Wing include Execution of Building works taken up under Plan Schemes, Secretariat buildings, Court Buildings and judicial Quarters (under State Centrally Sponsored Schemes) and Buildings of other Department under Deposit works and Maintenance of Buildings under Non-Plan Schemes.

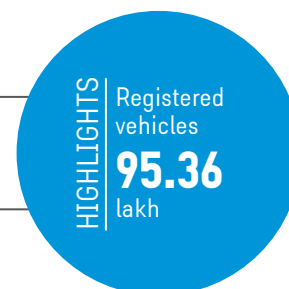
The present plinth areas of Government buildings in the control of R&B Department are as follows.

1. Non-Residential : 30.12 Lakh Sft.
2. Residential Buildings: 30.81 Lakh Sft.

### Construction of Office Buildings

This is a State Plan scheme to Construction of new office Buildings in the State. Under this scheme 9 Buildings works are taken across the State.

- Construction of 3 Integrated Collectrate Complexes each at Srikakulam, Ananthapuram and Nellore
- Construction of Multistoried Building at Vijayawada for (R&B) HOD office accommodation.
- Construction of office Buildings at Madanapalli and Ongole are under progress
- Construction of Buildings for Vigilance and Enforcement department at Tirupathi.
- construction buildings for Inspection Bunglows/GHs/ Other Buildings where in this Buildings are for providing accommodation to VVIPs and Officials during their tours.



- construction of new Residential buildings and renovation for existing Govt residential accommodation for State Government Officials .
- Construction and renovation of buildings for Judicial Department ( Law Dept-Home Dept). An amount of Rs: 28.30 Cr is provided in BE 2016.17 and Expenditure incurred Rs.15.17 Cr for 31 No of Court Buildings and 11 No of Residential Quarters .

## Transport

*Vehicles on road - 95.36 Lakhs*

*Revenue for 2015 - 16 - Rs.2128.75 Cr.*

Road Transport plays a prominent role in the economic development of the State. The transport department plays a key role in granting licenses to drivers, registration of motor vehicles, issue of transport permits, levy and collection of motor vehicle tax, enforcement of vehicle violations, and acts as nodal agency for road safety and motor vehicles pollution control.

The State as on 1-12-2016 had a registry of 95.36 lakh vehicles. About 78.34% of the vehicles on road are two wheelers, followed by cars, tractor trailers, three wheelers, buses and goods carriage trucks. Details about registered motor vehicles on road are shown in Annexure 7.6.

The transport department collects revenues from the issue of driving licenses, registrations, permits and taxes. The revenue is shown in Table 7.10.

Table 7.10: Revenues of Transport department

Year	Total Revenue (Rs. Crs)	% of Growth
2011-12	1473.54	11.28
2012-13	1602.12	8.73
2013-14	1517.83	-5.26
2014-15	1766.16	16.35
2015-16	2128.75	20.53
2016-17 (up to Feb 2017)	2251.66	5.77

Source: Transport Department

## Enforcement

The Transport Department has been making a conscious effect to enforce the provisions of the Motor Vehicles Act by actively booking cases for violation of various provisions of Motor Vehicles Act, 1988, A.P. Motor Vehicles Taxation Act, 1963 and the rules made there under. Active enforcement enables better compliance of registration, licensing and taxation by operators. In the year 2016-17 (upto November, 2016), the department through active enforcement has been able to mobilize revenue of Rs.185.83 Crores. During the current year the enforcement wing is focusing on road safety related violations such as 1) Drunken Driving, 2) Carrying passengers on Goods Vehicles, 3) Over Speed, 4) overload, 5) Driving Without helmet, 6) Not having valid driving license, 7) No reflectors, 8) Not wearing seat belt, 9) Driving in wrong/ opposite direction, and 10) overloading of passengers on vehicles. For the 1st Quarter of the financial year 2016-17 from 01-04-2016 to 30-06-2016, the number of cases booked against the above violations is 65,794. In the 2nd Quarter from 01-07-2016 to 30-09-2016, the number of cases booked is 63,730.

## Road Safety

To minimize the road accidents in the state, Road Safety Programmes and awareness campaigns were conducted in the state with vehicle drivers, students and stake holders.

## Rectification of Black spots

The interdepartmental coordination is critical for identification and rectification of black spots on all the State and National Highways of the State. Though 1013 Black Spots were identified, out of which 951 black spots were rectified and the list of the rectified black spots was communicated to the Transport Department officials and they were asked to study the impact of these rectifications in consultation with respective departments. The district officials of Transport/Police/R&B/ Medical & Health who are members of the District Road Safety Committees had inspected the accidents spots again after rectification and furnished their impact study reports which are being referred to R&B Dept for necessary action.

### Lead agency:

The lead agency meetings were conducted every three months and several decisions were taken on road safety.

### Enforcement on Road Safety Related Violations:

During the current year the enforcement wing of the Transport Department had focused more on Road Safety related violations like driving with Over speed, plying vehicles with Overload, driving 2 wheelers Without Helmet, driving vehicles without valid Driving Licence., etc., and booked 1.30 lakh cases from 1st April, 2016 to 30th September, 2016

### Trauma Care Centers

It is decided to support management of the existing trauma care centers and to establish more such centers.

### Road Safety Fund

To create Road Safety Fund with an amount of Rs.10 crore for various Road Safety improvement activities. The Committee on Road Safety has issued necessary directions to the states to set up Road Safety Fund and ensure that a steady flow of money accrues to the fund by diversion of significant portion of the fines/compounding fee collected from the traffic violations.

### Wearing of Helmets & Seat Belts

During the year 2016-17 (up to November, 2016) 7.52 lakh cases of driving without helmet were booked. The two wheelers are contributing 24% of total motor vehicles accident deaths in the State and the wearing of protective headgear will reduce the deaths and injuries to persons travelling on two wheelers.

### Need for vehicles and equipment:

The Transport Department does not have appropriate fast moving vehicles and other equipment required for enforcement against drunken driving and speed driving. 40 breath analyzers are available for this purpose.

### Removal of Liquor shops on Highways:

On removal of liquor shops on State and National Highways, notices were issued to 890 shop owners to shift the shops away from the Highways. Excise Department had to take all the administrative / legal steps to complete the process of removal of liquor shops from National/State Highways.

### Training & Research Institute:

The Government of Andhra Pradesh has proposed to construct the institute in Venkatachalampalli Village Darsi Mandal, Prakasam district in partnership with M/s. Maruthi Suzuki Private Limited.

### Inspection & Certificate Centre:

The Ministry of Road Transport & Highways introduced a scheme to establish Inspection & Certification Centre in each of the State. A proposal was submitted to the Government of India for sanction of the said project near Gannavaram at Vijayawada and is in active consideration of Government of India. Another single track Inspection & Certification Centre under the demo corridor project is also coming up at Kadapa.

### I.T. Related Initiatives

- As part of e-Pragati Project of Government of Andhra Pradesh to make the citizen services transparent and responsive, the department proposed to make all the 83 services available to citizens online.
- Business process re-engineering is being done in respect of 83 citizen services wherein collection of taxes/fee is being done by SBI MoPS payment gateway so that revenue collected from the citizens is directly deposited to the treasury.
- All the services are going to be integrated with Aadhar number and authentication by capturing thumb impression of vehicle owner/driver to avoid impersonation by having integration with UIDAI/AP Online.

- All citizens services are being integrated with Vahan/ Saradhi portals of Govt. of India, wherein details of other State vehicles/Driving licenses will be obtained through web service whenever they approach for any transaction in AP. This initiative will curb entry of fraudulent vehicles/Driving Licenses in AP.
- New registration of the non-transport vehicles is integrated with “Vahan” portal, wherein technical specifications of the vehicles are directly captured by entering Chassis number and Engine number of the vehicle at dealer level in New Online Application.
- All citizens services are being integrated with IIB for Online authentication of insurance policy number as well as validity of the insurance.
- Integration with CCTNS, Financiers, Police Department, Income tax Department (PAN) etc., is also being done.
- The Online Services project was inaugurated by the Hon’ble Chief Minister on 1st March, 2016 at Visakhapatnam by facilitating the registration of vehicles online at the Dealer point itself, without the owner visiting the RTA office. This process of online registration is already extended to the entire State. All the other transactions also would be made online by February, 2017.
- While the new owner of a vehicle will get his vehicle registered online without coming to RTA office, the other online services facilitate the vehicle owner or licence holder to apply online, to pay fee and upload document online. The officials of the transport department also would approve the transaction online and the applicant will be permitted to download the official document online. The online facility will not only reduce the footfalls of citizens in RTA offices, but would improve the transparency and security of all the transactions.
- Transport Department is the first Government Department to install 110 PoS machines for collection of taxes/fee in the 95 offices in the entire State during November/December 2016 owing to demonetization effect, as citizen friendly initiative.
- The Department has decided to go for Cloud Service Provider which is very economical instead of purchasing a server and the tender process is already completed for Cloud Service Provider.

## Andhra Pradesh State Road Transport Corporation

*No Employees - 57651*

*The average vehicle productivity per day  
of its fleet - 378 kms*

The AP State Road Transport Corporation initially had a fleet strength of 609 buses (16 depots) with a staff of 5,081 in 1958. The needs of transport have increased, forcing implementation of nationalization and increase in fleet strength year after year to meet the needs of traveling public as the State has been growing on all fronts since then. The fact that APSRTC is the largest state road transport undertaking in the country was acknowledged both by Limca Book of Records (2000), and the Guinness Book of World Records (31st October, 1999).

The corporation has 4 zones, 12 regions and 127 depots with a total fleet strength of 11,962 buses and 57651 employees on rolls as on October, 2016. It recorded fuel efficiency of 5.16 per liter up to October 2016, it operates on about 44.87 lakh kms and transports about 69.75 Lakh passengers daily. The average vehicle productivity per day of its fleet is 378 kms and the Corporation achieved 99.50% fleet utilization upto October, 2016.

The Corporation has introduced trend setting improvements in the quality of travel in rural and urban areas by providing newly designed ordinary coaches “Teluguvelugu” for rural passengers, “Vennela AC Sleeper, Garuda Plus, Garuda, Indra and Super Luxury buses for long distance passengers, Metro Luxury AC, “Metro Deluxe” and “Metro Express” for urban passengers, and “Sapthagiri luxury and Saptagiri express” for ghat road

passengers from Tirupathi to Tirumala Ultra Deluxe buses and Amaravathiare the new type vehicles introduced. JnNURM buses were also introduced for urban passengers in major cities like Vijayawada, Visakhapatnam and Tirupathi. The Corporation has introduced on-line ticket booking system for the convenience of passengers.

### Special achievements

The Corporation bagged National Awards for 1.HighestTyre Performance, 2. Fuel efficiency and 3 Productivity. Among the STUs in India, APSRTC stands top in physical performance in vehicle productivity and resource utilisation indicators like vehicle utilisation, fleet utilisation, average number of passengers transported, fuel efficiency, tyre life, break down rate and accident rate.

Regular conduct of induction training and refresher courses for defaulting drivers have increased safety during both night and day time operations. The AP State Road Transport Corporation performance from 2010-11 to 2016-17 (Upto Oct-16) is given at Annexure 7.7.

## Airports And Non Metro Airports

*Vijayawada, Tirupati, Kadapa and*

*Rajahmundry Airports to be upgraded*

*New airports at Bhogapuram, Dagadathi, Orvakaland Nagarjunasagar*

Government has entered into memorandum of understanding with Airports Authority of India for upgradation/modernization of non-metro airports at Vijayawada, Tirupati, Kadapa and Rajahmundry. There is a scope for improvement of air linkage is essential to fast development in the state.

As per the MoU, the state government will provide additional land required for expansion / up-gradation of

the airport on free of cost to AAI besides supply of water, electricity and security arrangement free of cost for 5 years.

### Vijayawada Airport

The existing operational airport belongs to Airports Authority of India, Government of India. The existing land of the present airport is in around 536.19 acres. As per Master Plan, AAI has already constructed new apron and subsequently extended the runway from 5725 ft to 7500 ft for operation of A-320 type of Airports.

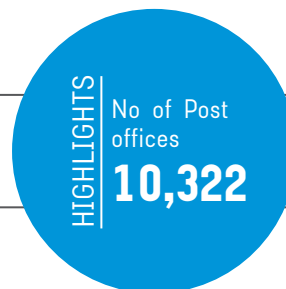
Terminal expansion under way, interim terminal building commercial operations date will be scheduled after the inauguration on 12th January 2017. Out of 698 acres 610 acres are handed over to AAI by the state government. Balance of 88 acres will be handed over in next 2-3 months after completion of R&R. MOCA / AAI to sanction integrated terminal building and international status to the Airport, MoCA has requested for the same.

### Tirupathi Airport

The existing airport is in an area of 312 acres and belongs to Airports Authority of India. The AAI has proposed to upgrade the airport to international standards. Though no MoU was entered with AAI, the State Government agreed to provide 718 acres of land and 690 acres in Phase-I free of cost. State Government has handed over advance possession of 293 acres located in Reniguntamandal. The Airport Authority of India, New Delhi has proposed for up-gradation of Tirupathi Airport and the total requirement of additional land is 1165.00 acres (approximately). 686 acres of land has been handed over to AAI. All the support functions for the operations are in place viz., immigration process trained personnel, customs and immigration systems etc. International operations awaited from a scheduled carrier to commence flights.

### Rajahmundry Airport

This is an existing operational airport in an area of 365.49 acres. The State Government signed MoU with AAI on for up-gradation & operation of bigger aircrafts such as B 737 – 800 / A320 etc. The new domestic passenger terminal building for 150 per hour capacity and new fire station cum technical block cum control tower are completed. The new



terminal building is also opened for passengers. 686 acres of land has been handed over to AAI. All the support functions for the operations are in place viz., immigration process trained personnel, customs and immigration systems etc. International operations awaited from a scheduled carrier to commence flights Letter of request for commencement of international operations has been sent to Air India.

### Bhogapuram

83% of land under possession (2191 acres out of 2646 acres). Consent for 455 acres yet to be received statutory clearances, site clearance & in-principle approval obtained

Environmental Clearance: Environmental studies under completion and submitted to PCB. Public hearing scheduled on 11 Jan 2017 and environmental clearances before March 2017.

### Dagadathi

438 acres out of total 1399 acres under possession Statutory Clearances: Site clearance & in-principle approval obtained Environmental Clearance: Environmental studies under completion and submitted to PCB. Public hearing completed and Environmental clearances to be obtained.

### Orvakal

Total land planned for airport development: 1010 Acres Government land – 638 Acres; Assigned land – 123.2 Acres, Patta land – 243 Acres. Statutory Clearances: Site clearance & in-principle approval obtained Environmental Clearance: Environmental studies under completion and submitted to PCB. Public hearing scheduled on 5 Jan 2017 and Environmental clearances before March 2017.

### Kadapa Airport

Airport is operationalized under the Viability Gap Fund scheme to airlines and air connectivity provided to Vijayawada. Total land available with the Airport: 1060 acres.

### Aviation Policy

Government of Andhra Pradesh has brought a comprehensive Civil Aviation Policy, 2015 for development of Airports in the State.

## Communications

There were 10,322 Post offices in the State, of which 59 are Head Post Offices, 8 are Mukhya Dak Ghars, 1,517 are Sub Post Offices and 8738 Branch post offices as on March 2016. Details of district wise post offices data are shown in Annexure 7.8

There were 2,386 Telephone exchanges, 7.11 lakh land line connections, 14354 public telephone connections (Local +STD), 64.94 lakh wireless subscribers (pre & post paid) and 15040 wireless subscribers WLL (pre & post paid) up to November 2016 in the state. District wise status of telephone connections are given in Annexure 7.9.

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*Telephone exchanges - 2,386*

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*Land line connections, - 7.11 lakh*

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*Public telephone connections (Local +STD)-  
14354*

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*Wireless subscribers (pre & post paid)- 64.94  
lakh wireless subscribers*

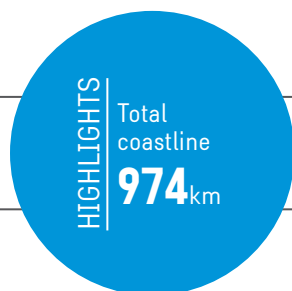
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## Banking

There were 7007 scheduled bank offices at the end of September, 2016 in the State. The aggregate deposits amounted to Rs.2,39,389.77 crore and the total bank credit extended was to the order of Rs.2,53,808.45 crore up to September, 2016. The credit-deposit ratio of the banks in the state is 106.02% as against RBI norm of 60%.

The total priority sector advances to Net Bank Credit (NBC) was Rs.1,72,457 crore (71.17%) against RBI norm of 40%. Agricultural advances to Net Bank Credit were Rs.1,03,238 crore (42.61%) against RBI norm of 18%. Non-Farm Sector Advances was Rs.40,979 crore which accounted for 16.91% of NBC. Other priority sector advances are at Rs.27,363.73 crore forming 11.29% of NBC. Profile of banking institutions in A.P as on 30-09-2016 is given in Annexure 7.10.





## Sea Ports

### Major Port -1

#### Notified Ports -14

#### Kakinada Anchorage Port (Aprl- Oct 2016)

Cargo handled -10.90 lakhM. Tonnes

Total Revenue earned - Rs.11.35 crore

#### Kakinada deep water Port (Aprl- Oct 2016)

Cargo handled -79.90 lakh M. Tonnes

Total Revenue earned - Rs.228.00 crore

Gangavaram Port (uptoOct) Cargo handled -108.40lakh M. Tonnes

#### Krishnapatnam Port (Aprl- Oct 2016)

Cargo handled -209.00lakh M. Tonnes

Total Revenue earned - Rs.896.92 crore

#### Rawa Port (Aprl- Oct 2016)

Cargo handled -5.70 lakh M. Tonnes

Total Revenue earned - Rs.2.58 crore

Andhra Pradesh has 974 Kms long coast line with a major Port at Visakhapatnam under Government of India control and 14 notified ports under State Government. Of which 4 are captive ports.

### Kakinada Anchorage Port

The anchorage port is being operated by the State Government. The anchorage port has a capacity to handle

about 4 million metric tons of cargo per annum. The port handled 21.00 lakh tonnes of cargo and realized revenue of Rs.25.40Crore on cargo and earned total revenue of Rs.25.40 crore as Government share in 2015-16. The Port handled 10.90 lakh Tonnes of cargo and earned total revenue of Rs.11.35 crore during 2016-17 (upto the end of October, 2016).

### Kakinada Deep Water Port

The port was awarded to M/s Kakinada Seaports Limited on OMST basis on Dt. 1-4-1999 for a period of 20 years initially stipulating that they have to pay 22% of revenue share on the Gross Income to the Government. The Governments constructed 3 berths at a total cost of Rs.293.00 Crore. Presently, Kakinada Deep Water Port is under operation with 6 berths and 2 OSV berths and one North return wall berth of 635 Mts. length. So far, an extent of 441 Acres land was given on lease basis. The port handled 150.00 lakh tonnes of cargo and realized revenue of Rs.393.00 crore. The Government received Rs.95.99 crore as Government share in 2015-16.

The port handled 79.90 lakh tonnes of cargo and earned total revenue of Rs.228.00 crore during 2016-17 (upto the end of October, 2016).

### Gangavaram Port

The Government of Andhra Pradesh awarded a green field deep water port at Gangavaram near Visakhapatnam under PPP. The State Government is having an equity share of 10.39 % in M/s GPL. The concession fee is 2.10% of the gross revenue earned by the developer. Presently, Gangavaram port is under operation with 9 Berths with a capacity of 45 Million Tons per annum. An extent of 1800 Acres of land was given towards equity and 1052 acres was given on lease basis.

The port handled 194.00 lakh tonnes of cargo and realized revenue of Rs.737.71 crore against which they have paid Rs.26.24 crore as AP Government share for 2015-16. The Port handled 108.40 lakh tonnes of cargo and earned total revenue of Rs.371.94 crore and Government received Rs.7.82 crore as Government share during the year 2016-17(upto the end of October, 2016).

## ECONOMIC INFRASTRUCTURE

## Krishnapatnam Port

The commercial operations in Krishnapatnam port were commenced on 20.03.2009. Presently, the Port is under operation with 9 berths. Construction of Additional berths under Phase II is in progress with an estimated cost of Rs.6000 crore. So far, an extent 3462 Acres of land was given as against 5800 acres approved by the Government. The balance land acquisition is under process.

The port handled 348.90 lakh tons of cargo and realized revenue of Rs.1506.09 crore against which they have paid Rs.39.15 cores towards Government share to the A.P. Port department in 2015-16.

The port handled 209.00 lakh tonnes of cargo and earned total revenue of Rs.896.92 crore during the year 2016-17 (upto the end of October, 2016).

## Rawa Port

Rawa Port is located near Surasenayanam in East Godavari District and it facilitates to transport Crude Oil from S. Yanam to Chennai / Visakhapatnam / Haldia by Sea. The Port is in operation.

The Port handled 13.00 lakh tonnes of cargo and realized revenue of Rs.5.00 Crore in 2015-16. The Port handled 5.70 lakh tonnes of cargo and earned total revenue of Rs.2.58 and Government received Rs.2.58 crore as Government share during the year 2016-17(upto the end of October, 2016).

## Other Non- Major Ports under development,

Non-Major Ports at (1) Machilipatnam, (2) Bhavanapadu (3) Narsapur (4) Ramayapatnam (5) Kakinada SEZ (6) Meghavaram Port (7) Nakkapalli Port (8) Nizampatnam, (9) Vodarevu are under development process. Further, Duggarajapatnam Port in Nellore District in under development by Government of India.

## Machilipatnam Port

The Government of Andhra Pradesh have awarded development of Machilipatnam Port in Krishna District under PPP Model. Land acquisition is in process.

Notification issued by District Collector for Ac. 2282.20. The Government has constituted Machilipatnam Area Development Authority (MADA) for land pooling with jurisdiction of 426.16 Sq. Kms. and with Head Quarters at Machilipatnam under section -3 A of the Andhra Pradesh urban Areas (Development) Act 1975. Land pooling is under progress to procure lands required for Machilipatnam Port under Machilipatnam Area Development Authority.

## Bhavanapadu Port:

The port is located in Srikakulam district. There is a defunct fishing harbor, and no commercial activity at this Port. Availability of the Land is 270 Acres. As per the report the port can be developed to handle about 6.5 MTPA by 2016-17. The estimated cost of the Project in Phase-I is Rs.1707 Crore, Phase-II is Rs.656 crore. The port is initially proposed to be developed under Phase-I with 5 berths.

The Government issued orders to limit acquisition of land only to an extent of 2000 to 2500 acres for establishment of Bhavanapadu Port. Revised land map consisting of 2130 acres. (2050+80=2130 acres) of project site has been communicated to the RFP bidders on 26.09.2016.

## Narsapur Port:

The Port is located in West Godavari district. There is no commercial activity in the port. No port land is available at the port. M/s. INCAP has been nominated as nodal agency for the selection of bidder for the development of port. M/s. INCAP has entrusted the work of preparation of techno economic feasibility report to M/s. RITES, New Delhi. The work is in progress. Requisition for land acquisition filed with District Collector for Ac. 3695.76.

## Ramayapatnam:

Ramayapatnam proposed site for port development is a coastal village, located at South – East corner of Prakasam district in Ulavapadu Mandal, located 4.5 km East of Thettu on NH-5 and 93 km North of Krishnapatnam Port. It is 12.8 km away from Ulavapadu and 78.7 km distance from Ongole. The connecting straight road joins NH-5 at Thettu. South Central railway passes adjacent to the NH-5 Nearest Railway stations is ‘Thettu’ located within 6 km from the sea.

M/s. INCAP has been nominated as nodal agency for the selection of bidder for the development of Port. M/s. INCAP has entrusted the work of preparation of techno economic feasibility report to M/s. RITES, New Delhi. The work is in progress.

### Kakinada SEZ:(Captive Port)

The State Government declared Kakinada SEZ as a minor port. M/s. Kakinada Special Economic Zone Pvt. Ltd., proposed to construct Captive Port within SEZ. It is proposed to handle all cargos in SEZ through this captive port. This notified port is situated 15 Km. North of Kakinada Deep Water Port in East Godavari District. Initially M/s. Kakinada Special Economic Zone Pvt. Ltd., proposed to construct Captive Port within SEZ. M/s.KSEZ proposal to construct 3 berths one for handling coal and other two for handling general cargo. The total cost of project includes Dredging, Breakwater revetment, construction of Berths, Port Buildings, Road works, Railway line, Port Craft berth, Miscellaneous etc., is Rs.2041.92 Crores.

### Meghavaram Port: (Captive Port)

The State Government declared Meghavaram port in Srikakulam district as minor port on 19-3-2008. The captive port has been allotted to M/s. East Coast Energy on 19-3-2008. Captive port for imports of coal, fly ash for the thermal plants. The Port is being developed by M/s East Coast Energy Pvt. Ltd., with an estimated cost of Rs.600 Crore. Project preparatory works are in progress.

### Nakkapalli Port: (Captive Port)

The State Government declared Nakkapalli port in Visakhapatnam district as a minor port for export of Alumina by M/s ANRAK Aluminum Ltd. The proposed port is 75 Km from South of Visakhapatnam. M/s. Anrak Alumina Ltd., has proposed to construct 2 berths to handle alumina & thermal coal etc. The cargo handling capacity of the project is 4 MLT per annum.

### Nizampatnam and Vodarevu Ports: (under development)

The State Government have proposed to develop Vodarevu port in Prakasham district & Nizampatnam port in Guntur

district under Public Private Participation mode on Build, Own, Operate and Transfer (BOOT) basis. The port is at present under dispute.

### Duggarajapatnam :

Proposed port at Duggarajapatnam is located in SPSR Nellore district of Andhra Pradesh. The site is located 23 kms north of Sriharikota islands (ISRO) in Vakadumandal of SPSR Nellore district. Important towns like Gudur are at a distance of 40 km and Vakadu at 10 km.

The site is 30 km from the National Highway 5 at Nayudupeta and within 100 Km from Chennai/Tirupati besides being in close proximity to Tada growth centre. The site is connected with NH-5 at three places namely Sullurpet (35 km), Naidupet 33 km) and near Gudur (40 km). The nearest railway line is at Naidupet and railway junction is at Gudur at a distance of 42 km away from Duggarajapatnam. The development of the port is under process by Government of India as per A.P. Re-organization Act 2014.

## Tourism

*No of Central reservation offices - 10*

*No of Buses - 52*

*No of boats and launches - 77*

Tourism is an effective instrument in terms of generating employment, earning revenue and foreign exchange, enhance environment, preserving culture and tradition there by resulting in overall development. The government is committed to develop Heritage spots in Kurnool, Prakasam, Rajamundry, Tirupathi, Vijayawada, Visakhapatnam and other important places. Divine destinations like Tirupathi, Srisailem, Srialahasthi, Kadapa Darga, Mahanandi, Simhachalam, Annaram, Vijayawada and other places are being integrated in religious tourism circuits. While ensuring that the bio diversity and socio economic needs

## ECONOMIC INFRASTRUCTURE

of the community are maintained, beach tourism is being promoted. World class coastal and eco-tourism circuits are being developed.

### Andhra Pradesh Tourism Development Corporation (APTDC)

APTDC, the State Government undertaking was incorporated in 1976. It continues to register significant growth since last few years with focus on creation of tourism infrastructure and products. The Corporation continues to strive for promotion of new tourism products such as eco-tourism, beach tourism and cruise tourism. The river cruise tourism to Pattiseema and Papikondalu on river Godavari, Nagarjunasagar to Srisailam on Krishna river have become immensely popular. APTDC operates 28 tour packages including on demand tours. The transport fleet is operated through network of 8 tour promotion scheme agents, authorized booking agents and 10 Central Reservation Offices.

Currently, the corporation runs a chain of hotels and restaurants and providing quality accommodation and food for tourists at important locations. 42 hotels with around 1002 rooms and 2140 bed strength in prime locations fostering homely ambience packages and an impressive fleet of 52 buses that connect important tourism locations within and outside the state. The water fleet with 77 boats and launches provide pleasure cruises and river cruises at affordable prices. The corporation runs sound & light shows, river & lake cruise and pleasure rides making tourism a pleasurable experience.

The activities of the corporation can be classified broadly into the eight categories viz. Hospitality (hotels & catering units), transport (guided & package tours), water fleet (leisure cruises & pleasure boating), sound & light shows, eco-tourism, construction of new tourism products, tourism asset management and conduct cultural festivals

While the primary focus of APTDC remains aggressive in developing a world-class tourism infrastructure, recently, it has ventured into new tourism related fields like, heritage, pilgrimage and eco-tourism etc.

### Growth of APTDC

APTDC has registered a systematic growth both in terms of revenue and tourist arrivals over the years. In line with the policy of the Government, APTDC has focused on development of tourism infrastructure that has led to promotion of new tourism products and successful functioning of tourist centers. About 17.52 lakh tourists visited the state accruing a revenue of Rs.93.16Crores during 2016-17.

### Tour Packages

APTDC has designed a number of Tourist packages to different destinations covering temples, hill resorts, beach resorts, heritage sites both in and outside the state. A modern transport fleet of over 55 buses. APTDC is the first corporation in the country to introduce Volvo coaches that set a new level in tourism travel. The transport fleet is supported by a chain of central reservation offices in Hyderabad, Tirupati, Visakhapatnam, Bengaluru, Chennai and Kolkatta supported by a network of tour promotion agents. APTDC also enters into strategic alliance with major tour operators. These tours connect major hubs such as Chennai, Bengaluru, Tirupati, Coimbatore seamless travel destination.

### Haritha Hotel Chain

The “Haritha Hotel Chain” with 42 hotels (1002 rooms) located in important tourist centers provide the right ambience and quality that tourists demand. All APTDC hotels provide a restaurant, AC and non AC accommodation and in major locations a swimming pool. Few places where hotels & resorts are located include Vijayawada, Visakhapatnam, Jungle Bells, Araku Valley, Rishikonda, Tirupati, Horesely Hills, Kuppam, Kurnool, Dwaraka Tirumala, Srisailam, Nellore, Kadapa, Srikalahasthi, Orvakallu and Dindi including new hotels and resorts at Srikakulam, Chinthapalli, Kakinada and Thummalapenta and Tirupati.

### Properties of APTDC

There are 7 resorts in Visakhapatnam division, 3 in Kakinada division, 3 in Vijayawada division, 5 in Nellore division, 4 in Tirupathi division, 5 in Kadapa division, 7 in Kurnool division, 3 in Srisailam division.

## Wayside Amenities

APTDC has taken up development of wayside amenities along highways to provide better facilities to highway travelers like Restaurant, Washrooms, Parking area, Souvenir shop and Children play area at Alankanapaly, Ontimitta, Gopavaram, Thallapaka and Lepakshi have been completed and commissioned. Wayside amenities development at Nagari, Udayagiri and Kalikiri have been taken up and works are in finishing stage.

## Water Fleet

APTDC owns the large water fleet of 86 small and big boats. The corporation operates leisure based cruises and water sport boats at different lakes and rivers of the State and also Para sailing at Srisailam, Vijayawada, Rishikonda and Mypadu. The vessels Nagasiri and Vijayasiri are very popular for leisure cruises.

APTDC water fleet strength includes FRP boats, Launches, Parasailing boats and large vessels. The Corporation operates 8 cruises in Godavari and Krishna rivers. New catamaran type boats and the latest Speedboats were introduced at various water bodies to strengthen water fleet operation. APTDC operates pleasure rides at Nellore, Srisailam, Vijayawada, Hope Island (Kakinada), Vishakhapatnam (Bay of Bengal), Rajahmundry and Brahmastaram.

## Different types of Boats

### River Cruises

Most popular river Cruise on river Godavari between Pattiseema and Papikondalu is being operated that is attracting large number of tourists. The introduction of the river cruise on Godavari has motivated many private entrepreneurs to operate similar cruises on the river. The cruise offers a pleasurable experience of a four hours boat ride and brings the tourists back to Pattiseema in the evening. A two day package with night stay intended camp along the banks of the Godavari near Kollurenroute to Papikondalu is also arranged for tourists. A package tour was introduced in river Krishna from Nagarjunasagar to Srisailam. A Twin deck cruise (120 seater) (Haritha) with an air- conditioned lower Deck is presently operating in Godavari river in addition to FRP boats.

## Houseboats

In addition to pleasure cruises, 3 air-conditioned house boats are being operated, which offer an experience similar to the backwaters of Kerala. The House boats are equipped with two bedrooms and a deck to laze through the day along the serene and picturesque Godavari in East Godavari district.

## Ropeway

The Ropeway facility available at Srisailam Pathalaganga gives good revenue of an average of about 10 to 12 Lakh per month to the corporation. This facility benefited many local people with direct and indirect employment. Boating revenue also increased as more tourists got down at Pathalaganga to take the boat rides. This has become a major attraction for Srisailam pilgrim tourists also.

## Sound and light shows

Sound and Light show organized at Chandragiri palace near Tirupati to showcase the historic and heritage monuments of Chandragiri Fort to tourists is immensely popular. These shows have recorded narrations (English, Hindi & Telugu) along with imaginative use of music, sound and light effects—creating a dramatic history of the forts.

## Single window service

For the first time in India, APTDC has introduced customized tours in the year 2009 to fit the specific needs of tourists. The tour is customized on the requirement of choice of activities of the tourists and APTDC helps plan the entire itinerary to provide a seamless tour experience. Services offered in package include- transport, accommodation, sightseeing & visits, escort services, shopping, local cuisine, local events. Places not shown to routine visitors are shown; sightseeing places insisted by the tourists are taken care of and includes entry tickets with specific taste involved for local cuisine.

Online booking is extended to general public facilitating the tourist to book APTDC properties online. A website [www.aptdc.gov.in](http://www.aptdc.gov.in) is in place providing more details. APTDC also taken up a massive social media/online campaign through face book, twitter, you tube etc. It has a toll free No: 1800 425 45454 which operates round the clock.

## Mega destinations and secondary destinations

APTDC has focused development in and around the three primary destinations of Vijayawada, Visakhapatnam and Tirupati. In addition, development is also centered around the 3 secondary destinations like Kakinada, Kurnool and Nellore. The development of infrastructure is based on developing destinations and tourism circuits with a funding mix from the Government of India and State Government.

## Eco-Tourism initiatives

The corporation has taken up the initiative of identifying potential Eco-tourism spots in the state. It has successfully implemented popular eco-projects like the Belum caves, revamping of Borra caves, an exotic Jungle destination by name 'Jungle Bells' at Tyda, the illumination of Ettipothala waterfalls and development of Bhavani river Island.

## Community based Eco-tourism

Andhra Pradesh is encouraging community based eco-tourism in association with forest department, by providing opportunities for jungle walks, forest retreats, wild life tourism, bird watching and trekking.

Some of the places identified for eco-tourism are Maredumilli (East Godavari district), Nelapattu (Nellore district), Mamandur, Talakona, Nanniyal (Chittoor district), Balapalli (Kadapa district), Ettipotala (Guntur district), Kambala Konda (Visakhapatnam district), Orvakallu (Kurnool district), Coringa Wild life sanctuary (East Godavari district). Transport to and from the destination is provided by APTDC. Vana Samrakshana Samithi (community) provides accommodation, guide services and food facilities. Forest department provides the infrastructure under Community Forest Management (CFM).

## Tourism Projects

APTDC taken up the Construction of new tourism projects with state and central finance assistance and for the year 2015-16.

- Development of Costal tourism circuit in Nellore District under Swadesh Darshan Scheme of GoI.

- Development of Amravati as Heritage & Pilgrimage tourism destination under Prasad & Hridaya schemes of GoI. Projects are under progress.

APTDC has also initiated the new proposals and appointed the consultants for the preparation of DPR's. for development of rayalaseema regions and heritage tourism circuit, development of Mahayana Buddhist circuit in AP. development of costal tourism circuit in Visakhapatnam district. Development of Godavari river flowing areas as Akhanda Godavari tourism projects with state funds.

## Information Technology and Communications

*No of Services covered under e-Pragati 745*

*No of Aadhar Uploaded 6528814*

The state government is making efforts to make Andhra Pradesh as an IT hub in the years to come. The Government is proactively working for making the State as preferred IT Destination. With an intent to rebuild the State by implementing a slew of IT initiatives, Government has formed three societies viz., e-Government authority, Electronics & IT agency and Innovation Society for development of ICT Industry in the Sunrise State of Andhra Pradesh. Government has put in place two policies – IT policy and Electronic policy which are based on four pillars - Infrastructure, Incentives, Human resource development and Good governance. The policies offer suitable infrastructure and incentives to encourage start ups and first generation IT/Electronic companies which is unparalleled in the country.

The government has put in place several technological interfaces such as on-line feeder monitoring system, geo-tagging of agriculture bore wells, smart metering installation, utilization of 'Kaizala app' for seamless interaction among

the employees during the implementation of Government programmes and HT Consumers. The government has implemented the innovative fibre grid providing a package wherein Internet with 15 MBPS speed, Video, TV with all channels, three phone facilities would be provided to all the houses in the state at an affordable cost of Rs.149/- per month. As a pilot project, Mori village in the East Godavari District has been developed with the assistance of some global companies in becoming fully Internet of Things (IoT) compliant transforming the rural economy. The village stands as an e-example in the Country with the accessibility of WiFi, internet connectivity, cable TV in all its households and moving towards less cash economy. Success of this pilot project has encouraged us to scale it to five assembly constituencies in the 1st phase.

Recently eight IT companies were inaugurated at IT Service Tech Park in Vijayawada. Visakhapatnam is being developed as 'Fintech hub' of national and international importance. Tirupathi is being developed as electronic cluster. Many leading companies have already set up their plants.

Some of the key incentives offered to promote IT initiatives

- Rebate on land cost @ Rs.60,000 per employee created in case in case of mega projects in IT and Rs.40,000 per employment generated for other IT companies, subject to a maximum of 80% of land cost.
- The mega projects operate from the built up space are also eligible for rental subsidy @ Rs.10 per SFT per month for a period of 3 years in prescribed scale space per employee.
- For IT Companies that received land from State Government, incentive will be given Rs.50,000/- for generation each employment.
- For IT Companies that did not receive land from Government and have annual sales of more than Rs.25 crores per annum, incentive of either Rs.1,00,000/- or 6 months of CTC (cost to company), whichever is lower, for generation each employment.
- For IT Companies under MSME/SC/ST categories and those companies having less than Rs.25 crores of annual revenue, Incentive will be given either Rs.1,50,000/- or 6 months of CTC (cost to company), whichever is lower, for generation each employment.
- Training companies for IT and Electronics will get Investment subsidy up to 50% with CAPEX, to a maximum of Rs.1.00 Crore.
- In case of Mega Projects in Electronics, 30% of investment will be provided as subsidy, capped at Rs.250 Crores.
- In case of General Projects in Electronics, 25% of investment will be provided as subsidy, capped at Rs.250 Crores.
- In case of MSME/BC/ SC/ ST/ Women/ Rural Electronic industries, 30% of investment will be provided as subsidy, capped at Rs.250 Crores .
- 25% Power subsidy for Mega Projects for a period of five years; 20% Power subsidy for all other categories of companies for a period of five years.

### IT Infrastructure:

To provide infrastructure which suits the global needs for setting up of IT/Electronic companies in the sunrise state of Andhra Pradesh. The Government has initiated the development of infrastructure like IT parks at Kapulapadda in Visakhapatnam and in Tirupathi to attract the global players in IT industry. The proposal to develop Information Technology Investment Region in Visakhapatnam region in an area of 40.4 Sq.Km with a total outlay of Rs.10,357 Cr is under active consideration of GoI.

Parallel to the above, Government has identified Electronic System Design & Manufacturing as a growth sector to create employment high in numbers. To achieve this, Government has earmarked few areas for Electronic Manufacturing Clusters (EMC) across the state for setting up companies exclusively for ESDM. There are a total of 9 such EMCs both in private and Public development models. Some Govt. initiated EMCs are like Gudipalle in Anantapuramu, Yerpedu in Chittoor and Gurrampalem in Vishakhapatnam. Renowned private organizations are also in different stages of development of EMCS viz. Sri City in Chittoor, Elicina Ragamayuri in Anantapuramu, Nobel Electronic Manufacture Cluster Pvt Ltd in Anantapuramu, Kakinada SEZ Pvt Ltd in Kakinada and Continental Warehouse Corporation Ltd in Chittoor.

Government envisage developing physical incubation infrastructure to host institutes as the pilot incubators to

## ECONOMIC INFRASTRUCTURE

create world class live work and play environment for nurturing innovation and start-ups. To take this ahead, ITE&C Department has inaugurated 50,000 SFT incubation space as “Start up Village”, IT incubation towers in Tirupathi (7,500 SFT), Kakinada (15,000 SFT) and IT incubation tower in JNU-Anantapuramu (20,000) will be inaugurated shortly to encourage students to become prospective start-ups.

Government is keen to provide the ready to use office spaces (plug a play) to the needy entrepreneurs. In this regard, Government started the construction of IT Towers exclusively to allot to the IT companies who wants to start their commercial operations in Visakhapatnam, Tirupathi and CRDA region as Millennium Tower (4.5 Lakh SFT), IT Business Center (50,000 SFT) and IT Towers – Mangalagiri (2 Lakh SFT) respectively.

Development of IT industry are given in Table 7.10.

Table 7.10 Software Turnover

S. No	Indicator	Achievements			
		As on 31-3-2015	As on 30-11-15	During 2016-17 (Nov 15 to Nov' 16)	Cumulative (up to Nov' 16)
1	IT Companies established (Nos.)	246	356	13	369
2	Start-ups (Nos.)	30	186	0	186
3	EMCs approved (Nos.)	-	3	0	3
4	IT Incubation Towers Constructed (Nos.)	-	3	0	3
5	Turnover (Rs.in Cr)	1850	2150	395.42	
6	Employment Created (Nos.)	24,739	31,939	2,991	34,930

Source:IT&C department

### e-Procurement ([www.apecurement.gov.in](http://www.apecurement.gov.in))

e-Procurement System is being used in the State for all procurements above the value of Rs.10 Lakhs. The platform is extensively used for procurement works by Irrigation department, Roads and Buildings etc, Government issued orders to Go-Live of new version of e-Procurement system for all user departments and PSUs etc. of Andhra Pradesh with effect from 9th May, 2016. The new system is being used by all user departments/PSUs/ Universities /Local bodies etc. of Government of Andhra Pradesh. The portal has successfully processed 310919 transactions in united Andhra Pradesh worth Rs.352637 Crores up to 31st May 2014 and 95890 transactions processed in newly formed Andhra Pradesh worth Rs.32311 crores from 02.06.2014 to 31.10.2016.

Sl. No	Year	Total Transactions	Total Value (Rs. in crores)
1	01.06.2014 to 31.03.2015	21422	4181
2	2015-2016	43055	17247
3	01.04.2016 to 31.10.2016	31413	10883
	Total	95890	32311

Source:IT&C department

### Achievements:

e-Procurement has secured demonstrable and significant benefits by way of cost and time savings to the Government, brought transparency and empowered the small & medium suppliers. The path breaking initiative has proved that transparency, fairness and equal opportunity to private entrepreneurs who bid for Govt. contracts, sell products or expertise to Govt. agencies will not only result in healthy competition, significant contribution to the economy but also makes significant social impact as a citizen assurance on transparent utilization of public funds. As a matter of fact the successful implementation of this initiative by the state of Andhra Pradesh has motivated the Govt of India and several other state Governments have to embark on e-Procurement initiatives.

### Challenges:

Government of Andhra Pradesh e-Procurement system still faces challenges. Although the system's hardware is in place, its operating system must be stabilized, users continuously trained, content reliability enhanced, and product choices broadened. Furthermore, some parts of



the population have been left out of e-Government. A Government wide policy is needed to narrow the widening societal gap information and communications technology capacity. For the full effect of e-Procurement reform to be felt, its changes must be internalized, and savings in Government agencies' procurement should be reflected in their expenditure management. Engaging treasury officers in the overall procurement process from demand planning, budget planning, acquisition management, and logistics management, to final disposal-would enable agencies to prepare more accurate expenditure plans, helping ensure more predictable procurement in support of service delivery. Developing this link would require integrating the e-Procurement system with the treasury information management system to allow timely data exchange between them.

### Awards

- Topped the overall assessment of 39 e-Gov projects conducted by the Ministry of Information Technology, Govt of India with a score of 83.7 on a scale of 0-100. [www.mit.gov.in/SA/index.asp](http://www.mit.gov.in/SA/index.asp)
- GoAP- e-Procurement case study is published in the World Bank website [www.worldbank.org/egov](http://www.worldbank.org/egov)

### Communications Wing:

New G2G AP SWAN Network (AP Broad Band Network):

Government has implemented APSWAN connecting the State Capital to all District Head Quarters (DHQs) with 12 Mbps bandwidth and connecting all DHQs with corresponding MHQs with 4 Mbps under AP Broad Band Network. The new Network is completely IP based and provides voice, data and video communications to all Government offices.

### APNET/SAPNET:

The Government of Andhra Pradesh as a part of its objective to harness the potential established a Satellite based communications Network to be utilized in District Education, Tele Medicine, Agriculture Extension, E-Governance, creating Awareness in Self Help Groups and Human Resource Development. Presently Andhra Pradesh has 2 Channels. Channel 1 is to telecast the

recorded programmes and Channel 2 for live Interact. Live is being used for transmission of programmes of Education, Agriculture Department, Indira Kranthipatham and Police, HRD, Social Sector Programs and AP Skill Development Programs etc.

### IVRS Project

The Government of Andhra Pradesh, in the process of building & developing a new State, and to ensure that all the information related to Government Services & welfare Schemes being implemented for the public to be pooled in a single system and create awareness in the public using telephonic- Voice & SMS campaigns has implemented an IVRS based customized system with SIP Telephony trunk lines that can handle Public Broadcasting on Government Schemes & Services and also obtain the Citizen Satisfaction levels through ITE&C Dept. Based on the Feedback received from the public, GoAP intends to ensure that there are no bottle necks in the implementation of Welfare Schemes and also to improvise the Governance through speedy delivery of the services & schemes to citizens.

ITE&C Dept established and commissioned the IVRS for robust broadcasting & feedback system - PBFT Public Broadcast and Feedback Telephony System comprising a Web-portal (<https://ivrs.ap.gov.in>), Unified Communication platform for Voice & SMS, IVR dial out calls facility for measuring public satisfaction using SIP trunk technology and fine tuning policies according to the needs of the people with 24/7 customer service support, and the roll out to all the Departments is completed. Presently the system is operating with 15,000 SIP trunks (10,000 from BSNL and 5,000 from Reliance as alternate source for connectivity) with 2 Connectivity Service providers M/s.BSNL and M/s.Reliance with load balance to improve the call success rate of existing SIP based setup. Daily teleconferences and feedback surveys are being conducted on regular basis with Service Providers M/s.Web Country.

### Video Conference Facility (VCF):

The Information Technology & Communications Department through M/s A.P. Technology Services (APTS) Limited has implemented IP based High Definition Video Conference (VC) system up to Mandal Level. Mandal level Video Conference system is procured and commissioned in

## ECONOMIC INFRASTRUCTURE

669 Mandals and 49 RDOs, 13 CPOs, 13 Collectorates, 3 ITDAs and at State Head quarter, Hyderabad. Now Video Conference facilities are extended to new Interim Government Complex (IGC), Velagapudi.

### APSCAN (Post AP Reorganisation)

Andhra Pradesh Secretariat Campus Area Network (APSCAN) is connecting all the line blocks and connecting about 5000 nodes for data and presently 2000+ nodes are operational. Apart from this, it provides Internet, Intranet, eMail, SDC Staging & DR Services. Internet Bandwidth is provided through 3 service providers.

### Interim Government Center (IGC)

FM and O&M activities are provided to all the Blocks by ITE&C Department.

### AP State Data Centre (APSDC)

APSDC is being shared by both the States. It provides support Infrastructure for Power; (AC, UPS, and Generators etc), Network Infrastructure, Security Infrastructure, Management Infrastructure, Disaster Recovery Setup, Computer Infrastructure and Storage Infrastructure. 108 Applications from 31 departments are hosted.

### e-Pragati :

Andhra Pradesh has always been at the forefront of implementing e-Governance, having pioneered popular projects like CARD, eSeva, MeeSeva, e-Procurement. To take the evolution of e-Governance to the next level, it is felt essential to have AP State Enterprise Architecture (APSEA) for providing better services to citizens and businesses. The initiative has been named as e-Pragati to signify that the program is intended to create an ecosystem based on integration and interoperability of all the development and welfare departments of the Government towards realizing the vision of Sunrise AP 2022 by enabling design and delivery of services in a coordinated, integrated, efficient and equitable way that citizens and businesses deserve.

e-Pragati is a massive program covering 33 departments and 315 agencies and around 745 services have been identified so far. The services have been grouped into 72 projects (45 green field and 27 brown field) and bundled into 14

packages for ease of procurement and implementation. This is the largest e-Governance program approved by any State with a total outlay of Rs.2398 crore out of which, the Government Capex would be to the extent of Rs.1528 Crore. The Program is scheduled to be implemented / rolled out by Mar'18. The design phase of the program is almost completed and e-Pragati vision document has been released on Oct 9th 2015. Some of the RFPs are already issued and all the RFPs packages are planned to be issued by Jun'2017.

### MeeSeva

MeeSeva currently has 355 high impact services and the project has already completed 8 crore transactions and most of the government departments are now on board. The target is to ensure that MeeSeva becomes the entry and exit point for the citizen to approach the government for any service. Besides this, project also delivers more than 20 crore transactions every year for other services like Bill Payments besides a big range of B2C services making it the country's biggest one stop e-governance shop. MeeSevacenters are now also providing Business Correspondent Services for various banks and achieving financial inclusion for the citizens. This is significant because of the large scale Aadhaar based DBT roll out in the country.

The convergence of services viz., interactive services, payment services through various Delivery Channels/ Kiosks helps citizens access multiple utilities. Bill payments at the same counter through credit cards/debit cards, cash, Demand Drafts and cheques for payments from April to November,16 were Rs.674.68 crore through 175.18 lakhs transactions..

### MeeKosam:

The Government had directed to revamp the existing system and design a new integrated Public Grievance Redressal System. Under the proposed system, all the grievance petitions received at the CMO/Secy./HoDs/ District Collectorates, District level and Mandal level Offices would be registered, tracked and redressed on a common platform, linked to the Aadhaar No. of the petitioner to ensure proper accountability. MeeKosam system receives all the grievance petitions through the new Grievance Redressal System named as "MeeKosam" from

27 departments of our state. Meekosam live portal ([www.meekosam.ap.gov.in](http://www.meekosam.ap.gov.in)) was launched by the Hon'ble CM on 26.05.2015 for remaining districts in AP.

Present Status: A total 60.92 lakh of grievances are registered from 02.03.15 to 07.12.16 and 59.19 lakhs were resolved.

## Andhra Pradesh Information Technology Academy

Andhra Pradesh Information Technology Academy (APITA) has been established on 01-06-2016 in place of Institute for Electronic Governance (IEG), a Schedule-X Institution of A.P. Reorganization Act, 2014. The academic activities of the Society have been planned to run in the name of "Amaravati Knowledge Centers".

The major objectives of APITA are:

- Support capacity building initiatives of ITE&C Department.
- Develop and offer courses in IT, Electronics and Communications in collaboration with industry.
- Bridge the urban rural divide in producing readily employable graduates.
- Provide conducive environment for learning through value addition programs.
- Promote a culture of Research and Development in IT, Electronics and Communications.
- Facilitate e-governance through oriented programs for state government employees.
- Offer consultancy support in Capacity Building programs.
- Collaborate with Industry, Educational and Research Institutions for the promotion and development of e-governance.

APITA has academic collaborations with Oracle Academy, Microsoft, IBM, Indian School of Business, National Instruments, SAP, DQ Entertainment, eSF Labs, Arjun e-Learning to offer various academic / training programs to the students of Andhra Pradesh. The details of the programs are mentioned below:

Academic Partner	Program offered
Oracle Academy	Free licensed software to APITA registered colleges; training and certification to faculty members; training to the students
Microsoft	Microsoft Imagine Academy Program (offer five client access licenses, Office 365 software at reduced price; MS office license free of cost for all students and faculty; certification coupons at reduced price
IBM	IBM Cloud Application Developer Training and Certification Program
Indian School of Business (ISB)	Technology Entrepreneurship Program (TEP)
National Instruments	LabVIEW and Industrial IoT program
SAP	SAP University Alliance Program and SAP Student Academy
DQ Entertainment	Training and Certification in Animation
eSF Labs Pvt Ltd	Training and Certification in Cyber Security and Digital Forensics
Arjun e-Learning Pvt Ltd	Free e-Learning content / courses / tutorials to the students

During the academy year 2016-17, 162 colleges (128 Engineering / MCA colleges and 34 Degree colleges) in the state are registered with APITA. During the current academic year 2287 students are trained in Soft skills, 1457 in Aptitude and reasoning, 470 in Oracle Database, 503 in Animation and 76 in NI Lab VIEW and IIoT. Furthermore, 56 faculty members are trained and certified by Oracle Academy in JAVA fundamentals and Program and 152 faculty members are trained in Engineering Education and Research by National Instruments. For the ISB TEP Program 411 students from 15 colleges have joined for 2016-18 batch and 171 students out of 185 from 2015-17 batch have completed the first year course.

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APITA is also playing a major role in the capacity building activities of the e-governance initiatives. It has trained a total of 73667 government employees on Tablet PCs and also coordinated the MDM enrollment program in the districts. The social contribution of this training initiative can be perceived in the spread of digital literacy to the mandal level government officials and the economic contribution may be perceived in the increased productivity of the officers who have begun using the tablets for their official purposes. APITA staff working in the districts is also trained by AP HRDI as Master Trainers for conducting CSC2.0 training in Andhra Pradesh.

### Aadhaar Permanent Enrollment Centers

UIDAI, in the process of evolving a national level policy for setting up PECs across the country, ensured that the needs of unenrolled beneficiaries are taken care through MeeSevacenters in the districts. APTS have set up of 811 Permanent Enrollment Centres (PEC) in MeeSevacenters at each Mandal headquarters across the State of Andhra Pradesh. Details of the Aadhaar kits delivered and activated status as on 07-12-2016 is given in Table 7.11.

Table 7.11 Aadhaar Kits Delivered and Activated Status as on 07-12-2016

District	Aadhaar Kits Deployed	Enrollments done	No of Packets Uploaded
Srikakulam	39	405287	376548
Vizianagaram	54	607046	578701
Visakhapatnam	57	589808	559914
East Godavari	64	589740	564095
West Godavari	51	446860	416858
Krishna	61	300707	268343
Guntur	59	469600	440028
Prakasham	56	468400	439413
SPS Nellore	72	542309	522127
YSR	57	291778	272214
Kurnool	97	919535	890920
Ananthapuramu	68	874038	851686
Chittoor	76	368534	347967
TOTAL	811	6873642	6528814





CHAPTER 8 SOCIAL INFRASTRUCTURE

## SOCIAL INFRASTRUCTURE

## Social Infrastructure

Good economic infrastructure is a pre-requisite for sustained development. However, it is the effort that is required to push forward the social sector parameters like education, healthcare, nutrition, water supply, housing, social security and other basic minimum social services that results in a healthy ambience and happy living.

2011 Population Census:

*Population of AP: 495.77 lakh*

*Share in country's population: 4.1%*

*Decadal variation 2001-2011: 9.21%*

*Sex Ratio: 997*

*Urban Population share 29.47%*

*Density of Population: 304*

*Female literacy: 59.96%*

The Government continues its focus on social infrastructure towards meeting basic minimum requirements of the people especially for ensuring higher levels of social justice in society in accordance with, the Sustained Development Goals and the associated global indices. Once the process of social development is institutionalized, it provides sustenance for overall economic development.

At the United Nations Sustainable Development Summit on 25 September 2015, world leaders adopted the 2030 Agenda for Sustainable Development, which includes a set of 17 Sustainable Development Goals (SDGs) to be affected on 1st January, 2016 to end poverty, fight inequality and injustice, and tackle climate change by 2030. The Government of India is a signatory to the SDG.

The SDGs build on the Millennium Development Goals, eight anti-poverty targets that the world is committed to

achieving by 2015. The MDGs, adopted in 2000, aimed at an array of issues that included slashing poverty, hunger, disease, gender inequality, and promoting access to water and sanitation. The world over enormous progress has been made on the MDGs, demonstrating the value of a unifying global agenda underpinned by goals and targets. However, despite the significant success, poverty and inequality has not yet ended for all while the MDG implementation period has been ended in December 2015.

The government is keen to have effective service delivery with strategies for poverty reduction and provision of related social amenities through institutional reforms. The following paragraphs outline the broad trends emerged in the 2011 population census.

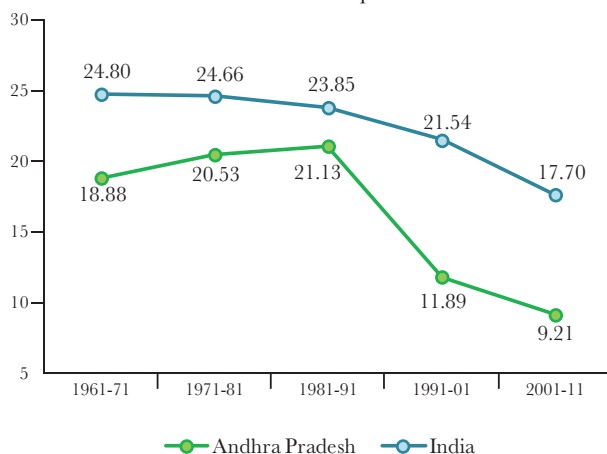
The State Government has taken up the saturation approach under the Samaja Vikasam and Kutumba Vikasam by giving assurance to provide 10 types of basic facilities in each village and to each family on 15 types of social and economic securities respectively. Samaja Vikasam include – Access to Quality Education for All, Health Security, Agriculture and Allied Development, Industrial Development, Service Sector Development, 24 X 7 Power Supply, Roads and Infrastructure Development, Information and Technology, Citizen Services, Inclusive Development. Under Kutumba Vikasam include Social security, Nutrition security, Insurance security, Electricity Security, Health Security, Gas Security (Deepam), Water Security, Housing Security, Sanitation Security, Education Security, Fodder Security, Employment Security, Information (Fibre net) Security, Individual Security, Livelihood (Income Security) for all.

### Population

Andhra Pradesh is the tenth largest state in the Country, in terms of population. As per 2011 Census, the State accounts for 4.10% of the total population of the country. The population of Andhra Pradesh is more than doubled in the last half century from 23.29 million in 1961 to 49.58 million in 2011. Of this, 24.83 million are males and 24.75 million are females. The decadal growth of population rose from 18.88 percent during 1961-71 to 21.13 percent during 1981-91. Subsequently a significant decline was observed in the rate of growth of population and decline is even more prominent at 9.21 percent during 2001-11, lower than the

All-India's growth rate of 17.70 percent. Decadal variation of population in AP and India are shown in chart 8.1.

Chart 8.1: Decadal Variation of Population in AP and India



Among the districts, East Godavari is the most populous district in the state whereas Vizianagaram accounts for the lowest population. District-wise population from 1961 to 2011 census is given in Annexure 8.1.

## Sex Ratio

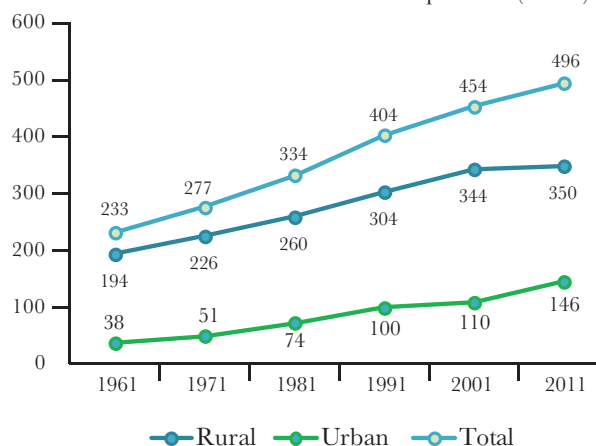
Sex ratio, the number of females per 1,000 males, has shown a declining trend in the State till 1991. The sex ratio in the state was up from 983 in 2001 to 997 in 2011 and is higher than all India figure of 943 in 2011. Sex ratio continues to be favourable in Vizianagaram and Srikakulam districts. The districts of Visakhapatnam, East Godavari, West Godavari and Guntur have registered a progressive sex ratio moving from less than 1000 category to more than 1000 from 2001 to 2011. District wise population (decadal variation) and sex ratio is given in Annexure 8.2.

## Density

Density of population, another important demographic indicator, is defined as per the number of persons living per sq. km. The density of population for Andhra Pradesh is 304 persons per square kilometer, as against 382 persons per square kilometer at all India level in 2011. Krishna district has the highest density at 518 while Y.S.R and Prakasam districts have the lowest population density with less than 200. District wise density of population details are given in Annexure 8.3. Details of total population in rural / urban

and total are shown in chart 8.2.(rounded to nearest integer)

Chart 8.2: AP Rural / Urban & Total Population (Lakhs)



## Urbanization

Urbanisation has been regarded as an important component for growth realization. The percentage of urban population to the total population in the State is 29.47 percent in 2011 as compared to 24.13 percent in 2001. Among the districts, Visakhapatnam stood first with 47.45 percent of urban population followed by Krishna district with 40.81 percent. Srikakulam with 16.16 percent of urban population followed by Prakasam with 19.56 percent are the least urbanized districts. District wise percentage of urban population to total population is given in Annexure 8.3.

## Literacy

A person aged 7 years and above who can both read and write with understanding in any language is considered as literate. The literacy rate of the State is 67.35 percent in 2011 as against 62.07 percent in 2001. The literacy rate of the State is lower than the all India literacy rate at 72.98% percent. The best record in literacy so far at both the national and state levels was during the nineties. A slow growth in literacy rate was identified during the last decade at state and national levels. The decadal improvement at the national level had been not more than 8 percentage points till 1991 and the nineties witnessed an improvement of 13.8 percentage points. The literacy rate has identified an improvement of more than 8 percentage points during 2001-2011 at national level. Literacy in Andhra Pradesh increased over 37 percentage points from 29.94 percent

in 1981 to 67.35 percent in 2011. In spite of this fast rate of growth in the last three decades, the literacy rate in Andhra Pradesh is still lower than the all India average. While the literacy rate of Andhra Pradesh was about three fourths of the all India level in 1961, the State has made substantial progress, especially in the last four decades. The overall literacy rate has gone up from 62.07 percent in 2001 to 67.35 percent in 2011; the male literacy rate has increased from 71.28 to 74.77 percent. Female literacy rate has gone up from 52.72 percent in 2001 to 59.96 percent in 2011. West Godavari is at the top with 74.32 percent and Vizianagaram is at the lowest with 58.89 percent in 2011 among the districts. District wise details of male, female and total literacy rate from 1961 to 2011 are given in Annexure 8.4.

## School Education

Over the years, efforts are being made both at the state and national levels to achieve the goal of “Education for All”. As per Article 45 of the Constitution of India, Universalisation of Elementary Education is a directive principle of state policy that underlines the need to provide free and compulsory education for all children up to the age of 14 years. As per Article 21A and 93rd Constitutional Amendment 2009, Education has become a fundamental right. This article spells out the responsibility of the State for providing free and compulsory education to all children in the age group of 6 to 14 years.

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*No of schools – 61,528*

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*Enrollment – 68.47 Lakhs*

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*Dropout ratio*

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*I-V classes – 9.68%,*

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*I-VIII classes – 12.77%*

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*I-X classes – 20.67%.*

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To make effective and meaningful implementation of this obligation, elementary education was brought under “Sarva Siksha Abhiyaan” (SSA) to universalize elementary education. Similarly, secondary education was brought under the flagship programme “Rashtriya Madhyamik Siksha Abhiyaan” (RMSA). These two schemes aim to strengthen school education in terms of access, enrollment, retention and quality.

The Government is committed to achieve total literacy by 2019 and several schemes have been initiated for bringing about both quantitative and qualitative improvement. The department provides schooling facility to school aged population of 68.47 lakh children (Aadhaar linked enrollment).

### Universal Access in School Education

The following norms in establishing schooling facilities have been laid down to achieve universal access in school education:

- Primary level schools should be within 1 km. walkable distance of all habitations
- Elementary level schools should be within 3 km. walkable distance of all habitations
- Secondary level schools should be within a radius of 5 kms of all habitations

On these parameters, our State has achieved 99% access at elementary level and 91.5% at secondary level. Primary schools and secondary schools have been started in areas, which were not served earlier. Details of type of schools and teachers are shown in Table 8.1 and management wise schools and teachers in 2016-17 are shown in Table 8.2.

Table 8.1: Type of Schools and Teachers

Sl No	Category of School	No. of Schools	No. of Teachers
1	Primary	39193	105242
2	Primary with UP (I to VII/ VIII Class)	10272	56980
3	Primary with UP, Secondary & Higher Secondary (I-XII Class)	174	2630



Sl No	Category of School	No. of Schools	No. of Teachers
4	UP with Secondary , Higher Secondary (VI – XII Class)	184	2280
5	Primary with UP, Secondary (I-X Class)	1747	16505
6	UP with Secondary (VI-X Class)	9958	104426
	Total	61528	288063

Source: Commissioner of School Education (Provisional Data of U-DISE 2016 – 17)

Table 8.2: Management-wise Schools and Teachers 2016 - 17

Sl. No	Management	Schools	Teachers
1	Central Govt.	64	828
2	State Govt.	3753	17030
3	MPP/ZPP	38719	156438
4	Municipal	2119	12051
5	Pvt.Aided	2269	7705
6	Pvt.Un-aided	14604	94011
	Total	61528	288063

Source: Commissioner of School Education (Provisional Data of U-DISE 2016-17).

## Enrolment

Steps are being taken up for ensuring 100% access in Education. Strengthening existing schools, opening new Primary Schools, establishment of alternative schools and other type of educational facilities in smaller and un-served habitations are few of the strategies implemented for universalization of Elementary Education.

Enrolment in all types of schools in the state during 2016-17 was 68.47 Lakh out of which 34.76 Lakh in I-V classes; 20.85 Lakh in VI-VIII classes and 12.87 Lakh in IX-X classes. In terms of percentage enrolment of children was about 50.76% in I-V classes, 30.45 % children in VI-VIII and 18.79% in IX-X. Details of enrolment are given in the Annexure 8.5.

## Dropouts

It has been observed that there is a problem of retention at different levels in enrolment of school aged group children into the schools. During 2016-17, dropouts at I-V classes (Primary Level) were 9.68%, 12.77% at I-VIII (Elementary Level) and 20.67% at I-X (Secondary Level). Necessary measures have been taken to retain children into schools i.e., Badi Pilustondi Programme etc. The details of school dropout rates are given in Annexure 8.6.

## Teachers and Teacher Pupil Ratio

A teacher is instrumental in developing knowledge, skills, attitudes and values among children at all stages of Education. It is essential to maintain an optimum teacher-pupil ratio to achieve the goal of universal enrolment, retention and improve the Education of children. With a view to maintain an optimum teacher-pupil ratio to achieve the goal of universal enrolment, retention and improve education of children, sustained efforts are being made to recruit teachers in all types of schools. Sustained efforts are being made by the Government to recruit teachers in all types of schools to maintain a reasonable Teacher-Pupil Ratio. Rationalized deployment of teachers, creation of new posts and massive recruitment of teachers helped overcome imbalances in demand and supply of teachers. During 2016-17, there were 1,05,242 teachers in primary schools, 56,980 in Primary with Upper Primary schools(I-VII/VIII), 2630 in Primary with Upper Primary, Secondary & Higher secondary schools (I-XII) and 2280 in Upper Primary with Secondary & Higher secondary schools (VI-XII) 16,505 in Primary with Upper Primary & Secondary schools (I-X) and 1,04,426 in Upper Primary with Secondary (VI- X).

The Teacher Pupil Ratio for Primary, Upper primary and High Schools are shown in Table 8.3

Table 8.3: Teacher Pupil Ratio

Year	Primary	Upper Primary	High School
2010-11	28	20	25
2011-12	27	21	25
2012-13	30	23	25
2013-14	26	22	25

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Year	Primary	Upper Primary	High School
2014-15	26	21	26
2015-16	22	19	26
2016-17	22	19	27

Source: Commissioner of School Education. (Provisional Data of U-DISE 2016 – 17)

### Examination results

Performance of students at different levels of education has been conventionally considered as an important indicator for assessing efficiency of educational system. The number of students appearing and passing the S.S.C. examination at the end of secondary stage (cycle) is an important indicator. The pass percentage of students in S.S.C examinations during 2015-16 was 94.53 which is higher than the previous year percentage i.e., 91.42 in 2014-15. Details of year wise performance in S.S.C Examinations are given in Annexure 8.7.

### Examination reforms

ICR cum OMR sheets were introduced instead of application forms for conduct of minor examinations of (T T T C), Technical Teacher Training Course (Lower) and (TCC) Technical Certificate Course examinations. The following are some of the important initiatives taken:

### Mid-day meal scheme

The Mid Day meal scheme a Centrally Sponsored Scheme with 60% Central and 40% share and State Governments for I-VIII classes and the State Government is funding 100% of the Mid day meals scheme for IX & X classes. The main objectives of the programme are to improve the nutritional status of children, motivate children to attend school regularly, and providing nutritional support. 36.66 lakh children were covered under this programme during 2016-17 out of which, 18.27 lakh are in Primary [I-V] classes including NCLP, 11.15 lakh in Upper primary (VI-VIII) and 7.24 lakh children in High schools in the state.

A flexible menu, provision of mostly rice, sambar and pulihora are the key features of the scheme. As per the orders of the Supreme Court, the Government has issued orders to provide one more egg in addition to two eggs already providing per week under Mid Day Meal.

All schools were provided with kitchen devices under Phase-I allocated by State Government with coverage of 31,213 schools @ Rs.75,000/- and under phase-II 13,103 kitchen sheds were allocated @ Rs.1.75 Lakh per kitchen shed

Government of India has developed a Management Information System (MIS) and data is being entered in the MIS Portal. Monitoring MDM daily attendance and meals taken through SMS and mobile application and the same is linked to CM core dash board. Food grains are being supplying through e-POS from August,2016 onwards. Supply of Dal and Oil along with LPG connections to the school is under process. The tender for supply of three eggs to the school point and steel plates to drought affected area schools is under process.

### School Health Programme

Special drive for screening eyes of school age children in convergence with health department is being taken up. 'De-worming' tablets and iron and folic acid tablets were given to all school children. Health checkups are also being taken up twice a year for all school students.

### Digital Class Rooms

It is proposed to provide digital classrooms in 5000 schools during 2016-17 and 2017-18. Digital class rooms are started in 1638 schools. Towards this goal of promoting Digital Classrooms Government has allotted Rs 45 Crores for purchase of equipment in Government Schools and equipment will be supplied from Government funds to other schools during 2016-17. NRI/CSR support is also being pursued to mobilise additional resources for this project @70:30 ratio.

The Digital content will be made available both in online as well as off line mode for the teachers and the students. It can be accessed both at the School as well as at home through a password protected mechanism. The State Resource Group members, of different subject teacher forums, subject lead from SCERT and external experts, will evaluate and upload the digital content from different sources.

APEX initiative is an online initiative which consists of all subjects forum, Online courses for teachers, repository

(Providing e-content) and Research. All these services will be given to the teachers and students from a single platform. Most of the web features will be maintained by the selected teachers across Andhra Pradesh.

### Virtual Class Rooms:

The Government have stressed the need to develop an effective e-governance system for the School Education Department by deploying modern management techniques and Information Technology. Virtual Class Rooms have been proposed as a remote education solution in order to deliver a high quality virtual learning experience that will impart primary and secondary education as well as skill development to vast rural populations in Andhra Pradesh.

The Government of Andhra Pradesh vision is to make Andhra Pradesh a digitally empowered state and envisions using technology for improvement in student learning. It presently manages and regulates 40,000 schools in Government / Zilla Parishad / Municipal and is in the process of developing a comprehensive Management Information System (MIS) relating to infrastructure, syllabus, admissions /enrolment and grievances. Virtual Classrooms will serve as an integral part of this MIS platform as it will connect vast rural populations to the best educational and skilling talent in the state.

It is proposed to implementing of Virtual Class Rooms in 3500 identified Schools throughout the State.

### Objectives of Virtual Class Rooms:

- To provide a platform to learn from the best teaching talent in the state.
- To establish an enabling environment to promote the usage of Information Technology for providing quality content to students.
- Using e-learning to provide quality education to all students
- To enable students to acquire skills needed for digital world
- Making the state of Andhra Pradesh a leader in National Digital Literacy Mission (NDLM).

### Rashtriya Madhyamik Shiksha Abhiyan

“Rashtriya Madhyamik Shiksha Abhiyan” is a Centrally Sponsored Scheme. The main objective of this scheme is to provide access to Quality Secondary Education for children in the age group of 14 to 18 years. All Secondary Schools are provided with annual grants to schools to meet school maintenance expenditures like lab consumables Science and Mathematics kits, Electric charges, purchase of library periodicals and other items to achieve objectives of RMSA. Infrastructure strengthening facilities were sanctioned to secondary schools and the works are at different stages. An amount of Rs.30.12Crores have been released for 6025 Secondary Schools. During PAB 2016-17, 884 schools have been approved out of which 171 schools are KGBVs and the rest are ZPHS, MPUPS etc.

### In service Teacher Training

Under RMSA 1325 High school headmasters were trained during the year 2016-17 in leadership of schools. Under the shalaa shidhi (School students are self evaluation) 705 high school head masters were trained to take up school self evaluation and uploading the data into NUEPA Portal. As a pass of RMSA in service training, a training programme is planned for 594 model school (language and social studies teachers)1408 KGBV (language teachers)10700 Zilla Parishad, Government and Municipal teachers (Language and Social). A special training programme is designed for Science and Maths teachers as MPMS, KGBV, ZP, Government and Municipal school teachers, covering 24813 teachers.

### Model Schools

The Government of India have sanctioned 163 Model Schools. At present out of 163 Model schools, 160 Model Schools are functioning in the State from classes VI to X and Intermediate 1st & 2nd year classes @ 80 students per class in co-education.

70,540 students are studying in English Medium from class VI to senior Intermediate (Class XII) in Educationally Backward Mandals during 2016-17.

## SOCIAL INFRASTRUCTURE

The result of AP Model Schools during 2015-16 in SSC Public Examination is 96.84%, first in the Government Managed Institutions and next to the best result of all Private Management Schools. AP Model School Rayachoty in Kadapa District stood as best school among all schools in Andhra Pradesh by achieving 5 top grades i.e., 10/10 GPA. The results in Intermediate course is 74.91% which is also worth mentioning and has good scope for considerable improvement during 2016-17.

The Government of Andhra Pradesh recruited so far 78 Principals, 1430 Post Graduate Teachers and 570 Trained Graduate qualified teachers to work in the Model Schools in regular time scales of pay as in Government.

The Government of Andhra Pradesh is also considering to start 184 Model Schools in the remaining EBB Mandals to provide quality & holistic education in PPP Mode.

### Girls Hostels

163 Girls Hostels are sanctioned in the premises of Model Schools with an outlay of Rs.128.81 lakh under non-recurring and Rs.15.71 Lakh for recurring expenditure to accommodate 100 inmates. The construction of girls hostels are under progress at different stages.

### Providing Quality Education in Madarasas

Under the scheme to encourage Madarasas & Maktabas to introduce formal subjects i.e. Science, Mathematics, Social Studies, Hindi & English by means of providing financial assistance. One time assistance upto Rs.50,000/-for libraries/book banks/teaching learning material followed by an annual grant of Rs.5,000/-. A grant up to a maximum amount of Rs.15,000/-for purchase of science/ maths kits & other pedagogical equipment. An amount of Rs.100/- per teacher per day (15 days) for providing in service training through SCERT/DIET etc. 100% financial assistance to meet registration fees, examination fees & cost of study material supplied by NIOS for each student opting NIOS at Secondary & Senior Secondary level. Madarasa can opt for vocational course after fulfilling norms & standards set by NIOS(website link) with assistance for registration fee. ITT's in the vicinity of madarasa will be linked for the use of workshop. State Madarasa board to get

Rs.5 Lakh per year for the appointment of staff, Research & Evaluation & awareness generation amongst the Muslim community.

### Infrastructure development for Minority Institutions

This scheme facilitates education of minorities by strengthening school infrastructure in Minority Institutions (Elementary/Secondary/Senior Secondary Schools). Encourage educational facilities for girls, children with special needs and those who are most deprived educationally amongst minorities. It covers the entire country; however, preference will be given to eligible minority institutions located in district, blocks and towns having a minority population above 20%, based on available census data. The scheme "Infrastructure development for minority institutions" focuses on extending new trends in Education to educationally backward minorities through provision of basic educational infrastructure and physical facilities in 9 areas/blocks indentified by the Government of India in 6 Districts. The scheme provides funds a maximum of Rs.50 Lakh per school for strengthening of educational infrastructure and Physical facilities in the existing school including additional classrooms, science/computer lab rooms, Library rooms, toilets, drinking water facilities etc.

### Improvement of Urdu Education – Appointment of Urdu Teachers

Under the Central scheme 'Improvement of Urdu education financial support is provided to the state governments for appointing Urdu Teachers / Honorarium to existing teachers for teaching Urdu.

### District Institute of Education and Training

13 Teacher Training Institutes have been upgraded into District Institutes of Education and Training (DIETs) with an intake of 100 each under telugu medium. In 5 DIETs, Urdu medium parallel sections are running with intake of 50 in each and in one Tamil medium section 50 intake at Karvetinagar, Chittoor district. During the year 2016-17, 759 Private D.Ed., colleges are functioning with total intake of 41,100 (50/100 intake).

New syllabus is introduced in D.El.Ed course on the basis of NCTE 2014 norms. 1st year D.El.Ed text books and internship manual are developed and II year D.El.Ed text books development is in progress. The District level sport meet and state level sports meet for D.El.Ed students is planned.

## Sarva Shiksha Abhiyan

Sarva Shiksha Abhiyan is an effort to universalise elementary education by community-ownership of the school system. It is a response to the demand for quality basic education all over the country. The SSA programme is also an attempt to provide an opportunity for improving human capabilities to all children, through provision of community-owned quality education in a mission mode. Sharing pattern of GOI and GOAP is 60:40.

### Objectives

- All children in school, education guarantee centre, Alternative school, Back-to-School camp.
- All children complete five years of primary schooling.
- All children complete eight years of elementary schooling.
- Focus on elementary education of satisfactory quality with emphasis on education for life.
- Bridge all gender and social category gaps at primary and upper primary stage and Universal retention

### Intervention wise progress during 2016-17:

Progress overview 2016-17 of Access and Retention, out of school children, children with special needs and provided support services (CWSN) are given in Tables 8.4, 8.5, 8.6 and 8.7

Table 8.4 Access and Retention

Category of schools	Target	Achievement
Upgradation of PS to UPS	1	1
Residential Schools	2	2
Residential Hostels	13	13
Uniforms	2936570	2936570

Source: Sarva Shiksha Abhiyan

Table 8.5 Out of school children

Strategy	Target	Achievement
Direct enrolment in regular schools/ KGBVs/ Residential schools	20709	20709
Non Residential Special Training Centres	15698	10933
Madarasas	20516	15417
Seasonal Hostels (Residential)	13042	6525

Source: Sarva Shiksha Abhiyan

Table 8.6 Children with Special Needs (CWSN)

Activity	Achievement
Identified CWSN	94397
Enrolled CwSN	80997
CwSN provided home-based education	13400
CwSN covered through School readiness	12032
CwSN provided Aids & Appliances	7170
Resource Teachers	1340
Physiotherapists hired	226
Disabled friendly toilets (Schools)	3578
Ramps & Rails Constructed Schools	23015

Source: Sarva Shiksha Abhiyan

Table 8.7 Provided Support Services

Activity	Progress
Provided transport to CwSN	9942
Escort allowances to CwSN	7610
Children undergone Minor Corrective surgery	768
Children availing physiotherapy services	12771
Provided Braille books	722

Source: Sarva Shiksha Abhiyan

### Quality Enhancement

1248 teachers are provided ToT on languages, Maths and Science at State level.

Teachers undergone training at block and cluster and levels as shown below:

Languages & Maths for class I&II: 44,348

Languages & Maths for class III to V: 49,487

Maths and Science for class VI to VIII : 33,836

Training covered early literacy skills, Continuous & Comprehensive Evaluation (CCE), Gender sensitization, Learning Indicators (LINDICS), Pade Bharat Bhade Bharat (PBBB) & Rashtriya Avishkar Abhiyan (RAA) Swachha Bharat and Swachha Patasala also.

SOCIAL INFRASTRUCTURE

### Implementation of Rashtriya Avishkar Abhiyan (RAA) in Andhra Pradesh

Rashtriya Avishkar Abhiyan scheme is implementing in two districts (East Godavari and Visakhapatnam) and two leading institutions viz., JNTU, Kakinada and Andhra University, Visakhapatnam are identified as the nodal agencies in the state.

Modules for training developed based on SLAS, ASER & NAS analysis. Organized 45 day School Readiness & Class Readiness Programme.

### Research, Evaluation, Monitoring & Supervision (REMS)

PINDICS are implemented in all schools (PS:40880 and UPS: 12078) in the state. 135830 (PS: 98866 & UPS:36964) teachers are participated. Monitoring teams formed with state and district level sectoral officers in the name of “Sankalpam” online web application developed to monitor the school visits by field level functionaries through e-Monitoring App. Implemented Shalasisiddi in Primary and UP schools

### Conducted 3Rs Assessment Survey (2016-17)

The children achievement levels on 3Rs among the students of all managements i.e; Government & Local bodies for II to V classes in Telugu, English and Maths in all 671 blocks are covered (100%). Data Entry work is being progress under this survey. 2859343 children are covered from Class II to V. Over all trend analysis of 3Rs Assessment in the state is depicted in Chart 8.3 and children learning levels are depicted in chart 8.4

Chart 8.3: Trend analysis of 3Rs Assessment in the state 2016-17

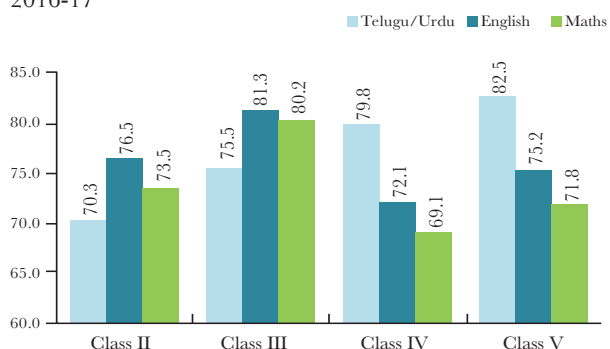
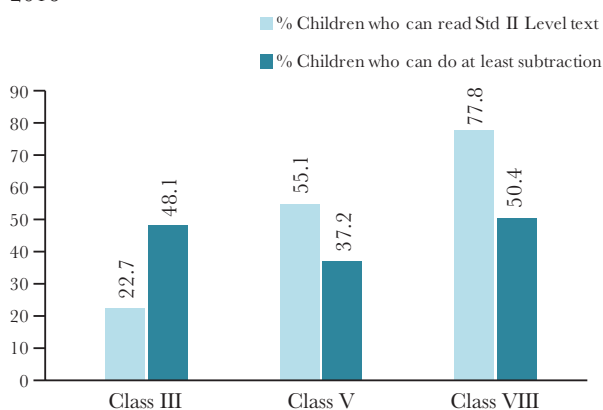


Chart: 8.4 Children Learning Levels according to ASER 2016



### Vidyanjali

The Government has launched Vidayanjali School Volunteer Programme at Atkur school, Krishna Dist. The Volunteers will conduct one or more from among the co-scholastic activities with children in standards 1st to 8th like helping children with creative writing; public speaking, play acting, preparing story books, reading books and it is started with 84 schools in Andhra Pradesh as a pilot basis

### Community Mobilization:

Badi Pilustondi & Mana Vooru Mana Badi:

Enrolment of Students and dropouts in Govt. Schools are shown in Table 8.8

Table 8.8 Enrolment of Students

Class	Students
Class I	262464
I to II	325560
II to III	344519
III to IV	344689
IV to V	356065
V to VI	367107
VI to VII	373976
VII to VIII	382763
Dropouts	5896

Source: Sarva Siksha Abhyan

## Activities

- Display of Tableau (15th August 2016 & 26th January 2017)
- Education Day (11th Nov. 2016) & Children's Day (14th Nov. 2016)
- Child Rights Week (14-20 November, 2016)
- Development of Training Handbook for SMC Members
- State level ToT for SMC Trainings & Training has conducted for 268038 SMC Members
- Vanam Manam (Plantation Programme by School Children)
- Badi Runam Thirchukundam (Persons showing gratitude to schools where they once studied): Rallies at Block/Mandal and District levels for inviting Community participation and Involvement in School Development. Positive impact observed by massive community support across the state

## Badi Runam Thirchukundam (School cared our future. We care our school future)

Organized rallies at Block/Mandal and District levels for inviting community participation and Involvement in School Development. Positive impact observed by massive community support across the state. A total of Rs.16.42 Crores obtained from community members across the state both in the form of cash and kind for school development through additional classrooms, Compound walls, additional uniforms, digital classrooms equipment, etc. and poster released in Finland for mobilizing NRIs across the globe.

## Activities taken up under Media

- Dial your SPD: Radio Phone in live interaction with School Children.
- Dr. Sarvepalli Radhakrishnan Best Educational News features Awards
- Kasturi bai-monthly Magazine exclusively for Girl Children.
- Hoardings, Pamphlet, Brochure, Banners for Badi Runam Thirchukundam
- Development of Documentaries, TV Commercials, Radio Gingles is in progress

## KGBV- Progress overview during (2016-17)

There are 352 KGBVs in and 95% pass percentage achieved in SSC 2015-16. 54 students got IIIT seats for the academic year 2016-17. 175 KGBV Schools achieved 100% pass percentage in SSC 2015-16. Special care is being given to CWSN children studying in KGBVs. In 2016, 1 deaf and dumb girl has scored 10/10 GPA

## KGBV -Achievements e-KGBV

Andhra Pradesh is the 1st state in the country to introduce digital class rooms in all 352 KGBVs and also proposed to provide Intermediate education in at least One KGBV per district from the academic year 2017-18. 13 KGBVs are proposed for upgradation as Junior colleges in the 1st phase. It is proposed 1st State in the country to monitor KGBVs through web based online Monitoring. Solar power systems of 5 KW capacity were provided in 65 KGBV schools in remote/agency areas towards self sufficiency in power generation. In Kadapa, Solar Lamps has been provided to all 29 KGBVs. NCC units are proposed for all KGBVs during this year to build up self confidence among KGBV girls

Magic English Second Language Learners Programme in KGBV Schools

This Programme is a two-year immersive English language program, attempts to rapidly improve the English proficiency of children from predominantly non-English environments in collaboration with Karadipath organization with support of UNICEF in 24 KGBVs of Guntur district. The programme targets Class 6th to 8th students to improve the English proficiency of 3000 students and 60 teachers since February 2016.

## Digital Classrooms

Set up 250 digital classrooms in Visakhapatnam district on pilot basis and improved enrolment and learning levels of the students. The unit cost of each digital class room is Rs.1.5 lakh. GIS School mapping is being progressed. 90% of schools were mapped the remaining schools are being completed by end of February 2017.

## SOCIAL INFRASTRUCTURE

## Progress overview - Civil Works

Sl. No.	Civil Works	Sanctioned under AWP & B 2016-17	Completed	Under Progress	Not Started
1	Additional Classrooms in lieu of upgraded UPS	3	0	3	0
2	Additional Classrooms (R, U & HA)	639	149	272	218
3	ACRs for Adding Class VIII	6	0	6	0
4	Boys Toilets	577	40	366	171
5	Separate Girls Toilets	308	21	162	125
6	Drinking Water Facilities (Urban)	244	8	50	186
7	Major Repairs (PS)	658	651	7	0
8	Major Repairs (UPS)	211	200	11	0
	Grand Total	2646	1069	877	700

Source: Sarva Siksha Abhyan

### Implemented Best Practices for enhancing quality of education among students:

**TaRL:** SSA initiated Teaching at Right Levels (TaRL) Program in collaboration with J-PAL & Pratham implemented in 1600 schools in 32 lowest performing Mandals of Anantapur District, covering 52,000 students. Being scaled up to 8000 schools in all Mandals in 2 districts – Kurnool, Vizianagaram covering 2.8 lacs students.

**ISHA:** SSA initiated teacher motivation and english teaching skills enhancement project being implemented in 460 schools of Kuppam Constituency. It is a 3 year program implementing in collaboration with ISHA Foundation since January, 2015-16.

**E-School Monitoring:** In Chittoor district one app was developed for monitoring of enrolment of the students, attendance of the teachers and monitoring of the physical facilities viz., drinking water and toilets in schools.

**Savithri Bhai Phule Best Women Teacher Awards:**

SSA has initiated the best women teacher's awards on the eve of Birth celebration of Smt. Savithri Bhai Phule. SSA has identified 41 best women teachers and honoured them. The government has decided for birth celebrations of Smt. Savithri Bhai Phule in every year for encouraging of best women teachers in the state.

**Student Academic Monitoring System in KGBVs:** For monitoring of students academic performance in KGBVs one software was developed through HAS technology for tracking of Attendance of students and Staff, academic performance as well as Health and Teacher Performance in Vizianagaram, Prakasam & Kurnool districts on pilot basis in 2016-17.

**Child Tracking:** To reduce the dropouts and increase the enrolment, Aadhar based child tracking is taken up based on drop box concept from UDISE data and supplemented by field survey. Based on the survey and identified 65,321 out of school children.

Utilising the services of Micro Soft Corporation Machine learning – Dropout analysis and prediction is in the process of development to predict the probable dropouts based on certain parameters and taking follow up action to prevent dropouts

**E-Clubs:** To improve communication skills among KGBVs students, English news papers were supplied and instructed to SOs and CRTs to inculcate the students to develop the reading habit of the news paper and also group discussion has been conducted for improving communication skills by weekly.

A bi-monthly student magazine titled "Kasturi" was released in covering of all educational information, promoting girl child education and best practices in and around the countries.



**Badi Pilustondi:** It is a unique programme to create awareness among the people on education for enrolment of students in primary schools so as to achieve RTE.

**Established Digital Class Rooms:** State has been introduced in 1212 schools in 1st phase with the support of U-SKY to provide content support in English and Telugu Medium and also provided ICT infrastructure facilities in all schools.

**SRUJANA:** It has been implemented in West Godavari with an objective to support and strengthen the academic standard and improve learning outcome through using TLM/ILM.

**Formation of KGBVs Alumni** with 28481 students from KGBVs in the state who have passed out SSC successfully since inception. Among them 3669 were employed in different sectors (Doctors, Engineers and software) and others are pursuing their studies.

Supplied 10,000 Tablets to all the HMs of model Primary schools, Upper Primary Schools and SOs of KGBVs for monitoring the student and teacher attendance and children performance to improve the quality education.

e - Monitoring through AFGF app on toilet sanitation status on the lines of Swach Bharat which is released to all districts as pilot basis for uploading the Photos. The APP is now standardised and it was released by January 2017

## Intermediate Education

*No of Junior Colleges – 3264*

*Enrollment (1st year) - 5,44,324*

*Pass %-General courses – 73.8%*

*Pass % in Vocational courses – 71.1%*

A policy decision was taken in 1964 to change the structure of secondary school system and introduce 10 year study duration instead of 11 years, followed by two years intermediate education in place of higher secondary and multipurpose system. The plus two stage education was introduced in Andhra Pradesh under 10+2+3 pattern from 1969-70. The Directorate of Higher Education has been bifurcated into two Directorates, Director of Intermediate Education and Directorate of Collegiate Education from 1-11-1989.

There are 447 government junior colleges including 8 government vocational junior colleges besides 130 private Aided Junior Colleges under the administrative control of the Director of Intermediate Education.

Conventional courses in science, arts and, commerce and vocational courses are offered at intermediate in plus 2 education. 27 Vocational courses are also being offered in the field of Engineering & Technology, Agriculture, Home Science, Business & Commerce and Humanities. Details about district wise and category wise functioning junior colleges are given in Annexure 8.8.

The category-wise Junior colleges in the districts under Government are shown in Table 8.9.

Table 8.9: Category wise Junior Colleges

S. No.	Category	Number
1.	Government Junior Colleges	447
2	Government Model Schools	163
3.	Private Aided Junior Colleges	130
4	Private Aided composite degree colleges offering Intermediate courses.	68
5	Private Un-Aided Junior Colleges	1749
6	Exclusively Vocational Junior Colleges (Private)	400
8	Incentive Junior Colleges	84
9	Others (APRJC, GOI, Social Welfare, Tribal Welfare, Disabled welfare, Co-operative, Railways)	223
	Total	3264

Source: Director of Intermediate Education

## SOCIAL INFRASTRUCTURE

## Enrollment of Students

Contact/Awareness Programme is conducted at district level/mandal level for identification of SSC dropouts and improvement of enrollment in government junior colleges for the academic year 2016-17. The government has fixed

minimum target of 10% increase in enrollment of students in government junior colleges over last year by preparing pamphlet, success stories of the students in the government junior college concerned. Enrollment of Students in the year 2016-17 are shown in Table 8.10

Table 8.10: Enrollment of Students in the year 2016-17

2016-17	Govt. + Aided+ Other Govt.institutions		Private		Total	
	No. of Colleges	Enrolment	No. of Colleges	Enrolment	Colleges	Enrolment
1st Year	1115 (447+130+538)	1,59,165	2149	3,85,159	3264	5,44,324
2nd Year	1115 (447+130+538)	1,36,187	2149	3,61,915	3264	4,98,732

Source: Director of Intermediate Education

## Results of Intermediate Examination

For 2nd year I.P.E March 2016, 4,11,941 candidates appeared for General Courses of which 3,04,035 students passed out whereas under Vocational courses, of the 21,708 candidates appeared, 15,433 students passed out. District wise General and Vocational courses results are given Annexure 8.9.

## Appointment of Faculty on Contract basis

About 3776 junior lecturers were engaged on contract basis in Government Junior Colleges during the academic year 2015-16. Government has accorded permission with certain conditions for renewal of the contract faculty for the academic year 2016-17. Orders were issued by the Government to renew the Contract Faculty working in Government Junior Colleges for the academic year 2016-17. 3668 Contract Faculty have renewed for the academic year 2016-17.

## Training Programmes

One day spoken English programme for Junior Lecturers in english conducted on 02-11-2016 for selected 75 Junior lecturers at Vijayawada.

## Short term vocational courses

About 3520 unemployed youth have been admitted/registered, of which 3272 were passed for 47 short term vocational courses for November, 2016 module under the notification issued by the State Institute of Vocational Education wing in the Commissionerate of Intermediate Education.

## Activities

### Supply of Free Text Books

Government sanctioned an amount of Rs.7.50 crores for supply of free text books to the Intermediate Students studying in the Government and Aided Jr. colleges. The free text books were already distributed to the 1,72,231 students of the Government /Aided Jr colleges for an amount of Rs.8.73 crore.

### Tribal Sub Plan on going works 2016-17.

The Government have sanctioned an amount of Rs.13 Crores for construction of attached hostels and additional class rooms under ST Sub Plan 2016-17. Works were sanctioned in Tribal areas of Srikakulam, Visakhapatnam, East Godavari, West Godavari Districts. Of which 18 works were proposed for construction of buildings in the Govt Jr Colleges with an estimated cost of Rs.15.30 Crores under this scheme.

### SC Sub Plan on going works 2016-17

The Government have sanctioned an amount of Rs.9.18 Crores for construction of attached hostels and additional class rooms under SC sub plan 2016-17. The proposals for an amount of Rs.9.66 Crores were submitted to Government for construction of college buildings in GJCs where the SC students strength more than 40%.

## RIDF works in the year 2016-17

The Government have sanctioned an amount of Rs.20 Crores for construction of additional class rooms under NABARD RIDF for the year 2016-17. An amount of Rs.19.05 Crores incurred expenditure up to December' 2016 towards the construction of additional class rooms in Govt Jr colleges. Under this scheme, 214 works were sanctioned for construction of additional class rooms for an amount of Rs.216.42 Crores under the RIDF 18, 19, 20 and 22 tranches. Of which 127 works were completed and an amount of Rs.104 Crores has been incurred expenditure up to November 2016.

## Apprenticeship Selection:

Vocational pass outs are sponsored for one year Apprenticeship Training with APSRTC/Hospitals/Business firms/Industry. The selected candidates are entitled to a stipend of Rs.2758/- per month during this one-year training period, half of which will be reimbursed to the training Agencies by Government of India through Board of Apprentice Training, Chennai. The department in association with Board of Apprentice Training (BOAT), Chennai have placed 793 vocational pass out students in various Hospitals /APSRTC/Business firms / Industry during the year 2016-17. The Apprenticeship selections were conducted at Visakhapatnam and Kurnool.

## Collegiate Education

Higher Education has been identified as a growth engine in the sunrise state of Andhra Pradesh and is pushed in a mission approach for sustaining and promoting quality of education and for providing purposeful education, particularly to students hailing from marginalized sections of the society.

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*No of Government degree colleges - 146*

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*No of students in degree colleges - 85,078*

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*No of students in Private Aided Colleges - 1,00,217*

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*Pass% in 2015-16 - 69.7*

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The department of collegiate education monitors the administrative functions and academic quality of 146 Government degree colleges (145 Degree +1 oriental college) and 141 Private aided colleges (126 degree +15 oriental) existing in the state. The department also looks after the development needs of 1,85,295 students (85,078 GDCs+ 1,00,217 Pvt. Aided Colleges) offering UG & PG courses. Out of these, 38 are autonomous colleges (11 GDCs + 27 aided), 16 oriental colleges (1 GDC + 15 aided) & 2 are social welfare Govt. residential degree colleges offering B.Com (Hons). The Department has initiated various programmes for sustaining and promoting quality of education.

Details about the number of Degree Colleges and their strength are shown in the Table 8.11.

Table 8.11 Degree Colleges and Students, 2016-17 (Number)

Type	Colleges	Students
Government Colleges(incl. one Oriental college)	146	85,078
Private Aided Colleges(126 Degree +15 Oriental)	141	1,00,217
Total	287	1,85,295

Source: Commissionerate of Collegiate Education

District-wise colleges, strength and category wise enrolments of Government & Private aided Degree colleges during the year 2016-17 are given in Annexures 8.10 and 8.11 respectively.

## Government degree colleges - Result

Results of Government degree colleges were analyzed and placed on the CCE website [www.apcce.gov.in](http://www.apcce.gov.in) to encourage and motivate the faculty members and to create a healthy competition among the colleges. Average pass percentage in 2015-16 is 69.7. 294 Lecturers secured 100% results in their subjects. 1041 Lecturers secured more than 90% pass percentage.

## SOCIAL INFRASTRUCTURE

## Important programmes / initiatives

### A. Academic

#### Starting New Courses

The department has introduced need based, job oriented new courses like biotechnology, industrial chemistry, microbiology, computer science, Communicative English, tourism, advertising and sales promotion etc., in government colleges in the last few years on partial self-financing basis keeping in view the recent developments in Higher Education. PG courses, on self-financing basis were also sanctioned every year on the basis of demand and facilities available.

#### Employability enhancement - Jawahar Knowledge Centres

Jawahar Knowledge Centers, initiated by the state government, have evolved into a dynamic and student friendly platform to accommodate job aspirations of students in degree colleges. 120 JKC's were established in government degree colleges and students trained in 250 hours curriculum having modules in Communication skills, soft skills, analytical skills and basic computer skills. Commerce students have the opportunity of undergoing training in financial accounting packages. 14460 candidates have participated in training programme and 2452 candidates were allotted placements in the state during 2016-17 (upto November 2016).

#### JKC – TISS training programme

To strengthen the existing Jawahar Knowledge Centers in Degree Colleges the department of higher Education has entered into partnership with the Tata Institute of Social Sciences (TISS). The parallel degree programme is designed so that the graduating youth acquire job related skills through immersive projects and will be offered to students through Jawahar Knowledge Centres (JKC) across the State. 12000 students enrolled in the programme in 100 Degree Colleges This would involve College student engagement over three years in a multi stakeholder collaborative model involving NGOs, Universities and Corporate Sector. During the three year graduation period, students can earn a Certificate in Management Skills- on completion of 3 years of study.

#### Special Concession to SC,ST & Disabled

JKC registration fee for SC and ST students was waived and met from the SCSP and TSP funds. Free training was provided to disabled students by meeting free fee from existing JKC funds of the respective GDC. About 6000 students got benefited by this scheme.

### B. Infrastructure development

#### Rastriya Uchchitar Siksha Abhiyan

Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is a Centrally Sponsored Scheme (CSS), providing funding to eligible state higher educational institutions. The funding to states would be made on the basis of critical appraisal of State Higher Education Plans, which would describe each state's strategy to address issues of Equity, Access and Excellence in Higher Education which is the objective of RUSA funding and the outcome will be visible through increasing GER, Quality Teaching and Relevance in Research output.

#### Action Plan under RUSA (Plan period 2012-17)

- Creation of Universities by way of upgradation of existing Autonomous College at Govt Arts College, Rajahmundry @ Rs.55 Crores
- Creation of Universities by conversion of colleges in a cluster at Kurnool @ Rs.55 Crores
- Construction of New Model Degree Colleges in six places viz., Kurnool (Atmakur), Prakasham(Yerragondapalem), West Godavari (Kamavarapukota), East Godavari (Jaggampeta), Srikakulam (Pathapatnam) and Vizianagaram(Cheepurupalli) districts are under progress @ Rs.12 Crores each
- Upgradation of existing Degree Colleges to Model Degree Colleges in two places at Visakhapatnam(GDC, Bheemunipatnam) and Guntur (GDC,Repalle ) @ Rs.4 Crores
- Infrastructure Grants to 56 Govt Degree Colleges in the state @ Rs.2 Crores

## C. Quality enhancement

The Department mandated all Colleges under its administrative control to get accredited by the (NAAC). The accreditation and subsequent grading by NAAC is a credible indicator of quality of education imparted by the institutions. The department extends necessary support to colleges in the process of accreditation such as training for Principals and Coordinators of (Internal Quality Assurance Cell) IQAC in preparation of Self Study Report (SSR) for submission to NAAC. 88 Government colleges are having valid NAAC grade as on 31.12.2016. Details of the grades are shown in Table.8.12.

Table 8.12: Grades obtained by Govt. Colleges

S. No	Details	Number
1	No. of GDCs with valid grade	88
2	No. of GDCs preparing for Cycle 2	9
3	No. of GDCs preparing for Cycle 1	16
4	No. of GDCs Established after 2008	30
5	No. of GDCs not functioning	2

Source: Commissionerate of Collegiate Education

## Capacity Building Programmes for Faculty:

The department provides training to Principals, Lecturers and non-teaching staff to enhance the academic, administrative skills of the staff. Lecturers working in government degree colleges are nominated by the CCE for training programmes including Refresher Courses and Orientation courses conducted by Academic Staff Colleges (ASC) of the Universities. 173 lecturers from government degree colleges were nominated to Academic Staff colleges of Andhra University, Visakapatnam, Sri Venkateshwara University, Tirupati. Capacity building programmes were conducted for principals of Govt. Degree Colleges.

## English Language Labs (ELL)

To improve the English communication skills, 71 English Language Labs (ELL) were established in Government Degree Colleges. To strengthen English language skills among the student community, in the academic year, another 28 ELLs are planned to establish.

## Autonomous Colleges

Three colleges, GDC(W), Kurnool, GDC(M), Palakol and GDC(W), Kakinada were conferred with Autonomous status. UGC Committee visited 1 college DK (W) GDC, Nellore conferred with Autonomous status and UGC committee visited GDC (w) Kadapa & SRR&CVR GDC, Vijayawada

## MANA TV

MANA TV is ICT based learning resource for students in remote and rural areas. This is two way audio and one way video tool where students can learn from subject experts. 135 Government Colleges in the State are having the facility. 355 programmes were conducted through MANA TV (live programmes-174, Special live programmes-17, recorded telecast- 200).

## Academic performance assessment of teaching staff

The department has devised academic performance indicators (API) for Lecturers & Academic & Administrative Performance indicators (AADPI) for Principals in consonance with UGC guidelines for assessment of teacher performance in a systematized way and API scores are placed on the website www.apcce.gov.in. 2036 Lecturers of Govt Degree Colleges and 1537 lecturers of Pvt Aided Colleges have submitted API scores.

## Awards - State Teacher, Pratibha and Yuvatarangam awards

54 awards were given to teachers on 5th September, 2016 on the occasion of Teachers day (University level-26, Subject wise-12, Subject wise awards to affiliating College teachers-16). The Government has instituted Pratibha awards for the students of Higher Education in recognition to their merit. 309 awards were given to the students of Degree Colleges on 15th October, 2016 at Vijayawada on the occasion of Abdul Kalam's Birth day. Each awardee is given Merit Certificate, Medal, Cash prize of Rs.20,000/- and Electronic Tab.

## District Resource Centres

District Resource Centers (DRC) were established in select colleges of all districts in the state to optimize utilization of

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resources by pooling and sharing among all the Government Colleges in the district. The DRCs have been conducting activities like extension lectures, seminars, academic competitions for students by sharing teacher expertise, labs, library, and other learning resources and sports infrastructural facilities. The DRC has emerged as a platform for conducting various activities over a period of time.

### Knowledge Mission:

As a part of the educational reforms in the state of Andhra Pradesh, the State Government has formulated Knowledge Mission to develop Andhra Pradesh as a Global Knowledge and Education Hub. Andhra Pradesh aims at becoming one of the three best performing States of India by 2020, and to become one of the best states in the country by 2029. The Government is adopting a two-track approach for implementation of the Knowledge Mission:

**Track-I:** Strengthening of existing Institutions through programmes like Curriculum upgradation, Establishment of Smart Campuses, Allotment of credits to Online courses, Introducing Gap Year concept, Establishment of Incubation Centers, Industry Collaborations, Training in Employability skills.

**Track-II:** Creation of new premier institutions of Higher Education.

28 Govt Degree Colleges are having WiFi connectivity on campuses and 146 Govt degree Colleges have introduced Biometric attendance system for faculty

### Key Performance Indicators (KPIs):

The Degree Colleges are graded based on Key Performance Indicators like NAAC accreditation, Infrastructure facilities, Focus on Research, Faculty Training programmes, Results & Placements and the grades are posted on CM dashboard ([www.core.ap.gov.in/](http://www.core.ap.gov.in/)).

### Academic Audit:

Academic audit was successfully conducted in all functional Government Degree Colleges & Private Aided Degree Colleges by the trained academic advisers during the last five academic years.

### Anti ragging:

The Government of Andhra Pradesh passed instructions to take necessary steps to eradicate ragging incidents in College premises as ragging has ruined countless innocent lives & careers and action being initiated against the students involved and also the Institution responsible. In this context, a toll free no. 1800 425 5314 was allotted and activated on 03.08.2015.

### Extra Curricular & Extension Activities

#### a. Vanam- Manam Programmme:

The Government of Andhra Pradesh had launched Haritha Andhra Pradesh Mission (MHAP) on 29th July 2016 through Vanam- Manam Programmme with a goal to achieve tree cover over 50 per cent of the total geographical area of the State by bringing an additional 40 lakh hectares of land under tree cover by 2029. All the colleges in the state was taken steps to immediate measures to ensure successful launch of Mission Haritha Andhra Pradesh on 29.7.2016 through Vanam-Manam Programmme. As per the directions of the Government, the plantation programme (by planting nearly 58,000 plants) was implemented effectively in and around the College premises (i.e.,in public areas also) by the students and Staff (both Teaching & non Teaching) of all the Degree Colleges in the State.

#### b. Women Empowerment Cell (WEC):

Women Empowerment is empowering the women to take their own decisions for their personal growth and development. The Commissionerate of Collegiate Education is keen to enhance the empowerment of women in social, economic and political terms as Women Empowerment is the core part of any development strategy. To empower Women in the society and to create awareness of the Women's Right, Women Empowerment Cells have been established in all Government and Aided Degree Colleges in Andhra Pradesh. The Principals and WEC Coordinators in 13 identified Govt. Degree Colleges are monitoring the functioning of WEC activities in Colleges in respective districts.

## Technical Education

Technical Education department promotes technical education in the State to bring out good engineers and technicians with profound knowledge, skill, positive work culture, improved efficiency and productivity. The ultimate goal is to ensure effective working of our industries and to shape our students to be competitive in the global market.

The department is responsible for development of technical education both at degree (graduate engineers) as well as diploma level (technicians). The department implements policies of the state government and also coordinates with All India Council for Technical Education (AICTE) in processing applications for the establishment of engineering, M.B.A., M.C.A., B. Pharmacy and polytechnic colleges and institutions, enhancement of sanctioned intake, introduction of new courses etc.

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*No of Professional Colleges - 1360*

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*Intake of Students - 3,21,003*

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*No of Polytechnic Colleges - 313*

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*No. of Polytechnic Students - 87,681*

- The department encourages qualitative Technical Education at degree and diploma levels through improved standards set by AICTE and National Board of Accreditation (NBA).
- The department encourages implementation of Government of India Schemes (MHRD) to provide sophisticated laboratory equipment and better residential and training facilities for diploma level Students to provide quality education by creating the stimulated industrial environment in Polytechnics to provide hands on experience and immediate job placements at supervisory level.
- The department in coordination with Board of Apprenticeship Training (BOAT), Ministry of Secondary

and Higher Education, Government of India and various organizations/ industries provide apprenticeship training to thousands of engineering graduates and diploma holders including sandwich courses to improve their skills to fit into the best production centers in the country

- The department and the State Board of Technical Education and Training A.P, conducts examination for diploma level and certificate courses. It also on a challenging basis implementing the e-Lessons and as a teaching aid in all subjects and error free EDEP (Electronic Dispatch of Exam Papers) System for conduct of diploma exams
- The department (convener for professional courses) nominated by AP State Council for Higher Education) conducts Web based admissions for EAMCET, ECET, ICET and POLYCET, as per the ranks secured by the candidates, in AP for Admissions into Professional Courses and Diploma Level Courses. This enables the student to attend counseling at any one of the above places in the State as per their convenience and select college and course of his choice. The Convener for the Diploma Courses will be nominated by Commissioner of Technical Education, AP.
- The department encourages Internal Revenue Generation (IRG) throughout the State in the Polytechnics, to update their skills and find out resources for institutional development.

### Professional Colleges

Government's proactive policy has been implemented by this department with increased intake in Technical Institutions particularly at Degree level. At present, there are 1360 diploma & degree level professional institutions with an intake of 3,21,003 in the State. The details of professional colleges and intake of students in the state are shown in Table 8.13.

Table 8.13: Professional Colleges and intake of Students

Type	Polytechnics	Students
Engineering	326	154962
MCA	201	15420
MBA	387	49140
B. Pharmacy	115	12720

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Type	Polytechnics	Students
Polytechnics	313	87681
D.Pharmacy	18	1080
Total	1360	3,21,003

Source: Technical Education Department

### Initiatives to Improve Access Polytechnic Colleges

There are 313 polytechnic institutions in the state with a total intake of 87681 and 18 D. Pharmacy institutions with a total intake of 1080. Details about the number and intake in Polytechnics colleges during 2016-17 are shown in Table 8.14.

Table 8.14: Polytechnics and Students, 2016-17

Type	Polytechnics	Students
Government Polytechnics	81	16395
Aided Polytechnics	2	715
Pvt. Unaided Polytechnics	72	34091
2nd Shift Polytechnics in Engineering Colleges	158	36480
Total	313	87681
D. Pharmacy Institutions	18	1080

Source: Technical Education Department

### Initiatives for Improvement of Quality

The following measures are being taken to correct the skewed ratio in intake of engineering and diploma holders of 4:1 as against 1:4 by increasing the intake in polytechnics in technical education.

46 new government polytechnics were established under Government Sector. 11 government polytechnics, 1 aided polytechnic, and 23 Private Un-Aided Polytechnics and 171 engineering colleges were permitted second shift polytechnics in the state. Initiated steps to start 3 community colleges under National Vocational Educational Qualification Framework (NVEQF) to provide employment and flexibility of studies by integrating general and vocational education by offering courses such as 1. software development 2. welding 3. fashion and garment technology.

### Establishment of National Level Institutions:

IIM, Visakhapatnam, Indian Institute of Technology (IIT) at Merlapaka Village Yerpedu (M), Chittoor Dist., Indian Institute of Science Education Research (IISER) at Srinivasapuram, Panguru and Chindapalle Villages of Yerpedu (M), IIT, Sri City, Chittoor District, National Institute of Technology (NIT), Tadepalligudem and IIT, Kurnool were started in 2015-16 and two more National level Institutes are established i.e. Tribal University at Relli in Vizianagaram District and Central University in Ananthapuramu district for the Academic year 2016-17.

The lands have been identified for IIT and IISER at Tirupathi and IIM at Visakhapatnam. Temporary accommodations for these 3 institutions and necessary steps are being taken up to commence IIT, Tirupathi and IIM, Visakhapatnam from the academic year 2015-16, foundation stone was laid for IIM and IIT institutes at Visakhapatnam and Chittoor respectively. Identification and finalization of lands to other institutions is under process.

### Schemes

#### a. Technical Education Quality Improvement Programme

TEQIP-II is a centrally sponsored scheme with the assistance of World Bank being implemented in the State for improving the quality of technical education prior to bifurcation of State, there were 25 Engineering Colleges selected under TEQIP-II with a tentative outlay of Rs.263.00 crores. At present, there are 11 selected engineering colleges and two centres of Excellence (CoEs) in two University Engineering Colleges under the purview of SPFU, AP with a tentative outlay of Rs.88.80 crores in the ratio of 75:25 between Central and State for the Government Institutions, and 60:20:20 share ratio among Central, State & Institutions respectively.

#### b. Apprenticeship Training

The department is also providing training for engineering graduates and diploma holders in collaboration with BOAT, MHRD Government of India. The department is conducting walk in interviews throughout the state to engineers and diploma holders and industries are participating in the camp for selection of Apprentices.



### c. New Schemes of MHRD, GOI under Skill Development:

The Ministry of Human Resource Development, Government of India announced various schemes for providing 100% direct central assistance under the scheme of sub-Mission of Polytechnics under coordinated action for skill development. In response to the proposals of the State Government, the MHRD sanctioned and provided funds under the schemes.

Sl. No.	Scheme	No. of Polytechnics	Amount Released (Rs. in crores)
1	Community Development through Polytechnics (CDTP)	29	11.19
2	Construction of Women's Hostel	27	22.70
3	Strengthening of existing Polytechnics (Up gradation)	35	24.40
	Total	91	58.29

### Other Important Schemes:

#### Exclusive schemes for SCs & STs students of GMR Polytechnics:

There are 2 GMR Polytechnics in the State for SCs Rajahmundry of East Godavari District and Madanapalle of Chittoor District. There are 3 GMR Polytechnics in the State for STs – Paderu of Visakahpatnam district, Srisaillam of Kurnool district, Yetapaka of East Godavari district. The Government for the first time sanctioned the scheme of “improvement of hostels for GMR Polytechnics for SCs and STs” which is an exclusive scheme for the benefit of SC and ST Students. The Scheme is expanded in technical education and more number of schemes are included to cater the needs of SC and ST Students of GMR Polytechnics. Four GMR Polytechnics for STs were located one each at Seethampeta, Gummalaxmipuram, Rampachodavaram and K.R. Puram with an annual intake of 120 students in two branches.

### The University of Knowledge Technologies

The University of Knowledge Technologies (RGUKT) cater to the educational needs of the rural youth. Two fully residential IIITs have been established under the UKT at Nuzvid in Krishna district and R.K. Valley in Kadapa district. These institutes are meant to specialize in teaching and research in Information Technology and emerging areas of Engineering and Science. The Under Graduate programme at these IIITs leading to a B.Tech Degree is six years duration. Admissions are made after the SSC level (Class X) on the basis of marks obtained in the board examination. All education is imparted through the use of IT&C. Now the intake is 1000 students for each APIIT.

### Buildings for Government Polytechnics

Sanction was accorded by Government for construction of Government Polytechnic Buildings and Additional Class Rooms/Hostels.

16 buildings were sanctioned in Government Polytechnics with an estimated cost of Rs127.41 crores under different tranches of RIDF and the construction of 10 buildings are completed and remaining are under progress.

## Family Welfare

Family Welfare department provides maternal health care, child health care and family welfare services through

7659 Sub-centres, 1156 Primary Health Centers, 193 Community Health Centers, 31 Area Hospitals, 8 District Hospitals, 3 Mother and Child Health Centres and 11 Teaching hospitals, apart from these 73 Urban Family Welfare Centers, 48 Post Partum Units and 222 (e)-UPHCs.

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*No of Sub-centres - 7,659*

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*No of Primary Health Centres - 1,156*

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*No of Community Health Centres - 193*

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*No of Area hospitals - 31*

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*No of district hospitals - 8*

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*No of Mother and Child Care centres - 3*

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*No of Teaching hospitals.-11*

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The estimated Crude Birth rate, Crude Death rate and Infant Mortality Rates for the year, 2015 in the state are 16.8, 7.1 and 37 respectively while it is 20.8, 6.5 and 37 for All India (as per Sample Registration System, bulletin December, 2016). The Male and Female expected life at birth in the combined AP State is 68.4 and 72.1 respectively

as against the All India figures of 68.8 and 71.1 in (2016-20). Maternal Mortality Ratio (MMR) is defined as the proportion of maternal deaths per 1,00,000 live births reported, which is 92 in the combined state as against 167 in All India (2011-13) as per the latest Sample Registration System results.

### Demographic Goals

The Goals fixed for State under Infant Mortality Rate, Maternal Mortality Ratio, Total Fertility Rate are <25, <80 and 1.8 respectively. Through Implementation of various planned departmental programmes in a structured process over the years has culminated in achievement of the set demographic goals in the following manner. Status of Achievement in Demographic Goals in AP are shown in Table 8.15

Table-8.15: Status of Achievement in Demographic Goals – AP

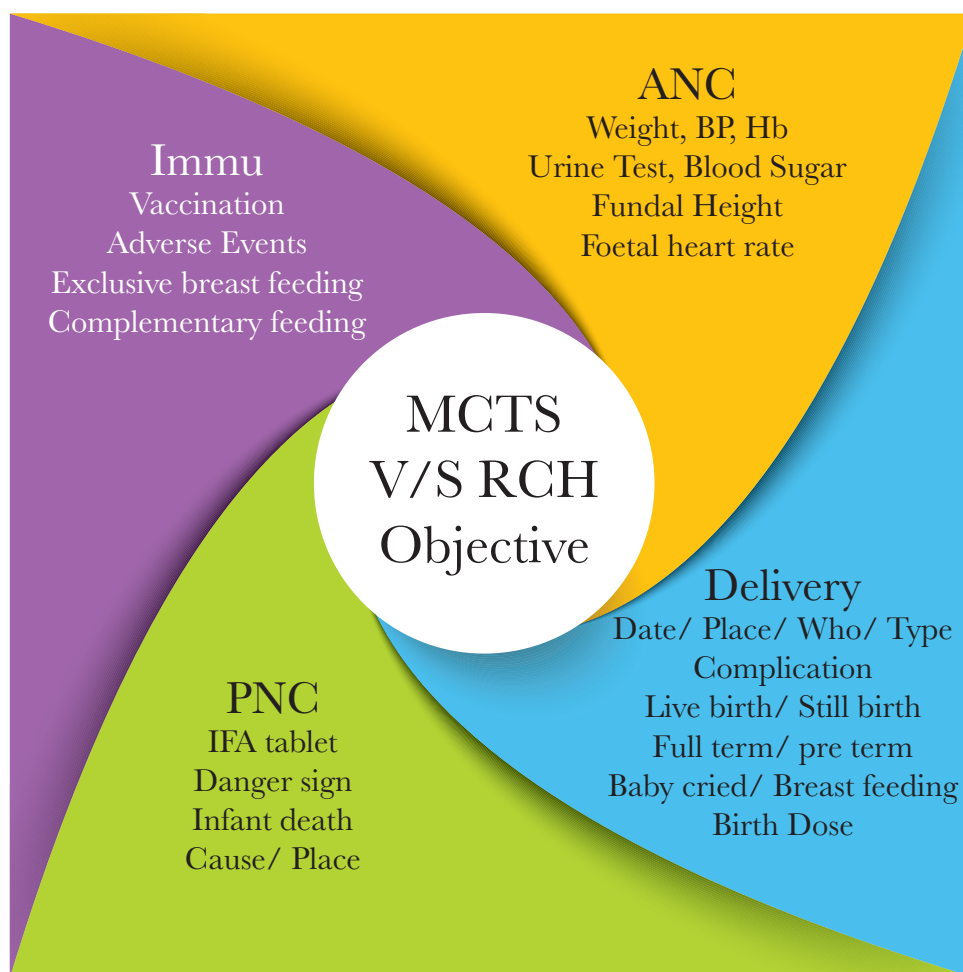
S. No	Name of the Indicator	Goal	Present Status		Source
			AP	India	
1	Maternal Mortality Ratio (MMR) (combined)	<80	92	167	SRS 2011-13
2	Infant Mortality Rate (IMR)	<25	37	37	SRS 2015
3	Under 5 Mortality Rate (U5MR)	<30	40	45	SRS 2014
4	Total Fertility Rate (TFR)	1.8	1.8	2.3	SRS 2014
5	Contraceptive Prevalence Rate (CPR)	-	66.7	48.2	DLHS-3
6	Crude Birth Rate (CBR)	-	17.0	21.0	SRS 2014
7	Crude Death Rate (CDR)	-	7.3	6.7	SRS 2014
8	Adult Sex Ratio (ASR) (Combined)	-	993	943	Census 2011
9	Child Sex Ratio (CSR) (Combined)	-	939	919	Census 2011

### A. Maternal Health Care Services

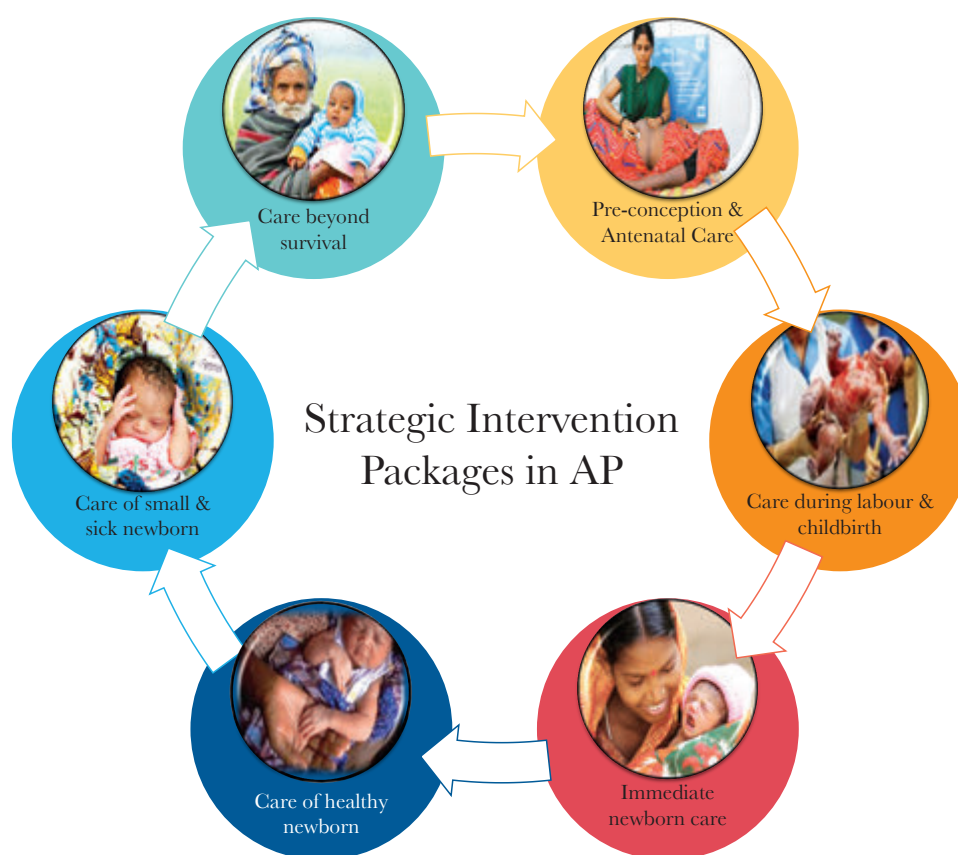
In Andhra Pradesh, Maternal Health Care Services are being provided to pregnant woman by implementing the following schemes/ interventions:

- Accredited Social Health Activist: 38755 ASHAs are working against the sanctioned strength 39009 in Rural Areas. Similarly, 2502 ASHAs are working in Urban area as against the sanctioned strength of 2660.
- Comprehensive Emergency Obstetric and Neonatal Care Services: 88 CEMONC centers were established in selected First Referral Units (CHCs/AHs/DHs) in the State.
- Blood Bank and Blood Storage Centres: 137 Blood Banks and 57 Blood Storage Centers are functioning in the state and 3,39,087 units of blood (118% of state target till date) were collected and voluntary blood donations of 2,59,893 (>100% of state target).

- d. 24-hours Mother & Child Health Centre: 460 PHCs are functioning as 24 X7. 23812 deliveries conducted by 24x7 PHCs from April to October 2016.
- e. Janani Suraksha Yojana: under this scheme 1.35 lakh were benefitted during 2016-17 (upto October 2016)
- f. Village Health and Nutrition Day Centres: under this scheme 3.00 lakh VHNDs conducted during 2016-17 (upto October 2016)
- g. Janani Sishu Suraksha Karyakram: Under this scheme 1.20 lakh PW availed free drugs and consumables during 2016-17 (upto October 2016)
- h. Maternal Death Review:
- i. Other Initiatives
- Mother and Child Health Cards for every registered pregnant women & children
  - Web portal for tracking mothers and children – 8.04 lakh mothers and 7.12 lakh children were registered during 2015-16 and 3.48 lakh mothers and 2.86 lakh children in 2016-17(upto October, 2016).
  - Adolescent Reproductive and Sexual Health (ARSH): The activities include promotive, preventive, curative and referral services. About 409 Adolescent Friendly Health Clinics were established throughout Andhra Pradesh.



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All interventions delivered at family & community level are also available at outreach/ Sub Centre.  
 All interventions delivered at outreach/ Sub Centre level are also delivered at health facility level.

Table 8.16 Progress under Key Performance Indicators under Mother Care Services.

S. No.	Indicator	2015-16	2016-17 (Apr to Oct)
1	ANC Reg.	861015	482123
2	High Risk PW	120349	68820
3	ANC 4 Checkups	760441	423429
4	Deliveries Transported through 108	316278	113052
5	Govt. Institutional Del.	338000	190961
6	Low Birth Weight (<2.5 Kgs)	21216	11098
7	Breast Feeding within 1Hr	657033	396180
8	Post Natal Checkups	600570	369551

### B. Child Health Care Services

The State Government has envisaged establishing 26 Special New Born Care Units (SNCUs), 18 Nutrition Rehabilitation Centres, 95 Newborn Stabilization Units (NBSUs) and 789 New Born Care Corners (NBCCs) in the state to reduce Infant Mortality Rate (IMR) by strengthening neo-natal care services. 21 centres will have 20 bedded facilities in district hospitals and teaching hospitals and five will have 10 bedded facilities in area hospitals/community health centres.

#### Child Immunization

All infants under one year are vaccinated against VPDs such as whooping cough, diphtheria, tetanus, polio, TB, measles, and hepatitis-B under immunization schedule through B.C.G, D.P.T, O.P.V., measles and hepatitis-B

vaccines. Subsequently they are subjected to DPT at 5 years TT at 10 and 16 years as booster doses. Instead of DPT & Hepatitis-B vaccines Govt. has introduced Pentavalent vaccine from the year 2015-16. Apart from these, routine immunizations including vitamin- A and intensified pulse polio immunization are also given twice a year.

#### **Rashtriya Bal Swasthya Karyakram**

Rashtriya Bal Swasthya Karyakram (RBSK) is being implementing in the state duly sub serving the existing School Health Programme and extending the coverage from birth to 18 yrs. The RBSK programme program is broadly aimed at screening children for 4ds (defects at birth, childhood diseases defections and development delays) and providing treatment with early intervention. To provide the referral treatment to school children 16 DEIC (District Early Intervention Centres) are also established to provide comprehensive treatment. Achievements of Rashtriya Bal Swasthya Karyakram Programme are shown in Annexure 8.12.

#### **Rota Virus Vaccine**

Rota Virus diarrhea is singularly responsible for up to 40% of all the severe diarrheal cases in India, killing 1 child in every 4 minutes in the country. Available data indicates that Rotavirus is responsible for nearly 8.7 Lakh hospitalizations, 32.7 Lakh outpatient visits and 78 thousand deaths annually in under-five children in India.

The vaccine against Rotavirus was introduced successfully in the Universal Immunization Programme (UIP) in 2016 in 4 States (Haryana, Himachal Pradesh, Andhra Pradesh and Odisha) of the country and now is being expanded to 5 other states (Madhya Pradesh, Rajasthan, Assam, Tripura, Tamil Nadu).

The vaccine is given at 6 weeks, 10 weeks and 14 weeks of the age orally in the form of 5 drops. Introduction of a rotavirus vaccine in the national immunization program is expected to result in 6.9 Lakh fewer outpatient visits, around 3 Lakh fewer hospitalizations and nearly 27 thousand fewer deaths each year in India besides reducing the incidences of malnutrition due to diarrhea among children and reducing the burden

of out of pocket expenditure while seeking treatment for diarrhea. Since launch in April' 2016 in Andhra Pradesh, till date a total of 10.70 lakh doses of Rotavirus Vaccine have been administered.

#### **Inactivated Poliomyelitis Vaccine**

The poliomyelitis is a crippling disorder of mainly affecting the young children resulting in permanent paralysis. The last polio case was seen in the country at 2011 and India was certified as "Polio Free" in 2014 by WHO.

As a part of Global Polio Eradication Initiative (GPEI), along with oral bivalent Poliovirus Vaccine (b-OPV)-the Inactivated Poliovirus vaccine (IPV) is introduced in UIP to mitigate the risk of emergence and transmission of VAPP and VDPV (vaccine associated paralysis) and to ensure 100% polio-free future and sustain gains made by eradication efforts.

In the State the IPV is given at 6 week and 14 week intramuscularly 0.1 ml through routine immunization delivery systems.

### **C. Family Welfare Services**

- a. Government is providing family planning incentives as compensation towards wage loss an amount of Rs.600/- is paid to Tubectomy acceptors belonging to BPL, SC and ST families and Rs.250/- to other Tubectomy acceptors. Similarly Rs.1100/- is paid to the Male Sterilization (Vasectomy) acceptors belonging to all categories
- b. Medical Termination of Pregnancy Services - The objective of the scheme is to provide MTP services to eligible couples for termination of unwanted pregnancies. These services are being provided at all Government hospitals in the state. 2,490 patients during 2015-16 and 1,536 patients 2016-17 (upto October 2016) benefited under this scheme.
- c. Family Planning insurance Scheme-. Under the scheme, Rs.2.00 lakhs is given after death of an acceptor due to sterilization operation within 7 days from the date of discharge from the hospital, Rs.50,000 for such occurrence between 8 to 30 days, Rs.30,000 for

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sterilization failure and a maximum of Rs.25,000 as expenses for treatment of medical complication due to sterilization operation. 16 persons were claimed FP Insurance (upto October 2016)

### D. Urban Slum Health Services

To provide preventive, promotive and curative services to people living in urban slum areas. There are 193 Urban Health centres functioning in the state through NGOs with State government funds. Each urban health centre covers 15,000 to 20,000 people in slum areas.

#### **Mukhyamantri Aarogya Kendram (e-UPHCs):**

The Government has upgrading all the existing UHCs into eUPHCs and named as Mukhyamantri Aarogya Kendram. In addition to existing 193 UPHCs 29 more centers are identified to convert as e-UPHCs and thus it is planned to establish 222 e-UPHCs in the urban area of the state. The new policy aims at providing wide range of health care services to the urban poor on free of cost which will be a boon to the urban poor and vulnerable sections and is aimed at decreasing out of pocket expenditure. The new system also ensures, if there is any need of further referrals of patient, the patient will be referred to tertiary government hospital only but not to the private hospital.

### E. Tribal Health Services

A number of interventions for improving delivery of effective, accessible and quality health services to the tribal citizens living in the agency areas are initiated in the state. Adolescent friendly health clinics are established at the AHs, CHCs and PHCs in tribal districts. Specialist camps are conducted twice a month in 30 CHCs at all tribal areas. Srisailam project hospital was proposed to be developed as a multi specialty hospital.

#### **Birth Waiting Homes**

Government sanctioned and constructed 31 birth waiting homes in tribal areas of 6 ITDAs to increase institutional deliveries and to reduce MMR and IMR. A policy was evolved to provide complete nutrition and peri-natal care to the pregnant women who use birth waiting home and their attendants.

### F. Preconception and Prenatal Diagnostic Techniques –

To prevent female feticide and to improve female sex ratio. So far 2664 Nursing Homes/Hospitals/Laboratories and Diagnostic Centers were registered in the state under PC&PNDT Act. Multi Member Appropriate Authority and Advisory Committees were constituted at State Level, District level and Sub district level

### G. Community Involvement

Community engagement to improve health services in the periphery through the following schemes and interventions.

- i. Untied Funds
- ii. Village Health and Sanitation Committee -13119 VHSCs formed. An amount of Rs.10,000/- given to each VHSC every year, for ensuring optimal use of health service in the village, maintaining quality health services and to prevent occurrence of epidemics in the villages.

### H. Special Initiatives

The state is implementing emergency transportation to aid patients in health emergencies, fixed day health services to converge services in each rural habitation for identification, diagnosis, treatment, record keeping and referral of high risk cases and health information help line to provide health advice and health counseling to public.

- a. Emergency Health Transportation Scheme  
433 ambulances with trained technical staff are available 24 hours /365 days through 108 - toll-free telephone numbers were made operational to cover the entire State. 5.73 lakh patients were transported under the scheme during 2015 and 3.33 lakh patients transported till Oct. 2016.
- b. **Fixed Day Health Services**  
277 mobile health vehicles are placed in all districts to provide once-a-month fixed day service at the rural habitations. 38.75 lakh patients utilized these services during 2015-16

### c. Health Information Helpline

For comprehensive management of issues related to pregnant women, Government initiated process for establishment of 102 call centres.

Details of achievements of Family Welfare Programme and immunization are given in Annexure 8.13.

## New Initiatives

In order to decrease Out of Pocket Expenditure (OPE) of the public, the government has taken up the following new initiatives.

### N.T.R.Vaidya Pariksha

#### Free Clinical Laboratory Services

It is endeavor of the Government to provide Free Essential Laboratory Investigations to all the patients visiting public Health Facilities. Government of Andhra Pradesh has adopted the National Health Missions mandate of providing 19 Free Investigations in PHCs, 40 in CHCs, 72 Tests in Area and District Hospitals.

Out of the 19 tests assured at PHC level 12 tests which are high volume and low cost will be conducted in house laboratory by the Technician of the Government. Only 7 tests which are in low volumes and high cost are outsourced to the agency. On the same lines 16 out of 40 Laboratory Investigations assured in a CHC will be carried out by Government Lab Technician in house and the remaining tests are outsourced similarly 19 out of 72 tests assured at Area and District Hospitals will be conducted in house laboratory and the remaining tests were outsourced to the agency.

Under this scheme all the patients visiting 1156 PHCs, 193 CHCs, 31 Area Hospitals and 8 District Hospitals in all the 13 districts of state including Tribal and hard to reach areas. 42.40 lakh Samples collected during the year 2016. 130.46 lakh free lab tests done during the year 2016. 14779 were benefitted under Free CT Scan services for the year 2016. 3.47 lakh were benefitted with Free Lab Tests upto October, 2016

#### Free Tele Radiology Services

It is endeavor of the Government to provide Tele Radiology Services to all the patients visiting and prescribed by a doctor

in all the CHCs, Area and District Hospitals across the State. The above initiative will facilitate the State of Andhra Pradesh to get Tele-Radiology interfaced till CHC level and would be second state in country to do so. 3.47 lakh were benefitted Free Lab Tests done during the year 2016

## Free Dialysis

Free Dialysis centers have been established in 11 centers at Srikalahasti, Rajahmundry, Tadepalligudem, Gudur, Hindupur, Machilipatnam, Proddatur, Nandyal, Narsipatnam, Tenali and Chirala and 2 Centres at Parvathipuram and Palakonda will be launched soon. 503 patients availed this facility.

## Bio Medical Equipment Maintenance Programme

Current dysfunctional rate is 28% for equipment inventory of Rs.480 Crores in the state. An initiative for maintenance of equipment of all equipment across all the hospitals has been taken up with NHM support

## Thalli Bidda Express

Reduction of Maternal Mortality Ratio and Infant Mortality Rates is the High Priority Area for the Government. Providing referral transport to the pregnant women is one of the interventions for reduction of MMR. In order to ensure provision of drop back service to every pregnant woman from hospital till home a dedicated fleet of 278 vehicles are positioned. 2.06 lakh pregnant women were transported

## Chandranna Sanchar Chikitsa (Mobile Medical Units)

Government of Andhra Pradesh launching Chandranna Sanchar Chikitsa. An initiative for providing quality Primary care services through Medical Officers at village level by upgrading 104 Fixed Day Health Services from April 2016. Chandranna Sanchar Chikitsa consists 277 Mobile Medical Units with a team of Medical Officer, Staff Nurse, Pharmacist and Lab Technician in every Mobile Medical Units, 13903 villages with population of 262.80 lakhs will be covered once in a month. Under this scheme the people were providing the services of screening diagnostics,

SOCIAL INFRASTRUCTURE

dispensing drugs to non communicable diseases, regular checkups to Antenatal and Postnatal women, immunization and Child Health, Regular Water quality monitoring and Health awareness programmes.

Maintaining electronic medical records of every beneficiary on real time basis is strong back bone to this initiative. 59 types of drugs, medicines and lab consumables will be made available in every MMU. This initiative reduces Infant Mortality Rate, Maternal Mortality Ratio, diseases burden due to non communicable and out pocket expenditure on account of Health. 23.73 lakh of Patients treated and 0.44 lakh water bodies checked

**Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)**



The Government of India has launched PMSMA 9th of July 2016 in the state of Andhra Pradesh. The objective of PMSMA is to ensure that all the pregnant women receive at least one ANC check up in 2nd & 3rd trimester by doctor/ Gynecologist and to reduce the gap of pregnant women from 1st ANC checkup to Full ANC checkup. Another objective of PMSMA is to identify the pregnant women early for high risks and refer to higher facility for management with dedicated & appropriate birth planning so as to decrease the maternal morbidity & mortality, thereby giving a positive outcome “Safe Motherhood & Healthy Infant”. PMSMA is being conducted on 9th of every month at all public health facilities. 2.14 lakh PW were received ANC services under PMSMA up to Oct 2016.

**NTR Baby Kits**

The main aim of the NTR Baby Kits to reduce the Infant Mortality Rate (IMR) and reduce infection rate in mother and baby. It is also motivating the pregnant woman for their safety delivery in Government Hospitals only. The NTR baby kits consists of Baby bed cum carrier with zip, baby Wrap, baby protective Net, Liquid hand wash and Rexine Kit bag (total 5 items). This programme has been launched 20th September 2016 in the state. The NTR baby kits click in AP state and also helps to reduce infections of the Mother and Baby. A total of 0.83 lakh baby kits were distributed in the state upto November 2016.

**Swasthya Vidya Vahini**

Government of the Andhra Pradesh launched Swasthya Vidya Vahini programme on 24 December 2016. The main objective of the scheme is to achieve the SDGs had opted for Health Promotion Initiative SVV (Swasthya Vidya Vahini) to improve health literacy of the rural populations by addressing the social determinants of health at the community and social environments. Teams of students shall visit villages with messages to promote health. They are attached to a MMU which will provide health services. Each student team is fixed for a Gram Panchayat for a period of 10 months. At the end of the month the students shall observe and measure the changes in the thematic areas. Concurrently the outcome in terms of disease burden or health seeking behaviors is measured. The Ten Thematic Areas are Wash, Environmental Hygiene, Communicable Diseases, Personal Hygiene, Anaemia, Reproductive & Child Health, Nutrition, Physical literacy, Non Communicable Diseases and Substance abuse

**Dr. NTR Vaidya Seva**

Dr.NTR Vaidya Seva’ scheme counts to be one of the pioneers in terms of achieving equity and providing accountable and evidence-based good-quality health-care services in the state to assist poor families from catastrophic health expenditure. The aim of the scheme is to provide Health Coverage to BPL families. The scheme is a unique



PPP model in the field of Health, tailor made to the health needs of poor patients and provides end-to-end cashless services for identified diseases under secondary and tertiary care through a network of service providers from Government and private sector.

The objective of the scheme is to improve equity of access to BPL families to quality tertiary medical care both by strengthening the Public Hospital infrastructure as well as through purchase of quality private medical services to provide financial support for catastrophic health needs. The treatment of diseases shall be by way of hospitalization and surgeries or therapies through an identified Network of Health Care Providers.

In order to facilitate effective implementation of the Scheme, the State Government set up an independent Trust “Dr.NTR Vaidya Seva Trust”, which, in consultation with the specialists in the field of healthcare, runs the Dr.NTR Vaidya Seva Scheme.

### Network hospitals - service providers

A health care provider shall be a hospital or nursing home in the state both from public and private sector established for indoor medical care and treatment of disease and injuries and should be registered under Andhra Pradesh Private Allopathic Medical Establishments (Registration & Regulation) Act and Pre-Conception and Pre-Natal Diagnostic Techniques Act (wherever applicable).

### District administration- mobilization

District level monitoring committees implementing the scheme through regular review meetings and also help mobilize patients by encouraging them to attend camps, conducting awareness campaigns through peoples representatives, Self Help Groups and other field functionaries.

### Geometry of health coverage

The beneficiaries of the scheme are the members of Below Poverty Line (BPL) families as enumerated and photographed in White Ration Card linked with Aadhar card and available in Civil Supplies Department database. The Scheme provides Health Coverage to BPL population

including Prevention, Primary care and In-Patient care. All the Primary Health Centres (PHCs) which are the first contact point, Area/District Hospitals and Network Hospitals are provided with Help Desks manned by Vaidya Mithra to facilitate the patients. The Scheme is intended to benefit 150.95 lakhs families in all districts of the state.

### Technology Solutions

A dedicated real-time online workflow system was designed by the Trust in order to bring dynamism and decentralization of work like Online processing of the cases starting from registration of case at first referral center, health camps etc., registration at network hospital, pre-authorization, treatment and other services at the hospital, discharge and post treatment follow-up, claim settlement, payment gateway, accounting system, TDS deductions, e-office solutions etc. The maintenance of the workflow is done round the clock.

The choice of hospital for treatment is with the patient. The entire process from the time of conduct of health camps to the screening, diagnosing, treatment, follow-up and claim payment is made transparent through online web based processing to prevent any misuse and fraud.

### Achievements made under the Schemes being implemented by Trust:

#### 1. Dr. NTR Vaidya Seva Scheme and CMCO:

Twelve (12) CMCO peripheral centers are established in the state except Krishna district for issue of CMCO referral cards to the eligible poor patients. The CMCO referral card holders undergo cashless treatment under the Dr.NTR Vaidya Seva Scheme in the respective Government Network Hospitals. There were 10.34 lakhs patients treated as out-patients and 9.57 lakhs patients treated as in-patients in the Network Hospitals. 8.97 lakhs therapies were pre-authorized at the cost of Rs.2521.14 crores for the period from 02.06.2014 to 31.10.2016.

District-wise details of Health camps conducted and the performance in the identified therapies under the Scheme for the period from 01.04.2016 to 31.10.2016 are given in Annexure 8.14.

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**2. Employees Health Scheme:**

Trust is the Implementing Agency for the Employees Health Scheme under the supervision of Government for providing health coverage to all regular State Government employees, service pensioners, family pensioners etc. for 1885 notified therapies in 31 categories in the empanelled Network hospitals. There were 2.36 lakhs patients treated as out-patients and 1.42 lakhs patients treated as in-patients in the Network Hospitals. 2.43 lakhs therapies were pre-authorized at the cost of Rs.304.67 crores for the period from 02.06.2014 to 31.10.2016.

Under the Schemes of Dr.NTR Vaidya Seva Government has issued orders for conducting high end procedures of Heart, Lung, and Heart-Lung transplantations and all the employees of above 40 years will be eligible under Employees Health Scheme for a free medical checkup in any "Notified Hospitals" once in a year consisting of comprehensive services.

Government has decided to provide outpatient treatment under Employees Health Scheme for chronic diseases like non communicable diseases (NCDS) such as Diabetes, Hypertension, Coronary Artery diseases, cerebro-vascular diseases, Cancers, Renal failure; communicable diseases such as Tuberculosis, Leprosy, etc., postsurgical, post-traumatic conditions, etc., all of which require longer-term sustained medical treatment, including consultation, medicines and diagnostics in the notified Government Hospitals.

**3. Working Journalists Health Scheme:**

Providing health services to the accredited Print and Electronic Media Journalists and accredited freelance journalists and their dependent family members in the empanelled Network hospitals. There were 1220 patients treated as out-patients and 712 patients treated as in-patients in the Network Hospitals. 1200 therapies were pre-authorized at the cost of Rs.1.44 Crores for the period from the date of commencement of the Scheme i.e., 21.03.2015 to 31.10.2016.

**Follow - Up Services**

Follow-up package for consultation, investigations, drugs etc., for one year for listed therapies formulated by Technical Committee of the Trust in consultation with specialists are listed in website: [www.ntrvaidyaseva.ap.gov.in](http://www.ntrvaidyaseva.ap.gov.in).

**Impact on Health Scenario**

- i) Changing Tertiary care profile
- ii) Improvement in documentation and regulatory effect on Hospitals
- iii) Improvement in quality of services:
- iv) Establishing Medical Protocols tailor-made to local situations
- v) Performance of Government Hospitals

**104 seva kendram:**

The services offered by the 104 seva kendram are two types  
 a) Inbound services - health advice, medical advice, health information, counseling, blood bank information, complaint registry, employees health scheme  
 b) out bound services- health advice, monitoring and evaluation of mother and child health services, feedback of Dr. NTR Vaidya Seva. 63.76 lakh calls were registered under inbound services and 16.10 lakhs were registered under outbound services for the period from 02.06.2014 to 31.10.2016. The Outbound and Inbound calls registered for the period from April 2016 to Coctober.2016 were 3.75 lakhs and 3.22 lakhs respectively.

**Special focus of Govt. on the Dr.NTR Vaidya Seva Scheme:**

- The Government enhanced the financial coverage from Rs 2.00 lakhs to Rs 2.50 lakhs per family per year.
- The Govt added 100 more procedures to the existing thereby increasing the procedures to 1044.

**Strengthening of Govt institutions**

- Establishment of Centre of Excellence for Cardiac and Cardiothoracic categories at Govt. General Hospital, Guntur under PPP model. Govt. has identified Govt. General Hospital, Guntur as Center for Excellence for performing Heart Transplantation surgeries for the beneficiaries under the Schemes of Dr NTR Vaidya Seva and Employees Health Scheme.

- Empanelment of Trauma Care Center, Dist Hospital, Eluru under Neurosurgery category for providing tertiary care services.

### Cochlear Implantation Scheme:

Financial assistance of Rs.6.50 lakhs is being provided under the Trust to the BPL patients undergoing Cochlear implantation surgery and Audio Verbal Therapy (AVT) for one year to the totally deaf children of below 5 years for Pre-lingual deafness and 12 years of age for Post lingual deafness.

### Special Tribal Health Camps:

The aim of the Government is to achieve “Health For All” in Andhra Pradesh and to bring awareness among the tribal population of State, majority of them are farmers and agricultural illiterate laborers and are not aware of advanced medical treatments and are silent sufferers of ill health. This is truer in case of diseases related to heart, kidney, brain, cancer and injuries due to domestic accidents and burns.

Government has intended to conduct Tribal Health Camps regarding the diseases they suffer from and to provide free medical care and refer the patients to Government and Corporate Network Hospitals for secondary and tertiary care for the procedures identified under the Scheme. Health education is conducted to create awareness about the seasonal diseases.

- The date and venue of Health camp will be intimated to the surrounding villages through IEC Activities. 2 NWHs are permitted to participate in the Tribal Health Camp. and Identified referred patients to Network hospitals. Medicines, Refreshments and Fruits etc are distributed to the beneficiaries in the Health camps. Free diagnostic services are provided in the Health camps.
- The IEC activity during the health camps, screening, counseling and treatment of common ailments in the health camps and out-patient services in network hospitals is supplementing the government health care system in preventive and primary care.

- There were 3734 Medical camps conducted in rural areas and screened 10.48 lakhs patients by the Network hospitals and referred 9790 patients to the Network hospital for further cashless treatment

### New initiatives:

#### Dengue:

Trust has introduced the coverage of epidemic and communicable diseases like dengue in 2014 to treat the poor in crisis.

## Andhra Pradesh Vaidya Vidhana Parishad

Andhra Pradesh Vaidya Vidhana Parishad (APVVP) is an autonomous organization funded by the Government of Andhra Pradesh, started functioning from March 1st 1987 to manage secondary level hospitals. At present there are 116 hospitals under the control of APVVP. CHC Alluru, Nellore districts are transferred from District hospitals to the control of APVVP. 122 hospitals are also transferred to the control of APVVP in the State and the details are shown in Table 8.17.

Table 8.17: Hospitals and Beds

Type of Hospitals	Hospitals	Beds
District Hospitals	8	2200
Area hospitals	31	3100
Community Health Centers	193	6510
Specialty Hospitals	4	260
FRUs in Urban areas	0	0
Dispensaries	3	0
Additional beds in hospitals	0	2369
Total	239	14439

Source: AP Vaidya Vidhana Parishad

## SOCIAL INFRASTRUCTURE

## Hospital Activities

APVVP hospitals provide outpatient services, inpatient services (including emergency & surgical), diagnostic services and laboratory services. These hospitals along with the Primary Health Centers and Teaching hospitals (Tertiary Hospitals) act as a platform for implementation of various national health programs like Malaria, Tuberculosis, Family welfare, AIDS, etc.

The APVVP deals exclusively with the middle level hospitals of bed strength ranging from 30 to 350. These institutions also referred to as secondary hospitals or first referral hospitals and are called District Hospitals, Area Hospitals and CHCs depending on bed strength.

The District Hospitals (DH) provide service with a bed strength ranging from 200-350 and ten clinical specialities like Obstetrics & Gynecology, Pediatrics, General Medicine, General Surgery, Orthopedics, Ophthalmology, ENT, Dental Pathology & Dermatology.

The Area Hospitals (AH) provide services with 100 beds and four clinical specialities like Obstetrics & Gynecology, Pediatrics, General Medicine and General Surgery.

The Community Health Centres (CHC) with 30-50 beds provide maternity and child health care services. These Hospitals are provided with professional Staff (Doctors, Nurses and Paramedics) and medical equipment depending upon their service levels and bed strength. Drugs are provided to all Hospitals by the Central drug stores under APMSIDC as per the requirements.

## Blood Banks and Human resources

There are 26 blood banks and 38 blood storage centres are functioning in APVVP Hospitals in the State. These blood banks are providing blood to the needy patients in the Hospitals. There are 1563 Doctors, 2022 Nursing and 1149 Paramedical, 386 Administration cadres working for health care in the state. Certain services are taken on third party or outsourcing basis. Sanitation and cleaning services are taken on third party or outsourcing basis. Sanitation and cleaning services are contracted to third party agencies and other non clinical services like security are provided mostly through third party or contract basis.

## Hospital Performance

The comparative performance of hospital activities in are shown in Table 8.18.

Table 8.18: Performance Indicators of Hospital activities  
(Nos in Lakh)

Indicator	2014-15	2015-16	2016-17 Up to Nov, 2016
Out patients	164.35	49104	45830
Inpatients	13.53	44298	40362

Source: AP Vaidya Vidhana Parishad

## Performance of National Rural Health Mission

Under NRHM 14 SNCU, 7 NRC, 96 NBSU, 77 CEMONC, 21 Tribal Hospitals are functioning in APVVP Hospitals. 3 MCH Hospitals are established in APVVP Hospitals.

## Special Care New born Units

Government sanctioned 14 SNCUs to APVVP hospitals. These units provide special medical care and treatment to low birth weight new born babies and premature babies. The Performance of SNCU in APVVP Hospitals are shown in the below Table.8.19

Table 8.19: Special Care New born Units

Births under SNCU	No. of units (2015-16)	No. of units upto Dec, 2016)
Birth weight of babies		
>2500gm	7865	8938
<2500gm	3709	4552
1500-2499gm	463	563
1000-1499gm	104	110
Preterm births(Gestation)		
>37 weeks	7200	8486
<37 weeks	3663	4205
No. of new borns who required resuscitation at birth	1048	1393

## Trauma Care Centres

The Government has taken up establishment of trauma care centres in 5 APVVP Hospitals located in the state to provide immediate emergency Medical care to accident victims.

## New Born Stabilization Units

96 new born NBSU are located in APVVP hospitals in the state. The NBSUs are used to stabilize new born babies. During September 2015 to November 2016, 56408 cases were admitted, 50152 were discharged, 4745 were referrals and 317 were deaths.

## Nutritional Rehabilitation Centres

There are 7 NRCs in the APVVP hospitals. These NRCs provide care to sick and malnourished children. During Sep 2015 to November 2016, 1627 cases were admitted and 1456 cases were discharged, 974 were discharged with target weight gain, 728 cases were referrals and 1570 cases were children followed up.

## NTR Vaidya Seva

NTR Vaidya Seva scheme was introduced in all district hospitals, most of the Area Hospitals and a few CHCs have empanelled, based on the availability of specialists and equipment were covered. There is a gradual increase in the number of cases treated in the APVVP hospitals.

## Performance of Janani Shishu Suraksha Karyakram under NRHM, RCH-II Programme

Janani Shishu Suraksha Karyakram scheme is being implemented at the Hospital level. Under Janani Shishu

Suraksha Karyakram in APVVP hospitals. The Scheme aims to provide cashless deliveries, free transport facilities and care to sick new born for 1 year after birth, make local purchase of emergency drugs and consumables, facilitate diagnostics for ANC checkups and provide free blood and free diet.

# Health

## National Vector Borne Diseases Control Program

The National Vector Borne Diseases Control Programme (NVBDCP) deals with Malaria, Japanese Encephalitis, Suspected Viral Encephalitis, Dengue, Chikungunya, Filariasis and Kala Azar under an umbrella program with broad objectives of "Prevention of deaths due to vector borne diseases and Reduction of morbidity. Enhanced Malaria Control Project was introduced in 1997, aided by World Bank, covering tribal areas of 10 districts in the State. The major strategies include: 1. Early diagnosis and prompt treatment of all vector borne disease cases, 2. Integrated Vector Control Measures through adoption of insecticidal spray operations, personal prophylactic measures and source reduction method, 3. Capacity building and 4. Inter sectoral co-ordination between the medical, health and other departments, Health education through Information Education and Communication (IEC) to create awareness among people regarding the diseases its prevention and control. Details on Vector borne diseases are shown in Table 8.20.

Table 8.20: Vector Borne Diseases

Diseases	2015			2016 (upto Dec,2016)		
	Blood samples (Lakhs)	Cases	Deaths	Blood samples (Lakhs)	Cases	Deaths
Malaria	68.17	25042	0	60.84	21523	2
Dengue	0.17	3162	2	0.24	3339	2
Chikungunya	0.00	83	0	0.00	140	0
JE	0.00	0	0	0.00	3	0
Filaria	1.34	27	0	1.46	8	0

Source: Directorate of Health.

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## TB Control Programme

The Revised National TB Control Programme (RNTCP) has developed National Strategic Plan to be implemented during 2012-17, the nation 12th Five Year Plan period.

### vision and objectives for RNTCP.

The main goal of the programme is to ensure Universal Access to quality TB diagnosis & treatment for all pulmonary & extra pulmonary TB Patients including drug resistant and HIV associated TB.

Objectives of Revised National TB Control Programme

- To achieve 90% notification rate for all types of TB cases
- To Achieve 90% success rate for all new and 85% for re-treatment cases

- To significantly improve the successful outcomes of treatment of Drug Resistant TB
- To achieve decreased morbidity and mortality of HIV associated TB
- To improve outcomes of TB care in the private sector.

### Action Plan

- To achieve 85% cure rate among new sputum positive TB cases registered
- To detect 70% (52 cases per one lakh population) of the estimated new sputum positive cases after achieving object 1. Year-wise details are shown in 8.21

Table 8.21 Performance of RNTCP.

Year	Total case detection rate (142)	New smear +ve detection achieved	Smear conversion (expected 90%)	Cure rate expected (85%)
2012	131	80%	91%	87%
2013	124	75%	90%	86%
2014	128	78%	90%	87%
2015 (upto Sep)	122	75%	93%	88%
2016 (upto Sep)	126	80%	94%	89%

Source: Directorate of Health

## National Program for Control of Blindness

National program for control of blindness was started in 1976 to reduce prevalence of Blindness from 1.4% to 0.3% by 2020. The present rate is 1% as per the survey of Government of India.

### Disease Control

Free Cataract surgeries, both in Government and NGO sector; refractive errors detection, school eye screening, distribution of free spectacles, eye ball collection through eye banks and eye donation centres and early detection of other eye diseases viz., Glaucoma and Diabetic Retinopathy

### Objectives

- To provide high quality eye care to affected population
- To expand coverage of eye care services to the under-served areas
- To reduce the backlog of blindness
- To develop institutional capacity for eye care services

### Cataract Operations

3.33 lakh cataract operations were conducted during 2015-16 and 2.29 lakh operations conducted during 2016-17 (upto December 2016). Details about School Children Eye screening are shown in Table 8.22.

Table 8.22: School Children Eye Screening (Nos.)

Item	2014-15	2015-16	2016-17 (up to Nov 2016)
Teachers Trained	8171	11119	3276
School Children eye Screened	1281404	1247860	523056
School Children detected with Refr. Errors	65363	66476	28200
Distribution Free Glass	41633	38073	5577
Eye Ball Collection	2628	3115	2396

Source: Directorate of Health

## National Leprosy Eradication Programme (NLEP) Services of NLEP

Diagnosis and treatment free of cost in all the PHCs, treatment of leprosy reactions, provision of MCR foot wear to the affected, reconstructive surgery (RCS) for correction of early deformity, provision of incentives for undergoing RCS, disability pensions, AAY cards, incentives to ASHA s for identification and follow up of leprosy cases.

## High endemic District in the state

As on March -2016 high endemic districts in the state are Srikakulam (11.76), Vizianagaram (13.83), Nellore (10.87), Ananthapur (10.45) and Kurnool (10.13). Annual New Case detection rate is more than 10 per one lakh population in these districts. A special campaign on LCDC is done in Vizianagaram and new cases detected are 161.

## Action taken on High Endemic Districts

1. Survey in selected pockets under strict supervision, 2. healthy household contact examination, 3. training of GHC staff on leprosy and DPMP activities, 4. awareness in the community for early case detection, voluntary reporting of suspects at the PHC and behaviour change communication, 5. involvement of persons affected with

leprosy and 6. validation of the diagnosed cases by the District Nucleus team

## Integrated Disease Surveillance Project

Integrated Disease Surveillance Project (IDSP) is a decentralized, district based surveillance programme intended to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner. Syndromic (Form S), Presumptive (Form P) and Confirmed (Form L) are the different types of surveillance under IDSP. Average Reporting % of S,P,L form – 48 weeks – 2016 are shown in Annexure 8.15

## National Iodine Deficiency Disorders Control Program

Iodine is a micro nutrient and the body requires 100  $\mu$  -150 $\mu$  gms of iodine for normal body growth and mental development. Iodine Deficiency is the single most common cause of preventable mental retardation and brain damage. Iodine deficiency in pregnant women may cause miscarriages, still birth and birth defects. Children with Iodine Deficiency grow up stunted, less active and may be retarded with impaired movement or hearing. National Iodine Deficiency Disorders Control programme is implemented as 100% Government of India sponsored scheme.

## Action Plan

- A stakeholder meeting was conducted in June 2015 in order to discuss about the status of universal salt iodization and seek inputs from various concerned stakeholders for effective program implementation.
- In relation to this, salt producers and consumers meeting was held on in September 2015, to review the supply of iodized salt in the state.
- Government ordered to supply of iodized salt through PDS (Public Distribution System).
- Process has initiated to procure salt testing kits in order to continue testing of iodized salt, all over the state.

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Sl. No	Name of the district surveyed	Total Goitre Rate (TGR)	Salt samples PPM		UIE (Urinary Iodine Excretion)	
			Less than 15 PPM (%)	15 PPM or more of iodine (%)	Less than 50 µg/L	More than 50 µg/L
1	East Godavari (ITDA)	5.22	69.45	30.55	32.60	67.40
2	Visakhapatnam (ITDA)	8.81	70	30	58.15	41.85
3	Srikakulam (ITDA)	8.78	58	42	67	33

Source: Directorate of Health

### Tobacco Related Diseases and Control

Tobacco use is one of the common factors for 4 major non communicable diseases like Cancer, Cardio-vascular diseases, and accounts for more than two third of all new cases of NCD. Tobacco use alone accounts for one in six of all deaths resulting from NCD.

### National Tobacco Control Programme

The National Tobacco Control Programme was launched by the Ministry of Health and Family Welfare, Government of India in 2007- 08.

#### Objectives

- Ten districts are covered under NTCP. Guntur is the pilot district.
- World Tobacco Day celebrations were conducted in Vijayawada on 31st May, 2015 in collaboration with Indian Dental Association Andhra Pradesh wing. Rally and skit were conducted with dissemination of appropriate IEC material including pamphlets.

### National Oral Health Programme

National Oral Health Programme is a new programme for the state. Four districts (Guntur, Prakasam, Nellore and Kadapa) have been approved for this programme. 52 Hospitals under APVVP have been identified for strengthening the Dental Equipment and services

National Programme for Prevention and Control of Diabetic, Cancer, Cardiovascular Diseases and Stroke

All districts of the state are covered under National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS). Five districts were newly added to the programme, under ROP 2015-'16. Screening activities are being conducted in 13 districts

for Diabetes and Hypertension and monthly NPCDCS reports being submitted regularly. Six Cardiac Care Units are functioning and two are in process. Recruitment of staff for NPCDCS programme at district level is completed in 7 districts. A new initiative (MMHC 35 +) started for the screening of all women above 35 years at Subcentre level by trained ANMs on every Thursday and Friday of the week for Hypertension, Diabetes, Vision, Common cancers ( Oral, Breast, and Cervical ) and Harmonal disorders. Life Style Diseases (LSD) clinics has been established in Krishna District, in collaboration with AYUSH department as a pilot district

### National Programme for Health Care of Elderly

All districts of the state have been covered under the programme. Physio therapy equipment for the elderly have been distributed at the selected sub-centres level. Institution based equipment (cervical tractions, short wave diathermy, trans-electric nerve stimulator) have been installed at the 55 CHCs covered under the programme. Cardiac care equipment (ECG, pulse oximeters, monitors and defibrillators) that have been sanctioned were installed in the 55 CHCs covered in the programme. Training for using physiotherapy equipment has been given to Medical Officers and health workers in the district of Nellore.

### National Programme for Prevention and Control of Fluorosis

Fluorosis is a crippling and painful disease caused by fluoride intake. Fluoride can enter the body through drinking water, food, toothpaste, mouth rinses and other dental products, drugs, and fluoride dust and fumes from industries using fluoride containing salt and or hydrofluoric acid. The programme is covered in Nellore, Prakasam and Guntur under ROP 2014-'15. 4521 villages /habitations are covered Nellore, Prakasam and Guntur districts and 1766



villages are affected with high fluoride in water. Details of the survey report on NPPCF is given in Annexure 8.16

### Swasthya Vidya Vahini

Government of Andhra Pradesh, in the context of achieving the SDGs had opted for Health Promotion Initiative SVV (Swasthya Vidya Vahini) to improve health literacy of the rural populations by addressing the social determinants of health at the community and social environments.

Teams of students shall visit villages with messages to promote health. They are attached to MMU which will provide health services. Each student team is fixed for a Gram Panchayat for a period of TEN months.

The theme for every month is fixed. At the end of the month the students shall observe and measure the changes in the thematic areas. Concurrently the outcome in terms of disease burden or health seeking behaviors is measured. This programme is launched on 24th December 2016.

## Aids Control Society

Human Immunodeficiency Virus (HIV) is a retrovirus that eventually causes Acquired Immunodeficiency Syndrome (AIDS), a global public health problem as more than 35 million people are living with HIV/AIDS worldwide. The HIV epidemic has been one of the most challenging modern public health problems for India. Provisional estimates put the number of people living with HIV in India at 25 lakhs and 3 lakhs in Andhra Pradesh.

### Prevention Activities

#### Basic Service Division:

Basic Services which include free HIV/AIDS counselling, testing services and also prevention of mother to child transmission of HIV/AIDS through 1348 Govt& 179 Pvt Integrated Counselling and Testing Centres, Prevention of Parent to Child Transmission of HIV/AIDS centres established in all Government Hospitals and Private Hospitals as per the need.

#### Targeted Interventions (TI):

TIs including Link Workers Scheme are implemented through Non Government Organisations and Community Based

Organisations to provide condom promotion, behavioral change communication and treatment services for sexually transmitted infections to Female Sex Workers (FSW), Men Having Sex with Men (MSM), Transgender, Intravenous Drug Users (IDU), Migrants and Truckers who are highly vulnerable for HIV/AIDS due their life style. At present 87 Targeted Interventions are implemented in the state to cover 7 FSWs, 2 MSMs, 3 IDUs, 65 Core components, 2 Truckers and 8 Migrants in high focused areas. These interventions are covering 88,099 FSWs, 20,311 MSMs, 1,263 IDUs, 1,57,984 Migrants and 21,163 truckers in the state.

Though only 87 NGOs existing, the Key population is adjusted towards the existing TIs and DAPCUs. The actual budget required for AP is 280.00 Lakh against which 152.40 Lakh is allocated for TIs hence the coverage PE, HRG and ORW,HRG ratios has been drastically increased.

#### Blood Transfusion Services (BTS):

BTS are provided through establishment and supporting 134 blood banks, 86 blood component separation units, 57 Blood storage centers. where blood is tested for HIV and other infectious diseases and safe blood is ensured to be made available to all the needy population who require blood/blood components. Blood safety services also promote voluntary blood donation to ensure safe blood availability in the blood banks per the required quantity and quality.

SACS has been providing prevention, treatment, care and support services through the establishments in the state. Details of key establishment under APSAC are given in Annexure 8.17

#### Blood Cell APP:

AP Blood Cell APP was started for improving the Voluntary Blood Donations.

#### Achievements:

From 2013, first time trainings given to 12 batches of Medical Officers, LTs, Staff Nurses of NACO Supported Blood banks this financial year.

Training of trainers regarding Quality Management Services completed.

Training of Non-NACO Supported Blood bank Medical Officer, LTs, SNs ongoing at RTC, KGH, Visakhapatnam

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Training of 18 blood banks regarding QMS at CMC, Vellore under process.

Training of blood bank counselors under process.

Recruitment of vacancies of Blood bank staff under process- notification given

BCTVs (under process), Computers, Printers, Internet provision to district completed

### Sexually Transmitted Infections (STI):

Prevention of Sexually Transmitted Diseases and Reproductive Tract Infection services are provided through establishment of 55 Designated STI/RTI Clinics (DSRCs) in Government Hospitals providing free testing, treatment and drugs. HIV-TB services are provided with free treatment and drugs for PLHIVs who are affected with TB at Directly Observed Treatment Centres (DOTs).

Information, Education & Communication, Mainstreaming, Youth and Greater Involvement of People Living with HIV/AIDS (IEC & Mainstreaming):

APSACS has been taking up various initiatives to create massive awareness among masses on prevention, treatment and care and support services available for HIV/AIDS through media.

Mainstreaming HIV/AIDS related services in public and private sector industries, departments and institutions, HIV/AIDS counselling, testing services are now established under PPP model.

People Living with HIV/AIDS have been encouraged to form networks at the district and state levels and these

networks are provided with opportunities to carry out HIV/AIDS related services in their districts. All PLHIVs are registered with district level positive networks and working for the welfare of the PLHIV by providing confidence and psycho social support and reduction of stigma and discrimination.

### Care, Support and Treatment (CST)

Care, Support and Treatment, including Community Support Services: are provided through establishment of 40 Anti-Retroviral Treatment Centers in Government Hospitals providing free ART medicines to all eligible PLHIV in the state. ART services are widely decentralised with established of 32 Link ART + centres and 114 Link ART Centres. More than 1,47,153 PLHIV are presently receiving ART medicines free of cost from the ART centres in the state. 39,373 ART Patients are received ART Pensions through NTR BHAROSA. Around 75000 new applications are pending at SERP for Govt approval .

### Strategic Information Management Unit (SIMU)

Strategic Information Management Unit is responsible for Monitoring, Evaluation & Surveillance of HIV/AIDS related activities in the state, which collects data periodically and a separate reporting system is established for HIV/AIDS related facilities from NACO for this purpose. Details of Establishments and Facilities under Blood Components are shown Table No. 8.23

Table 8.23- Physical Performance of APSAC [Apr'16 - Nov'16]

Core Component Name	Indicator	Annual Target (Lakhs)	Prop. Target (Oct'16) (Lakhs)	Achievement (Lakhs)	% achievement on Prop Target
Blood Safety	Total Blood units Collection	4.32	2.88	3.38	118%
	Voluntary Blood units Collection	3.88	2.59	2.59	100%
Integrated Counselling & Testing Centers	NON Ante Natal Cases Tested	8.71	5.81	7.28	125%
	Seropositivity( %)			17671 (2.4)	
	Ante Natal Cases Tested	7.46	4.98	6.95	140%
	Seropositivity( %)			618(0.09)	
STI component (DSRC)	STI cases treated	3.12	2.08	1.10	53%
Anti Retro Viral The rapy	Pre ART	NA	3.47	NA	
	Alive on ART	NA	1.48	NA	

Source: Aids Control Society

## PEPFAR (President's Emergence Plan for AIDS Relief):

PEPFAR India, a programme supported through CDC with their partners is focusing on the key population of female sex workers (FSW), men who have sex with men (MSM), Transgendered individuals, and people who inject drugs. It is being implemented in two states in the country i.e., Maharashtra and Andhra Pradesh. In our state, these programs are being implemented in East Godavari, Krishna and Guntur districts.

In 2016-17 PEPFAR India will implement new and diverse HIV testing and counseling approaches in the high priority districts to diagnose and link more people living with HIV to care and treatment, reducing LFTUs, activities on PPTCT and HIV/TB co-infection. It also provides technical assistance for service delivery improvement including capacity building quality improvement and system strengthening

## Women Development and Child Welfare

The Constitution of India guarantees equality of opportunity, equal pay for equal work, no discrimination to all women. It also allows special provisions to be made by the State in favour of women and children for securing just and humane conditions of work that renounce practices derogatory to the dignity of women.

Women now participate in all activities such as education, politics, media, art and culture, service sectors, science and technology, etc. All our efforts are being made for development and welfare of children whose overall development is recognized as the ideal way for fostering national human resources. The National Charter for Children notified in the year 2004 underlines the commitment to children's rights to survival, health and nutrition, standard of living, play and leisure, early childhood care, education, protection of the girl child, empowering adolescents etc. The following are the details of Government run institutions for Women and Children to cater to their needs in difficult circumstances.

## Institutions

The department is running 46 Homes for Children and 21 Institutions for women to cater to the needs of children and women.

## Women Institutions

### A. Service Homes

Three Service homes are functioning in the State at West Godavari, Nellore and Anantapuramu districts. At present, there are 125 inmates as against the sanctioned strength of 405.

### B. State Homes

Two State Homes are functioning in the state at Srikakulam and Rajahmundry with 80 inmates as against the sanctioned strength of 200. Food, shelter and clothing are provided besides imparting training in various trades for self-employment, wage employment/ job employment.

### C. Homes for the Aged

There is one Home functioning in the State at Chittoor with 24 inmates at present, against the sanctioned strength of 30. This Home provides peaceful and comfortable living for the old destitute women above 60 years.

### D. Homes for Collegiate Girls

There are 4 homes functioning in the State at Vizianagaram, Tanuku, Guntur and Tirupati with 152 inmates at present, as against the sanctioned strength of 170 and to pursue higher studies of inmates and allowed to stay for a maximum period of 5 years.

### E. Working Women's Hostels

11 Hostels are functioning in the State with 565 inmates at present, as against the sanctioned strength of 610.

## Ujjawala Scheme

Six Ujjawala Homes are working in 5 districts of West Godavari, Guntur, SPS Nellore, YSR district and Ananthapuramu with 125 inmates as against the sanctioned strength of 325. Vocational trainings are provided to 106 inmates. Of which 123 inmates reintegrated with their

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families. 33 inmates provided placements and 13 inmates are transferred to other homes during 2016-17 (from Jan to Nov 2016).

### Swadhar Shelter Homes

Eight Swadhar Shelter Homes are working in 6 districts of Kurnool, West Godavari, Guntur, Visakhapatnam, YSR and Vizianagaram to care for women in difficult circumstances aim at covering primary needs with 327 inmates as against the sanctioned strength of 430. Vocational trainings are provided to 209 inmates. Of which 199 inmates reintegrated with their families. 34 inmates provided placements and 20 inmates are transferred to other homes during 2016-17 (from Jan to Nov 2016).

### Institutions for Children Children Homes

46 Children homes are functioning in the State with 1875 inmates at present, as against the sanctioned strength of 3110. Cosmatic charges are Rs.75/- per month per inmate in the children's homes. Diet charges are @ Rs.750/- per child up to 7th class and @ Rs.850/- per month per child for students from 8th to 10th class. Out of 273 inmates,

### Orphan Certificate

Government issued orders to earmark 3% of the seats for orphans/destitute in the age appropriate class in Residential Schools, Residential Junior Colleges and Residential Degree Colleges run by Welfare Departments and Education Department. Government issued instructions to create awareness among NGOs regarding procedure to obtain Orphan Certificate. Every district shall have a Monitoring Committee for the management of the institution and monitoring the progress of every child under Rule 55 of Juvenile Justice (Care & Protection of Child) Rules, 2007.

### Domestic Violence Act 2005 and Rules 2006 (DV Act No - 2005)

Annually Rs.188.08 lakh is being spent to facilitate proper implementation of the Act. Under this act 21,614 petitions are received, of which 9973 Domestic incident report filed and 6041 are compromised through counseling and 385 Interim Orders received and 2989 final Orders are issued so far.

### Integrated Child Development Services

ICDS Scheme is the single largest Centrally Sponsored integrated programme of Child Development scheme. Pre-school education aims at ensuring holistic development of children and provision of a learning environment to children conducive for promotion of social, emotional, cognitive and aesthetic development of the child. Pre-School activities strengthen the child to get ready for primary school education with required skills to perform better in school entry and also improve regular attendance in schools. It aims to improve school enrollment and school retention in rural areas, relieve older sibling mostly girls from the burden of child care and enable them to attend school and prepare children to adjust to formal school. Pre-school material are supplied to all Anganwadi centers every year at a cost of Rs.3000/- per main AWC and Rs.1500/- for mini AWC as per Government of India norms.

### Achievements under ICDS:-

- About 9.07 Lakh children are attending pre-school education activities in Anganwadi Centres. 257 ICDS projects are functioning in the State.
- A.P. State is the only State who have developed and launched an activity based Pre-School Curriculum since 2009-10 to promote holistic development in children uniformly throughout the state.
- Organizations like Andhra Mahila Sabha, College of Home Science, KEK Ltd., SODHANA, Pratham, Azimii Premji Foundation and World Vision are being involved actively to strengthen Pre-School activities in AWCs.
- Hot meal with snack was introduced along with 4 eggs in a week for the Pre-school children

### Supplementary Nutrition Programme

Supplementary Nutrition Programme is being implemented in 257 ICDS projects covering 48770 main Anganwadi Centers and 6837 mini AWCs. At present the 31.87 lakh beneficiaries were covered under SNP during 2016-17 (upto September 2016). The following food models are implemented under SNP.

## Take Home Ration

Take Home Ration (THR) consists of 3kgs Rice, ½ kg Red Gram Dal, ½ kg Oil and 8 Eggs per beneficiary per month distributed on first day of every month with a cost norms of Rs.6/- per beneficiary/per day with a 744.73 kcal energy & 19.96 g protein. 16.13 lakhs children are covered under this programme. 7 months to 3 years SUW children for additional supplementation of milk, mini meal and 1 egg per day per beneficiaries. Additional 243.81 kcal energy & 13.63g protein provided with additional cost of Rs.7.24/- per day.

## Hot Cooked Food

Hot cooked meal containing Rice, Dal, Vegetables, Condiments every day and 16 boiled eggs in a month are being provided to ICDS beneficiaries in the age group 3 to 6 years children in 257 ICDS projects. Snacks (Kurkure) boiled Channa/ Peanuts for 6 days in AWCs are being provided.

8.75 lakhs children are covered under this programme. In addition to the above 9 additional eggs per month, 100ml milk, per day are being provided to SUW/SAM/MAM Children. Additional 243.81 kcal energy & 13.63g protein provided with additional cost of Rs.7.24/- per day.

## Pregnant & Lactating Women

In 152 Non Anna Amrutha Hastham (IAH) projects Take Home Ration (THR) is being provided and 4.37 lakhs of Pregnant and Lactating women are covered under this programme.

## Anna Amrutha Hastam

The “Anna Amrutha Hastam Programme” -One Full Meal for a minimum of 25 days in a month to Pregnant & Lactating Women was introduced in 104 ICDS Projects in the State. The one full meal will meet 40% of the daily calorie and 40% of protein and calcium requirement per day of the pregnant and lactating mothers. The cost of the meal is Rs.20/- per day per woman as against the existing norm of Rs.7/- per day per woman. Further Rs.5/- is provided as flexi fund to meet price variations of the commodities. The additional amount of Rs.13/- per beneficiary per day is provided by State Government

apart from the State and Central share under General Supplementary Nutrition Programme as per GOI norms. Along with the meal, Iron Folic Acid (IFA) tablet is to be administered. Under this programme 310928 pregnant / lactating women are benefitted upto October, 2016.

## IDA Assisted ISSNIP

International Development Association (World Bank) assisted ICDS Systems Strengthening and Nutrition Improvement Project (ISSNIP) has been restructured w.e.f 01.12.2015. The restructured ISSNIP is being implemented in 10 Districts of Andhra Pradesh at an estimated cost of Rs.75.75 Crore in the cost sharing ratio of 70:18:12 between the World bank:GoI and the State Government for a period of 2 years from the date of effectiveness of the project i.e. 01.12.2015 to 30.12.2017.

The project has four components, viz., 1 Institutional and System Strengthening; 2 Community Mobilization and Behaviour Change Communication (BCC); 3 Piloting Convergent Nutrition Actions & Project Management, Technical Assistance and Monitoring & Evaluation .

196 ICDS Projects and 43,616 Anganwadi Centres in the 10 selected districts in the state except Krishna and Guntur are covered under ISSNIP. An amount of Rs.2.11 crore was incurred expenditure so far.

## Action Plan for 2016-17:

- Incremental Learning Activity (ILA) to strengthen the capacities of Anganwadi Workers for improved Service delivery. Use of modules 1-9 for training.
- Community Based Events like Seemanthalu for Pregnant women and Annaprasana.
- Pilot on the Common Application Software (CAs), using Information Communication Technology based Real Time Monitoring ICT-RTM System, for tracking of ICDS beneficiaries in 11008 AWCs. The CAS activity is intended to Improving service delivery at Anganwadi Centers; ensuring better supervision of ICDS Scheme; enabling data based decision making.
- Innovations Pilot “Five Hundreds” One year Pilot implementation at Parvathipuram Project in Vizianagaram District. The objective of the innovation

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is to promote consumption of 'five-hundreds' (specified in section 3.1) by pregnant women for improving the nutritional status of pregnant women and birth outcomes. More specifically it will promote dietary diversity and use of prophylactic doses of IFA and calcium by pregnant women.

### Achievement during 2016-17

- Received Challenge fund of Rs.4.2 crore for achievement of DLL.
- 1-days training on NHTS, e-sadhana, and Kaizala APP in the month of October.
- Community based events were organised in 43616 AWCs covering 4,92,681 pregnant women in the event of Seemanthalu and 1,54,166 Children in the event of Annaprasana.

### ILA progress- (to refine yet)

So far, from February to November, 2 rounds of State Resource Group (SRG) training completed on the thematic modules under Incremental Learning Approach (ILA) covered module#s 4 to 9. Similarly the District Resource Group (DRG) members and Block Resource Group (BRG) members are trained on the 6 thematic modules related to Infant Young Child Feeding Practices; Identification and care of weak New Borns; Initiation of Complementary feeding; Dietary diversification and Exclusive Breastfeeding for 6 months. A total of 123 SRG members; 515 DRG members; and 7033 BRG members trained on 6 thematic modules.

### ICT-RTM

Recruitment of IT technical personnel at districts and block level,(CAS and Non- CAS) . Software Support for CAS will include providing troubleshooting for mobile applications for AWWs and Supervisors and reports and dashboard for ICDS functionaries. Pilot of village mapping is West Godavari District and finalising the 11 digit coding in web mpr

### Innovation Pilot progress

The state would promote consumption of 'five-hundreds' during pregnancy within the overall framework of

promoting appropriate dietary practices, which includes promotion during the course of pregnancy of at least: 100 IFA tablets , 100 calcium tablets ,100 glasses of milk, 100 bananas for vegetarian and 100 eggs for non-vegetarians and 100 groundnuts and jaggery candies

All food items except the groundnut and jaggery candies will be supplied through the ICDS. The National Health Mission provides IFA and calcium tablets. The GoAP proposes to procure candies from local market or get them prepared them through SHGs from the funds earmarked to the pilot by standardizing the recipe. The pilot also proposes to promote use of Double Fortified Salt.

The approved concept note pilot proposes to strengthen the existing platforms of ICDS and Health and Family Welfare, and elicit support of the community-based organizations (including the self-help groups-SHG) and the elected members of the Panchayati Raj Institutions (PRI) to sensitize the families and communities on the need to promote access to key services and practice appropriate behaviors during pregnancy in 377 anganwadi centers of Parvathipuram ICDS Project-Vizianagaram District. Pilot Period: January 2017-December 2017(one year).

### IGMSY:

Indira Gandhi Matritva Sahayog Yojana Scheme(IGMSY) is a Centrally Sponsored Conditional Cash Transfer Scheme and is being implemented in the selected District of West Godavari. To improve the health and nutrition status of Pregnant and Lactating (P & L) women and their young infants.

To contribute better enabling environment by providing cash incentives for improved health and nutrition to pregnant and lactating women. Anganwadi worker (AWW) and Anganwadi Helper (AWH) would receive an incentive of Rs.200/- and Rs.100/- respectively per pregnant & lactating women after all the due cash transfers to the beneficiary. As per National Food Security Act, 2013 Union Government has revised the maternity benefits from Rs.4,000/- to Rs.6,000/- in two installments i.e., 1st installment - Rs.3,000/-, 2nd installment – 3,000/- on fulfillment of prescribed conditions Under this scheme 44194 were benefitted and an amount of Rs.7.18 crore was transferred to the beneficiaries so far.

## SABLA- Rajiv Gandhi Scheme for Empowerment of Adolescent Girls (RGSEAG)

The Scheme aims at covering adolescent girls in the age group of 11 to 18 years in all ICDS Projects in 4 Districts i.e., Vishakapatnam, West Godawari, Chittoor and Anantapur since 2010-11 covering 81 ICDS Project and 18735 anganwadi centers (15080 main and 3655 mini AWCs). Under this scheme Supplementary nutrition is provided to the out of school adolescent girls in the age group of 11-14 years and all girls in the age group of 15-18 years. Each adolescent girl is being given the monthly ration of first day of every month i.e., Rice: 3 kgs, Dhal: 1kg, Oil : ½ liter and 16 eggs by the state Government orders with in the GOI nutritive norms of 600 calories, 18-20 grams of protein and cost norms of Rs.7/- per day per beneficiaries provided for 300 days. In this scheme 3.18 lakhs adolescent girls are covered.

### Girigorumuddalu under tribal sub-plan:

This programme is implemented in 24 tribal ICDS Projects with high tribal density covered in 2540 Anganwadi centers and 1818 mini Anganwadi Centers for the development of children in order to tackle malnutrition among the age groups of 7months to 6 years children in similar to “Gorumuddalu” guidelines for “Special care and Supervised feeding” of the children up to 5 years categorized under Severely Underweight (SUW)/Severe Acute Malnutrition (SAM)/ Moderate Acute Malnutrition (MAM) under SNP programme in all ICDS Projects.

In this scheme an amount of Rs.20 crores are released for the financial year 2016-17 with cost norms of Rs.13.91 and Rs.11.46 per day per beneficiary to the children age group of 07 month to 3 years and 3years to 6 years respectively in addition to Rs.6/- per child per day under SNP. 128268 children's are covered. In this programme additional nutrition is provided for 7 months to 3 years children 100 ml milk, mini meal and egg in THR. For 3 to 6 years children 100 ml milk, egg and along with mid-day meal every day.

### Integrated Child Protection Scheme

Integrated Child Protection Scheme (ICPS) is a centrally sponsored scheme with an objective to provide a protective

environment for overall development of children. The Scheme has strengthened prevention of Child Rights violation, enhanced infrastructure for protection of services and provided financial support for implementation of the Juvenile Justice (Care and Protection) Act, 2015.

### State Child Protection Society (SCPS):

The SCPS is set up in every State/UT as the fundamental unit for the implementation of the scheme. The SCPS takes care about the implementation, supervision and monitoring of ICPS and all other child protection schemes/programs and agencies/institutions at State level.

State Adoption Resource Agency (SARA): The SARA is a unit under the SCPS, to support CARA in promoting in-country adoption and regulating inter-country adoption and to coordinate, monitor the work of adoption.

District Child Protection Unit (DCPU): District Child Protection Unit (DCPU) in each district is a fundamental unit for the implementation of the scheme. The DCPU shall coordinate and implement all child rights and protection activities at district level. The District Child Protection Units (DCPUs) function under the overall administrative control and supervision of the District Magistrate of the concerned district.

District Child Protection Societies are established under the chairmanship of District Collector, and District Child Protection Units with 12 officials are functioning under the control of Project Director, DWCD.

### Specialized Adoption Agencies (SAAs) / Sishugruhas

ICPS supports State run Specialized Adoption Agency (SAA), where adoptable children of less than five years of age are provided residential care. The individual care plan for each child is prepared within a month by the Specialized Adoption Agency (SAA) in coordination with the District Child Protection Unit (DCPU). The Department is promoting adoption through establishment of 14 Specialized Adoption Agencies (Sishugruhas), in 13 districts (2 SAAs in Krishna District). In-country and Inter - Country Adoptions are being processed through online CARINGS, duly following the new CARA guidelines from

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1st August 2015..Adoption process is decentralized to the district level. At present 125 children are housed in 14 Sishugruhas. 42 children are placed for in country adoption and 3 children are placed for Inter-Country adoption.

Status of implementation of ICPS (Since 2014-15 till November, 2016):

- 2105 Child Marriages were stopped as per the Child Marriage Act, 2006.
- 9884 Child Protection Committees have been formed in the state. Mandal (557), Village/Ward (9284) and major Railway stations identified (30) levels in the state.
- 2005 sexual assault cases registered / booked under POCSO Act, 2012.
- 8028 Children in Need of Care and Protection were identified and provided care and protection services.
- 2040 Child Labour children were rescued.
- 427 missing children were institutionalized and children have been repatriated to their families.
- 432 children (HIV Infected/Affected, Physically / Mentally Challenged and others) have been provided Sponsorship and Foster care services.

### Prohibition of Child Marriage Act, 2006

- 40% of child marriages in the world takes places in India only
- India is 11th position among 68 nations, where child marriages are reported.
- AP has the highest prevalence among Southern States as per NFHS – IV.
- 2047 child marriages have been stopped (2014- 15 to October, 2016).
- Development of 1381 Child Friendly Villages @100 in each district.
- Involvement of community, youth and adolescent group for supporting network.

### Maa Inti Mahalakshmi

Under this programme 1, 62,613 beneficiaries have been covered by SERP and MEPMA and an amount of Rs.2417.07 lakhs was paid as incentives so far. The SERP / MEPMA are state implementing authorities for rural and urban areas respectively. The scheme is under active consideration of Government.

### Girl Child Protection Scheme (GCPS)

The Government of Andhra Pradesh have implemented the New Insurance Scheme for Protection of Girl Child in collaboration with LIC. The New Girl Child Protection Scheme is aimed at preventing gender discrimination by empowering and protecting the rights of Girl Child through direct investment from Government.

#### Benefits:

In case of a single girl child she is entitled to receive Rs.1.00 lakh after completion of 20 years of age. In case of two girl children, both of them are entitled to receive Rs.30,000/- each, after completion of 20 years age.

Both the “single girl child” and “two girl children” are entitled to receive Rs.1,200/- per annum as scholarship from 9th class to 12th class (including ITI course) during their period of study, as a benefit under the Scheme.

The nominee of the insured parent-member whilst he/she is the Insured Member under Janasree Bima Yojana, is entitled to be paid Rs.30,000 for natural death of insured, Rs.75,000 for death or total permanent disability due to accident and Rs.37,500 for partial permanent disability due to accident. 4,15 lakh beneficiaries covered under the scheme.

#### Relief to victims of atrocities:

Under this scheme an amount of Rs.1.39 crore has provided as relief to 479 atrocity victims from the year 2011-12 to 2015-16.



## Construction of Buildings under RIDF

RIDF	Sanctioned	Completed	Under progress	Balance works
XIV 2008-09 (Tranche closed)	1177	697	84	396 (Tranche closed)
XVI 2010 -11	731	419	121	191 (cancelled)
XIX 2013-14	364	185	108	71 (yet to be stated)
XX 2014-15	492	173	151	168 (yet to be stated)
“Strengthened & Restructured ICDS”.	3535	1157	1526	852 (cancelled)
Strengthened & Restructured ICDS”.	4828	2496	644	1688 (yet to be stated)
CDPO office buildings	149	20	100	29(yet to be stated)
PD office buildings	2	0	1	1 (yet to be stated)
AWCs under MGNREGA	7048	94	4104	2752 (yet to be stated) 98 (not approved)

Women Development & Child Welfare Department

## Juvenile Welfare, Correctional Services And Welfare Of Street Children

The Juvenile Welfare department endeavors to undertake necessary steps for all round development and rehabilitation of “Children in need of Care and protection” (children who have been alleged to have committed offences) up to the age of 18 years. There are 771 Children in 32 homes and 12 open shelters. In January 2016 the Parliament has enacted a new Juvenile Justice (Care and Protection of Children) Act, 2015.

### Institutional Services Children Homes for Boys

There are 4 homes functioning at Visakhapatnam, Eluru, Kadapa & Tirupati for reception & rehabilitation of ‘children in need of care & protection’ who are admitted as per the orders of the Child Welfare Committee.

### Observation Homes

There are 6 observation homes functioning at Vijayawada, Rajahmundry, Visakapatnam, Kurnool, Tirupathi and Ananthapur for juveniles in conflict with law during pendency of cases against them before juvenile justice boards.

The observations of the Hon’ble Supreme Court of India in WP (Civil) No. 473/2005 filed by Sampurna Behrua Vs UOI to reduce the distance between the Juvenile Justice Boards and Observation Homes, the Govt have notified certain NGOs as Certified Observation Homes and also to start certain Observation Homes as Extension Homes by this dept in addition to already functioning Observation Homes.

### Special Homes for boys

2 Special Homes are functioning for juveniles in conflict with Law after completion of cases against them by the Juvenile Justice Boards at Visakapatnam and Tirupathi for reception and rehabilitation

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### Special cum Children Home & Observation Home for Girls:

There is a temporary reception for girls in need of care & protection and in conflict with law referred by the CWCs & JJBs. 12 Open shelters are run by the voluntary / non-government organizations with the grant-in-aid support of Govt. of India, these are meant for children in need of care and protection or urban & semi urban areas.

### Non-Institutional Services - Probation:

The department implements the Probation of Offenders Act 1958. District Probation Officers appointed under this Act work to rehabilitate Ex-Convicts released from Central Jails/ juveniles/children by enforcing the conditions of the orders of Hon'ble Court/Juvenile Justice Board/ Child Welfare Committee and Jails. District Probation Officers act as convener for the District Probation Advisory Committees in districts to extend rehabilitative support to children and adults under existing govt. schemes.

### Welfare of Street Children – Open Shelters:

The Government of India is providing grant in aid to the Non Government / Voluntary Organizations for establishing and maintaining Open Shelters for these children in the ratio of 60:30:10, which means GoI provides 60 % of the grant and 30 % will be released by the State Government, while 10% will be borne by the voluntary organization. Presently, 12 Open Shelters are functioning in the State.

### Other Components

#### Juvenile Justice Boards (JJB):

Government have constituted Juvenile Justice Boards to deal with the cases of 'children in conflict with law' in all the 13 districts. All the Juvenile Justice Boards are headed by the lady Magistrates, as Principal Magistrates.

### Child Welfare Committees (CWC):

Government have constituted Child Welfare Committees to take with the cases of 'children in need of care & protection' in all the 13 districts.

### Integrated Child Protection Scheme (ICPS):

Under the ICPS, the Govt of India is extending financial support to the department under various components for effective implementation of the JJ Act.

### Reintegration & Rehabilitation of the Children:

Repatriation of children to other states: Reintegration of the children admitted in the institutions to their families is one of the regular activities of this department. Besides this, 66 children who belong to other states were repatriated to their native states.

### Educational & Vocational Trainings:

The children are provided with education in the schools run in the Children Homes. Children are also admitted in outside schools with the permission of CWCs. 45 Children have passed 10th class examination through open school system and five children regularly. 3 children have appeared for Intermediate examinations and all of them have passed in 1st class. 4 children have appeared for Intermediate 1st year exams through Open School and all of them have passed.

### Trainings / Orientation Programs:

The department provides required trainings / orientation programs for the members of Child Welfare Committee, Juvenile Justice Board and the staff of this department as envisaged in the JJ Act, with the support of the reputed NGOs like UNICEF and in collaboration with line departments including CID, AP State Legal Services Authority. The members of CWC/JJB are also deputed to NIPCCD, Bangalore.

## Welfare of Differently Abled & Senior Citizens

The Persons with Disabilities Act, 1996 that deals with both prevention and promotional aspects of rehabilitation of education, employment and vocational training, creation of barrier-free environment, provision of rehabilitation service for persons with disabilities, is in force both at the central and state levels, to ensure that older persons are able to live with dignity and that their needs for maintenance, welfare, medical care and protection are taken care of.

To look after the welfare of the disabled, an independent corporation (1981) and a separate department (1983) were established in the State. The department is working towards implementation of persons with Disabilities Act, 1996 and National Trust Act, 1999 that ensures multi sectoral coordination with various government departments for prevention, early identification and detection, education, employment, rehabilitation, mainstreaming, networking and monitoring of Government of India grant-in-aid projects of NGOs.

As per the census 2011, the total number of people with disabilities in the state of Andhra Pradesh is 11,03,789. Out of them visually handicapped people are 2,03,167, hearing handicapped people are 2,90,146, orthopedically handicapped people are 3,12,782, mentally handicapped people are 1,02,166, multiple handicapped people are 1,95,528.

A number of schemes are being implemented for the empowerment and rehabilitation of persons with disabilities. These schemes aim to promote physical, psychological, social, educational and economic rehabilitation and development of persons with disabilities to enhance their quality of life and enable them to lead their lives with dignity.

### Education

- Maintenance of 18 pre-matric and 2 post-matric hostels and 2 homes with a sanctioned strength of 1,780

- Out of 6 Residential schools 3 for hearing impaired at Vizianagaram, Bapatla, Ongole and 3 for visually impaired at Vizianagaram, Visakhapatnam, Hindupur with a sanctioned strength of 860.
- One Residential Junior College for hearing impaired at Bapatla, Guntur District with a sanctioned strength of 50.
- Pre-matric scholarships to the disabled including Mentally Retarded have sanctioned. 6548 beneficiaries were benefited in 2015-16 and 390 were benefited in 2016-17 up to Oct, 2016.

### Social Security

- A subsidy of Rs.1.00 lakh was sanctioned to disabled persons under economic rehabilitation scheme. About 363 persons benefited in 2015-16 and 231 were covered in the year 2016-17 up to Oct, 2016.
- Incentive awards for marriages between disabled and normal persons was enhanced from Rs.50,000 to Rs.1,00,000 in the year 2015-16, 741 beneficiaries and 925 beneficiaries were covered in the year 2015-16 and 2016-17 (up to Oct, 2016) respectively under Marriage Incentive Awards scheme.
- Petrol subsidy to the disabled persons who are having motorized own vehicles for self transportation and income upto Rs.24,000/- per annum was sanctioned. 50% subsidy on actual expenditure (2 HP and below - 15 Litres and more than 2 HP- 25 Litres) on purchase of petrol/diesel.

### Construction

Government allocated an amount of Rs.4.00 crores and Rs.4.90 crores for the year 2015-16 and 2016-17 (up to Oct, 2016) respectively for construction of Hostels, Homes and Schools.

Survey, Assessment of Needs and issue of medical certificates and identity cards

The department in close collaboration with departments of rural development, Medical & Health, NIMH, NGOs has evolved a scientific computer aided disability assessment strategy. This software is called as SADAREM (Software for Assessment of Disabled for Access, Rehabilitation & Empowerment).

## SOCIAL INFRASTRUCTURE

### Aids and Appliances

Camps are conducting for differently abled people for distribution of tricycles, wheel chairs, walking sticks, Braille slates, laptops, tape recorders, CD players and smart canes to needy people.

### Senior Citizens

The Government of India has enacted Maintenance and Welfare of Parents and Senior Citizens Act, 2007. Tribunals have been constituted in all the Sub Divisions of Andhra Pradesh. Appellate tribunals were also constituted in all 13 Districts.

### Action Plan

The Govt. issued orders to establish two homes for the blind persons one at Ananthapuramu and other at Kakinada with intake capacity of 100 inmates in each home.

It is proposed to establish four homes for Destitute Aged and Crippled persons at Srikakulam, Eluru, Nellore and Kurnool with an estimated cost of Rs.284.60 lakh per annum @ Rs.71.15 lakh for each home.

The Govt. issued orders to establish a Study circle exclusively for Persons with Disabilities at Vijayawada.

It is proposed to establish of 3 old age homes on PPP mode at Visakhapatnam, Guntur and Anantapuramu in the State with an estimated cost of Rs.139.92 lakh per annum @ Rs.46.64 lakh for each home.

Govt., of India sanctioned Centre for Disability Sports at Visakhapatnam. The District Collector, Visakhapatnam handed over 10.00 acres to the officials of National Institute for Mentally Handicapped.

Govt. of India sanctioned Braille Press to Guntur District under the scheme of modernization/capacity augmentation for starting new Braille Press and released Rs.29.77 lakhs to Andhra Pradesh Differently Abled & Senior Citizens Assistance Corporation during the year 2015-16.

### Government of India Schemes

The Government of India, Ministry of Social Justice & Empowerment has sanctioned Deendayal Disabled

Rehabilitation Scheme (DDRS), Integrated Programme for Older Persons (IPOP) and Prevention of Alcoholism and Substance (Drugs) Abuse Scheme. The Government of India sanctioned 7 District Disability Rehabilitation Centres in the districts of East Godavari, Vizianagaram, Kurnool, Prakasam, Nellore, YSR and Chittoor districts. The composite regional centre of national institute for mentally handicapped sanctioned by GoI. It was accommodated temporarily and the same was started on 3-1-2016. An amount of Rs.31.65 crore is estimated for construction of buildings, purchase of equipment and salaries.

### Achievements during 2016-17 (up to October,2016)

- Govt. have launched special recruitment drive for filling up of the backlog vacancies reserved for the differently abled. The period of recruitment has been extended from time to time upto 31.3.2017.
- Government issued orders to admit the Deaf girls also who passed SSC along with boys, into Intermediate course within the sanctioned strength of existing Government Junior College for Hearing Handicapped, Bapatla from the academic year 2016-17.
- Government issued orders to upgrade the Government Residential School for Hearing Handicapped, Vizianagaram up to Class VIII for admitting the hearing handicapped and students from visually handicapped from the academic year 2016-17, with the sanctioned strength of students and staff.

### A.P. Differently Abled & Senior Citizens Assistance Corporation (APDASCAC)

The corporation has been taken up the programme to differently Abled in their rehabilitations i.e. supply of prosthetic aids and mobility aids, supply of educational aids to individuals and institutions, facilities to impart training in various technical and non-technical trades, organizing employment generation production units with assured market for products and creating awareness among parents for early detection and stipulation and treatment of various disabilities.

## Rehabilitation and Supply of Prosthetic Aids

Under this scheme, Differently Abled and Senior Citizens Assistance Corporation supplies aids and appliances such as tricycles, wheel chairs, crutches, walking sticks, try pods (Hand sticks), artificial limbs and hearing aids etc., to PwDs. Government issued orders permitting Andhra Pradesh Differently Abled and Senior Citizens Assistance Corporation (APDASCAC) to extend the facility of supply of aids and appliances/assistive devices to Senior Citizens on par with Differently Abled during the year 2015-16. Accordingly, an amount of Rs.49.34 lakhs has been released to benefit 10,700/- Senior Citizens so far.

### Investments in APVCC:

There are 9 T.C.P.Cs functioning to impart vocational training to the differently Abled persons for skill development in the state. New training programmes like offset printing, DTP, Motor winding, Journalism, Cell Phone servicing, Computer training etc., have been continued through ITI & Non-ITI trades. It is proposed to introduce new schemes like coaching for competitive examinations and creation of cell for mobilizing disabled persons for job opportunities in private and public sector. Supply of Educational Aids such as Lap tops, CD Players, Tape recorders and Cassettes with lessons recorded, Braille Books, text books from I to X Class.

## Backward Classes Welfare

*Government B.C. hostels - 897*

*Residential Schools - 32*

*Post Matric Scholarships and Reimbursement of Tuition fee in 2015-16 - 6.47 lakh*

*Reimbursement of tuition fee to EBC students in 2015-16 - 2.28 lakh*

*College Girls and Boys Hostels - 349*

*AP Study Circles - 13*

Population belonging to backward classes pursuing traditional activities such as cattle and sheep rearing, toddy tapping, earth works, fishing, weaving, goldsmith, blacksmith, brass smith, carpentry, stone carving, laundry, pottery, oil pressing, basketry, hair dressing, tailoring and dyeing fall under 138 communities listed are divided into five Groups viz., Group A, B, C, D and E.

Government is implementing the various welfare, educational and economic development programmes for the welfare of the backward classes people. Without hurting the interests of BCs, the government is committed to provide reservation to Kapu/Balija/Ontari/Telaga communities.

### Pre-matric hostels

Hostels are providing free boarding and lodging to students belonging to backward classes and enabling them pursue their Pre-Matric studies. At present, there are 897 government B.C. hostels, (692 hostels for boys and 205 hostels for girls). A total strength of 96,997 boarders were admitted in the B.C. hostels during 2016-17. All these hostels have a combination of 76% Backward Classes, 10% Scheduled Castes, 5% Scheduled Tribes, 3% Minorities and 6% other castes for encouraging Social Integration.

Of the total 897 hostels, 556 hostels are located in government buildings. Out of the remaining hostels, 48 buildings are under construction under matching grant programme and under centrally sponsored scheme to provide a clean and healthy ambience to boarders of hostels. Still 293 buildings are to be constructed. The boarders are provided with diet charges at Rs.750/- per month per boarder for III to VII

## SOCIAL INFRASTRUCTURE

classes, and Rs.850/- per month per boarder for VIII to X classes. They are also provided cosmetics at the rate of Rs.50/- per month for boys and Rs.55/- per month for girls up to class VII & Rs.75/- per month for Girls from class VIII to X class. Boarders are also supplied note books, four pairs of dresses and bedding material every year. 96.75% of X class students in BC hostels were passed against the 94.77% of state average during the year 2015-16.

### Residential Schools

There are 32 B.C. Residential Schools (17 for boys and 15 for girls) functioning in the state during the year 2016-17 with a total strength of 12,292 students. The students were admitted from V class through the lottery system. All these residential schools have a combination of 74% Backward Classes, 15% Scheduled Castes, 6% Scheduled Tribes, 2% EBCs and 3% Orphans.

4 Institutions located at Amalapuram (East Godavari), Mopidevi (Krishna), Satyavedu (Chittoor) & Golagamudi (SPSR Nellore) are meant for the children belonging to fishermen community. Admission pattern in residential schools meant for fishermen community of Fishermen children are 46%, BC-A: 7%, BC-B: 10%, BC-C: 1%, BC-D: 7%, BC-E: 4%, SC: 15%, ST: 6%, EBC: 1%, Orphans: 3%.

97.77% of X class students in BC Residential schools were passed against the 94.77% of state average during the year 2015-16.

### Post-Matric scholarships and reimbursement of tuition fee to BC students

Government is implementing the Post Matric Scholarships and Reimbursement of Tuition fee scheme to enable BC students pursue higher education. All eligible BC students having an annual family income up to Rs.1.00 Lakh per annum are sanctioned Post Matric Scholarships and Reimbursement of Tuition fee on saturation basis. 6.47 lakh BC students were sanctioned Post Matric Scholarships and Reimbursement of Tuition Fee in 2015-16. 3.93 students were benefited under the scheme Post-Matric scholarships in 2016-17(April to Oct 2016) and 3.48 lakh students were benefited under reimbursement of tuition fee scheme in 2016-17(April to Oct 2016)

### Reimbursement of Tuition Fee to EBC students

The Government has been implementing the scheme of Reimbursement of tuition fees for the Economically Backward Classes (EBCs) on saturation basis on par with BCs from the year 2009-10 onwards. The eligible criteria for EBCs for getting reimbursement of tuition fee are same as those applicable for BCs i.e., having an annual family income up to Rs.1.00 lakh. 2.28 lakh EBC students were sanctioned reimbursement of tuition fee during the year 2015-16. 1.00 lakh students were benefited under this scheme in 2016-17(April to Oct 2016)

### College Girls and Boys Hostels

In order to promote the education of BC Boys and Girls at the Post Matric level, Government have issued orders for establishment of College Hostels @ one for each Assembly Constituency for Girls and Boys. During 2016-17, 349 College Hostels (177 Boys College Hostels and 172 Girls College Hostels) were functioning with a total strength of 37,239 boarders (19198 Boys and 18041 Girls). All these College hostels for boys and girls have a combination of 69% Backward Classes, 15% Scheduled Castes, 6% Scheduled Tribes and 10% Minorities for encouraging Social Integration. 37,879 students were benefited under this scheme in 2016-17(April to Oct 2016)

### AP Study Circles for BCs

There are 13 BC Study Circles functioning in the State to provide free coaching facilities to eligible BC unemployed graduates and post graduates, who are appearing for various competitive examinations of State and Central Government like Civil Services, Group-I and Group-II, JJs, Police jobs, Defense jobs, Banking jobs, Railway jobs etc. In total 1,363 students were given training during the year 2015-16. All these study circles have an admission pattern of 66% Backward Classes, 20% Scheduled Castes and 14% Scheduled Tribes for the purpose of Social Integration. 2893 students were benefited under this scheme in 2016-17(April to Oct 2016)

### Mahatma Jyothybai Pule A.P.B.C.W. Residential Schools

12142 students were benefited under this scheme in 2016-17(April to Oct 2016)

### NTR Videsi Vidyadharana

170 students were selected under this scheme in 2016-17 (April to Oct 2016)

### Welfare schemes

Welfare schemes are being implemented through the following institutions for providing self employment to poor B.C families.

A.P Backward Classes Cooperative Finance Corporation Ltd., A.P.Washermen Cooperative Societies Federation Ltd., A.P Nayee Brahmins Cooperative Societies Federation Ltd., A.P Vaddera Cooperative Societies Federation Ltd., A.P.Sagara (Uppara) Cooperative Societies Federation Ltd., A.P Valmiki/Boya Cooperative Societies Federation Ltd., A.P Krishna Balija, Poosala Cooperative Societies Federation Ltd., A.P. Bhattraja Cooperative Societies Federation Ltd., A.P. Medara Finance Corporation Ltd., A.P. State Viswabrahmins Cooperative Corporation Ltd., A.P. State Kummari/ Shalivahana Cooperative Societies Federation Ltd.,

A.P Backward Classes Cooperative Finance Corporation Ltd.,

The A.P Backward Classes Cooperative Finance Corporation Ltd., was established in 1974 for economic upliftment of Backward Classes in the State. The Corporation implements the schemes of (i). Margin Money and (ii). BC Abhyudaya Yojana.

### Margin Money

Margin Money Scheme aims to provide financial assistance to B.C. beneficiaries in agriculture and allied sectors, small business and industry, service and transport sector activities. The beneficiaries are covered from rural area. The scheme has been restructured from 2013-14 onwards with the following funding pattern Subsidy of 50% unit cost not exceeding Rs.1,00,000/- per beneficiary and 50% unit cost as Bank loan.

Action Plan for the year 2016-17 to benefit 20,900 beneficiaries is under Margin Money scheme with a total value of Rs.418.00 Crore, out of which Rs.209.00 Crore is the Subsidy provided by the Corporation for implementation of the scheme.

### BC Abhyudaya Yojana

BC Abhyudaya Yojana, which aimed at providing financial assistance to the B.C. Artisans/ B.C. Occupational Groups in urban areas. The scheme has been re-structured from 2013- 14 onwards with a funding pattern that a subsidy of 50% unit cost not exceeding Rs.1,00,000/- and 50% Bank loan is offered.

21388 students were benefited under Margin money and BC Abhyudaya Yojana schemes in 2016-17(April to Oct 2016)

### Schemes for the benefit of individual families

There is a common financial assistance scheme is being implemented for the welfare of individual families of different communities covered by ten federations. It is implemented by taking one society affiliated to concerned federation comprising 15 members as one unit. The government have restructured the financial assistance scheme for the benefit of affiliated Primary Cooperative Societies to the Federation concerned with the following funding pattern.

(In Rs.)

Funding pattern	Per Society /Group	Per Member
Unit Cost (for 15 members Group)	7,50,000	50,000
50 % of Unit Cost as subsidy by Govt.	3,75,000	25000
50 % of unit Cost as Bank loan	3,75,000	25000

11960 primary co-operative societies have been registered in all districts of the state for 10 Federations.

### Scheme for community services:

Construction of dhobi ghats is being implemented through A.P. Washermen co-operative Societies Federation with a 100% subsidy with unit cost of Rs.5.60 Lakh. Government have allotted Rs.20 crores for construction of 357 dhobighats during 2016-17.

## Social Welfare

*SC population to total population*

**-17.08%** (2011 census)

*Literacy rate of SCs in 2011-* **64.47%**

*Enrollment ratio-* **82.29%**

*Dropout rate -* **39.64%**

*Hostels-* **958**

*Ananda Nilayams-* **24**

The Scheduled Castes Population in the state has increased from 74.28 lakhs in 2001 to 84.69 lakh in 2011, registering a growth of 14.01 percent. As per the 2011 Census, Scheduled Castes population forms 17.08 percent of the total population of Andhra Pradesh and 79.98% of the Scheduled Caste people live in rural areas. Sex Ratio among the Scheduled Castes is 1007, which is higher than the state average of 996. The literacy rate among SCs was 64.47, lower than the State's Literacy rate of 67.41. SC population ranges from 7.68% in Visakhapatnam district to 23.19% in Prakasam district. Literacy rate among SCs ranges from 55.26% in Kurnool district to 71.43% in West Godavari district. SC enrollment ratio 82.29% and dropout rate was 39.64%.

### Educational programmes

#### Hostels

958 Hostels are functioning in the state, with an admitted strength of 89,840 in 2016-17. 566 special hostels and 27 Integrated hostel Welfare Complexes are functioning in the State.

The students studying from class III to X will be admitted in to these hostels in the ratio - SC: 70%, Christian

converts from SCs: 12%, ST:5%, BC:9% and Others: 4%. The amenities are provided to the students are: Diet with Rs.750/- per month per boarder upto class VII and Rs.850/- per month to the boarders from VIII to X , cosmetic charges in cash Rs.50/- per boy and Rs.55/- per girl per month upto class VII and Rs.75/- per month to the girls from VIII to X , hair cut charges @ Rs.12/- for boys of all classes per month, four pairs of dresses in a year, one carpet and one bedsheet, note books 5 to 18 as per class of the student, trunk box, plate and glass and sports material.

### Ananda Nilayams

At present 24 (18 boys and 6 girls) Ananda Nilayams are functioning in the State in 2016-17. 50% of the seats in Ananda nilayams are filled with orphan students and the remaining 50% with children whose parents are engaged in unclean occupations. The inmates in these Ananda nilayams are provided all facilities on par with the boarders in Social welfare hostels.

### Bio-Metric attendance

Bio-Metric attendance is implemented in 998 Hostels. Tablets will be supplied to all pre-metric hostels and college hostels, to implement the Bio-Metric attendance in all hostel students and staff.

### Residential quality education to hostel boarders

272 hostels were merged into social welfare residential schools, benefiting 13,592 students during 2016-17.

### Results

Out of the 15,045 students who appeared for SSC Examinations in March 2016; 13,680 students passed. The overall pass percentage is 90.93 as against the State average of 94.52.

### College Hostels

There are 285 College hostels (140 boys and 145 girls) functioning with an admitted strength of 27,990 students.

### Post-Matric scholarships

Post Matric scholarships are sanctioned to the SC students



whose family income does not exceed Rs.2 lakhs per annum. The process of sanction is made online from the financial year 2008-09. Aadhar cards for claims of Scholarship from the financial year 2013-14 and verification of the students is being done using Aadhar online authentication. an amount of Rs.598.72 crores is provided for 3.16 lakhs students upto Oct, 2016.

### Dr.B.R.Ambedkar Overseas Vidyanidhi

Under this Scheme, financial assistance is provided to the eligible SC students for pursuing higher education to abroad. The selected SC students are sanctioned Rs.10.00 (5.00+5.00) lakhs grant in two installments. Selected students can study in USA, Canada, UK, Singapore, Australia, Germany, New Zealand, Sweden, Netherlands, France, Denmark, Russia, China, Philippines and Kazakhstan. 61 students have been selected and assisted under this scheme and an amount of Rs.24.75 Crore was released during 2016-17 (up to October, 2016).

The Nodal Agency for SCSP has approved enhancement of grant from Rs.10.00 lakhs to Rs.20.00 lakhs per student during the meeting held on Sep, 2016.To consider the students to pursue 2nd PG in Foreign Universities, keeping in view the fact that such courses provide value addition and job opportunities. To consider 2nd child in a family also from the same family, keeping previous experience in view that the number of students applying for the scheme is low

### Skill Upgradation

To seek admission in reputed foreign universities, students have to obtain good scores in tests of English proficiency such as TOEFL & IELTS and in General Aptitude Tests such as GRE / GMAT or equivalent qualifying examinations for pursuing admissions into various Post Graduate Courses in reputed foreign universities and to equip the SC students with requisite skills by providing them the benefit of coaching in GRE / GMAT/ TOEFL / IELTS / etc., through reputed coaching institutions for obtaining higher scores, so that to get admission in reputed foreign universities, Govt is implementing the scheme of "Coaching to SC students for eligibility test

such as TOEFL/IELTS and GRE/GMAT and other for admissions in foreign universities. An amount of Rs.2.25 crore is provided during 2016-17, to train students, out of which Rs.1.68 has been released upto Oct, 2016.

Pre-matric scholarships for students belonging to SCs studying class V to X

The objective of the scheme is to support parents of SC children for education of their wards studying in classes V to X so that the incidence of drop-out, especially in the transition period from the elementary to the secondary stage is minimized. During 2016-17(upto Oct, 2016) 1,10,043 scholarships were sanctioned and incurred an expenditure of Rs.37.20 crore.

### Best Available Schools schemes

Under this scheme, preference is given to the children of those belonging to the families of agricultural labourers, jogins, bonded labourers and orphans. Schools having high standard of education with high reputation for discipline like schools run by the missionaries will be selected under this scheme. 13106 students were benefitted incurring an expenditure of Rs.18.76 crore during the year 2016-17.

### Backlog vacancies.

Under this 3315 SC vacancies and 2306 ST vacancies are identified. Of which 2213 are filled by SCs and 1354 filled by STs.

1102 SCs, 952 STs vacancies are yet to be filled. Government have issued orders extending up to 31.03.2017 to fill up all the backlog vacancies

### PCR ACT, 1955 and POA ACT, 1989: Special sessions courts:

Government sanctioned 13 Special sessions courts in all districts of AP. The Special sessions courts are headed by Spl. Sessions Judges and assisted by Public Prosecutors functioning in the State to deal with the cases of atrocities against SCs/STs under POA Act, 1989 in the state. There are 1312 SC/ST Cases pending as against 1959 Cases registered during 2013-14 and 2014-15.

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**Special Mobile Courts:**

Government sanctioned 13 Special Mobile Courts in all the districts of A.P. The Special Mobile Courts were constituted for dealing with offences under PCR Act, 1955 in the State from 1978. The Mobile Courts are headed by First Class Judicial Magistrate and assisted by Asst. Public Prosecutor.

**Relief and Rehabilitation to the victims of Atrocities:**

Under Rule 14 & 15 of the POA Rules, the scheme of Relief and Rehabilitation to the victims of Atrocities is entrusted to the State Government and issued orders enhancing the Relief and Rehabilitation amount fixing the monetary limits for each kind of atrocity depending on the nature of the loss sustained by the victims of atrocities and their dependents with effect from 14-4-2016 as per the amended POA rules, 1995. The expenditure on sanction of relief and rehabilitation to the victims of atrocities was exempted from Treasury control.

**Rehabilitation of bonded labour**

Rehabilitation of bonded labour is a centrally sponsored scheme with funding pattern of 50:50 between the state and the centre. The A.P. Scheduled Caste Cooperative Finance Corporation is rehabilitating the identified bonded labourers out of the Corporations funds initially with the help of District SC Co-operative Service Societies.

**Rehabilitation of Jogins**

Economic Support Schemes with a unit cost of Rs.20,000/- per family has been implemented for rehabilitation of Jogins of which Rs.10,000/- is subsidy. The District SC Societies are implementing schemes for the benefit of Jogins through Bank Linked Schemes like Milch Cattle, Bullock carts and Kirana shops etc.

**Incentive award for inter-caste married couples:**

Government have been encouraging Inter-Caste marriages for social integration and social reform with an objective of eradication of caste system in the society. Under this

scheme Govt. have increased the incentive award for inter-caste married couples from Rs.10,000/- to 50,000/-. The incentive award can be sanctioned to the couple where one of the spouses belongs to Scheduled Caste.

**NTR Vidyonnathi**

315 SC candidates were selected through an entrance exam conducted by the JNTU, Kakinada during the year 2015-2016 and they have allotted to five reputed institutions in the Country. (1) Brain Tree, Hyderabad (2) R.C Reddy IAS Study circle, Hyderabad (3) Sri Ram's IAS, New Delhi (4) Universal coaching centre, Bangalore (5) Dr. Lakshmaiah I.A.S Study Circle, Hyderabad. An amount of Rs.5.07 crores was released towards meeting the expenditure for implementation of NTR Vidyonnathi Scheme for the year 2015-16. 700 SC candidates were selected under this scheme for the year 2016-17. 500 SC candidates were sponsored to five Institutions for coaching for Civil Services examination to be conducted by the UPSC. An amount of Rs.14.00 Crs is allocated in Budget Provision 2016-17 for this scheme.

**Free Power to SC House holds:**

The department pays electricity arrears and monthly bills of SC households living in SC housing colonies consuming 0-50 units per month. The amount payable shall be based on the actual demand consumer wise furnished by the DISCOMs. During 2016-17 (upto Oct.,2016) 10.33 lakh SC families were benefited and incurring expenditure of Rs.120.86 crores under this scheme.

**Scheduled Castes Sub Plan**

The Scheduled Caste and Tribal Sub Plan are designed for channelizing the flow of outlays and to benefit for the development of SC's & ST's at least in proportion to their population in the plans with an objective to bridge the gaps in development indicators between the general population and SC's and ST's. During the year 2015-16, an amount of Rs.5844.52 crores expenditure incurred under this scheme. During 2016-17 an amount of Rs.8724.26 Crores allocated and Rs.4023.42 Crores expenditure incurred (Upto October, 2016).

## Andhra Pradesh Scheduled Castes Cooperative Finance Corporation Ltd

The main objective of A.P. Scheduled Castes Cooperative Finance Corporation Ltd is to provide financial assistance for creation of income generating assets to the poor belonging to Scheduled Caste households for social and economic development.

The Corporation mainly prepare plans, promote and take up economic assistance programs in the fields of Agriculture, Animal Husbandry, Marketing, Procession, Supply and Storage of Agriculture Products, Small Scale Industry, Cottage Industry, Trade, Business or any other activity which enables Scheduled Castes members to earn a better living and improve their standard of living. Special emphasis is on vulnerable sections like scavengers / safai karamcharis, bonded labour, flayers & tanners, jogins. All these schemes are implemented with loan tie up from the banks towards providing skills for enhancement of opportunities for wage employment and self employment.

Under SC Action Plans an amount of Rs.1001.06 crore was provided towards financial assistance for the benefit of 76,426 SC beneficiaries for the year 2015-16. An amount of Rs.1252.10 crore is allocated for the benefit of 91,279 SC beneficiaries for the year 2016-17.

## Implementation of Schemes - Special Central Assistance

Government of India is providing funds under Special Central Assistance to the State Government for taking up schemes for the benefit of Scheduled Castes and the funds are utilized for providing subsidy and for non-recurring items. An amount of Rs.37.02 crore was allocated under Special Central Assistance.

## Enhancement of Subsidy

The Government have enhanced the subsidy component for economic support schemes and the subsidy component is 60% or Rs 1.00 lakh (whichever less) in case of the self-employment schemes.

## E-payments

The Government have issued orders to all welfare departments, government corporations and participating banks to implement the bank-linked subsidy schemes through e-payment system of direct release of subsidy to beneficiaries' loan account from the head office, avoiding all the intermediary levels.

## Innovative activities Vulnerable Groups

Providing financial assistance with 100% Grant to vulnerable groups like Leather workers (F&T / Cobblers), Safai Karamcharies (families involved in sanitation work), Manual scavengers (Fresh cases), Jogins, Bonded Laborers / Atrocity Victims and Surrendered extremists with an amount of Rs 7.70 Cr. for the benefit of 770 beneficiaries.

## Minor Irrigation

Providing irrigation facilities like bore wells, submergible pump sets to the lands of poor scheduled castes families to take out their livelihood with a total outlay of Rs 18.21 Cr for the benefit of 3072 beneficiaries with 90% subsidy.

## Land Development

Land Development scheme is being taken up in assigned, lands which were not covered by DWMA with an amount of Rs.4.82 Cr. to cover 4815.00 acres of land.

## Land Purchase Scheme

Social Welfare Empowerment & Tribal Welfare Empowerment has taken a conscious decision to implement the land purchase scheme for Elimination of Rural Poverty with a systemic approach to reduce the incidence of poverty among poor persons in the State. The main objective of this scheme is to empower the poor Agricultural Scheduled Caste Women in the society by providing means of livelihood as well as economic security. An amount of Rs 102.00 crores is provided under SCAP for the year 2016-17 for benefit of 840 SC families for purchase an extent of 1860.00 acres of Agriculture land.

## SOCIAL INFRASTRUCTURE

## Chandranna Cheyutha

- to encourage skill development for SC youth by providing employability linked training programs.
- to encourage standardization in the certification process and initiate a process of creating a registry of skills
- Enable and mobilize a large number of SC youth in the state to take up skill training and become employable and earn their livelihood.

Around 30,023 SC Youth in the state with an cost of Rs.162.94 crore were benefited under this programme.

### **National Scheduled Caste & Finance Development Corporation & National Safai Karamcharis & Finance Development Corporation**

The broad objective is to enable easy access to credit for SC educated un-employed poor youth belonging to SCs at cheaper rate of interest for self employment units and to identify entrepreneurial capabilities among them. With a view to encourage SC educated youth, the APSCCFC has revived the self employment programmes with the loan assistance from NSFDC during the year 2016-17. An amount of Rs 42.99 crore sanctioned for the benefit of 884 beneficiaries for the year 2016-17. An amount of Rs 20.74 crore. sanctioned for the benefit of 468 beneficiaries under SCAP 2016-17 upto Oct, 2016.

## Tribal Welfare

*ST population to total population (2011 Census)-5.53%*

*Literacy Rate (2011 census)-48.83%*

*Residential schools- 80*

*Ashram Schools-391*

*Hostels-139*

*Total Enrolment -1,05,246*

*SSC Pass %-90.87*

The tribal population of Andhra Pradesh according to 2011 Census is 27.58 lakh constituting about 5.53% of the total population of the State. The scheduled areas extends over 14,132.56 sq.kms which is about 8.82% of total area of the State with 5,318 villages spread in Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari districts. There are 34 ST communities living in the State. Of the 27.58 lakh tribal population, 10.54 lakh are found in the above mentioned 5 districts. The ST literacy rate is 48.83% (Female 39.40, Male 58.37). Government accorded high priority for development of tribals. Major focus is on education, health, skill development and creation of social infrastructure including road connectivity and supply of drinking water in inaccessible tribal areas.

### Important Goals

A perspective plan is prepared envisaging 3 broad aims translated into 19 goals in tune with the MDGs and SDGs. Project based with 81 ongoing and new projects in the areas of infrastructure development including housing Schemes benefitting individuals for poverty alleviation and social empowerment with an estimated cost of Rs.23766.98 crore for 7 year period.

### Other Livelihood Promotion activities:



Promoting potato cultivation in Paderu and Seethampeta and also taking up Apple cultivation with (100) farmers by introducing low chill varieties of apple in Paderu and Rampachodavaram. Beside this, some trials are being taken up on other temperate fruit crops plums and pears and Japanese permissions in Paderu Agency area to evaluate the feasibility.

### Residential Education

Government converting 50 Tribal welfare Hostels in Non Scheduled area into 50 TW Residential Schools. 30 Hostels were converted into Residential Schools in Non Scheduled area. These 80 Residential schools were started functioning with a strength of 5708 from class 3rd to 5th. Converting 30 TW Hostels into Ashram Schools in Scheduled Area with a Strength of 4525.

### Quality Initiative under Education:

There are 391 Ashram Schools, 134 Hostels, 5 IWCH (including merged Mandal) and 98,869 students have been enrolled so far. An amount of Rs.1570.53 Cr is provided in Budget for 2016-17 towards Diet and other maintenance charges. 6377 ST students are admitted in 63 Best Available Schools for the year 2016-17.

### Economic Support Schemes:

It is proposed to cover 5242 beneficiaries for effective implementation of the Economic Support Schemes. Under this scheme, selected ST beneficiary / ST group will be provided financial assistance 60% to 90% of the unit cost subject to a maximum of Rs.1.00 lakh for creation of livelihood activities. Beneficiaries' registration is done through Online Beneficiary Management & Monitoring System (OBMMS). An amount of Rs.43.50 crores allocated towards providing financial assistance to 5242 ST families.

### Skill Development:

Under this programme 9098 ST youth are provided training for skill up gradation including Direct Placements. So far 2276 were placed in private employment. 3230 placed through Direct placements. 1363 trained for formal employment. Apart from this 1720 are under training. 50 Entrepreneur Development programme through NI-

MSME & DICCI as a pilot and subsequently it will be scaled up so far to ensure better access for stand up India programme. Aspiration training infrastructure was created by consulting (28) Youth Training Centers which are facilitating as skill development centers of Excellence. MoU between Tribal Welfare Department (TRICOR) and AP State Skill Development Center (APSSDC) is entered for providing skill up gradation trainings for employability of ST youth. Pre – training orientation, Bavitha Campaigns are being organized which is to mobilize ST youth, Career guidance and counseling. Job melas / direct placement drives are being organized for placement to the skilled youth. Training in 42 skill sectors in 96 trades working with 62 training partners, are being offered to ST youth from the YTC's and Pool Training Centers, NAC & CIPET etc.

### Coffee Project:



Total cost of project is Rs.526.16 Crores and subsidy from Coffee Board is Rs.160.36 Crores. Subsidy from TSP is Rs.364.00 Crores. Beneficiary Contribution is Rs.1.79 Crores. Duration of the project is 2015-16 to 2024-25 ((7+3 years maintenance). 10000 acres of new coffee plantation completed. 15000 acres of rejuvenation / consolidation was also completed. 11751 acres of new shade plantation completed so far. 1403 MTs of raw coffee pooled and marketed by GCC during 2015-16 season and the Farmers got Rs.69 /- kg for cherry (72% incremental price over the local market price) and Rs.156 /- kg for parchment (95% incremental price over the local market price). Promoting wet pulping as part of quality improvement through promoting parchment coffee. 727 Baby Pulpers were supplied for primary processing in 2015-16. 1000 Baby Pulpers targeted for 2016-17, of which 600 Pulpers have already been supplied. Consumption loan to Coffee farmers

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to avoid private lending through GCC is also provided to ensure optimum utilization of market intervention of GCC.

### Infrastructure Works

During the year 2016-17, it is proposed to provide basic infrastructure facilities like connectivity to unconnected habitations, PHC's, Sub centers, GCC godowns to tribal habitations and accommodation and drinking water & sanitation facilities to Tribal Welfare educational institutions under EI grant in agency area wherever necessary. An amount of Rs.145.00 Crores is allocated for 606 works to provide infrastructure in tribal areas during the year 2016-17 and 182 works are completed.



An amount of Rs.7.50 crore is allocated for taking up 20 road works under NABARD, ST habitations connected with benefiting of a population 43836 with a cost of Rs.39.65 crore.



Additional accommodation is provided for 1.06 lakh ST boarders with a cost Rs.322.70 crores. Various institutions like PHC's, Sub centers, CHNCs, GCC depots provided with government accommodation with a cost of Rs.86.74 crores.

### Post – Matric Scholarships

The Government has allotted a budget provision of Rs.120.00 Crores. for providing scholarships to benefit 66,000 ST students for the year 2016-17. Student's registration for sanction of Scholarships through online.

### IT Initiatives

To enhance service delivery systems to reach up to the last mile taken up through e-Hostels, e-pass, web-portals etc., Biometric attendance implemented in all districts by A.P.Online. Financial accounting system introduced in TRICOR & Gurukulam. Online monitoring of Post Matric, Pre-Matric Scholarships, Corporate Colleges, BAS schemes, NTR Vidyonnati, Giriputrika Kalyana Yojana Schemes. Student academic & Attendance monitoring system introduced in Gurukulam.

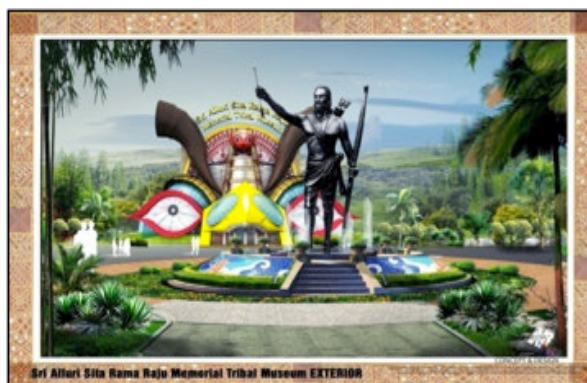
### Gurukulam

Gurukulam has secured 4 seats in IITs, 11 seats in NITs and 8 seats in AIPVT during 2016-17. 60 students got seats in reputed Engineering Colleges.

### Results during 2015-16

90.87 pass % (92.41 state average) pass in SSC 2016 with Gr.-A 54% in 2016 against 16% in 2015. 88.83% pass (State Avg. 73.78%) in Intermediate and 6 Colleges got 100% results. 4th, 5th and (two) 11th ranks Government Jr. Intermediate.

### Alluri Seetha Ramaraju Museum



Foundation stone laid for the museum in the four acres of land in Visakhapatnam on 03.07.2015. Rs.25.00 crore sanctioned for the Museum. Expert group constituted for collection and finalization of artifacts. 3 to 4 galleries exclusively for 3D digital art based on tribal themes through global tender. The plans and structure of designs are under finalization. Proposed date of completion is 31.07.2018.

### Girijan Cooperative Corporation (GCC) Ltd.

GCC has procured Rs.639.66 lakhs worth of Minor forest produce and agricultural produce, supplied Rs.1320.14 lakhs of essential commodities and Rs.2759.89 lakhs worth domestic requirements through GCC owned DR depots (Fair price shops). GCC obtained organic certification for 13MF products and launched sale of organic products in Retail Market.

### Important Activities

#### Tribal Sub Plan (TSP)

Andhra Pradesh is the first state to enact AP SCSP and TSP Act, 2013 to provide legal backing for allocation, expenditure and monitoring of TSP. Nodal Agency Meetings are being conducted regularly. An amount of Rs.618.42 crores is allocated to the department and Rs.445.71 crore was released towards educational programs. For implementation of welfare programs an amount of Rs.1904.48 crore is allotted under Tribal Sub Plan (TSP) to various line departments and an amount of Rs.1711.08 crore is incurred expenditure by the 42 line departments covering 173 schemes.

Providing quality education to ST Students, committed to implement TSP in true letter and spirit, providing safe drinking water to all ST habitations, providing connectivity to unconnected villages, electrification of un electrified ST Habitations, Empowering building and skill up gradation of ST youth and committed towards gender empowerment by providing necessary support in education, Health improvement, income Generation, Capacity building and Skill up gradation.

### Giriputrika Kalyana Padhakam

Government issued orders for sanctioning new scheme “Giriputrika Kalyana Padhakam”. The scheme was effective from 1.04.2015. The aim of the scheme is to extend the financial assistance of Rs.50,000/- to tribal girls at the time of their marriage with a view to alleviate financial difficulties to celebrate marriage in the families of Scheduled Tribes in the state. 1017 beneficiaries were covered under the scheme during the year 2015-16. So far, 463 beneficiaries availed benefit as against online registrations of 2290 during 2016-17 up to Nov 2016.

## Minorities Welfare

As a secular country, the Government’s endeavour has always been to ensure progress to all population, including the Minorities. Several schemes and policies have been put in place to ensure up-liftment of Minorities under the aegis of the Minorities Finance Corporation. Development of Minorities requires attention from several angles. The minority population is mostly urban-based. A large segment of the Minority population is below poverty line. The share of Minorities in different economic support schemes has also been very low.

### Minorities Welfare

The primary objective of the department is socio economic development and educational advancement of minorities in the state. The department has taken up various schemes for improvement in livelihoods, educational upliftment and imparting training for enhancing employment opportunities for the minorities.

### Scholarships:

Government is providing Scholarships both MTF and RTF to the Post Matric Students covering Intermediate, Graduation, Postgraduation, M.Phil, Ph.D, diploma courses like Polytechnic, Nursing etc., Professional courses like MBBS, B.Tech, MBA, MCA etc., on saturation basis. 1,11,363 students applied online and still registration is going on.

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RTF of Rs.141.46 Crore and MTF of Rs.32.24 Crore has been sanctioned to 103087 students during 2015-16.

52349 students have been sanctioned RTF of Rs.32.30 Crore and MTF of Rs.17.37 Crore for the year 2016-17 (upto October 2016).

### Dulhan Scheme:

Government introduced Dulhan Scheme for socio economic development of poor Minorities girls for BPL families. An amount of Rs.44.77 lakh was released towards for implementation of Dulhan Scheme in the state in the year 2016-17 (upto Nov, 2016.)

### Minorities Welfare Hostels:

There are 06 Prematric Minorities Hostels and 09 Post matric Hostels are functioning aiming the educational and social development of the poorest of the poor minority students. Rs.1.50 crore have been released to all the Districts for maintenance of Minorities Welfare Hostels upto Nov 2016.

### Residential Schools:

There are 6 Residential schools in the state aiming the educational and social development in Minority students with residential amenity. An amount of Rs.3.75 crore have been released to A.P. Residential Schools in the state upto Nov, 2016.

### The Multi Sectoral Development Program:

MsDP funds have been released to the 4 Districts viz., Ananthapuramu, Guntur, Kurnool and YSR district for implementation of the Scheme. The works are under progress.

### APSMFC

The Andhra Pradesh State Minorities Finance Corporation (APSMFC) Limited encourages the socio economic development of weaker sections of Minorities viz., Muslims, Christians, Sikhs, Buddhists, Jains and Parsis, educational development skill upgradation through training developing confidence among Minorities of being

important stakeholders in nation buildings. Assistance is provided through banks for which the corporation provides subsidy component under economic assistance for setting up business, industry, service, agriculture and allied viable activities and grant in aid for welfare schemes.

### Schemes

#### Subsidy for Bankable Scheme

The scheme is being implemented for minorities to setup viable Self-employment scheme. During the financial year 2015-16, 10,735 persons were benefitted with an amount of Rs.3927.95 lakh. During the year 2016-17, an amount of Rs.5040.00 lakh released under the scheme. The selection process is under process.

#### Tatkal Scheme

Minority women particularly widows, divorcees, destitute, orphans, physically challenged and victims of any atrocities will be assisted under this scheme. Under this scheme petty loans upto Rs.20,000/- will be given. Out of which 75% of unit cost (maximum upto Rs.15,000/-) subsidy will be provided by the Corporation and the remaining 25% will be the Bank loan. During the year 2015-16, an amount of Rs.17.55 lakh utilized to assist 118 beneficiaries.

#### Small Loan Scheme

Provide Small Loans from State Government funds with Bank linkage, upto Rs.20,000/- to poor needy persons looking for small assistance. Under Small Loan Scheme during the year 2015-16 an amount of Rs.237.45 lakh utilized to assist 1601 beneficiaries.

#### Adarana Scheme

This Scheme is introduced to empowering Minority Artisans by providing improved hand tools, power tools and equipment etc., Under this Scheme Loans upto Rs.25,000/- will be given. During the year 2015-16 an amount of Rs.87.83 lakh utilized and assisted 527 beneficiaries.

#### Dukan-Makan

The Government of Andhra Pradesh revived Dukan-Makan Scheme for welfare of Minorities during the year 2015-16. The Joint Meeting of Minorities Welfare is proposed in consultation with Housing Department to



finalize the Unit Cost and the modalities for implementation of Scheme. It is proposed to implement the Scheme during the year 2016-17 with revised Unit Cost.

### Training & Employment and placement

The main objective of the scheme is to improve the technical skills under various traded and to create self employment among the educated unemployed youth in Minority communities. The training is being given on Electronic, Automobile, IT & ITES, Banking, Construction, Beauty Culture & Hair Therapy, Health & Medical, Retail, Manufacturing, Textile, Hospitality, Electrical, Education, Police recruitment, Job Melas, Pre recruitment coaching for competitive exams etc.,

### Empanelment of Training Partners

The placement linked training programme shall be organized with the Training partners empanelled with REEMAP/ EGMM/ MEPMA/ any Government Organisation with whom the V.C. & MD, APSMFC will enter into MoU at State level. During the Training Period Stipend of Rs.500/- per month will be paid to the eligible trainees. During the year 2016-17 Police pre recruitment training already commenced. 333 candidates. During the year 2016-17 the Corporation is planning to conduct highend training programmes for the benefit of B.Tech, M.Tech and M.C.A. unemployed candidates. A Minorities Job Mela was organized at Vijayawada on 5th June, 2016 in which 507 candidates were selected by the participated companies. Another Job Mela was organized at Nellore on 06-11-2016. wherein about 800 unemployed Minorities will be providing jobs.

### Law Graduates Scheme:

Training & Employment Corporation is implementing Minority Law Graduate Scheme for the benefit of Law Graduates to undergo Training in Administration of Justice under Public Prosecutor / Government Pleader for a period of 3 three years. During the year 2015-16, 23 Law Graduates were selected being trained under GP/PP at District level. During the year 2016-17, 25 candidates have been selected for Law graduate training programme against the target of 65 candidates.

### Financial Assistance to Minority Law graduates:

Law graduates training scheme is extended to Minorities in which Minority Law graduates to undergo Training in Administration of Justice. During the period, every Minority Law Graduate shall be paid a stipend of Rs.1,000/- per month uniformly for all 3 years, an amount of Rs.6,000/- towards purchase of Books and Furniture as one time grant in the 1st year. An amount of Rs.2,000/- per annum will be sanctioned to the candidate under training for Administration of Justice, for attending seminars, workshops, symposiums etc., that enhances advocacy skills of the candidate and enrollment fee of Rs.585/- and wherein the enrollment fee will be reimbursed to them. During the year 2015-16, 26 law graduates were trained in administration of justice.

### Central Government Schemes: Pre Matric Scholarships:

Pre Matric Scholarships will be sanctioned to the Minority Students pursuing studies in a Government or private School from Class I to X whose parent / Guardians income from all sources does not exceed Rs.1.00 lakh per annum and students must secured not less than 50%marks in the previous final examination.

An amount of Rs.3637.78 lakh released under pre Matric Scholarships to 156732 students for the year 2015-16. 2,05,899 students applied so far for the year 2016-17.

### Post Matric Scholarships:

Post Matric Scholarships will be sanctioned to the Minority Students pursuing studies in a Government or private colleges from Intermediate, Technical and vocational courses in Industrial Training Institutes. During the year 2015-16, 15233 students applied and 10616 students sanctioned an amount of Rs.897.64 lakh released under Post Matric Scholarships. During the year 2016-17, 19,932 students applied so far.

### Merit-cum-Means Scholarships:

Merit-cum-Means Scholarships will be sanctioned to the

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Minority Students pursuing studies in a Government or private colleges in Professional Courses (B.Tech, M.Tech, B.Pharmacy, M.B.B.S., M.B.A. M.C.A etc). During the year 2015-16, 1557 students applied and 1161 students sanctioned an amount of Rs.318.04 lakh released During the year 2016-17, 1,540 students applied as on Nov, 2016.

### AP State Christian Minorities Finance Corporation

Government has been in the forefront in implementing Welfare Schemes for the Christian Minorities. Many new initiatives brought out such as Christian Bhavan, Pilgrimage to Holy Land of Jerusalem, Financial Assistance to Self Employment Schemes, Grant in Aid to Churches and Church run Institutions, Scholarships, Trainings for Unemployed, Coaching Programmes, Training for Christian Minority Law Graduates, Dulhan etc., are implemented throughout the state.

During the FY 2016-17, Rs.56.60 Crore budget allotted exclusively for the AP State Christian Minorities Finance Corporation.

### Highlights and Progress of APSCMFC till date:

**Christian Bhavan:** Government allotted Ac.2.00 land for the construction of Christian Bhavan with a budget of Rs.10.00 Crore. Out of which Rs.3.00 Crore was released to the District Collector, Guntur for executing the works.

**Pilgrimage to Holy Land of Jerusalem:** Government revived the scheme of Pilgrimage to Holy Land of Jerusalem and provided a budget of Rs.5.00 crore during the FY 2016-17 for providing financial assistance to 2500 Pilgrims. First Batch of 48 pilgrims was sent on 04.10.2016.

**Taxi Subsidy Scheme:** Under Economic Support Scheme, Government issued orders for distribution of 150 Cars to eligible Christian Minorities in Krishna, Guntur and West Godavari districts @ 50 per district. Rs.1.50 Lakh shall be the subsidy from Corporation. 20% on On-Road price shall be the beneficiary contribution and balance amount shall be the Bank Loan.

**District Level High Tea Programmes:** The budget for conducting of High Tea Programme at District Head Quarters is enhanced to Rs.50000/- from Rs.30000/- per district.

**Distribution of Sewing Machines:** Under Training, Employment and Placement Scheme, training is provided to Christian Minority women in Basic Sewing Machine Course. The candidates who completed the training and cleared the Assessment test conducted by the Third Party Agency are provided with Sewing Machine. 540 Christian Minority Women are undergoing training under the scheme.

**Chandranna Christmas Kanuka:** Government provided basic commodities to 1,00,000 poor Christians during the Christmas season as Chandranna Christmas Kanuka .

### Schemes & Activities of the Corporation

#### Subsidy for Bank Linked Income Generated Schemes (Economic Support Scheme):

The scheme is for individuals who desires to setup self-employment activities where the maximum unit cost is up to Rs.2,50,000/-. The Corporation provides a subsidy @ 50% of the total unit subject to a maximum of Rs.1,00,000/-. 994 persons were benefitted under this scheme for the year 2015-16.

#### Training and Employment

APSCMFC offers intensive training programmes to create gainful employment opportunities for the Unemployed Christian youth. APSCMFC offers industry specific training across sectors including IT and ITES, Hotel Management, Retail, Engineering etc., at exclusive skills centres through multimedia content. The unique skill delivery process begins with the identification of jobs and ends with the placement of trained youth in various sectors.

Scheme of training for Christian (Minority) Law Graduates in Administration of Justice is intended to prepare Law Graduates to practice as Advocates.26 candidates were trained per year. During 2016-17 18 were benefitted with an expenditure of Rs.8.28 Lakh.

46 members were benefitted under free coaching for competitive exams programme during 2016-17.

## Centre for Educational Development of Minorities

CEDM has located at Kurnool, Guntur and Visakhapatnam and implementing three major state government sponsored projects.

A. An integrated project on improving classroom performance of minority school children:

- Provides special free coaching in core subjects of Mathematics, Physical Sciences, Biology, English and Telugu / Social Studies to X class Urdu / Telugu medium minority students at 60 centres in 9 districts of the State viz., Anthapuramu, Chittoor, Guntur, YSR, Krishna, Kurnool, SPSNellore, Prakasam and Visakhapatnam and 4000 beneficiaries were benefitted under this scheme
- Providing 5000 free workbooks and question banks to X class Urdu medium coaching and non-coaching students in all districts. The pass percentage of coaching students in SSC-2016 is 95%.

B. A comprehensive project for improving participation and performance of minority candidates in competitive entrance examinations:

Free Coaching and study material given to 1904 students seeking admission to courses like POLYCET, DEECET, EAMCET, ICET, EdCET, etc. in Hyderabad and other minority concentrated districts of AP.

C. Chamak Scheme: Free coaching to minorities for job oriented competitive examinations

Provides free coaching to job-oriented competitive examinations like. UPSC Civil Services (Prelims), APPSC Group I, II & IV examinations, NET, DSC, APTET, VRO/VRA, Police recruitment, Banking services, etc. 516 persons were benefitted under this scheme. An amount of Rs.200.00 lakh has been released for implementation of the above schemes for the year 2016-17.

## A.P. State Haj Committee

The AP State Haj Committee is constituted for making arrangements for the Haj pilgrimage of Muslims. The AP State Haj Committee makes arrangements for Muslims Haj pilgrimage right from the processing of Haj applications forms, to returning from Saudi Arabia. It imparts Haj training, arranges Meningitis Vaccine, provides Haj Guide books in Urdu and Telugu, makes arrangements for the departure and arrival at Haj camp embarkation point etc., from the point of exit to Saudi Arabia and other activities for the benefit of Haj pilgrims. An amount of Rs.2.00 crore was provided as grant-in-aid to the Haj Committee during the year 2016-17, 2117 pilgrims proceeded Haj during the year 2016.

## Khadimul Hujjaj

Every year the AP State Haj Committee deposes the Khadimul Hujjaj (Haj Volunteers) to assist Haj Pilgrims in Makkah Mukarramah and Madina Munawwarah. 8 Volunteers were deposed in 2016.

## Andhra Pradesh State Wakf Board

The Government sanctioned an amount of Rs.1150.00 Lakh in the year 2016-17 for construction, repairs to Mosques, Edgahs, Dargahs, Ashoor Khanas (Peerla chavidi) and compound walls to Muslim Burial Grounds etc. and benefited (1500) Waqf Institutions. Under Protection of Right and Divorce Act, 1986 an amount of Rs.100.00 Lakh was allocated and benefited to 75 Muslim Divorced Women. Rs.500.00 Lakh (Rupees Five Crore Only) has been allocated for the year 2016-17 by making about (10) Shopping Complexes on lands attached to Waqf Institutions.

An amount of Rs.250.00 Lakh was allocated for the year 2016-17 to utilize for payment of legal fees to Standing Councils representing in various cases of Waqf Tribunal and District Courts for protection of Waqf properties.

Rs.2400.00 Lakh was allocated for the year 2016-17 approximately to be benefited to Incentive to Imam and Mouzans in (2500) Masjids.

## SOCIAL INFRASTRUCTURE

## Urdu Academy

The area of activity of the Urdu Academy is limited to the literary activities such as extending financial assistance for holding Seminars, Mushairas etc., to Urdu Organisations and agencies; and publishes Urdu Manuscripts written by Urdu Poets, Writers and Linguists. Basically Urdu Academy's functioning, its schemes & projects are meant for the promotion & protection of Urdu Language & Literature and is nothing to do with the minorities & its activities are basically literary & academic in nature and pertaining to the welfare.

## Preserving/promotion of Urdu language

Urdu Academy is implementing the Schemes viz., financial assistance to publication of urdu manuscripts, urdu libraries in shape of books, urdu news agencies, urdu periodicals, urdu writers & journalists, printing of urdu books, urdu voluntary organisations, urdu teaching & learning programmes, maqdoom award, life time achievement award, Moulana Abul Kalam Azad National Award, best urdu teachers award, best urdu students award, awards on printed urdu books, printing of rare urdu books, urdu text books, Qaumi Zaban ( monthly magazine of Urdu Academy), providing infrastructure facilities to urdu schools. Providing financial aid to reporters of electronic channels and cable TVs. An amount of Rs.1500 lakh was sanctioned to implement the above schemes during 2016-17.

## Maulana Abul Kalam Azad Award and Makhdoom Award:

The A.P. Urdu Academy has instituted a National Award of Maulana Abul Kalam Azad comprises of a Cash Prize of Rs.1.25 lakh once in every year and Makhdoom Award is a prestigious National Award carries a Cash Prize of Rs.1.00 lakh given once in every year.

## Vocational training in urdu computer education

The Urdu Academy is maintaining 36 Computer Training Centres and 36 Urdu Libraries. The duration of course is 6 months. The intake capacity of each of computer centre is 70 students.

## Construction of Urdu Ghar cum Shadikhanas

Urdu Academy has been releasing Rs.12.00 crores for construction urdu/completion Urdu Ghar-cum-Shadikhanas at various places.

## Youth Services

Youth Welfare schemes are implemented in accordance with the aspirations and needs of the youth. The department organized youth festivals at Divisional, District and State Level, National Youth Week Celebrations including Tribal & Multi-Cultural Youth Festivals, youth exchange programmes, celebrations of National importance days are being organized with coordination of other departments.

### New Initiatives:

Organised Inter District Inter-State and International Youth Exchange programmes. Promotion of adventure activities among youth belonging to State of A.P. like:

- (a) Mission Everest- "AP Youth on the top of the world"
- (b) Adventure activities in Andhra Pradesh
- (c) Financial assistance to youth for undergoing courses in adventure activities,
- (d) Cash Award for outstanding achievement in adventure activities

Construction of Yuva Bhavans - Youth Empowerment Centres in all Districts, distribution of sports material to Youth clubs/ Associations, Self-defence training programme to women, Disaster Management and First-Aid, State Youth Awards for best youth and youth organisations, youth innovation & entrepreneurship - future star awards youth conclave awareness and sensitization programmes on various topics of social, economic, health, environmental issues.

## Achievements during 2016-17

### Youth Festivals:

The Youth Festivals were conducted in all the Divisions in the state. State Level Youth festival was celebrated in Visakhapatnam on 23rd & 24th December, 2016. The 1st

prize winners of State Youth Festival will be sent to Rohtak, Haryana State to participate and compete in National Youth Festival. An amount of Rs.50,000/• per division and Rs.1.00lakh per district is sanctioned towards conduct of these festivals.

### Yuva Bhavans-Youth Empowerment Centres:

Yuva Bhavan is a novel idea which is conceptualized by the Department of Youth Services to undertake activities aimed at empowerment of youth in region. Yuva Bhavans will be the Hub of all activities related to Youth welfare and Empowerment at District level. The centre will have facilities for recreation, counseling, E-library and computer lab with internet, a place for conducting various youth forums, seminars, workshops on youth related issues.

The District administration is being identified and alienate 2.00 acres of land to the department at their respective district headquarters for construction of Yuva Bhavans at a cost of Rs.5.00 Crores each.

### Mission Everest

Proposed to conduct various Youth Welfare Schemes / Programmes during the current financial year 2016-17. Among the programmes, sending of A.P. Contingent to Mount Everest is one of them.

This adventurous programme is to instill a sense of confidence and achievement in hearts of youth especially from under privileged masses and to pitch the State of Andhra Pradesh on to the Global Adventure Map. Preliminary physical tests were conducted at District Level among the youth in two phases. 121 candidates were imparted training at 'Kethanakonda' of Krishna District in mountaineering, trekking and rappelling. In the 3rd phase, a team of 25 youth (23) men and (2) women were selected and sent to Sikkim, Himalayas for professional mountaineering training. A team of (24) youth has successfully climbed Mt BC Roy (18000 ft) peak on 9th December, 2016. It is for the first time in the history of South India, a team of 24 youth has successfully reached 19000 ft high mountain. Selected team of 9 youth will be trained

in advanced techniques of climbing and safety equipment and given physical endurance training in extreme cold and weather conditions by taking them to another expedition of Himalayas. 5 best performed youth will be taken for expedition of Mount Everest around April/May, 2017.

### Pre- Recruitment training for enrolment of candidates in Indian Army in different categories

A pre-recruitment training programme was organized in Kadapa, Chittoor, Ananthapur, Kurnool, Prakasam, Nellore and Guntur district at Guntur for enrolling more number of youth of Andhra Pradesh in Indian Army. During this training 1179 youth were trained. The said training programme was organized in Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari and Krishna Districts at Kakinada of East Godavari District from 5th to 15th, October, The recruitment rally was held at Guntur for recruitment in different categories like Soldier (Gen), Soldier (Tech), Soldier(Clerk) in Indian Army. 1892 youth were trained in physical tests as well as for written examination.

### Pre- recruitment training for enrolment of candidates in Indian Air Force in different categories:

A pre-recruitment training programme was organized in Kadapa, Ananthapur, Chittoor, Kurnool, Nellore and Prakasam districts for enrolling more number of youth of Andhra Pradesh in Indian Air Force. The recruitment rally was held at Kadapa in the month of September from September 2016 for the recruitment in different categories in Indian Air Force. During this training 1741 youth were trained in physical tests as well as for written examination.

### Formation/Rejuvenation of Youth Clubs:

About 3500 youth clubs, out of which, 683 youth clubs are active in the districts. Efforts have been made to revive the dormant groups and form new groups by conducting awareness programmes every month in every nook and corner of the district.

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### Sports material to Youth Clubs:

Issuing of sports material to the youth and material will be distributed as per the choice given by the Youth Organisations/Clubs all over the State.

### Disaster Management Training Programme:

Disaster Management Training Programme was conducted in all the districts in coordination with Indian Red Cross Society, wherein 2092 youth were given 4 days free training in subjects like disaster management, first aid, psycho social care, public health in emergencies, search and rescue, health hygiene and sanitation, climate change etc.

### Inter-District Youth Exchange Programme:

On pilot basis, an Inter-District Youth Exchange Programme was conducted with 30 members from the districts of Krishna, Prakasam, Guntur, Nellore, Srikakulam, Vizianagaram and Visakhapatnam from 14<sup>th</sup> to 17<sup>th</sup> May at Araku Valley, Visakhapatnam in coordination with Nehru Yuva Kendra authorities.

### Other Activities:

a) National Youth Week Celebrations are proposed to be organised in all the districts commemorating the birthday of Swami Vivekananda on 12<sup>th</sup> January, 2016. The weeklong celebrations consist various programmes like workshops, seminars, Essay writing, Quiz competitions etc. Felicitations to best youth/youth clubs/organizations/young artists / sports persons/poets reflecting the culture and heritage of Andhra Pradesh in all fronts with festive outlook and fervor. An amount of Rs.50,000 per district has been sanctioned towards conduct of Youth Week Celebrations.

## Housing

Andhra Pradesh has been the pioneer in implementing of "Housing for all" that proposes to further the objectives of National housing policy of "Shelter for all" and is committed to make "Housing for all" with adequate amenities.

APHCL acts as a Techno Financing Agency in shelter delivery in rural and urban areas by encouraging construction of houses through self-help and mutual help basis. It also encourages community participation in the construction of houses.

APSHCL encourages production and usage of cost effective and eco-friendly materials by beneficiaries to meet the demand of building materials and also minimize cost of construction. 49 Nirmithi Kendras / Sub Nirmithi Kendras were established all over the State for spreading awareness about the use of such materials and technologies. Building components such as sand cement blocks, Fla-G Blocks, pre-cast door & window frames, cement Jallies, RCC rafters etc., have been produced and utilized for the housing program taken up by the corporation so far.

APSHCL is the executing agency for taking up urban houses in all the municipalities under the centrally sponsored PMAY-HFA(U) –BLC scheme besides taking up IHSDP scheme and few BSUP projects along with local bodies under JNNURM.

Under IHSDP 24,194 houses were sanctioned with a project cost of Rs.387.77 Crore out of which, 21,006 houses were completed with an expenditure of Rs.339.84 Crore. Under BSUP 10,903 houses were sanctioned with a project cost of 301.84 Crore out of which 10,087 houses were completed with an expenditure of Rs.231.71 Crore.

### Weaker Section Housing Programme

56,68,370 houses have been completed up to Feb, 2017 comprising 51,68,249 in rural areas and 5,00,121 in urban areas under Weaker Section Housing Programme since 1993-94. District wise and Year wise details of houses constructed during the year 2015-16 and 2016-17 (upto February, 2017) are given in Annexures 8.18 and 8.19.

### Action Plan for 2016-17 (Rural Housing) NTR Rural Housing

APSHCL has taken up 2.00 lakh houses under NTR Rural housing programme dovetailing with MGNREGS during 2016-17 with a unit cost of Rs.1,50,000 per each house with a project cost of Rs.3000.00 crore.

### NTR Rural Housing(Gramin)

APSHCL has taken up 72,885 lakh houses under NTR Rural housing (Gramin) programme dovetailing with PMAY-G and MGNREGS during 2016-17 with a unit cost of Rs.2,00,000/- per each house with a project cost of Rs.1457.70 crore.

### NTR Upgradation

Rs.150.00 crore was sanctioned for taking up repairs to houses constructed prior to 2004 to make them habitable with a maximum financial assistance of Rs.10,000/- per house.

### NTR Urban Housing: BLC

73,041 houses were sanctioned under NTR Urban housing dovetailing with BLC component of PMAY, HFA (U) with a unit cost of Rs.3.50 lakh per house with a project cost of Rs.2556.44 crore

### AP Housing Board

A.P. Housing Board has extended its activities to the district headquarters and other urban areas in the districts. The main objective of establishing the A.P. Housing Board is to provide housing accommodation to the needy people at an affordable price, recover the cost from the allottees.

The board has so far constructed 24982 houses / flats at a cost of about Rs.500 Crore. Besides construction of houses/flats, Board has also provided 1296 developed plots under sites and services schemes at several places so as to facilitate allottees to have the houses/ flats of their choice. The district wise details of houses constructed up to 2016-17 up to Nov 2016 are given in Annexure 8.20.

### Ongoing Schemes and New projects

The APHB is taking up 5 projects comprising 576 houses of different categories with a project cost of Rs.167.95 crore in various districts. Works are in progress and the same are at different levels in different locations are shown in Table 8.23.

Table 8.23: Status of the Projects

Sl No	Location	HIG	MIG-II	MIG-I	Total	Progress	Project Cost (Rs. In crore)
KRISHNA District							
1	Machilipatnam	0	30	2	32	46.93%	5.82
2.	Bhavanipuram	0	65	0	65	27.33%	16.35
3.	Bhavanipuram (spl Scheme)	0	0	90	90	22.00%	13.35
KURNOOL District							
4.	Johrapuram Ph-III	26	91	60	177	87.00%	21.32
VISAKHAPATNAM							
5.	Paradesipalem	73	13	126	212	32.00%	111.11
	TOTAL	99	199	278	576		167.95

Source: AP Housing Board

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## Special Schemes

Special Schemes are also being taken up for Class- IV Government employees, Organised Industrial Workers, Employees under Shops and Establishments and construction workers etc., under Hire Purchase Scheme. As per demand received at Bhavanipuram, Vijayawada, 90 flats were taken up, the work is under progress and it will be completed by 15-06-2017.

## Rajiv Gruhakalpa Scheme

The APHB has taken up 4240 units in Tadepalligudem (W.Godavari), Guntur, Tenali Nellore Kadapa Adoni (Kurnool) districts of the state with a project cost of Rs.59.95 crore and all the works are completed.

# Public Health & Municipal Engineering

## Urban Water Supply and Sanitation

The Department is dealing investigation, design, preparation of estimates and plans and execution of water supply and sewerage schemes in all 110 Municipalities including 13 Municipal Corporations.

Water Supply Improvements Schemes are being taken up in Urban Local bodies from time to time to improve per capita water supply on par with National Standards. In addition the technical control over all Engineering Works in 110 Municipalities including 13 Municipal Corporations of the state is exercised by Engineer-in-Chief (PH). The operation and maintenance of Water Supply & Sewerage Schemes is being attended by the respective Municipalities and Municipal Corporations.

## Status of Water Supply

As per the standards stipulated in Central Public Health Engineering Environmental Organization (CPHEEO) manual, the rate of drinking water supply to be maintained is as follows:

*Town with Under- ground drainage - 135 LPCD*

*Town without Under-ground drainage - 70 LPCD*

The State Government is giving top priority to provide protected drinking water to all urban local bodies by strengthening existing infrastructure and service levels. 35 water supply schemes with an estimated cost of Rs.833.99 crore were completed in 35 ULBs adding 368.92 MLD of water, thereby increasing the average water supply from 63 LPCD to 85 LPCD. With the increase in water supply approximately 34.90 lakhs of population were benefitted and have access to safe and clean water.

The normal daily water supply in various Urban Local Bodies varies from 40 LPCD to 150 LPCD and the water supply is shown in Table 8.24.

Table 8.24 Status of Water Supply

Frequency of supply	No. of ULBs
Daily	92
Alternate Days	17
Once in three days and above	1
Total	110

Source: Public Health Dept

38,045 bore wells are functioning and catering to the water supply needs of the habitants in all ULBs. At present, 542 tankers make 3745 trips per day to un-served areas.

## Jawaharlal Nehru National Urban Renewal Mission (JNNURM)

Government of India launched the JNNURM in 2005-06 with a budgetary provision of Rs.50,000 crore for a period of seven years. The mission will cover 65 cities/urban agglomerations. The mission aims to encourage reform and fast track infrastructure development. The focus is on improving efficiency in urban infrastructure and services delivery mechanism, community participation, accountability of ULBs/ Parastatal agency towards citizens.



### Schemes under Implementation

#### A. Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)

This is a component of JNNURM programme launched to provide Urban Infrastructure in Water Supply, under ground drainage, storm water drains, solid waste management and transportation in Non-mission Urban local bodies (ULB's) in a planned manner.

The scheme applies to all ULB's in A.P. excluding mission cities like Vijayawada, Visakhapatnam and Tirupati. The funding pattern is in the ratio of 80:10:10 among Government of India, Government of Andhra Pradesh and ULBs.

52 projects costing Rs.1,902.43 crores were sanctioned covering 49 ULBs. Out of which, 41 are in the water sector costing Rs.1547.89 crore, 4 under sewerage sector costing Rs.211.12 crore, 4 under storm water costing Rs.89.48 crore, 2 under roads costing Rs.50.07 crore and 1 under Solid Waste Management costing Rs.3.87 crore. Out of these 52 projects, 37 Projects of water supply schemes were completed in the 37 ULBs benefitting 35 lakh of population for supply of safe and clean potable water. One project of UGD was completed benefitting 0.65 lakhs of population for scientific disposal of sewage and sullage, which is properly collected from communities without causing any health or environmental problems. 4 projects of Storm Water Drainage completed in 4ULBs benefitting 4.50 lakhs of population for effective discharging of the storm water during the heavy rains or storms without inundating the surrounding areas. 2 projects under Road sector are completed and the remaining projects are in progress.

#### B. Interated Housing Slum Development Programme (IHSDP)

It is mainly aimed to improve infrastructure facilities in slum areas. 17 projects costing Rs.213.28 crore were sanctioned covering 17 ULB's. The funding pattern is 80:10:10 among Central Government, State Government and ULB. All the 17 projects are

completed and benefitting the population residing in 265 slums for improvement of infrastructure facilities duly increasing the standards of living, of all the habitants of these Slum areas.

#### C. Urban Infrastructure and Governance

Three schemes have been sanctioned. Two are in storm water drains sector costing Rs.77.04 Crore and one in underground drainage costing Rs.19.00 crore. All the schemes are completed, benefitting the people around 4.6 lakhs in 2 ULBs, developing hygienic environment by safe disposal of sullage and storm water.

#### Plan Grant

28 Projects are sanctioned with Plan grants (24 WS, 1 UGD, 2 SWD, 1 - Traffic and Transportation) at a cost of Rs.376.01 Crores. Out of these, 22 water supply schemes, 1 UGD and 1 T&T are completed and the balance schemes are in progress.

#### HUDCO Grant

14 Projects sanctioned under HUDCO loan (12 WS & 2 UGD) at a cost of Rs.1591.68 Crores. Out of these, 10 water supply schemes completed in 10 ULBs covering approximately 14.81 lakhs population providing clean and potable water for drinking and 1 UGD completed benefitting 1.00 lakh of population.

#### AP Projects (GoI Non-Sanctioned)

10 schemes were cleared by SLSC to pose under JnNURM-UIDSSMT. But GoI has not sanctioned these schemes as the funds provided for Andhra Pradesh under JnNURM have exhausted. Govt. of AP decided to take up these projects and meet the expenditure of these projects from Plan funds. Out of 10 projects, 5 are in water supply sector costing Rs.128.29 Crores, 3 are in Sewerage sector costing Rs.171.74 Crores and 2 are in Storm Water Drain sector costing Rs.108.77Crores.

Out of these, 3 water supply schemes covered in 3 ULBs provided water to 5.50 lakhs of population are completed and the balance schemes are in progress.

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### APMDP Projects

6 Water supply Projects are sanctioned at a cost of Rs.1105.62 Crores and funding Pattern is 70:20:10 among World Bank, State Government and ULB. All the schemes are in progress.

### One Time Special Assistance Grants

The Central Govt. has sanctioned 2 projects as One Time Special Assistance to Vijayawada and Guntur cities. One Storm Water Drainage (SWD) and one Under Ground Drainage (UGD) Projects are sanctioned at a cost of Rs.1364.66 Crores. All schemes are in progress.

### State Finance Corporation Grants

Water Supply (Ongole) Project is sanctioned at a cost of Rs.40.00 Crores and the scheme is in progress.

### AMRUT Projects

The Central Govt. has launched AMRUT scheme for developing Infrastructure in the cities of population more than 1 lakh. The State Govt. has sanctioned for Rs.804.46 Crores in 30 ULBs all the works are in tender stage.

### Under Ground Drainage Schemes

At present 8 ULBs i.e. Visakhapatnam, Vijayawada, Tirupathi, Rajahmundry, Kadapa, Pulivendula, Puttaparthi & Tadipatri Underground Drainage schemes are functioning with a total treatment capacity of 295.00 MLD. Construction of sewage treatment plants in 6 ULBs are in progress at Visakhapatnam, Vijayawada, Yemmiganur, Kadapa, Nellore and Guntur to add Additional Sewage capacity 425.8 MLD and are proposed to be completed by March 2019.

### Action Plan for completion of on-going Schemes for 2016-17

8 water supply schemes in 8 ULBs costing Rs.919.22 Crores are aimed to be completed for benefitting 16.04 lakhs population. 2 Schemes costing Rs.152.49 Crores are aimed to be completed in 2 ULBs under UGD Sector for benefitting 4.84 lakhs population. 2 Scheme costing Rs.39.30 Crores are aimed to be completed under Storm Water Drainage Sector for benefitting 0.33 lakh population.

### Action Plan for the year 2017-18

4 water supply scheme in 4 ULBs costing Rs.1276.05 Crores is aimed to be completed for benefitting 20.00 lakhs population. One scheme costing Rs.69.76 Crores is aimed to be completed under UGD Sector to benefit 1.27 lakhs population. One scheme costing Rs.23.82 Crores is aimed to be completed under Storm Water Drainage Sector to benefit 0.60 lakhs population. One scheme costing Rs.3.87 Crores is aimed to be completed under Solid Waste Management Sector to benefit 0.90 lakhs population.

## Rural Water Supply

The Government is determined to solve drinking water problem in rural areas and also aim to provide:

- Delivery of adequate, safe and potable drinking water to all rural people.
- Supply of safe water to fluoride, brackish and other polluted habitations
- Upgradation of all habitations to fully covered status
- Special focus on sustainability of sources/schemes
- Proper sanitation facilities to all habitations

Various State and Central Government programmes such as NRDWP, Finance Commission, Swachh Bharat Mission and other external agencies provide the funds for implementing schemes/works for providing drinkingwater and sanitation facilities to habitations. Funds are also being tapped in the form of loans from NABARD, World Bank etc.,

### Rural Water Supply infrastructure created

There were 1,85,201 bore wells fitted with Hand pumps, 32,886 PWS Schemes and 520 CPWS Schemes (including Sri Satya Sai Schemes) existing as on 01.04.2016. 1905 habitations were covered incurring an expenditure of Rs.517.93 crores under all grants during 2015-16.

### RWS ongoing programme 2016-17

382 works were taken up at a cost of Rs.1260.45 crore to cover 3,130 habitations, of which 1,932 habitations are targeted for coverage during 2016-17. 1084 habitations are covered duly incurring an expenditure of Rs.245.71 crore under all programmes up to October, 2016.

### World Bank Assistance Programme

A project has been sanctioned for 5 years in 3 districts to provide drinking water facilities in quality affected, not covered and partially covered habitations with World Bank Assistance. It is proposed to cover 964 habitations with 685 SVS/MVS works with an amount of Rs.328.72 crore in Visakhapatnam, Prakasam and YSR Kadapa districts. Out of which, 681 works are completed covering 925 habitations duly incurring an expenditure of Rs 264.29 crores up to March, 2016. During 2016-17, 4 works are ongoing with a cost of Rs.64.43 crores to cover 39 habitations. 21 habitations are covered duly incurring an expenditure of Rs.39.61 crores up to October 2016-17.

### Swachh Bharat Mission (SBM-G)

Total Sanitation Campaign (TSC) was renamed as “Nirmal Bharat Abhiyan” (NBA) with effect from 1.4.2012 with modified guidelines and objectives to accelerate further the sanitation coverage in rural areas, so as to comprehensively cover the rural community with renewed strategies. Nirmal Bharat Abhiyan, which is renamed as Swachh Bharat Mission (SBM-G) from 2nd October,2014, envisages covering the entire community for saturated outcomes with a view to create Nirmal Gram Panchayats (NGPs).

To achieve 100% rural sanitation in the State, Government have taken up construction of Individual Household Latrines (IHHLs), School toilets and Anganwadi toilets as units. In order to have more coverage in rural areas, the unit cost of IHHL (size 3’X4’) is increased to Rs.12,000/-from 2nd October,2014, with Central share of Rs.9,000/- and State share of Rs.3,000/- and Rs.15,000/- with Central share of Rs.9,000/- and State share of Rs.6,000/- for IHHL of size 4’X6’.

Government of India had sanctioned construction of 68.38 lakh Individual Household Latrines (IHHLs). Of which 32.75 lakh IHHLs have been completed up to March,

2016. The Government of India allocated and released an amount of Rs.135.45 crore for the year 2016-17.

The target for the year 2016-17 is 2000 ODF Gram Panchayats along with 5 lakh IHHLs. Out of which, 1337 GPs are declared as ODF and 4.44 lakh IHHLs are constructed up to October,2016, incurring an expenditure of Rs.484.16 crores,

## Municipal Administration

### Urban Sanitation – Door to Door Garbage Collection

There are 110 Urban Local Bodies i.e., 14 Municipal Corporations, 71 Municipalities and 25 Nagara panchayaths in the State. As per 2011 census, urban population of the state is 132.23 lakhs. The total garbage generation in 110 ULBs i.e., 1,94,396 MTs and Waste lifted is 1,90,591 M.Ts per month or to the tune of 98%. Out of total 3393 wards, door to door garbage collection is covered in 3203 wards or to tune of 94.40% wards covered by door to door garbage collection.

### Municipal Solid Waste Management (MSWM)

All the ULBs have procured the equipment for effective handling of the solid waste i.e., plastic bins (for Pushcarts/ Tricycles), push carts, tri cycles, autos etc., by utilizing the 13th finance commission grants and perpetual continuation of the MSWM initiatives like Parichayam (Know your worker), Pin Point Programme, Wall Writings regarding details of sanitary staff, involvement of all stakeholders of the community, i.e., RWAs, SHGs, NGOs, students, senior citizens etc., and campaign of reduce, reuse and recycle etc. Remarkable change is witnessed in sanitation and Solid waste management in the state and the quantity of garbage generation is also reduced. 100% households are covered by door to door collection in certain ULBs in the state i.e., Amadalavalasa, Ichapuram, Bobbili, Salur, Palamaneru, Ponnur, Tadipatri, Guntakal and Tenali etc.. The dumping sites of Bobbili, Salur, Guntakal, Nadyal and Palamenru

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were converted as beautiful parks. Compost Plants were also established in several ULBs, Bio gas plants are established in Bobbili, Salur, Palacole, Eluru, Narasapur, Vijayawada, Guntur and Tenali.

The Swachha Andhra Corporation is exclusively established to deal with sanitation and solid waste management matters. To improve the sanitation conditions and to arrest open defecation, the Swachha Andhra Corporation has sanctioned individual household toilets on saturation mode in 110 ULBs. All the 110 ULBs in the state have been declared as ODF.

Uniform Operational Guidelines were issued for maintenance of Sanitation and Solid Waste Management for effective implementation of SWM Rules and directives of Hon'ble National Green Tribunal, New Delhi. The salient features are;

- Shifting from Worker Outsourcing to Work Outsourcing (Comprehensive responsibility for supply of vehicles, conservancy materials, workers etc.,)
- 100% service coverage - Micro Pocket (for 350 + waste generators) as a basic unit of service delivery in residential areas.
  - Gate to Gate Waste Collection.
  - Street Sweeping & Drains Cleaning.
  - Litter collection and Sweeping of Main Roads & Public Places.
  - Disinfection and Vector Control.
- Collection and Transportation of Commercial and Bulk Solid Waste in Commercial Areas.
- Assessment of service level performance of the contractor through technology based monitoring and evaluation system.

A Project Management Unit at state level was established to give handholding support to all the 110 ULBs, in implementation of the Government Orders. For this purpose, several state, regional and ULB level workshops were conducted. ULB level city sanitation task forces were also constituted. Local resource persons were also identified for creating awareness among the stake holders. Calling tenders for maintenance of sanitation by 87 ULBs and administrative sanction by the government were given to 55 ULBs, technical sanctions for the estimates of 49 ULBs

were also given. The preparation of guidelines, terms and conditions for calling tenders are in progress.

The Swachh Andhra Corporation, setup as State Mission Directorate for Swachh Bharat/Swachh Andhra Programme, under the directions of the MA&UD Department has initiated action for setting up of Waste to Energy Plants under PPP mode, in cluster approach. At present concessionaire agreements were entered into with the agencies for establishment of 10 waste to energy plants (10 Clusters with 53 ULB) at 10 different locations i.e. Visakhapatnam, Vizianagaram, Tadepalligudem, Guntur, Machilipatnam, Tirupathi, Nellore, Kurnool, Anantapur and Kadapa in the State for processing the Municipal Solid Waste around 4471 MTs of solid waste generated in 53 ULBs per day to generate 63 MW Power. In addition to this the Swachh Andhra Corporation has also initiated action for setting up of Municipal Solid Waste Management Projects in rest of the 57 Urban Local Bodies by using different technologies i.e., Waste to Compost/RDF/Bio-methanization/Bio-fuel.

### 14th Finance Commission Grants

The period of 14th Finance Commission is 2015-16 to 2019-20. The 14th FC has recommended grants to ULBs in two types i.e., 1) Basic Grant for Rs.2908.64 Crores and 2) Performance Grant for Rs.727.16 Crores (total for Rs.3635.80 Crores) on the ratio of 80:20 basis. The allocations of the amount to the ULBs is to be made based on Census-2011 Population with a weight of 90% and area with a weight of 10%.

For release of performance grants from 2016-17 onwards, the ULB has to fulfill the conditions from the year 2015-16 onwards. Making available data on local bodies receipt and expenditure through audited accounts, Improvement in own revenues and measure and publish service level benchmarks (SLB) for basic services.

Government have issued guidelines to execute the works like Water Supply, Sanitation including Septage Management, Sewerage Management, Solid Waste Management, Storm Water Drainage, Maintenance of community assets i.e. development of parks, protection of open spaces, development of play grounds, maintenance of municipal school buildings, Maintenance of roads and Burial and cremation grounds

### Smart Ward-Smart Village Programme:

A 'Smart Ward' encompasses sustainable and inclusive development of all sections of its community, so that they enjoy a high standard of living. 100 per cent achievement of the basic amenities, outcomes and services in a definite time frame, is a non-negotiable condition for moving towards Smart Ward. Eight steps are involved in achieving the objectives of Smart ward viz., conducting work shops, preparation of SLIPS, Non-negotiable indicators, identification of smart wards, etc.

Government have launched a unique initiative namely Smart Village – Smart Ward towards Smart Andhra Pradesh to achieve holistic and inclusive development on sustainable basis to improve the quality of life of people in the state, it is aimed to supplement the resources and efforts of the Government by eliciting participation of Corporates, Industrialists, Officers, elected representative, Philanthropists etc., by becoming partner in the development and to achieve the last-mile reach to the most marginalized and 20 non-negotiable development commitments for moving towards Smart Village-Smart Ward for the year 2016-2017. Accordingly, funds flow / available funds in the Ward being received through Government of India / State Government under various schemes to bridge the Gap of funds required to achieve the 20 non-negotiable development commitments for making Smart Andhra Pradesh had been mapped in the online and fixed the target for the 20 NNI for 2016-2017. Nodal Officers for each district have been appointed under Smart Ward Programme to co-ordinate with all the line departments and ensure to make it a continuous process to achieve the 20 non-negotiables towards Smart Village – Smart Ward towards achievement of Smart Andhra Pradesh.

All the Nodal Officers are updating their progress of departmental indicators as per the periodicity in the Key Performance Indicators in online every month with their respective credentials. The Monthly review would be done at the Mission level by 10th of every month and quarterly reviews by Hon'ble Chief Minister. Details are shown in Annexure 8.21.

### Swachha Andhra Corporation

Swachha Andhra Corporation was established on 01.05.2015 after launching of Swachh Bharat Mission (SBM) on 02.10.2014 and taking up the activities in ULBs

with a target to achieve 100% by Oct 2019 i.e. 150th birthday of Mahatma Gandhiji. Swachha Andhra Corporation was incorporated under Companies Act, functioning under MA&UD department is coordinating with the ULBs with regard to implement Swachh Bharat Mission.

### Objectives

- Elimination of open defecation
- Eradication of Manual Scavenging
- Modern and Scientific Municipal Solid Waste Management
- To effect behavioral change regarding healthy sanitation practices
- Generate awareness about sanitation and its linkage with public health
- Capacity Augmentation for ULB's
- To create an enabling environment for private sector participation in Capex (capital expenditure) and Opex (operation and maintenance)

### Achievements:

#### Declaration of Open Defecation Free State:

Upon completion of construction of all Individual Household toilets and many of the Community and Public toilets, the State was declared as ODF on 02.10.2016 by the Government. Later Quality Council of India has inspected all the cities towards cleanness & good sanitation work of School toilets, important places of cities and also community toilets. After analyzing the sanitation of the cities, QCI had issued certificates for 109 out of 110 cities so far.

### Individual Household Toilets

Out of 1.74 lakh eligible house holds, 1.70 lakh individual household toilets grounded and 1.64 lakh were completed upto February, 2017. An amount of Rs.224.43 crore released to the households so far.

### Community & Public Toilets

Unit cost of Community Toilet is Rs.98,000 (State share is Rs.59,800 and GoI share is Rs.39,200). 6613 number of community toilet seats were completed and 367 are in

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progress. Rs.17.80 crore was released to ULBs. 4040 number of public toilet seats were completed and 70 are in progress.

### Waste to Energy Projects

Municipal Solid Waste (MSW) Management is a modern and scientific approach. 10 waste to energy projects were awarded by NREDCAP (Energy department) to various agencies. The daily generated waste of quantity 4471 TPD form 53 Municipalities would be transferred to the these 10 waste to Energy plants for disposing in as per MSW rules.

### Status of MSWM projects:

Tenders were floated last date of submission date of bids 21.01.2017 for selection of agencies to establish MSWM

projects in 57 ULBs as per MSW rules. As such, the daily generated waste of quantity 1729 TPD form 57 Municipalities will be processed in these proposed plants. The projects will be awarded Feb, 2017 and commissioned by end of 2017

### Status of C&D Projects:

RFP for establishment of C&D treatment projects in three places i.e. at GVMC, CRDA & TMC was floated on 05.11.2016 with last date for submission of bids as 30.11.2016. After techno-commercial evaluation of the bids, proposals were submitted to GoAP for awarding of the projects. The projects are expected to award by 13.12.2016. The project details are

S.No	Description	GVMC	CRDA	TMC
1	Population (in lakhs)	18.83	10.48	3,74,260
2	Area (in Sq.km)	533	61.88	27.44
3	No. of Zones	6	3	1
4	Quantity of C&D waste (TPD)	80	60-70	55
5	Plant Location, (area in acres )	Mudasarlova 5.00	Ajitsinghnagar 5.00	Thukivakam 5.00

### AP Municipal Development Project

The Andhra Pradesh Municipal Development Project (APMDP) is a world Bank (IBRD) aided project with an estimated cost of Rs.1218.24 crore which aims at creating sustainable urban infrastructure in the urban areas as

well as creating managerial capabilities along the policy makers and the people who provide services to the urban population.

Component wise expenditure are shown in Table 8. 25

Table 8.25 Component wise expenditure

(Amount Rs.in crore)

Component	Allocation	Total expenditure up to 2015-16	Total expenditure up to 2016-17 (upto 30-11-2016)	Total Ependiture	Percentage
State level policy and institutional development support	5.70	1.18	0.42	1.60	28.07
Capacity enhancement	99.30	9.51	16.62	26.13	26.31
Urban infrastructure investment	1065.00	461.15	67.00	528.15	49.6
Project management technical assistance	45.60	20.06	2.48	22.54	49.42
Total	1218.24	491.90	86.51	578.42	47.48

Mission for Elimination of Poverty in Municipal Areas (MEPMA)

### National Urban Livelihood Mission (NULM):

The Government of India has restructured the SJSRY scheme as NULM and is being implemented with effect from 01-04-2014 in 32 eligible towns / cities. The Mission is aimed at reducing poverty and vulnerability of urban poor households by enabling them to access gainful self-employment and skilled wage employment opportunities, resulting in an appreciable improvement in their livelihoods on a sustainable basis, through building strong grassroots level institutions of the poor.

### Social Mobilization and Institutional Development (SM & ID):

The main objective of MEPMA is to organize poor women into Self Help Groups by covering all families living in slums and enable them to become self-reliant. A total of 1,92,267 Self Help Groups, 6934 Slum Level Federations and 137 Town Level Federations were organized up to November, 2016.

30,520 Persons with Disabilities (PWDs) are also organized into 3,052 exclusive SHGs, 79 Town Vikalangua Samakyas (TVSs) and 111 Parents Associations of Persons with Mental Rehabilitation (PAPWMRs) were formed in the State.

### Employment through Skill Training and Placement (EST & P):

It is proposed to provide placement linked skill trainings to 72,174 beneficiaries in 110 NULM towns during the year 2016-17 with 50% placements. 10,840 youth were trained and 9,967 were placed during 2016-17.

### Self Employment Programme (SEP):

This programme focuses on providing assistance to individual urban poor beneficiaries for setting up gainful self employment ventures and micro enterprises with interest subvention with an upper limit of Rs 2.00 lakh cost per unit. The target for the year 2016-17 is 8130, of which 313 SEP units have been sanctioned and 309 units grounded.

### d) Shelter for Urban Homeless (SUH):

The main objective of SUH is "Providing 24X7 all weather shelter to Urban Homeless with all amenities". 18 shelters are functioning under this scheme. During 2016-17, 30 shelters were sanctioned by State Level Sanction Committee in 12 ULBs with an amount of Rs.570.00 lakhs shelters.

### Scheme of Support to Urban Street Vendors (SUSV):

Strengthening and sustainability of livelihoods of Street Vendors (SVs) has been proposed to be implemented in all ULBs as a part of the national policy on urban street vendors. 1,47,621 Street Vendors were profiled 61,303 were submitted and 31,225 have been issued ID cards, Town Vending Committees have been formed in 110 ULBs. ID cards have been issued to 31,225 street vendors.

### SHGs Bank Linkage

SHGs-Bank Linkage programme has made MEPMA, one of the premier players in micro financing segment in the state. MEPMA facilitated SHG Bank Linkage worth more than Rs.796.82 crore to 28,875 Self Help Groups during the year 2016-17.

### Vaddi Leni Runalu

The Scheme is introduced in place of Pavala Vaddi to reduce interest burden on the urban poor for the loans taken by the Self Help Groups (SHGs) from the Banks for improving profitability of SHG enterprises and to encourage better payment. An amount of Rs.37.04 crore has been given to 84,817 eligible SHGs in 2016-17

### Stthree Nidhi:

The scheme aims to provide "credit gap funding" in addition to regular bank linkage. An amount of Rs.60.10 Cr was given to 5545 SHGs as soft loan under the scheme.

### Capital infusion:

An amount of Rs.10,000/- per each SHG member is being sanctioned under this scheme. In the 1st phase @ Rs.3000/- (30% of Rs.10,000/-) per member has been released. So far an amount of Rs.471.00 crores released to 15,78,970

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SHG members. Second instalment of Rs.47,592.00 lakhs + Backlog amount of Rs.492.00 lakhs will be released to 16,21,951 beneficiaries.

### Chandranna Bhima:

This programme was launched in 2nd October 2016 for unauthorized sector people. Under this programme 20 lakh members were enrolled by covering SHG members, rickshaw pullers, domestic workers, street vendors, self-employed and differently abled persons. 108 lakh members have been surveyed so far. 34.64 lakh members registered as unorganised and 3.04 lakh members enrolled under this programme.

### SHG Livelihoods EDP Trainings

MEPMA has planned to give EDP trainings on convergence mode to SHG and SLF Women on large scale based. During the year 2015-16, 54,000 SHG members have been trained against the target of 52,000 in Entrepreneur Development Programme through ALEAP, APITCO, KVK, Andhra Bank, Canara Bank, Andhra Mahila Sabha and NGOs etc, in advanced tailoring, food processing, jute product, handicrafts, readymade garments, glass paintings, bangles making and catering etc., livelihood units are grounded through SHG Bank Linkage and SHG Corpus benefiting 76,542 SHG members. During 2016-17, 30,184 SHG members have been trained against the target of 1.00 lakh and 1.13 lakh units have been established against the target of 2 lakh units.

### City Livelihood Centres:

47 City Livelihood centres were established in all ULBs and 35 City Livelihood Centres are functioning. As per NULM guidelines the first installment of Rs.3.00 lakhs per CLC was released for 35 CLCs for procurement of computer, phone with net connection and recruitment of staff. Services started in all CLCs.

### Common Facility center/Production Centers

After completion of EDP Trainings, handholding support will be provided for development of entrepreneurship amongst the SHG women. 61 Production centers were established in all districts and activities like tailoring, making of jute products and pickles.

### Generic Medical Stores

62 Generic Medical Stores grounded in the ULBs.

### MEPMA Bazars

MEPMA has facilitated urban SHGs' for participation in Regional SARAS in collaboration with District Rural Development Authority (DRDA) and also facilitated for participation in the exhibition held at New Delhi and regularly participating in Numaish at Hyderabad to encourage the market for SWASAKTHI Brand SHG products. 129 swasakthi canteens have been established through SHG Women in all districts at Collectorate, Hospital Premises, Municipal Offices, Market Yards, MRO office's and other public places.

### Pradhan Mantri Awas Yojana

Under this scheme "Housing for All by 2022" as "Pradhan Mantri Awas Yojana". Housing department is designated as the Nodal agency for implementation of the scheme in the state.

### RAY project status:

After discontinuation of RAY scheme ongoing projects of Suryatejanagar in GVMC, NSC Bose Nagar in VMC were approved by GoI to subsume under Housing for All.

## Rural Development

It is possible to increase productivity of degraded lands with proper planning, scientific approach and efficient management and create huge employment opportunities for the poor. It is firmly believed that development of degraded lands is an important input required for eradication of poverty. The Commissionerate of Rural Development is implementing various rural development programmes like Watershed Development programme, Self Help Groups and related programmes and Mahatma Gandhi National Rural Employment Guarantee Scheme. As per the 2011 census, rural population of Andhra Pradesh is 349.67 lakh constituting 70.53% of total population.

Watershed development programmes (DPAP, DDP, IWDP, IWMP), Comprehensive Land Development Programmes



(NTR Jala Siri under RIDF XIII, XV & XVII) and Wage Employment Programmes (MGNREGS) are being implemented in the State. All these programmes are being implemented and monitored through software solution RAGAS (Rashtra Grameena Abhivridhi Samacharam). The entire data is uploaded every day into central server and reports displayed on respective websites, thereby bringing in transparency and accountability in these programmes.

### Watershed Development Programmes

The main objective of the Watershed Development Programme is encouragement of Integrated Natural Resources Management following the ridge to valley approach in a selected micro watersheds of approximately 500 Ha. area with total participation of the local community. Watershed programmes are concentrated only in rainfed areas which have undulating terrain and area prone for degradation of soil (soil erosion). These areas are generally characterized by very poor groundwater sources. The watershed so delineated is treated for conservation of soil and moisture by following the ridge to valley approach. Soil and Moisture Conservation, Water Harvesting, Ground Water Recharge, Improvement of vegetation and Bio-mass, Wasteland Development etc., are the main components of Watershed Development Programmes.

Watershed development programmes are being implemented under Centrally Sponsored Schemes of DPAP, DDP and IWDP to combat recurring drought conditions in the state. After the Andhra Pradesh Rural Livelihoods Project (APRLP) supported by DFID provided the necessary learning's on providing Sustainable Livelihoods to the rural poor, the promotion of Watershed based livelihoods for the resource poor was included as another important component of the Programme since 2004. Watershed Development Projects has brought all schemes under one umbrella and provided for cluster approach wherein, contiguous areas upto 5000 Ha. are to be taken up for treatment from 2008. 3933 Watersheds covering an area of 19.67 Lakh Ha. has been taken up for Watershed Development so far. Of which 3907 Watersheds with an area of 19.54 lakhs ha. were completed. 432 water shed projects are under progress under IWMP.

A series of structures like sunken pits, rock fill dams, percolation tanks, check dams, farm ponds, earthen bunding, vegetative barriers, plantations etc., are constructed to reduce velocity of water and allow percolation. They also control soil erosion and improve vegetative cover on the land so as to augment productivity.

### Watershed Development Component of Pradhan Mantri Krishi Sinchayee Yojana(Previously IWMP):

The major objective of the IWMP program is to improve the ground water level by constructing the water harvesting structures like mini percolation tank, percolation tank and check dams etc. The main aim of IWMP is to restore ecological balance by harnessing, conserving and developing degraded natural resource such as soil, vegetative cover and water. Prevention of soil run-off, regeneration of natural vegetation, rain water harvesting and recharging of ground water table are few outcomes of these programs. This enables multi-cropping, introduction of diverse agro-based activities, and help provide sustainable livelihoods to people in watershed areas. IWMP programme has defined appropriate institutional arrangements, budget allocations, capacity building strategies and project management cycle. The proposed processes integrate gender, equity and livelihood concerns in the framework of Watershed development programme. Details about the achievements under this programme are shown in Table 8.26.

Table 8.26 : Watershed development under IWMP

Item	2015-16	2016-17 up to October 2016	Total
No. of watersheds	432	No Projects	432
Proposed for treatment (Lakh. ha.	18.10	were sactioned	18.10
Expenditure (Rs. in crores)	715.66	163.87	879.53

Source: Rural Development department

Component wise progress under IWMP and activities taken up under Natural Resource Management (NRM) are shown in Annexure 8.22.

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Activities taken up under Production Systems Improvement (PSI):

Sl. No.	Activity	No. of Activities	Expenditure (Rs crore)	No. of beneficiaries benefitted
1	Agriculture activities	19370	29.06	60500
2	Animal Husbandry activities	28489	11.8	
3	Other line dept. activities	2945	0.45	
	Total	50804	41.31	60500

Activities taken up under Livelihoods for Assetless:

Sl. No.	Activity	No. of Beneficiaries benefitted	Expenditure (Rs in crores)
1	Dairy activities	16411	42.06
2	Small Ruminants	12956	33.21
3	Petty Business	6910	17.71
4	Skilled Business	2591	6.64
5	Agriculture	4319	11.07
	Total	43187	110.69

### NTR Jala Siri (RIDF – XVII):

NTR Jala Siri-I (RIDF-XVII) is the convergence programme of State Govt., with MGNREGS and NABARD with a view to consolidate the gains made in Land Development Project to ensure sustainable and Comprehensive Development of SC/ST land. The project shall be taken up in all districts of the State.

Government has initially sanctioned Rs.198.80 Crs RIDF – XVII & Rs.186.75 Crs to MGNREGS. So far Rs.186.75 Crs has been released under NABARD and an amount of Rs.184.25 Crs. has been incurred under RIDF-XVII funds. During the year 2016- 17 an amount Rs.15.00 Crores were released under this programme out of Rs.75 crores allocated in the budget and an amount Rs.55.22 crores expenditure has been incurred including previous year balances.

### NTR Jala Siri Phase-II

Under this scheme 1,24,349 bore wells were sanctioned with an out lay of Rs.1496.29 Crs (Rs.377.15 Crs. from MGNREGS, Rs.621.75 from AP TRANSCO, Rs 125.00 Crs from Special Development Package, Rs.184.13 Crs. from State Govt and Rs.188.26 Crs. from beneficiaries contribution) to all the districts (except Ananthapur) to the small and marginal farmers SC/ST/BC and others (up to 5 Acre. of land) where additional ground water recharge available in the State during 2016-17.

The NTR Jala Siri Phase-II Programme essentially focuses on utilization of available water resources and to promote conjunctive use of surface water and ground water. This ensures recharge of ground water extracted from new bore wells through the available surface water in the vicinity and also through recharge by applied irrigation in command areas. 1,22,797 applications were received so far. Of which 97,402 were sent to the Ground Water Department for survey. So far 7,559 Bore wells were drilled under this programme and remaining are under progress.

### MGNREGS

Mahatma Gandhi National Rural Employment Guarantee Act is a legal Guarantee of 100 days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work. The objective of the Act is to providing not less than one hundred days of unskilled manual work as a guaranteed employment in a financial year to every household in rural areas as per demand, resulting in creation of productive assets of prescribed quality and durability. Also strengthening the livelihood resource base of the poor, proactively ensuring social inclusion and Strengthening Panchayat Raj Institutions. This programme is being implemented in all districts of the state.

All the works executed are grounded into four categories viz., a) Public works relating to Natural Resources Management, b) Individual assets for vulnerable sections, c) Common infrastructure for NRLM compliant self help groups and d) Rural Infrastructure. This is a centrally sponsored scheme with 90:10 central and state share respectively. The Central Government releases 100% for wage payments, 75% for material payment and 6% for administrative expenditure. Remaining 25% of amount is to be released by State Government for material payments, Unemployment allowance and MGNREGS-AP State Council expenditure.

## Performance of MGNREGS

MGNREGS is being implemented in 13,085 (Total No of GPs in AP is 12,918) Gram Panchayats in 661 Mandals of 13 districts. 84.85 lakh job cards were issued covering 1.78 crore wage seekers since inception of the scheme. 5.2 lakh Srama Shakti Sanghams have been formed with 60 lakh households covering 116 lakh wage seekers. Over view of MGNREGS during 2016-17 (up to Nov 2016) are shown in Table 8.26

Table 8.26: Overview of MGNREGS-AP

Particulars	During 2016-17 (upto Nov 2016)	Cumulative performance
Job Cards issued (lakh Nos.)	1.91	84.84*
Works Completed (lakh Nos.)	8.79	41.33
Total Expenditure (Rs.in crore)	3678.30	27938.31
Households provided wage employment (lakh Nos.)	36.74	60.02
Individuals provided wage employment (lakh Nos.)	60.14	11600.00
Total person days generated (crore)	15.76	176.30
Persondays generated for SC(crore)	3.65	41.83
Persondays generated for ST(crore)	1.80	20.50.
Persondays generated for BC (crore)	7.56	85.50
Households completed 100 days (lakh Nos.)	2.23	63.41
Average No. of days employment provided per HH	42.9	-
Average Wage rate per day per person (Rs.)	141.64	104.58

\*Removal of duplicated and permanently migrated job cards is under process

Source: Rural Development Department

## Best Practices

### End to End IT Utilization

### Rashtriya Grameenabhivruddhi Samacharam

The use of ICT becomes necessary especially in registration of wage seekers, estimation of works, disbursement of wages and effective monitoring for ensuring transparency in the execution of MGNREGS in Andhra Pradesh. The transaction based software issues job cards, maintains shelf of projects, generates estimates, issues work commencement letters, updates muster rolls and generates pay orders.

## MIS (Web) Reports

Web reports provide detailed information under various sections and subsections covering all aspects of MGNREGS activities. The user can access all reports in the website [www.nrega.ap.gov.in](http://www.nrega.ap.gov.in) which offers information related to employment generation, physical and financial performance. The reports generated are transaction based. The expenditure incurred is also transaction-wise which can be accessed through various reports in the website.

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## Key initiatives

The government had made effective use of IT applications in implementation of the programme which has avoided duplication of works, spurious transactions, fudging of muster rolls, parking of funds and ensured proper wage payments, timely fund disbursement, standard procedures, proper record keeping and transparency in the entire system. NREGA has popularized ICT as a tool for empowerment amongst the rural masses - grievances recording and accountability has eliminated the middlemen enabling true G2C interaction.

## Transaction based software to provide end-to-end solutions:

Andhra Pradesh is the first state to introduce comprehensive IT software that provides end-to-end IT solution with transaction based software in place since inception under MGNREGS. Various modules for execution of NREGS works, administration, accounts, etc., are prepared based on different aspects of the programme implementation. Every work planned and executed under MGNREGS is done through software by way of generation of the estimates, online sanctions, issue of work commencements orders, e-muster entries, direct payments to beneficiaries through eFMS etc. Web based monitoring reports are placed in the official website of <http://www.nrega.ap.gov.in/> capturing every work and transactions on real time basis which are kept available for public access.

## Electronic Muster and Measurement System

e-MMS is designed to ensure complete transparency in implementation of MGNREGS programme by obtaining electronic data directly from worksite to the website on day to day basis from all villages. The musters and measurements information is sent electronically through mobile technology. e-MMS is being implemented in all districts. Live musters are uploaded to the server directly from the field and can be viewed on the web on day to day basis.

The objective is to achieve complete transparency in implementation of MGNREGS by obtaining LIVE data from the Worksite to the Website on a daily basis. The mobile technology is customised and deployed for the MGNREGS field functionaries through different mobile applications like

e-Muster, e-Measurement, e-muster verification and e-check measurement. eMMS is designed to arrest distortions in the programme like Muster Fudging; Delays in Payments; Binami Wage seekers; Fake Measurements and Work Duplication. eMMS is being implemented in all the districts.



## Geo-tagging of all works where in public money involved in execution.

Under MGNREGA while at planning stage it is made mandatory to get GPS coordinates (Latitudes & Longitudes) to be taken to a particular work for the generation of estimate and capture images with GPRS tag for every payment and also date and time of visit to the work location. All such works are put in public domain for enhanced transparency. For this all field functionaries are provided with android based mobile which supports GPRS and GPS. Demand capture/ allocation of works/daily attendance to work sites and geo tagging are done through these mobiles and all the functionaries are trained to utilize this technology.

## Financial transparency through Electronic Fund Management system (eFMS):

eFMS has been established with the objective of implementing an efficient fund transfer system through online money transfers. All the MCCs and DCCs are networked to the central server and through that to a central fund in which all the MGNREGA funds are lodged. eFMS enables electronic transfer of money to a disbursing account (post office/smart card etc) where there is a requirement and allows optimum utilization of funds. eFMS avoids unnecessary parking of funds at



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The Department has provided the IRIS devices to all the districts for making of wage payments in the case of Biometric authentication failures to know the status of the wage disbursements made to the wage seekers in a real time MIS.

### Aadhaar Payment Bridge (APB) mode:

The Government has started an initiative to route the wage payments through Aadhaar Payment Bridge (APB) mode in which the wage amount will be credited directly into the individual wage seekers account through National Payment Corporation of India (NPCI). So far 2529 GPs have been converted to wage payments through APB mode in the 13 districts of AP.

### APNGO alliance (APNA) for MGNREGA:

AP NGO Alliance (APNA) has been formed with 253 NGOs in 428 Mandals to organize the rural poor to demand their rights under the MGNREGA. The NGOs are given the tasks of organizing the poor into SSSs, training them, overseeing implementation of the programme, observing the social audit system, etc. The services of the APNA have been utilized for the capacity building of wage seekers, formation of 3.41 lakhs Shrama Skhakthi Sanghas (SSS) and 5130 SSS federations in 4055 GPs.

They are also involved in fact-finding missions in areas where there are complaints in execution. There is a cascading debriefing sessions with the APNA members at mandal level on 3rd Wednesday, at District level on 3rd Friday and at State level on last Saturday of every month.

### Vigilance on programme initiatives

The Government has established Vigilance cells at the State and District levels to take up follow up action on the Social audit reports with the objectives of speedy redressal of deficiencies, improve the delivery mechanism, ensure accountability, close monitoring of disciplinary action, boost up the public confidence and ensure people's faith in Governance.

District Vigilance Officer takes to follow up action of both social audit reports and quality control reports, monitor recovery process, filing of criminal cases, and implementation of awards passed by the Ombudsman.

It is proved beyond doubt that the follow up process through State and District Vigilance Cells has resulted in empowering the primary stake holders by enabling them to demand their rights and entitlements. Thorough vigilance mechanism not only helped in evaluating the performance of implementation and improving the service delivery but also in enhancing the awareness levels and participation.

### Community monitoring through Social Audit (SA):

Governments are facing an ever-growing demand to be more accountable and socially responsible and the community is becoming more assertive about its right to be informed and to influence governments' decision-making processes. Faced with these vociferous demands SOCIAL AUDIT was felt needed.

Social audit process as it is being implemented under MGNREGA in AP, includes public vigilance and verification of the various stages of implementation following which 'Social Audit Forums – Public Hearings are organized where information is read out publicly, and people are given an opportunity to question officials, seek and obtain information, verify financial expenditure, examine the provision of entitlements, discuss the priorities reflected in choices made and critically evaluate quality of works as well as the functioning of the programme staff. The Social Audit Public Hearing is not only gives people an opportunity to review compliance with the requirements of transparency and accountability, but also serves as an institutional forum where people can conduct a detailed public audit of all NREGA works that have been carried out in their area since the inception of the Scheme. Social Audit will be conducted once in six months by the village social auditors.

Web based monitoring reports are placed in the official website of <http://www.socialaudit.ap.gov.in/> social audit schedules and action taken reports are kept available for public access.

### Social Audit follow-up action:

Rs.145 crore was covered by financial deviation in social audit (including convergence department). Rs.66.10 crore has been determined as misappropriation(Personal

Hearing) and so far Rs.22.30 crore has been recovered, but still Rs.43.80 crore is yet to be recovered where as Rs.52.00 crore has to be finalized. 72,073 disciplinary cases were disposed off where 828 functionaries were suspended, 25,945 functionaries were removed and 38,204 punishments were imposed and 7,924 were acquitted and 115 FIR being filed. 13,379 disciplinary cases were filed against FTEs, MPDOs and engineers etc.. are still pending.

### Quality Control cell

The main objectives of the QC teams are to ensure quality, quantity & qualitative analysis. Each district having one QC team and each team will be assigned online by TCS with 58 EGS works, 8 IWMP works every month and also will be assigned Social Audit inspections.

The team leaders for the division level teams and take responsibility about correctness and proper analysis of field data of the inspected works The QC teams conducted weekly training programmes at district level and mandal level, where in the QC team focuses and point out common mistakes being committed in their areas and explain to field functionaries about the lapses and ways of avoiding such mistakes in the future executions. This will help development of durable assets under MGNREGS

13248 works were assigned and 10678 (80.60%) works were inspected. 7843 (73.45%) works found with no deviation. 2555 (23.92%) works found within permissible limits. 280 works proposed with deviation for which recoveries/penalties. An amount of Rs.74.91 lakhs was proposed for recovery. Quality control inspection reports are kept open to public in the MGNREGS Web site.

### Public Grievance and Redressal system

Grievance day is being organised on every Monday at GP level/Mandal Level/District level on every Monday to register and monitor complaints from beneficiaries. A complaint is received, the designated authority will register it in the online Grievance redressal system, an SMS will be sent to the officer concerned for redressing the grievance. The system automatically escalates the complaints to the higher levels if appropriate action within the stipulated time is not taken at lower level.

Issues related to the entitlements of Wage Seeker, Work Related, Material Payments, Wage Payments, Corruption, Social Audit, APNA NGO, Disability, Tribal Welfare Department, Forest Department, P.R Department, others are redressed through [www.meekosam.ap.gov.in](http://www.meekosam.ap.gov.in)

Out of 6823 complaints registered, 6671 complaints were redressed (97.77%) and 152 are pending so far. The ultimate goal is to create a one-stop public grievance handling and resolution system, characterized by high efficiency of resolution and real time reporting. Beneficiary satisfaction is the key driving force in this Grievance redressal.

### Information, Education and Communication:

Certain measures were taken for dissemination of information and creation of awareness in rural areas with regard to social audits and participation in Gram sabhas are door to door awareness to wage seekers, mobilization through Kalajatha, SSS group meetings and ward sabha, creation of the awareness among the beneficiaries through worksite verification, awareness through village social auditors, using of print and electronic media for wide disseminating the information and through monthly Rozgar-Diwas

### Shrama Shakti Sanghas (Labour groups):

Despite the spectacular success in implementation of MGNREGS by introducing many initiatives, still there are many challenges to be addressed to ensure that the entitlements due to the wage seekers under the MGNREGS are assured. In order to achieve this Shrama Shakti Sanghaas (SSS) groups are formed to facilitate activities like monitoring collection of demand, identification of works, opening of work, timely wage payments, provision of work site facilities, concurrent social audit etc. 5,20,252 groups were registered and 86,34,682 wage seekers were covered in the groups.

### Formation of Srama Shakti Sanghala (SSS F) federations:

SSS federations formed at the village level will ensure higher level of labour participation, build confidence among the

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wage seekers and also empowers the SSS groups. 10,181 SSS federations have been formed with 1.32 lakh SSS groups in 5777 GPs of 417 mandals.

### Organisation of Rojgar Diwas:

The Rojgar Diwas is being organized on the 1st Saturday of every month in the Gram panchayats. The main objective of this meeting is to create the awareness among the wage seekers and general public about the MGNREGS Scheme.

### Vigilance on programme initiatives:

The Government established Vigilance cells at all over the state to take up follow up action on the Social audit reports with speedy redressal of deficiencies, improve the delivery mechanism, ensure accountability etc. The State Vigilance Cell headed by the Chief Vigilance Officer (CVO) functions under three broad categories viz. Preventive Vigilance, Punitive Vigilance and Surveillance & Detection.

### Spl. Provisions to PwDs:

Separate groups (Vikalangula SSS) are formed with persons with disabilities and provisions like 30% additional wage rate, preference to PwDs in the selection of mates, separate schedule of rates for PwDs and exclusive works for PwDs identified. 168295 Job cards were issued for PwDs. 14842 PWD groups formed with 89825 PWD wage seekers. 21.41 lakh person days generated for PWD wage seekers in 2016-17 with an outlay of Rs.33.86 Cr

### Special Strategy – ITDAs (Tribal Region)

#### MGNREGS Strategy in Tribal Areas:

Government have issued orders to enable them to oversee the implementation of the scheme in tribal areas. Separate DCCs are established for implementation of works like Check dams, Roads, GP buildings & mandal buildings in ITDA areas are taken up through ITDAs. Horticulture is given importance and plantations like Coffee, Mango, Rubber and Cashew were predominantly taken up in ITDA areas along with Land development activities. Provision of 150 days employment is being providing for RoFR (Forest Right Act) beneficiaries. 1.36 Cr person days are being generated in 5 ITDAs with the financial outlay of Rs.284.42 Cr in 2016-17.

### Special Strategy - Chenchu Primitive Tribal Group

Out of 33 tribal groups 8 groups are recognized as Particularly Vulnerable Tribal Groups (PVTG). Chenchus are also recognized as one among the 8 PVTGs. The MGNREGS Chenchu Special Project has been implementing to address the cases of extreme poverty, hunger & starvation and to arrest distress migration among Chenchu. The main features of Project are fixed wage employment throughout the year (15 days employment to each Chenchu wage seeker), three field offices have been established one at Yerragondiapalem in Prakasam dist, Atmakur in Kurnool Dist, and in Macherla in Guntur dist. Rs.56.13 Cr. has been incurred expenditure in the Chenchu areas since implementation of MGNREGS and 39.84 lakh persondays were generated by Chenchus.

### Wage Payment:

An amount of Rs.43.2 Cr. has been incurred expenditure in the Chenchu areas since implementation of MGNREGS and 33.24 lakh persondays were generated by Chenchus.

### Horticulture:

During 2016-17 it is proposed to take up 45000 acres under Horticulture plantation programme upto October 2016 estimates were generated for 72,715 acres. Pitting was done in 39,169 acres and planting in 32,863 acres.,

### Avenue Plantation:

It is proposed to take up Avenue plantation in 700 Kms of PMGSY roads, Nation highway roads and state Highway roads in convergence with Forest Department. Estimates have been generated for 20,085 kms. to plant 80.34 lakhs for roadside plantation. Planting is completed in 6482 kms.

### Homestead Plantation:

During 2016-17 it is proposed to take up plantations in the backyard of houses in villages. The seedlings are being supplied by the Forest department. As on now 4,67,519 households were covered.



### Institutional Plantation:

This year it is proposed to take up planting in 4,462 institutions and planting is under progress in 3,797 institutions.

### Convergence with PMKSY(IWMP) :

Rural Development department implements both MGNREGS and PMKSY-WC (previously IWMP). A state specific clear cut convergence policy between MGNREGS&PMKSY-WC for holistic treatment of the watershed has been evolved and is being successfully implemented in the state. Various NRM works like CCTs, Staggered trenches, Check Dams, Rock Fill Dams, Percolation Tanks, Mini Percolation Tanks, etc., are being taken up following Ridge to valley concept under IWMP. Land development, and soil moisture conservation works are being taken up under MGNREGS. NRM Category wise report from 01-04-2015 to 31-03-2016 (physical) is as follows

Name of the Activity	IWMP	EGS	TOTAL
Land development works	3021	0	3021
Soil moisture conservation works	2024	664	2688
Water harvesting structures	6306	19885	26191
Repairs to existing WHS	1217	2895	4112
Afforestation works	2884	3391	6275
Horticulture works	100	19257	19357
Live stock related works	852	1652	2504
Total	16404	47744	64148

### Animal Husbandry initiatives

Rural Development has formulated a strategy to converge the efforts of Animal Husbandry department for improving the productivity of existing Livestock. Perennial fodder, cattle drinking water trough and Silvi Pasture works were taken up with MGNREGS. The department involved in identification of beneficiaries and extending technical support to the field staff.

### Sericulture:

Mulberry Plantations & Tassar Host Plantations are being taken in the lands of SC & ST and SF & MF in convergence with Sericulture Department in accordance with the works included in the category II of Schedule I of MGNREGA.

### Fisheries Department:

Excavation of fish breeding ponds projects are being taken up in the fishermen villages to provide additional income to the fishermen community. These ponds are handed over to fishermen community for rearing inland fisheries. Unit cost of each fish breeding ponds is Rs.8 lakhs, out of which Rs.6 lakhs towards excavation is met from EGS funds and Rs.2 lakhs towards material component like finger lings etc., is included from the line department funds.

### Horticulture Department:

Horticulture plantation programme is being implemented under MGNREGS to enhance the livelihood security of farmers belonging to SC and STs through creation of productive assets. Horticulture crops like Mango, Sweet orange, Sapota, Acid lime, Guava, Tamarind and Custard apple are being promoted.

### Forest department:

Through Forest Department various NRM works like Check Dams, CCTs, afforestation activities such as raising of nurseries, avenue plantation, casuraina plantations etc, are taken up to improve and conserve the vegetation and water. Raising of nurseries for forest species, raising of plantations, water and soil moisture conservation works in the Reserve Forest Areas are being taken up by the Forest Department with MGNREGS funds through 39 Department Computer Centres (Forest) headed by the Divisional Forest Officers (DFO).

### Panchayat Raj & Tribal Welfare Engineering department

37 DCCs to PR Engineers and 5 DCCs to Tribal Welfare Engineers were established at divisional head quarters. Identification of works, estimate preparation, muster maintenance, execution and payments in other than tribal villages were made through the DCCs, Panchayat Raj and in tribal villages through DCCs, Tribal Welfare department. The works taken up through these departments include laying of CC Roads, Rural Connectivity works, Bharat Nirman Rajiv Gandhi Seva Kendras at Mandal and GP level.

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### Rural Connectivity Projects:

Rural roads are the critical infrastructure that is needed for bringing economic development in rural areas. A good network of all weather roads in rural area accelerates the development by connecting the village economy to the state and national markets. The road connectivity projects taken up under MGNREGS have resulted in increased mobility, increased productivity, saving in cost of transportation of men and material and speedier flow of commodities besides changes in the life style.

### Internal CC Roads in SC/ST colonies in villages

In order to improve the village basic infrastructure especially in the SC/ST habitations, construction of Cement Concrete Road works were taken up in big way under MGNREGS with technical expertise of PR Engineering Department. The 14th Finance Commission Grants to Gram Panchayats were dovetailed to MGNREGS funds on 50:50 basis and works were taken up in the village. The CC roads constructed in the villages have improved not only improved the village infrastructure but also brought a change in the village environmental sanitation. These villages are looking clean and green now.

### Panchayat Raj Department -Solid Waste Management

In order to promote better sanitation in rural areas, the PanchayatRaj, Rural Development and AP Swachh Bharat Mission have joined hands to promote Solid Waste Management units in Gram Panchayats. Under this initiative, the waste management is being tackled in a scientific manner, in which solid waste is being collected, transported, segregated and at Gram Panchayat Level in a centralised manner by Gram Panchayats. Different components of solid waste are being either sold out or recycled. This initiative has been taken up in 659 Mandal Head Quarters Major Gram Panchayats in the first phase. Under this project, the solid waste processing units (Shed) are constructed with MGNREGS funds. The Gram Panchayat is taking care of collection, transportation, segregation and the Try Cycles through sanitation workers called as "Green Ambassadors". The equipments like try cycles, sanitation tools, Garbage Transport Tipper,

incinerators, glass pulverisers etc are being procured from Swachh Bharat Funds. 366 Solid Waste Management Projects were completed during 2015-16. Effective conversion of waste into wealth is transforming the villages as clean villages and improving the living standards of the rural people.

### Tribal Welfare and Coffee Board:

Government of Andhra Pradesh have sanctioned Coffee Project under MGNREGS for taking Coffee Plantations in 1.04 Lakh acres and Shade Plantations in 1.00 lakh acres with estimated cost of Rs.349.00 crores, of which Rs.287.00 crores subsidy from MGNREGS (82.24%) and Rs.62.00 crores subsidy from Coffee Board (17.76%). The MGNREGS funds were utilised for pitting, planting, weeding, watch and ward etc., and Coffee Board funds were utilised for materials such as seed coffee, shade seeds, polythene bags, raising of pepper seedlings, mixed shade seedlings, supply of baby pulpers and administrative costs. The plantations which were promoted during the period 2009-10 to 2012-13 have already bearing fruits and GCC is taking the responsibility for marketing of the coffee beans. It is expected that each family would get an amount of Rs.45000/- per acre from coffee plantations.

Flag ship programmes like 'Panta Sanjeevani' (Construction of farm ponds), Neeru – Chettu (Construction of water harvesting structures & plantation of trees), Swachh Andhra Pradesh (Construction of Individual Household latrines) Wada Wadalo Chandranna bata (CC Roads) are the key Projects taken up by Andhra Pradesh Government during the year 2016-17, along with works like Vermi/NADEP compost pits, Anganwadi buildings, Solid waste management works and other works permissible under MGNREGS.

### Neeru – Chettu:

Convergence with PMKSY as well as Irrigation Department

Neeru – Chettu (Water – Tree) is one of the sub-missions under Primary Sector Mission of Rural Development is one of the line departments of "Neeru-Chettu" in which the MGNREGS and Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) are converged for effective treatment of Natural Resources.

As per the present focus, under Water Conservation Mission the following works to improve water table and green cover are taken up and the progress is as follows:

- Under Water Harvesting Structures Renovation of MI tanks, Check Dams, Check Walls, Percolation/Mini Percolation tanks, Farm Ponds/Dugout Ponds, CCT/Staggered Trenches etc. will be taken up are as follows for the year 2016-17 (upto Oct.2016).
- 5,71,114 water harvesting structure works is under progress and incurred with an expenditure of Rs.1631.64 crores as against the target of 6,89,193 works with an estimated cost of Rs.4114.41 crore.
- 28,412 Soil Moisture Conservation (SMC) works are under progress incurred is with an expenditure of Rs.109.20 Crores as against the target of 34,157 works with an estimated cost of Rs.69.08 crore.
- Under CHETTU programme 40,576 acres icovered with an expenditure of Rs.151.70 Crore as against the target of 83,587 acres with an estimated cost of Rs.648.66 Cr.
- Water harvesting structures like tanks, percolation tanks, Mini percolation tanks etc. are identified to take up desilting in 42,856 tank works with an expenditure of Rs.566.80 Crores. 2,72,501 Check dams, farm ponds and other harvesting structures were taken up with an expenditure of Rs.915.70 Crs.

### Panta Sanjeevani (Farm ponds):

The Pantala Sanjeevani programme, has been taken up as a massive key initiative to harvest rain water during rainy season and using the same for providing supplementary life saving to standing crop by promoting indigenous rain-water harvesting technologies, besides percolating the runoff water into ground. During this year, 9.00 lakh farm ponds, which can augment 6 TMC of water are being taken up.

A farm pond is a dug out pond constructed in or near the farm, where in rainwater is collected in the pond and

stored for future life saving of standing crop, recharging groundwater; and providing drinking water for farm animals. Each farmer can undertake farm ponds of various sizes 5X5; 8X8, 10X10 based on the need and size of the land holding. A farm pond can percolate water to a tune of 5 times of volume of farm pond. The farm-pond construction will be supported under MGNREGS upto 5 acres. Estimates were generated and sanctions were given for 7.03 lakh farm ponds. 2,26,500 farm ponds are under Progress and 1,28,671 are completed with an expenditure of Rs.735.42 Cr.

### Soak pits:

Water stagnation is one of the major reasons for the spread of mosquitoes and thereby communicable diseases like malaria, diarrhea, etc. Effective management of the liquid waste generated, shall not only make a dent on the hygiene in the surroundings, but also indirectly contribute to reduced health expenses.

Estimates were generated for 19 lakh pits, 7.96 lakh are under progress and 1,98,038 soak pits were completed.

### Solid waste Management works:

Solid waste management in rural areas includes collection and segregation of solid waste, provision for conversion of biodegradable solid waste into vermi compost and land fill arrangements to non degradable solid waste. Liquid waste management includes construction of pucca drains or underground pipeline and collection of same to a distance point and to take up low cost preliminary treatment for reuse the same for agricultural purpose. All Gram panchayats can take up this project. Estimates were generated for 2892 works worth of 17716.50 lakhs. Out of these 899 works are under Progress and 25 were completed with an expenditure of Rs.68.68 lakhs.

During 2016-17, 5001 Kms(CC Roads) under targeted Wada Waadala Chandranna Baata programme. So far 2566.55 Kms was laid with an expenditure of Rs.652.5 Cr.

## SOCIAL INFRASTRUCTURE

## GP/Mandal buildings &amp; Burial grounds

SI No	Item	Target	Sanctioned	In Progress	Completed	Total
1	GP Buildings (Rs.15 lakhs each)	1500	1957	626	688	1314
2	Mandal Buildings (Rs.32 lakhs each)	250	325	131	149	280
3	Burial Grounds (Rs.10 lakhs each)	2644	1727	901	1	902

## Individual household latrines (IHHLs):

Under MGNREGs 91,767 are completed with an expenditure of Rs.93.43 Cr and 1,53,437 IHHLs are under progress as against the target of 5 lakh IHHLs for the year 2016-17.

## Progress under MGNREGS:

Progress:	Component	Total Target	Target for FY 16-17	Progress in 2016-17	Responsible Agency
1	Skilling for wages	47876	27000	817	SEEDAP
2	Skilling for Self Employment	47772	15939	4625	RSETI
3	Livelihood Up gradation	12125	12125	2934	SRLM/SERP
	Total	107773	55064	8376	

## Key decisions taken during the year:

- To literate 5 lakh wage seekers in convergence with Adult Education department.
- Laying of 5,001 Kms. C.C. roads with an estimation of Rs.2,295.1 Cr. proposed in convergence with 13th and 14th finance funds with 50:50 sharing basis.
- Registration of Wage seekers those completed 50 days of work as building and other construction worker to get the benefits of the scheme.
- Opening of PMJDY accounts to all wage seekers or converting existing saving bank account to PMJDY account, to avail all the benefits.
- All the wage payments will be directly credited into the wage seekers accounts and are paid only based on biometric authentication.

The Government have issued orders for sanctioning houses under NTR Rural housing programme for the year 2016-17, duly dovetailing funds from PMAYG and MGNREGS. 90 person days under MGNREGS shall be provided for each new house taken up under NTR Rural housing programme

## Future Vision:

- More focus will be given to create durable assets
- Complete focus will be on Water conservation (NEERU), green works (CHETTU) to enhance the water level and to decrease the temperature by 4 degrees Celcius.
- Complete sanitation (construction of Individual Household Latrines- Swachh Andhra Pradesh), and creating awareness to use IHHLs. Open Defecation free Andhra Pradesh by 2019.
- Linkage of NREGS with Agriculture by taking up more agriculture allied activities.
- Paving the way towards double digit growth. Year wise action plans for convergence works were prepared for 5 years.
- By implementation of LIFE Project, skill development of wage seekers to promote self reliance.
- Implementation of Panta Sanjivani (Farm Ponds) and other flag ship programs.

The experience of over the few years clearly demonstrates that the MGNREGS has changed the face of rural Andhra Pradesh and not only empowered the people economically but also linked them with the local markets. The purchasing power of the rural poor has increased manifold and the living standards of the poor in terms health, education, sanitation, nutrition are improved to a considerable extent. The NREGS has helped the unorganised poor to get organised in to about 5.20 lakhs labour groups and there by enhanced their bargaining capacities.

### Awards:

The MGNREGS-AP software has been recognized as one of the best ICT solutions in the country and world-wide and has won the awards.

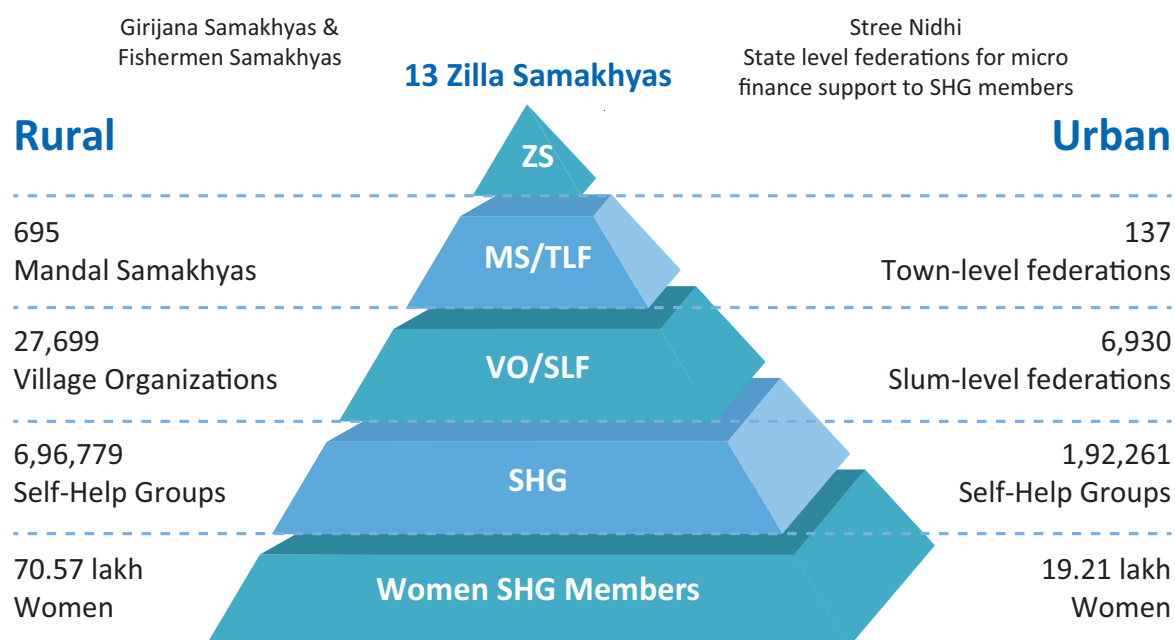
### AP Mahila Sadhikara Samstha Society for Elimination of Rural Poverty

Government of Andhra Pradesh's women's empowerment and poverty eradication agenda intends to ensure that disadvantaged communities in both rural and urban areas shall be empowered to overcome all social, economic, cultural and psychological barriers through self-managed organizations. Velugu, Implemented through Society for Elimination of Rural Poverty (SERP) and Mission for

Elimination of Poverty in Municipal Areas (MEPMA), this movement has achieved significant poverty reduction and social capital creation over the last decade through a holistic approach of facilitating and promoting empowerment, creating opportunities, providing mechanism for social security, and working for equity. Community Based Organisations (CBOs) have built up enormous financial capital base through savings corpus. Besides this, the human capital aspect of the SHG members has been built over the years and is continuously in the process of being strengthened through various programs and initiatives.

### Institution Building

**Self Help Groups (SHGs):** Currently, there are 89.78 Lakh members in 8,89,040 Self Help Groups (SHGs). Of these, 70.57 Lakh members are in rural areas (6,96,779 groups) and 19.21 Lakh members are in urban areas (1,92,261 groups). The total member's savings is Rs.3,937.03 crores and the total corpus is Rs.5,309.39 crores in rural areas. The urban SHGs are having the total corpus of Rs.1108.27 crores. Nearly 100% Aadhaar authenticated database along with a robust community based monitoring system support the targeted and efficient implementation of programmes. The federated structure of the institutions is given below:



## SOCIAL INFRASTRUCTURE

**SHG Federations:** Currently there are 13 Zilla Samakhya, 695 Mandal Samakhya and 27,699 Village Organizations in rural areas and 6,930 SLFs, 137 TLFs and 6,920 SLFs in the urban areas.

**Aadhaar Seeding:** Aadhaar seeding has been taken up on campaign mode to ensure beneficiary level data is authenticated and unique. The current member aadhaar seeding status is 98.84% (Total - 88,69,482- Rural - 69,75,807 + Urban -18, 93,675 members of the 89.78 lakhs total members).

**SB Accounts for SHG Members:** Out of 70.57 lakh rural SHG members, around 92% of the members (64.60 lakh) have their individual SB accounts in banks. Of these, 45.64 lakh rural SHG members accounts are seed with National Payments Corporation of India (NPCI). Out of 19.21 lakh total urban SHG members, SB Accounts are opened for 13.43 lakh members. APMSS have collected mobile numbers from 68.96 lakh SHG members (56.39 lakh (80%) of rural SHG members and 12.57 lakh (65%) urban SHG members.

SHG - Bank Linkage:

SHG Bank linkage is a successful programme in Andhra Pradesh and 30% of SHG bank linkage in the country being delivered here. During 2016-17 an amount of Rs.4449.17 Cr (Rs.3661.93.cr in rural and Rs.787.24 cr in urban) of bank linkage has been facilitated against a target of Rs.13784.34 Cr up to Sep, 2016.

### Chandranna Cheyutha - Investment Capital

Government decided to support SHGs with a capital infusion of Rs.10,000 per member to renew focus on livelihoods and provide sufficient leveraging strength to SHGs. The decision of infusing capital is a paradigm shift from the archetypical loan waiver scheme. The amount infused as capital into the SHG at the rate of Rs 10,000 per member (Rs 10,000 X No. of members in the SHG) will add to the existing corpus of the SHG. A giant leap in SHG Bank-Linkage envisaged in the coming years is now a possibility with the infusion of further capital, without which it would not have been possible given the slow process of periodical savings of Rs 50 a month per member. Thus, Rs.10,000 capital infusion per member is equivalent to her 200 months savings (over 16 years).

An amount of Rs.8400 crores has been sanctioned to 84 lakh SHG Women @ Rs.10,000 per member under capital infusion, out of which Rs.4914.24 crores has been released to 81,90,412 both rural and urban SHG members in the first & second phases. An amount of Rs.291.06 Cr was paid to 6,16,782 SHGs by the Government towards regular Vaddi Leni Runalu (VLR) for the period May to September 2015.

### PoP Strategy - Unnathi Programme:

PoP strategy is to enable every poorest of poor family in the state to come out of poverty with increased and sustainable livelihood opportunities established with the aid of an intensive handholding support. The major thrust areas will be ensuring entitlements and supporting the livelihoods for selected PoP families.

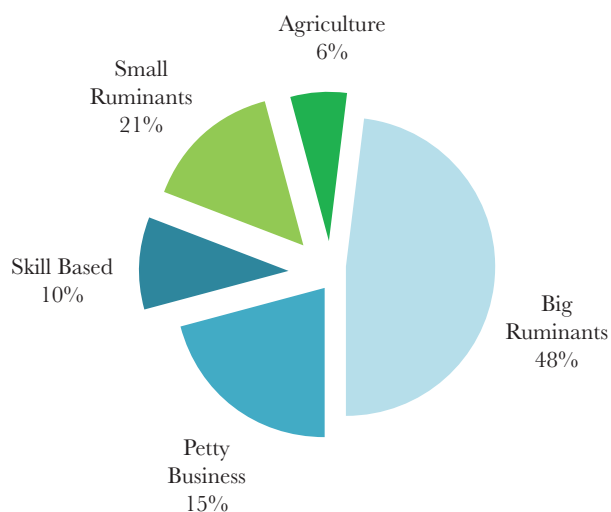
Baseline data of 16.66 lakh SC HHs, 5.46 Lakh ST HHs was collected and captured to know social and economical status of Individuals of the families and HHs to develop Decision Support System (DSS) to CBOs, and Project staff. Baseline details of 65724 BC/OC/Minority ultra poor HHs, and 33454 SC/ST colonies/villages infrastructure details also captured to identify gap in development

Livelihood/assets were provided to 1,79,590 households with Rs.427.31 Cr by mobilizing funds from various sources like APRPRP, Stree Nidhi-PoP tie up, NRLM, IWMP LH component, SCSP & TSP. Details are given in Table 8.26.

Table8.26: Fund wise grounding status

Source of Funds	No of Beneficiaries	Amount (Rs.in Crores)
APRPRP, Stree Nidhi-POP	46,060 PoP families	Rs.56.79
SC Sub Plan	79,246 SC families	Rs.226.14
Tribal Sub Plan	18,404 ST families	Rs.47.80
IWMP livelihood component	31,598 PoP families	Rs.84.58
NRLM Funds	4282 Ultrapoor families	Rs.11.98

## Livelihoods Pattern



It is planned to ground livelihoods to 22,412 SC HHs (Avg Unit Cost Rs.40,000) with an amount of Rs.89.65 Cr of SC sub plan and 21,270 ST HHs with an amount of Rs.85.07 Cr of Tribal Sub plan for the Year 2016-17. Livelihoods grounded to 12,101 SC HHs with Rs.39.65 Cr under SCSP, 2,924 ST HHs with Rs.9.14 Cr under TSP.

5000 Units of Ramlamb units (Unit Cost @ Rs.50000 for 10 Ramlamb) grounding is planned under SC/ST Sub Plan with the convergence of Animal Husbandry Department. Grounding of 6437 Units (Unit Cost @ Rs.60,000, (Loan Rs.15 000+ Subsidy Rs.45 000) of Heifer Induction is planned under SC Sub Plan funds with the convergence of AH Dept in the FY 2016-17.

## Stree Nidhi

Government and the SHG Federations have jointly setup Stree Nidhi Credit Cooperative Federation Ltd with an objective of providing low cost and timely credit to poor rural and urban SHG women in transparent and easily accessible manner through SHG federations i.e. VO/SLFs and MS/TLFs. Stree Nidhi, in addition to the loan services, also provides deposit services for resource mobilization, loan insurance, works as Business Correspondent to all Banks and also as a channelizing agency for financing livelihood activities under SC/Tribal Sub Plans, IWMP, NRLM etc., and is emerging as a gate way for transferring funds to the target group under different programmes.

### Credit disbursal:

An amount of Rs.415.81 Crores loan was disbursed to 176360 SHG members upto Oct, 2016.

### Recovery performance:

The recovery rate during current year stands at 94.40% as on 31.10.2016. Stree Nidhi has ensured the asset quality by restricting NPAs to 2.29% of total loan amount outstanding of Rs.993.58 crores as on 31.10.2016.

### Resource mobilization:

The MS/TLFs and State Government has contributed share capital amounting to Rs Rs.203.70 crores. Of Rs 203.70 crores, the MS/TLFs have contributed Rs 71.05 crores and State Government has contributed Rs 132.65 crores.

Stree Nidhi has commenced deposit services to mobilize surplus funds available with SHG federations not only to augment resources of Stree Nidhi but also to develop a sense of ownership and involvement of community Stree Nidhi, Rs.210.10crores as deposits from SHG federations including deposits of Rs.46.03 crores mobilized during current year upto 31.10.2016.

### Borrowings of Stree Nidhi:

Stree Nidhi, has mobilized Rs.775 crores funds as borrowings from different sources (banks & Financial institutions) as cash credit and term loan. Out of which Rs.395.00 crores used for on lending to SHGs and about Rs.380 crores are available for loan disbursements upto 31.10.2016.

### Interest margins distribution:

Though, Stree Nidhi collects interest at 13.5% interest on loan granted to SHG members, 2% is shared with VO/SLFs and MS/TLFs @ 1% each as these federations are functioning as monitoring agencies for Stree Nidhi operations.

### Business correspondent activities:

Stree Nidhi is working as a Business Correspondent (BC) to major banks in the state to provide financial services to the disadvantaged and low income groups at their door steps. Stree Nidhi has started the BC services in more than 178 locations covering more than 700 villages. Further, extending support in establishment of One Stop Shop (OSS) centers in 1000 locations.

SOCIAL INFRASTRUCTURE

**Insurance facility:**

Stree Nidhi is providing insurance services through “Loan Linked Life Insurance Scheme” to all the SHG members who avail loan from Stree Nidhi. Stree Nidhi has provided insurance coverage to more than 4.00 lakh SHG members up to Sep 2016 insuring an amount of Rs 1000 crores. Stree Nidhi has settled 434 death claims with an amount of Rs.89.36 lakhs up to 31.10.2016.

**Family Investment Opportunity Survey:**

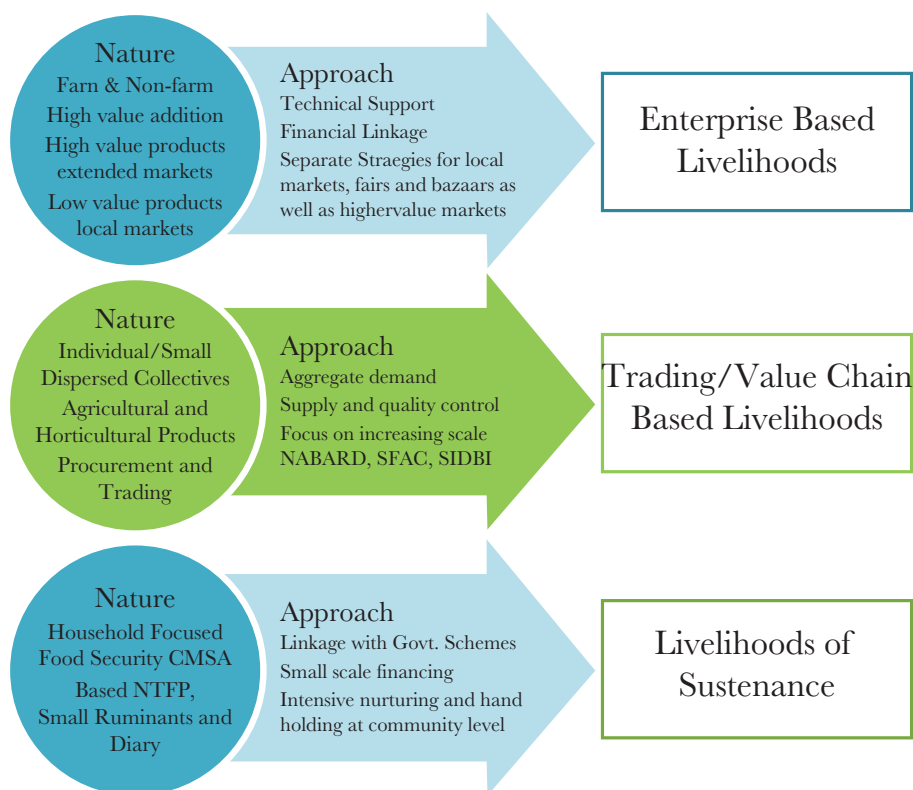
In order to leverage the capital infused into DWCRA groups, SERP is facilitating an intensive Family investment Opportunities Survey (FIOS) so that need based credit mapping can be done, facilitating productive as well as necessary subsistence credit to families with a clear objective in mind. SERP aims to build the household level investment plans of the members which are linked closely to the social and economic aspirations of the family. All SHG enterprises operating across farm and non-farm

sectors to be facilitated with Sector Experts to support the management of the verticals, and with credit, marketing and value chain linkages. The survey is going on.

**Diversified Livelihoods Strategy**

Community Based Organisations have built up huge financial capital base through savings and corpus. In addition to this, huge credit has been provided to CBOs through bank linkages. Therefore, it becomes imperative that this credit and these capacities are converted into productive outcomes for the SHG members as well as for the economy around them. This would involve a segregated livelihoods strategy for SHG members at different scales of capacity. SERP’s livelihood strategy is therefore, now focused at three levels- on household based livelihoods grounding, supporting and nurturing SHG linked enterprises and businesses and finally, on building value chains, second generation institutions and verticals around sectors that can create high value for the SHG members in terms of income increase.

**Livelihoods Approach**





## Primary Sector Based Producer Groups: APRIGP - Primary Sector Based Producer Groups-Value chainbased approach for FPOs

Under this approach, building & strengthening of Farmer Producer Organizations (FPO) have been taken up in order to harness higher value chain based returns in the primary sector. The idea is to enable establishment of institutions of the Farmer Producer Groups formed at the Village level participate actively in the FPO development under the Primary Sector Mission driven by the Government of Andhra Pradesh. This potential of SHGs can be further enhanced by building them into a network of producer companies/organizations where their capacities are built to function as autonomous stand-alone institutions. To implement this component effectively at the field level, SERP and the concerned Departments like Agriculture, Animal Husbandry, Horticulture have agreed to work together on a convergence mode in promotion and strengthening of FPOs in 150 APRIGP Mandals. Strategy for promotion of FPGs, FPOs were finalized and HR structure for implementation of rural value chains also finalized. The strategy aims to cover 2,50,000 producers in the Primary Sector based activities across 157 Farmer Producer Organizations to be established in 150 mandals. District wise details are given in Annexure 8.23

## SHG Enterprise Strategy Comprehensive platform for SHG enterprises-Rural retail chains

APRIGP through retail chain strategy aims to establish a platform to market SHG-made products and other FMCG products to increase the access to quality goods at reasonable prices in villages. Rural Retail Chains is a new concept in aggregation where village level Kirana stores are being brought together demand & supply is being negotiated at the Mandal Nodal Store level.

Rural Retail Chains sub-component while strengthening the livelihoods of rural kirana stores, envisages to increase incomes of 7500 retailers and 7500 entrepreneurs (of

whom at least 70% are Poorest of the Poor) by at least 50% and creates access to affordable, good quality nutrition and hygiene products to consumers by linking both the SHG (home-made) products and Fast-Moving Consumer Goods (FMCG) via the network of branded rural retail chain in 150 backward mandals across 13 districts over the project implementation period.

The pilot implementation of the RRC is being done in (14) Mandals across the state. The pilot implementation is being done so as to help evolve scalable models for further scale-up across the (150) Mandals as per the Project Implementation Plan. During this quarter, the RRC pilot implementation in the (14) mandals have been monitored closely.

The selected marts have been federated at the Mandal level and the MACS and VAT registrations of Mart Associations have been completed. All marts identified have contributed Rs.5000/- each as share capital towards the establishment of a Mandal Nodal Store (MNS) to facilitate logistics and collective procurement. All the 14 MNSs with a total aggregation of 514 kirana stores have mobilized share capital of over Rs.22.00 lakhs from 440 SHG members who are also Kirana store owners.

The focus is also on transforming the product mix and business models of nearly 7,500 traditional rural retail (kirana) stores to enable the provision of a range of products related to nutrition, hygiene and alternate energy products. This will include enabling expanded product offering, enhancing efficiency in logistics and distribution arrangements, aggregation and collective purchase among others. 150 aggregated nodal stores will be formed at Mandal-level to improve market access to SHG products and to increase profitability through demand aggregation of Kirana Stores and also as a push-point for products with social value.

SERP has also provided the initial investment of Rs.10 lakhs in the form Seed Capital towards working capital, the Electronic Point of Sale (EPoS) system and the infrastructure and fixtures costs for MNSs. All the (14) MNSs have started full-fledged transactions by May, 2016 and reached average sales turnover of Rs.1,72,855 by June, 2016.

## SOCIAL INFRASTRUCTURE

As per the annual action plan for retail chains for 2016-17, it has been decided to scale up Rural Retail Chains project to further (57) mandals to reach 71 mandals by 31st March, 2017.

As part of enterprise development, the way forward is to work with the existing SHG entrepreneurs and also new entrepreneurs to enhance their turnover and profitability by enabling a range of business development services and access to finance. In addition, enterprises linked to the processing of the agriculture produce and manufacturing of nutrition products will be promoted and linked to the rural retail stores

SERP seeks to build a solid, world class SHG member based production/ enterprise platform which will lead to SHG enterprises being able to link with markets, and compete on product quality, experience and service. The key theme for this strategy would be to work on providing linkages across the board- from design to business strategy, from markets to branding.

### Livelihood Achievements 2016-17

#### Value Chains:

- 20 Value chains for promotion of FPOs have been identified for implementation across 150 Mandals in 13 districts under Rural Value Chains component comprising of both Agriculture & Livestock commodities.
- 4,282 Farmer Producer Groups have been formed comprising of 66,579 small & marginal farmers upto October, 2016.
- Under Backyard Poultry, 13616 units of unit size 15 birds were grounded in DPMU & TPMU areas across the state in all 13 districts. In Convergence with Animal Husbandary dept. 10,000 Back Yard Poultry of Unit size of 45 birds with a target of 10,000 units to be grounded with a subsidy of Rs.3350.00 per unit. 1295 units are grounded under this scheme upto October, 2016
- 19,028 sheep & goat farmers are being organized into 1307small ruminant farmer producer groups for

establishment of 19 small ruminant farmer producer organizations in 12 districts with a membership of 15-20 rearers per group. 4,04,509 Livestock Units with the financial outlay of Rs.1641.13 crore are grounded upto October, 2016.

- Under SCSP, 12768 Milch animals were distributed for SHG members across the State. Under other schemes like Bank Linkage, 44,400 units were grounded in all 13 districts across the State.
- About 2,867 Azolla units were grounded to SHG members with a view to enhance productivity of Milch animals
- 28,853 Ram Lamb Units were distributed to SHG members across the State. Under SCSP it is proposed to distribute 6,473 pregnant heifers to the SHG members in convergence with AH dept. with a subsidy of 45,000 per unit.
- To encourage usage of compost and to promote SHG enterprises, estimates are generated for 3,09,859 Vermi compost units, out of which 2,61,547 units are sanctioned under NREGS scheme. 40,017 units are under progress and 30,148 units are completed

#### Rural Retail Chains (RRC):

- The pilot implementation of the RRC is operational in (14) Mandals across the state and it has been decided to scale up Rural Retail Chains project to further (57) mandals to reach 71 mandals by 31st March, 2017.
- All the 14 MNSs with a total aggregation of 597 Kirana stores have mobilized share capital of over Rs.24.40 lakhs from 488 SHG members who are also Kirana store owners. SERP has also provided the initial investment of Rs.10 lakhs in the form Seed Capital towards working capital, the Electronic Point of Sale (EPoS) system and the infrastructure and fixtures costs for MNSs. The (14) MNSs have achieved monthly sales turnover of Rs.31,89,623 and average sales turnover of Rs.2,27, 830 by September, 2016

### Skill training on Non-Farm Enterprises:

A total of 618988 SHG members have been trained on various areas like school sanitation, EDP training, value chain, retail chain training and smart phone usage for business.

- 231 Generic stores have been registered and are functioning in rural, urban and tribal areas till date registering a turnover of Rs.13.00 crores.
- 5188 food enterprises have been facilitated in 13 districts by providing credit, skills and market linkages.
- 16,142 SHG members have been trained in 152 stitching training centers so far.10,960 sewing machines distribution is on in districts.
- 27,882 Government elementary, upper, primary and high schools sanitation are being managed by SHG federations in all the districts. The enterprise opportunity from this is roughly Rs.25 Cr. per annum in wages and Rs.7.50 Cr. per annum in cleaning materials backward linkage.
- 55 DWCRAs Bazaars have been established across 13 districts in which SHG products like garments, pickles, powders, handicrafts etc.
- 704 Concrete mixers have been provided across 13 districts

### Startup Village Enterprise Programme (SVEP):

- Startup Village Enterprise Programme (SVEP), a sub scheme under NRLM, MoRD, GoI has been rolled out to provide support for Start- up to 1 Cr village enterprises and direct employment to 2 Cr people. The SVEP aims at helping the rural poor come out of poverty by helping them set up enterprises and providing support till the enterprises stabilize.
- Through this programme the supported enterprises will be provided with business skills, exposure, loans for starting and business support during the first 6 critical

months by using SHGs federations. These skills will be imparted by local youth (community resource persons – Enterprises promotion – CRPs-Eps) who will be trained in the requisite skills.

- Objective is to help rural poor to set up their enterprises by developing a sustainable model for village entrepreneurship promotion through enterprise advisory services. These enterprises may be individual or group enterprises covering manufacturing, services and trading. It covers traditional and new skills.
- SVEP programme has been taken up in Kuppam and Srialahasti clusters of Chittoor district and Cheepurupalli and Srungavarapukota clusters of Vizianagaram district. 8705 enterprises will be facilitated in these 4 clusters in 4 years with a budget of Rs.22.98 crores.

### Start and Improve Your Business Programme:

- International Labour Organization (ILO) has developed modules to train the Project Staff on Micro Enterprises promotion. Generate Your Business Idea (GYB), Start Your Business (SYB), Improve Your Business (IYB) will be covered in 10 training sessions spanning 10 days.
- 2 batches trainings have been completed on these modules by the ILO Master Trainers in which 40 staff have been trained. Concepts covered in the training are scoping study, generating business ideas, starting businesses, preparation of business plans, costing buying, marketing, stock control, record keeping.

### Market Access:

- 33,75,532 MTs of Paddy worth at Rs.4701.27 crores from 2,09,442 farmers have been procured by SHG federations. The commission to SHGs equal 106.17 crores.
- To address the gaps in availability of services to the urban poor and to create a platform where the urban poor can offer their goods and services in an organized manner to the potential buyers City Livelihood Centres (CLC)

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has been created. 35 CLCs have been established in 32 NULM ULBs and 10 to 40 Services started in each CLC. 3622 service providers have been registered in these CLCs so far.

- Rural and Urban SHGs have been provided with market access through regular DWCRA Bazaars, SARAS exhibitions. SARAS exhibitions have been held in Odisha, Kerala, Kashmir, Madhya Pradesh, West Bengal, Gujarat, Goa, Bihar, Assam, Mumbai, Rajasthan, Delhi, Chattisgarh and in this financial it will be held in Jharkhand and Haryana states for the year 2016-17.

### Social Security Pensions

State Government is committed to securing a dignified life to all the poor, the old and infirm to support their minimum needs to bring happiness in their lives. NTR Bharosa has turned public service delivery into a reality- at the door step of the beneficiary with timely and hassle-free delivery of services month on month, at a huge scale of over 43 lakh pensioners and an annual outlay of Rs.5400 Crores.

Implementation of pension portability was started to enable a pensioner to withdraw his pension amount anywhere in the State. A Total of 6,43,112 new pensions were sanctioned based on eligibility. Tab based distributions of payments at the doorsteps of pensioners has been initiated in all districts.

This is a first of its kind initiative in the entire country in public service delivery where the Government is going to the doorstep of each beneficiary, making pensions an entitlement in the truest sense of the word. The CORE (Chief Minister Office Real-time Executive) dashboard has been developed to monitor pensions closely. 99% of Pensions in the state are Aadhaar authenticated. District wise category wise pensions distributed upto October 2016 are given in Annexure 8.24.

### Chandranna Bima - Insurance for unorganized sector workers:

The Programme has been launched in October 2016 to further the cause of providing social security for Un-organised sector workers. The main object of the scheme is

to provide relief to the families of unorganized workers in case of death or disability of the unorganised worker leaving the families in great distress. All India statistics indicate that Andhra Pradesh is one of the States with large number of accidents. There is every need to provide accident death and disability insurance to the worker towards social security. Government had already implemented social security scheme to the transport drivers in the unorganized sector on pilot basis and on the working experience of the said scheme, it is felt appropriate to extend the social security scheme to all unorganized workers in the State with certain modifications to provide disability coverage also.

All Unorganized workers within the state and in the age group of 18-70 are eligible for enrollment as beneficiaries under the scheme and also for registering under the Unorganized Workers Social Security Act, with Asst Labour Officer. With convergence of existing insurance schemes AABY, PMSBY, State Accident Death and Disability Scheme, the benefits are consolidated and offered under Chandranna Bima. The programme offers relief in cases of natural death, accidental deaths and partial/total disability, coupled with education support to dependent children. In case of natural death an amount of Rs.30,000, and for accidental death and total disability Rs.5,00,000, partial disability Rs.3,62,500 are paid to nominee. Further, two dependent children studying 9th,10th, Intermediate or ITI courses would be provided with Rs.1200 per annum each as scholarship.

1.78 Crores unorganized workers are enrolled against the target of 2 Crores upto October, 2016. 4,874 claims (4,184 normal death cases and 690 accidental/disability cases) are reported. SERP as implementing agency, is leveraging the services of Zilla Samakhya Insurance Call Centres and Bima Mithras for enrollment of workers in the scheme and registration with Labour Officer, for quick processing of claims. Further, Government has asked Home and other departments concerned to issue instructions for issue of digital certificates and other documentation such as FIR, PMR, and Inquest Report etc needed for settlement of claims in accident cases in time bound manner.

## Human Development

As part of the Central government's flagship program Swachh Bharat Mission (SBM) Gramin (Rural), the Government of Andhra Pradesh has equally geared itself to achieve the outcomes envisioned and ensure Open Defecation Free GPs across the state. The ODF intervention is being implemented across the State, 2 Panchayats per Cluster in all the 2846 Clusters in all the 5692 Panchayats. The Project aims to construct Individual Sanitary Latrines (ISLs) in all these 5692 Panchayats by March 2017.

In order to achieve this goal, an integrated strategy is being followed, which focuses strongly on behavior change, collective decision making and community based ownership of ODF activities, along with convergence with the line departments like Panchayat Raj, Rural Water Supply, NREGS. All 150 Andhra Pradesh Rural Inclusive Growth Project (APRIGP) mandals, an amount of Rs.70 crores has been released as part of the Human Development Investment Fund (HDIF), for 2 GPs per Cluster for a total of 1448 GPs.

572 VHSNCs formed and 98 VHSNC Accounts opened across the 1st Gram Panchayat adopted per Cluster in the 150 APRIGP Mandals in (724 GPs) all the DPMUs and TPMUs.

23212 ISL's construction completed as against the target of 195705 (12%) of ISL construction across the 1st Gram Panchayat adopted per Cluster in the 150 APRIGP Mandals in all the DPMU and TPMU.

## Provision of Purified Water

Water purification plants are being planned to be set up in the ITDA areas, in order to supply good quality potable water. The programme is being planned in convergence with State Water & Sanitation Mission (SWSM), in a way that the enterprising SHG members can be given trainings regarding assessing the water quality,

## Solid Waste Management

Objective of this intervention is to effectively manage the solid waste generated at the household level and thereby

converting it to effective livelihood related activities through the establishment of vermin compost units. Solid waste generated at the household level is segregated with the use of different dustbins earmarked for the type of waste shall be handy in processing the same. This intervention shall help keep the surroundings clean and hygiene.

## Gender

### Anti Human Trafficking (AHT)

Prevention of trafficking of poor women in difficult circumstances not to fall prey into the trap of the traffickers in natural livelihoods eroded areas. Supporting women who are rescued from the traffickers to regain their dignity through creation of alternate livelihoods for them, Encourage shifting of women in sex work from their high risk livelihood to safe pattern of livelihoods. Prevention activities will address All 171064 SHG women and adolescent girls in 22 identified mandals of Ananthapuramu, Kadapa and Chittoor districts catering to 900 vulnerable families in providing support and safe livelihoods. 6000 women belonging to sex workers or rescued women or high risk families will get special focus for financial assistance for alternate livelihood. Social Action Committees identifies the target families through Gender CRP strategy.

### Digital Marketing:

To support the livelihoods of SHG members who engage in handloom and handicraft activities in the state by increasing the market each and customer base for these SHG members by retailing their products through Digital platform under the brand name 'Urban Village'. The ultimate aim is to increase the income of the SHG members and to showcase the heritage of Andhra Pradesh to Pan India.

Keeping the above view in mind, the Government commenced the 'Digital Marketing' initiative and it is active from April 2016. The role of SERP in implementing this project is to facilitate the Operational needs of selling the products manufactured by the SHG member households in all 13 districts of Andhra Pradesh through e-commerce portals.

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The products identified are being listed Flipkart, GoCoop, Snapdeal, Amazon, CraftsVilla, ShopClues e-commerce portals registered by the both the Zilla Samakhya under the brand name 'Urban Village'.

This project, running under the guidance and support of SERP is implemented through the Zilla Samakhya. Currently Krishna Zilla Samakhya and Visakhapatnam Zilla Samakhya are registered as sellers in various e-commerce portals and the products are listed online for sale. Two separate warehouses have been established in Vijayawada and Visakhapatnam. The artisans all over Andhra Pradesh hand over their product to the concerned warehouses. Once a sale transaction takes place, the product is packed in the warehouse and then picked and delivered to the customer. The artisans are paid their sale proceeds twice every month for the amounts received from the registered e-commerce portals – by 20th for all orders fulfilled from 1st to 15th of every month and by 5th of the succeeding month for all fulfilled from 16th to 31st of every month. 398 products have been uploaded into the e-commerce portals for sale. 150 new products were identified and the photo shoot was done in the month of Nov, 2016 and these products also will be listed in the e-commerce portals for sale.

Digital Marketing is developing its own e-commerce portal with domain name www.urvill.com., covering Apparel, Toys, Home decor, Accessories and Kitchenware categories. As Social Media is a very effective tool for promoting such marketing initiatives, Digital Marketing is also having presence in social media for promoting the project created a page in facebook, Twitter and Instagram.

### Digital Literacy Program

The Government of AP has Launched the Digital Literacy program for DWCRA members with the support of partner agencies that is, Intel and Airtel. Trainings across all the districts of Andhra Pradesh have been initiated and up to October, 2016, 3318 Internet Saathis have been trained.

This Saathis have spread across 10 Districts in the State of Andhra Pradesh covering 13246 Villages comprising of 19672 VO's. Around 92 training programs have been completed. About 37,493 entries were made by the SHG Women showcasing the uptake of digital literacy services. The program would galvanize the remaining districts and shall in turn work towards the objective of training 50 Lakh women SHG Members.

### Future Vision:

A strong base of social mobilization and organized credit in place, SERP envisages, over the next 2-3 year time frame, a very active engagement with community institutions, civil society organizations, academic and private sector partners to build strong, vibrant institutions of economic benefit to the poor.

SERP is also focusing very strongly on the support to livelihoods activities of the SHG members. This is further strengthened by the investment capital infused into SHGs by the Government.

SERP aims to leverage this strongly by building household level investment plans linked closely to the economic and social aspirations of the family. Bringing in sector experts to support the management of the verticals strategy designed to bring all SHG enterprises operating across farm and non-farm sectors and facilitating them with credit, marketing and value chain linkages will be the future of the SHG evolution in the state.

Massive efforts in the form of the digital and mobile literacy campaign and adult literacy campaign are expected to support the planned economic and social empowerment of SHG members. APRIGP, the third phase of collaboration with the World Bank is also expected to yield multi-sectoral results in some of the most difficult terrains of the state-learnings from which are expected to inform policy and implementation across the state.



CHAPTER 9  
POVERTY,  
EMPLOYMENT  
AND UNEMPLOYMENT

## Poverty

Governments at state and national level are implementing welfare programmes that essentially target wellbeing of the poorest of the poor. Thus, poverty alleviation continued to be the principal component of the state and central government initiatives. Over the decades, poverty has been interpreted and measured by experts in several methods. However, discussions centering around different dimensions of poverty remained the core welfare agenda almost in all the national and international forums. Several development paradigms, including the more recent Sustainable Development Goals (SDGs), emphasize end poverty in all its dimensions.

### Concept and measurement of poverty

In a larger context, poverty is a state where a person is unable to maintain a minimum socially accepted level of standard of living. Although there is a diversified opinion on the definition and measurement of poverty, it is regarded as the root cause for low levels of health and educational outcomes, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity for mobility. The concept and measurement of poverty have undergone changes over decades. The official estimates of poverty for the period 1973-74 to 2011-12 are placed in the Annexure 9.1.

The very definition of poverty has undergone change over the decades and continued to evolve in a wider perspective. Several committees and expert groups have studied the poverty measurement methodologies in the past. The recent expert group under the Chairmanship of Prof. Suresh D. Tendulkar recommended using poverty lines which are substantially higher than earlier ones. As per the latest estimates of the Planning Commission released in July 2013 for the year 2011-12, the poverty ratios for rural and urban areas of united Andhra Pradesh were 10.96% and 5.81% respectively and combined ratio stands at 9.20%. The corresponding figures for All India during the same period were 25.70%, 13.70% for rural and urban areas and the combined was 21.92%. Annexure 9.1 depicts the percentage of people below the poverty line in united Andhra Pradesh and at All India level for different time periods. However, there has been widespread criticism that

government grossly underestimated the number of poor in the country through a choice of unrealistic poverty lines.

### Andhra Pradesh – hub of innovative poverty alleviation programmes

Andhra Pradesh enjoys the legacy for introducing and implementing innovative poverty alleviation programmes. Apart from general economic policies, targeted poverty alleviation programmes for women's empowerment, providing housing and other infrastructure like pensions, land distribution and health insurance helping the poor in various dimensions. Increasing budgetary allocations, improving delivery systems in poverty alleviation programs and effective monitoring can help reduce severity of poverty.

### Categorization of states based on head count ratio

NITI Aayog has categorized the states into five classes based on their relative poverty head count positions in 2011-12 with scales of <10%, 10-20%, 20-30%, 30-40% and >40%. As per this classification, Andhra Pradesh in terms of urban poverty is placed in the range of <10%.

Standing of Andhra Pradesh

Urban Poverty(<10% range)- Andhra Pradesh, Goa, Sikkim, Himachal Pradesh, J&K, Mizoram, Kerala, Tamil Nadu and Meghalaya.

Rural Poverty(10%-20%)- Haryana, Meghalaya, Rajasthan, J&K, Nagaland, Tripura, Tamil Nadu, Uttarakhand.

With better and more focused implementation of various livelihood and employment generating schemes in the recent past, poverty in Andhra Pradesh is expected to further decline both in respect of rural and urban areas.

### Employment & Unemployment

The Employment and Unemployment surveys of National Sample Survey (NSS) are primary sources of data on various indicators of labour force at National and State levels. These are used for planning, policy formulation, decision support and as input for further statistical exercises by various Government organizations, academicians, researchers and scholars. NSS surveys on employment and un-employment with large sample size of households have been conducted quinquennially since 27th round (October'1972 - September'1973) onwards.



The National Sample Survey Office (NSSO) during the period July 2011 - June 2012 carried out an all-India household survey, ninth in its series, on the subject of employment and unemployment in India as a part of 68th round of its survey programme. In this survey, the nation-wide enquiry was conducted to generate estimates of various characteristics pertaining to employment and unemployment and labour force characteristics at the national and State levels.

The main objective of the employment-unemployment surveys conducted by NSSO at periodic interval is to get estimates of level parameters of various employment and unemployment characteristics at national and State level. These surveys collected information on several variables to capture the multidimensional aspects of employment and unemployment in the country. Persons engaged in any economic activity are termed as workers. Unpaid helpers who assist in the operation of economic activity are also considered as workers.

### Labour Force

Persons categorized as working (employed) and also those who are seeking or available for work (unemployed) together constitute the labour force. The Labour Force Participation Rate (LFPR) is defined as the number of persons in the labour force per 1000 persons. The estimates of Labour Force Participation Rate based on current daily status are presented in Annexure 9.2. Labour Force Participation rates for both rural and urban areas in Andhra Pradesh were higher compared with all India levels. However, over the years, the LFPR of all persons of rural areas have shown a decline, urban LFPR has shown improvement. The trend is visible both in Andhra Pradesh (combined state) as well as India.

### Work Force (Employed)

Persons engaged in any economic activity constitute the work force. The number of persons employed per 1000 persons is known as Work Force Participation rate (WFPR). The work force participation rate per 1000 persons is based on current daily status. As per the current daily status, a person is considered working (employed) for the entire day if he/she had worked for 4 hours or more during a day.

Work force participation rates in 2011-12 compared with the rates in 2009-10 have increased both in rural and urban areas of Andhra Pradesh. Details are given in Annexure.9.3.

Apart from the quantum of employment, the quality of employment also remains a concern in the state. Problems such as wage rate, seasonality, job insecurity, illiteracy, occupational hazards etc., continue in the state. Around 94% of the workers in A.P. are in the unorganized sector. Further, demographic dividend, which is one of the indicators of future economic growth, is expected to increase the working age group in the state and reduce dependency ratio. Reduction in dependency ratio is likely to increase savings and investments. Shifting workforce from Agriculture to non-farm sector is the best way of enhancing income levels of the poor by creating quality non-agriculture work opportunities through skill development in rural areas.

### Unemployment

The National Sample Survey Office (NSSO) provides Unemployment estimates on the basis of the Quinquennial surveys. Persons are considered unemployed, if he/she was not working, but was available for work for a relatively long time during the reference period.

Unemployment rate is defined as the number of persons unemployed per 1000 persons in the labour force. This in effect gives the unutilized portion of labour force. It is a more refined indicator of unemployment in population than the proportion of unemployed, which is nearly the number of unemployed per 1000 persons in the population as a whole.

Unemployment rates based on the usual principal and subsidiary status have shown a mixed trend during the period 1993-94 to 2011-12 in Andhra Pradesh and at All India level. Details about the unemployment rates on usual (principal and subsidiary) status of various rounds for Andhra Pradesh and All India are presented in Annexure-9.4.

After an initial rise in the rural and urban unemployment rates between 1993-94 to 1999-2000 in Andhra Pradesh, there has been considerable moderation in the rural and urban unemployment rates from 1999-2000 to 2004-05.

## POVERTY, EMPLOYMENT AND UNEMPLOYMENT

However, while in urban areas declining unemployment trend continued till 2009-10, it again went up by 2011-12. The rural unemployment increased quite alarmingly during the period 2004-05 to 2009-10 and remained at the same higher level in 2011-12.

## Employment and Training

The department of Employment and Training has trained the unskilled into skilled trainees so as to meet the demand of the Industry. Once the trainees come out from the institute the employment wing will provide employment assistance and as such both the wings have come under one umbrella.

### Craftsmen Training scheme

The craftsmen training scheme was introduced to ensure a steady flow of skilled workers in various vocational trades to meet the manpower requirements in industries to raise quantitatively and qualitatively the industrial production by systematic training of workers. And also to reduce unemployment among the educated youth by providing them employable training and to cultivate and nurture a technical and industrial attitude in the minds of the younger generation.

There are 79 Govt. ITIs & 404 Private ITIs are functioning in the state under under Craftsmen Training Scheme. In all these ITIs the admitted trainees will be imparted technical training in various trades as per the norms and syllabus of Director General of Training (DGT), New Delhi.

### Centrally Sponsored Schemes (VTIP & PPP)

#### Vocational Training Improvement Project- (VTIP)

This is a Centrally Sponsored Scheme with the assistance of World Bank and introduced in a phased manner. 19 ITIs are covered in the fold of VTIP. Various development activities were taken up during 2015-16. All the 19 ITIs are modernized with Machinery & Equipment as per the

latest syllabus of the DGT, New Delhi and the demand of the Industrial market. The Total project outlay is Rs.83.05 crore, of which Rs.76.55 crore were spent.

### Upgradation of existing ITI as Model ITI

Upgradation of existing ITI as model ITI with total cost of Rs.10crore in the ratio 70:30 by Central and State share respectively. Government ITI Gajuwaka, Visakhapatnam has been selected under this scheme. Out of central share of Rs.700 Lakhs GoI have released Rs.175 Lakhs as first installment and accordingly the GOAP. have released Rs.75 Lakhs as MSS.

### Public Private Partnership (PPP) Scheme

The scheme was introduced in a phased manner. There are 31 ITIs covered under the scheme, in all the districts of the state. Each Institute is funded with Rs.2.50 crore of towards construction of Buildings, procurement of Machinery and Equipment and other infrastructural facilities. The IMCs are delegated with Administrative and Financial powers for the smooth functioning of the ITIs. The fund released to each ITI is Rs.2.50 crore as interest free loan with 10 years moratorium period and repayable in 20 years in equal annual installments, which is directly credited into Joint Account of the IMC Society. An amount of Rs.7750 lakhs was released and Rs.5522 lakhs is the expenditure incurred so far.

### Skill Development Initiative Scheme under Modular Employable Skills

Government of India have introduced this scheme and to provide vocational training to school leavers, existing workers, ITI graduates, etc. to improve their employability by optimally utilizing the infrastructure available in Govt., private institutions and the Industry. Existing skills of the persons can also be tested and certified under this scheme. To build capacity in the area of development of competency standards, course curricula, learning material and assessment standards in the country. There are 68 sectors and 578 courses designed under MES. The Vocational Training Providers are conducting training for

the said courses under supervision of RDAT. The APMES society have trained 5581 candidates in 2013-14, 15580 candidates in 2014-15 and 7791 candidates in the year 2015-16 .

### Residential Skill Training Programme under APBOC

The Government have permitted the department to conduct residential Skill Training for 15,000 dependents of A.P. Building Other Construction Workers (APBOCW) by employment and training department through APMES society, meeting the expenditure from the budget provided by the APBOCWW Board for the year 2016-17. As on today, 11750 candidates from 440 batches were trained in various MES courses in the state under Residential Training Programme for the dependents of APBOC workers with the guidelines of SDI scheme.

### Residential ITIs for SCs

There are two Residential ITIs (RITIs) existing exclusively for SCs in the state, one at Macherla, Guntur district. and another at Kadapa, Kadapa Dist. Both these ITIs are functioning with Hostel facilities both boarding & lodging. In addition to these ITIs, there is one proposal for the establishment of two Govt. Model RITIs one at Tirupathi, Chittoor Dist. and another at Prathipadu, Guntur Dist. The Government has allocated an amount of Rs.44.14 crores in the year. 2016–17 towards the procurement of Tools, Machinery & Equipment, construction of administrative buildings, workshops, hostel buildings etc. for the two new model RITIs to be established at the above mentioned places.

### Residential ITIs for SCs

There are 5 Residential ITIs existing exclusively for the ST candidates in Visakhapatnam, Srikakulam, Vizianagaram and West Godavari Districts. There is a proposal for the establishment of one new Government Model RITI for STs, at Achutapuram, Visakhapatnam district. The Government have allocated an amount of Rs.11.75 crores in the year 2016–17 towards the procurement of Tools, Machinery & Equipment, construction of Administrative buildings, Workshops, Hostel buildings etc. for the new model RITI for STs at the above mentioned place.

### Employment Wing

Through employment wing the Registration, renewal and placement through 22 Employment Exchanges (14 Districts, 6 Sub and 2 Universities) are being done and Vocational guidance and career counseling to students in schools/colleges, collection of employment marker information through ER1 & ER2 returns are also implemented. Transformation of Employment Exchanges to Model Career Centers (MCC) at DEE, Chittoor and Anantapuramu is also under progress. The district-wise registration details are given in Annexure 9.5.

## Skill Development

Andhra Pradesh government has set out an ambitious goal of making the state a skills and knowledge hub over the next few years. The Government is working closely with reputed organizations to devise employable and effective skill development strategies so as to synergize the skilling efforts and deliver a structured, sustainable and scalable framework to impart ‘state of the art’ skills to the unemployed, underemployed and un-benchmarked youth in the state. Andhra Pradesh State Skill Development Corporation (APSSDC) has been established. Under this strategy, a Knowledge and Skills Mission has been set up to achieve the objective in a mission mode manner. Skill development is being given adequate focus and it is targeted to train about 5.69 lakh persons under various skill segments during the year 2017-18.

In spite of unstinted efforts of the government to provide necessary skills in various trades and skill development activities being undertaken for making them self-reliant, some of the youth are likely to remain unemployed. The government is contemplating to offer assistance to such unemployed youth with a pre-defined educational qualification and utilize their energies in the social service programmes. (Trained and placed candidates are shown in the below table upto Dec,2016).

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DSDEI – Trained and Placed candidates (up to December 2016)

Sl. No.	Program Head	Trained	Placed
1	Degree	24254	1701
2	Engineering	40520 (15116 are final year students)	2127
3	YTC (Tribal)	5678	3090
4	ESDM (Electronic Sec.)	1975	1036
5	NULM (Urban)	4855	3975
6	DDUGKY through SEEDAP /PIAs	8817	4951
7	Textiles (SEEDAP)	661	432
8	Direct Placements (SEEDAP)	63738	19451
9	Others	813	177
	Total	151311	36940
10	Job Fairs	98275	12747

### Society for Employment Generation and Enterprise Development in AP (SEEDAP)

- Society for Employment Generation and Enterprise Development in AP (SEEDAP) established in place of erstwhile EGMM to provide placement linked skill development trainings to unemployed youth of the State.
- SEEDAP assigned the responsibility of implementing Deen Dayal Upadhyaya Gramen Koushalya Yojana (DDUGKY) scheme in the State, with a target of 57,966 is allotted with a total budget outlay of Rs.471.01 Crs with the Central Share of 60% - Rs.282.60 Crs and State Share of 40% of Rs.188.40 Crs.
- 96 Project Implementing Agencies (PIAs) to implement DDUGKY program in the state are empanelled by Project Approval Committee (PAC). It is planned to establish more than 100 training centers across the state. So far 63 centers are established.
- SEEDAP, AP is also registered as a Project Implementing Agency (PIA) with MoRD for the own program SEEDAP Retail Training Program (SRTP)
- As on date the SEEDAP could provide trainings to 20,264 candidates, out of which 17,293 candidates were placed, in which 8,300 candidates trained through the SRTP program of SEEDAP, and also 16,398 candidates provided employment through direct placement drives.
- Apart from the above, courses for Commercial operations, Back end project management, Data analysis, Event management etc launched for 20,000 youth belonging to SC, ST, Minority and Women candidates under AYS Scheme.

### SIEMENS centers

28 Siemens Centers, including 2 COE and 26 TSDIs, being established and of them 10 are ready for inauguration. Ten centres have initiated trainings.

### Aspire Programme (School Vocationalisation) - Key Updates

- Program proposes to introduce blend of Vocational Skills, Computer Skills & Technology, Life Skills, Computational Thinking, Digital Literacy, English and Soft skills to the school students, typically from 8th to 12th class
- To create a ripple effect by familiarizing existing school staff with new technology, pedagogy, assessment tools etc., resulting in their increased effectiveness.
- to develop transferable skills among students i.e. the learnings and skills that students gather through school vocationalization program should result in enhanced learning and academic outcomes of the students in formal education
- Phase- I across 41 schools - consisting of model schools, tribal schools and social welfare residential schools
- To scale up to 155 model schools, 185 social welfare residential schools and 136 gurukulam and Ashram schools establishment of digital class rooms, tab based and laptop based labs, robotic kits, google cardboard etc. in these schools in progress
- Recruitment and training of mentors in each workshop along with English trainers and multi-skill trainers

## EKSTEP Collaboration

EKSTEP is contextualised modular learning platform increases access to learning opportunities by facilitating interaction among the learners (Content consumers), learning Facilitators (Teachers), Service Provider (Platform), Content Creators (Domain Experts)

## APSSDC intervention

Be the change agent by addressing hard problems towards Presence-less, Paper-less, cash less delivery through citizen consent covering the complete life cycle. A first ever attempt to build an overarching skilling framework over the Ek Step platform with key elements from the India Stack - e payments, assessments, digital signature, digital locker for certificates etc.

## Going Forward

Build an interface for EKSTEP platform for content consumption, train content creators to build the content, leverage the EKSTEP platform to enhance skill development in AP and integration of assessments, digital Key, eLocker and ePayment.

## Engineering – Trainings

Trained around 35198 students and faculty this year alone in the Faculty Improvement Program, Skill Improvement Program and Placement Improvement Program.

Digital literacy program : 28474 women and 1146 students were trained through across 22 colleges

## Engineering Training Partners – Key updates

- Google – Google Android Development Program for Faculty (320 trained by Google Headquarters team )
- Google Code labs – First ever “ Google Developers Code Lab “ in India
- Partnership with UDACITY – Certification for Google Nano Degree programs
- The University Innovation Fellows (UIF) program - a program offered by Stanford University, in partnership

with Google & APSSDC - trains students from around the world to become leaders of change in higher education. It provides students with training, mentorship and access to a global network of innovative students and faculty, thought leaders in Google and other Silicon Valley companies, and educators at Stanford.

- 13 Engineering Students from Andhra Pradesh selected out of 20 students across India during 2016. 40 Engineering Students from 10 Engineering colleges are under training.
- Trainings with Key partners like IBM –(Cloud Computing & Business Analytics), Microsoft – Azure, Amazon - AWS services, IIT Hyderabad- (Incubation & Innovation Centres, virtual Labs ), Corel – Embedded System, Lucid – VLSI, EDS Technologies – REVIT, Nastran, Autocad, Dassault Systems for CATIA.
- Tie-Up with NASSCOM for high-end trainings in Cyber Security & Data Analytics for 1600 students across 31 institutions. Out of which 100 students were already placed.
- Symantec in association with NASSCOM, launching Cyber security certification to women in 10 job roles

## Engineering Colleges

- NPTEL has rated the national universities and colleges based on their performance in NPTEL online certificate courses offered during July – December 2016.
- MITS, Madanapalle has got “AAA” rating. Among 686 local chapters, MITS stood among the top 100 and also occupied second position among the top ten colleges with “AAA” rating. This rating is given based on the scores attained by the students and the number of top ranks attained by the college.

## SIP program

- 40520 students from 106 Engineering Colleges are trained
- SIP programs are initiated right from first year
- Coding skills programs like TCS Code Vita are arranged for placement improvement

## POVERTY, EMPLOYMENT AND UNEMPLOYMENT

- Skill improvement programs are conducted on the following areas : Google Android , IBM Cloud Computing, Business Analytics , Cyber Security, AWS Amazon web services, Micro soft Azure, Java, PHP, .Net, Raspberry pi, Arduino , IOT, VLSI, Embedded systems, Auto CAD/ Auto Desk, Revit Structures, Nastran, CATIA, Technical English, Soft Skills, Aptitude & Reasoning, Computational thinking & Problem solving skills, TCS CodeVita, Coding Skills for different contests
- Placement Drives are in progress with Tech Mahindra, ZenQ, Veda
- 126 companies conducted campus drives in SDCs of various engineering colleges across the state.

### Financial Literacy / Cashless Transactions

- Financial literacy program of vital importance in the current context of demonetisation
- India seeing a jump from predominantly cash based economy straight into a digital economy, bypassing even the west, where there has been a slow progression from a banking economy, cheques to credit card , digital solutions having a slow take off
- Penetration of mobile phones even in rural areas helping the transitions. Mobile apps like Paytm extremely popular. usage of the app close to double from 3 to 6 million transactions a day
- Challenges in low penetration of smart phones and internet access in rural areas, Cyber security issues, lack of awareness, etc.
- Need for creating awareness, APSSDC using student resources in Colleges and schools for such trainings, in addition to on-line trainings
- Need to explore new solutions based on existing technologies like UPI, USSD, AEPS,- AP can leverage its near 100% coverage in Adhaar through an Adhaar to Adhaar payment system

### Job Melas

- 12747 placements have been provided through 38 Job

Melas in all 13 districts from 2010-17. constituency wise job melas have been scheduled till March 2017.

- 85500+ unemployed youth profile data base is maintained. It is being used for career counseling, Company specific recruitment drives, Modular employable trainings and further job melas.
- In order to increase Job mela success and retention rates, PRE-JOB MELA counseling, trainings (2-3 weeks) are planned in all Urban areas utilizing Employability Skills Centres (ESCs) and other premises.

### Degree colleges

- Employability Skills Centres (ESCs) are Collaborative Training Facilities created in UG & PG Colleges across the state. Initiated during 2015, and now graduated to ESCs.
- 367 ESCs are registered from UG, PG, University Campus. Enrolment is 19254.
- So far 1701 students placed in IT companies (TCS & CapGemini) from UG segment. Selection drives from companies Infosys, Wipro, Emphasis & others planned in Jan-Mar 2017.
- ESCs are running on integrated data systems in candidate profiling, performance analytics and certifications. All are seeded by Aadhar.
- Industry / Company Specific trainings: Problem Solving, Language & Communication skills, Interview & written tests patterns in on line & off line modes..
- Demand based Tech Programs : JAVA, SAP, Tally , Digital Marketing, Web Technologies
- Pre-Job mela trainings through ESCs: Out of 367 ESCs, 110 ESCs are selected to train in demanded skill sets for Company drives and job Melas .
- Mana TV – online courses: Daily online courses are using telecasted from ManaTV utilizing media like Youtube, Siti Cable (Channel-75).
- APSICHE & APSSDC initiation of foundation courses: APSICHE & APSSDC has organized workshops / meetings with Universities to offer 10 Foundation courses online by APSSDC to all UG as suggested by UGC's

New Choice Based Credit System (CBCS).

- Students from 86 ESCs Colleges have participated during 6,7,8 December, 2016.
- APSSDC is conducting on-line training on digital financial literacy for ESC students.
- Each ESC college is encouraged to adopt a surrounding village so as to train / demonstrate transaction processes.
- In Digital Literacy front, APSSDC has trained over 27,300 persons from 12 mandals of Srikakulam District.
- A total of 47728 students have been trained in digital financial literacy through Mana TV online for ESCs (19254) & Engineering colleges (28474)
- APSSDC is imparting demand oriented skill development trainings like Hardware & Networking & Niche skill set courses like Trainings in HR Systems on cloud based technologies.
- MOU with SAP authorized Training Agencies to train 10,000 trainees, with assured 30% placement has been signed and training at 2 centers in Hyderabad & Jammalamadugu started
- CAT (Cost Accounting Technicians) training started in 4 district in partnership with Institute of Cost Accountancy of India (ICAI) and Tally ERP 9.0 training in partnership with Tally to cover around 500 trainees.

### Tribal sub plan

- As of now 1600 students are undergoing training in various trades across 22 YTCs.
- Around 5678 trainings are completed, 3090 students are placed and rest is in progress.
- Apart from above 1416 candidates have undergone coaching for competitive exams and as of now around 600 candidates are undergoing coaching for Group II exams across 22 centers.
- As of now 708 EDPs are completed will be initiating rest EDPs are in pipeline.
- Under the novel initiative Aspire 4052 students are undergoing vocational training in schools.

- Established 10 centers in ITI/Polytechnics, and as of now 600 students are in class room.
- SIEMENS project - Established 3 COEs and 4 TSDIs.
- Around 379 candidates have undergone IT training in degree colleges.

### SC sub plan

- Around 4845 trainings are completed, 4100 students are placed and rest is in progress.
- As of now 708 EDPs are completed will be initiating rest EDPs are in pipeline.
- Under the novel initiative ASPIRE 3940 students are undergoing ASPIRE - vocational training in schools.
- Established 10 centers in ITI/Polytechnics, and as of now 560 students are in class room.
- SIEMENS project - Established 3 COEs and 4 TSDIs.
- Around 1835 candidates have undergone IT training in degree colleges.
- Around 1144 candidates have undergone training in Engineering colleges
- Initiated the process of EDP trainings and will be grounding the units in the month of Feb'17 including Textiles, Floriculture, Culinary Arts etc.
- 26 centers are established across state to impart coaching for competitive exams and 1100 students are undergoing coaching

### Other programs

- HPCL partnered training centre at Visakhapatnam started with more than 300 trainees
- CSR initiative of Power Finance Corporation Ltd for Skill Initiatives in Andhra Pradesh to a tune of Rs.5 Crores
- Centre under GAIL CSR in Kakinada, trainings to be initiated for 1000 youth in hydro carbon sector.
- Online Coaching for Competitive exams, in association with Lakshmaiah study circle, has been initiated in

## POVERTY, EMPLOYMENT AND UNEMPLOYMENT

27 centers across Andhra Pradesh, around 2500 students are in classroom as on today.

- Collaboration with ICRISAT for online training delivery model for farmers tying up with the KVKs and agricultural universities.
- Trainings to over 1500 traditional fishermen youth in collaboration with NFDDB in 3 selected districts of Visakhapatnam, Srikakulam and East Godavari.
- 17,285 SHG women trained in mobile/digital literacy by student volunteers
- A 'career counselling free helpline has been started from Nov, 2015 for all sections of youth and students. More than 15000 calls have been answered till now. One more line is being added from Nov 2016 to cover gap.
- Proposal for Alternate models for digital classrooms across segments varying from Schools to Colleges - need to move from the old model of content delivery to students to an interactive activity based technological solutions in education. Open schools : level based interventions for bridge schooling for drop outs with support from organisations like Pratham for training delivery and certifications along with Open School Society.
- Open schools : level based interventions for bridge schooling for drop outs with support from organisations like Pratham for training delivery and certifications along with open school society
- Partnership with UN women for pre-departure orientation training for women migrating primarily as domestic help from the 3 districts of East and West Godavari and Kadappa.

### CRDA updates

- Exercise of assessments, counselling, mock interviews and resume preparation completed for 2010 candidates, covering all villages of CRDA
- 9 Job Mela's conducted and under which 560 candidates have been provided employment.
- 561 candidates trained in CRDA with majority of women towards entrepreneurship (others include driving, consignment operator, Soft skills etc.)

- 4 groups producing herbal cosmetics earned more than 1.5 lakhs with local orders
- Land Surveyor "License" training completed for a batch of 30 candidates for the opportunities in CRDA region, 18 candidates got license and are in the process of attending interviews with CRDA as Surveyors
- A batch of 30 B. Tech trainees completed training in 'Industrial Automation' in Bangalore and are attending interviews
- "Amaravathi Skills Development Institute" has been established. Soft skills training imparted to 33 candidates Plan to invite more Empanelled Training partners for technical presentations.

### Recognition of Prior Learning (RPL)

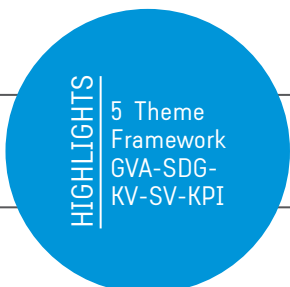
- Knowledge upgradation and recognition of existing skills is a key resource for new age economy. APSSDC has started the Recognition of Prior Learning (RPL) programme in key sectors.
- Supporting the fibre grid project by launching a massive upskilling programme along with APSFL for optic fibre technicians from LCOs (local cable operators/MSOs (multi-service operators) to undertake the last mile connectivity of fibre grid.
- 88 Master Trainers trained from all 13 districts. These in turn will train close to 20,000 technicians at the field level. All trainers and technicians will be certified by Telecom Sector Skill Council.







CHAPTER **10** INTEGRATED  
MONITORING  
FRAMEWORK  
FOR SUSTAINABLE DEVELOPMENT



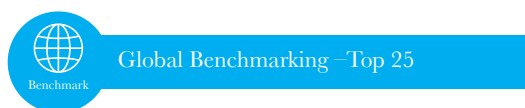
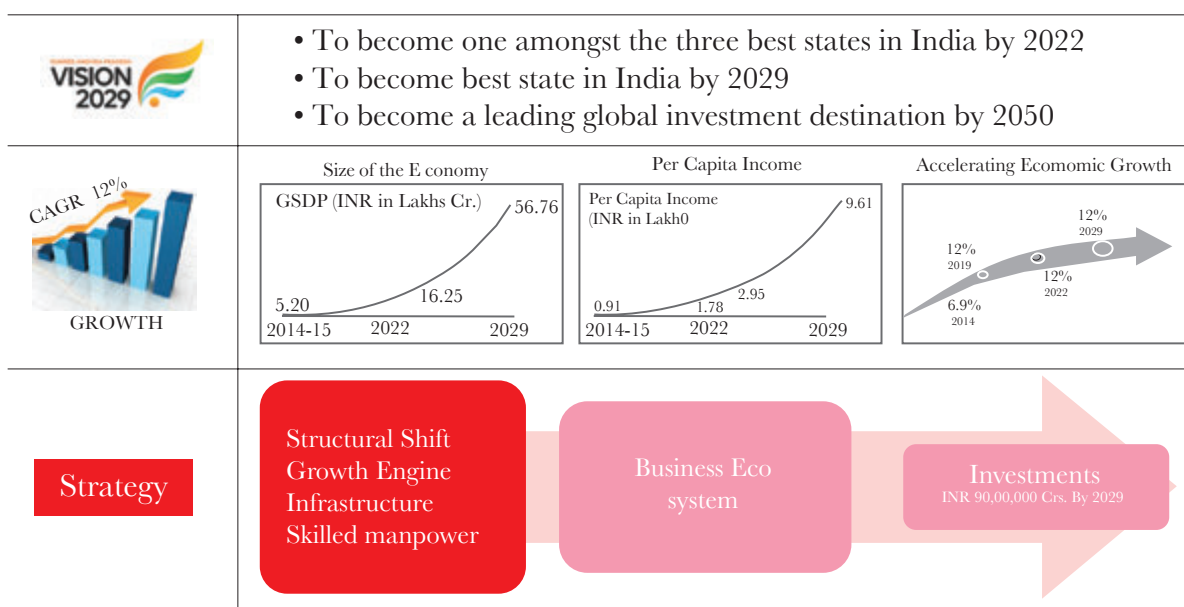
## Vision

Andhra Pradesh, is in the process of transformation as Sunrise state and growth strategies and targets are being set to achieve them in defined timeframe under Vision 2029. The seven missions, five grids and five campaign modes put in place are the growth vehicles and the state marching ahead with a mission based approach, targeting

double digit growth on a sustainable basis. Sustaining double digit growth for the next 14 years is imperative to ensure that Andhra Pradesh will be one among the top three performing states by 2022, the best in the country by 2029 and the best global destination by 2050. Preparation of Vision-2029 document is coming to the final stages.

## Sunrise Andhra Pradesh

**- Journey towards a happy and globally competitive society**



## Achieving Vision- a Mission-based approach

As part of holistic and long term development strategy, plans have been drawn to provide basic social & economic infrastructure, create human and institutional capacity and focus on the growth areas in identified sectors for increased resource use efficiency through a mission-based approach. The Government of Andhra Pradesh has launched Mission based approach for leveraging the sectoral strengths to propel the state into higher growth bracket.

The Government of Andhra Pradesh believes that a holistic and sustainable approach to state's development is

one that balances material and non-material values with the conviction that happiness of its people is the supreme goal. Stimulating an increase in the quality of life of its people remains at the forefront of the state's policies. People's well-being, both economic and social, shaped by individual traits is crucial for the state to monitor intermittently to highlight spatial differences and direct efforts at specific regions that have shown slow or no progress. The factors that influence people's well-being come into play at the local level; employment, access to education, levels of public safety, health status, for instance, differ from region to region even within a state.

## INTEGRATED MONITORING FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

## Sustainable Development Goals (SDGs)

India as a member country of the United Nations and signatory to the UN Sustainable Development Summit in September 2015, has also adopted the Sustainable Development Goals 2030 (SDGs 2030) effective from 1st January 2016 as the a guiding framework for its National Development Agenda till 2030. The SDGs 2030 builds on the MDG's ( Millennium Development Goals ) eight anti-poverty targets that the world committed to achieving by 2015. Post 2015, along with the rest of the world, Andhra Pradesh also adopts the Global Sustainable Development Goals 2030 to direct and drive the social and economic development policies and programmes in the state. The SDG 2030 constitutes of 17 goals with 169 targets covers a broad range of interconnected issues, from economic growth to social issues to global public goods to address the interconnected sustainable development issues. These include ending poverty and hunger, improving health and education, making cities more sustainable, combating climate change, and protecting oceans and forests.

### Sustainable Development Goals 2030

Goal 1	End poverty in all its forms everywhere
Goal 2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
Goal 3	Ensure healthy lives and promote well-being for all at all ages
Goal 4	Ensure inclusive and quality education for all and promote lifelong learning
Goal 5	Achieve gender equality and empower all women and girls
Goal 6	Ensure access to water and sanitation for all
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all
Goal 8	Promote inclusive and sustainable economic growth, employment and decent work for all
Goal 9	Build resilient infrastructure, promote sustainable industrialization and foster innovation
Goal 10	Reduce inequality within and among countries

Goal 11	Make cities inclusive, safe, resilient and sustainable
Goal 12	Ensure sustainable consumption and production patterns
Goal 13	Take urgent action to combat climate change and its impacts
Goal 14	Conserve and sustainably use the oceans, seas and marine resources
Goal 15	Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss
Goal 16	Promote just, peaceful and inclusive societies
Goal 17	Revitalize the global partnership for sustainable development

## Global Bench Marking

- WEF for global competitiveness
- World Bank for Ease of Doing Business
- Sustainable Development Goals (SDG) for comprehensive, inclusive and sustainable growth monitoring
- KPI for real time monitoring
- Public Perception Surveys

### Global Competitiveness Index 2015-16 & 2016-17 Rankings out of 140 economies

#### 2015-16 Rankings

Economy	Score	Prev.
1 Switzerland	5.76	1
2 Singapore	5.68	2
3 United States	5.61	3
4 Germany	5.53	5
5 Netherlands	5.50	8
6 Japan	5.47	6
17 United Arab Emirates	5.24	12
18 Malaysia	5.23	20
23 Thailand	4.64	31
33 Spain	4.59	35
37 Kuwait	4.59	40
38 Chile	4.58	33
54 Romania	4.32	59
54 Bulgaria	4.32	54
55 India	4.31	71
77 Croatia	4.07	77
78 Guatemala	4.05	78
79 Ukraine	4.03	76
89 Tajikistan	4.03	91
81 Greece	4.02	81

Vision 2029:  
To be in top 25 economies

GCI 2015-16  
AP-Rank: 51  
Score: 4.35

As per the GCI rankings of 2016-17, India with an improvement of 0.21 in the score, moved up by 16 positions.

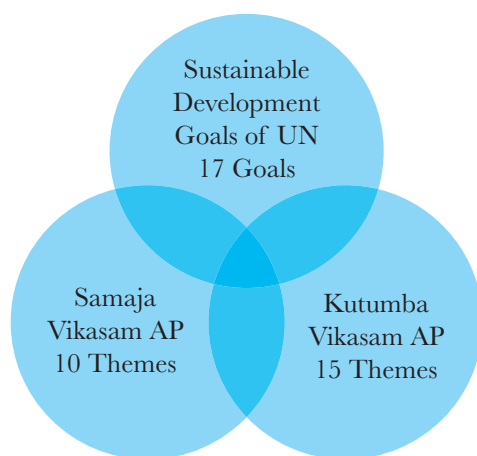
## INTEGRATED MONITORING FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

## GVA-SDG-SV-KV-KPI- An integrated framework for holistic development

Andhra Pradesh takes cognizance of this and has instituted flagship programmes such as Kutumba Vikasam and Samaja Vikasam aligned to the SDG framework for global benchmarking while taking actions at gram panchayat/ village level. Regular feedback is also obtained from primary stakeholders on key performance areas of the state. There is a status review which captures stakeholder perceptions and provides opportunity for timely course corrections. These surveys are conducted at quarterly intervals and special care is taken to draw samples that represent all sections of stakeholders pertaining to a subject.

While real time governance, innovation and adoption of best practices remain the core agenda to sustain the growth momentum, government is keen to put in a performance management framework to measure performance at family level (15 themes of Kutumba Vikasamu) and community level (10 themes of Samaja Vikasamu) and linking them with Sustainable Development Goals(SDGs). In tune with the priorities of Vision 2029, the state government has come out with 27 macro level indicators and a set of 104 indicators at activity and output level. These indicators are being aligned with the indicators identified under Kutumba Vikasamu (35 indicators) and Samaja Vikasamu (47 indicators). Under the overarching 5-theme framework of GVA - SDG - KV - SV - KPI.

### Vision 2029 Priorities Aligned with Global Benchmarking



KEY PERFORMANCE INDICATORS

## Samaja Vikasam 10-Themes & 47 KPIs

A	Education
1	Gross Enrollment Ratio - Secondary
2	Drop out rate-Primary
3	Drop out rate- Upper Primary
4	Drop out rate- Secondary
5	No. of Youth trained under Skill development Programmes
6	Youth skilled and Placed
B	Health
7	Mothers dropped back in Talli-Bidda express
8	Patients covered under NTR Vaidya Seva
9	No of Govt. hospitals doing NTR Vaidya Seva procedures other than the 133 earmarked ones
10	No. of mobile clinics operated
11	No. of persons availing free medical checkups
12	No. of NTR kits distributed
C	Agriculture And Allied Services
13	Soil Health Cards distributed to farmers
14	Cropped area covered under Chandranna Rythu Kshetralu
15	Additional irrigation potential created
16	Additional area brought under Micro Nutrient application
17	Additional area brought under Horticulture crops
18	Additional Area brought under micro-irrigation
19	Improvement in ground water position
20	Tanks covered under Neeru chettu
21	No of Hhs benefitted with fooder security program ( Jiva Mitra 50% subsidy fooder scheme)
D	Industrial Development
22	No of new MSME established
23	No of procedures to start a business
24	No of days to start a business
25	Amount of Investment from New Projects (R1+R2+R3+R4)
E	Service Sector
26	Provision and installation of Digital Financial Infrastructure
27	(i)Percentage of Households having functional Bank A/C (including JDY) with digital transaction facility
27 (a)	(ii)Percentage of vendor having atleast one functional mode for cashless payment instrument (POS machine etc)

## INTEGRATED MONITORING FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

<b>F</b>	<b>24x7 Power Supply</b>
28	Electricity Installed capacity
29	Minutes of outages per year
<b>G</b>	<b>Roads And Infrastructure Development</b>
30	Habitations without all weather Roads
31	New Habitations connected with Roads
32	New internal CC roads constructed
33	Affordable houses constructed (EWS-Urban)
34	Expenditure incurred in Smart Cities
35	Expenditure incurred in AMRUT Cities
<b>H</b>	<b>Information And Technology</b>
36	Households having Mobile Phones
37	Households having internet connection
38	Habitations having last mile fiber net connection
<b>I</b>	<b>Citizen Services</b>
39	Aadhaar Seeding for various government schemes
40	Land records purified under mee intiki – mee bhoomi
41	Mee kosam Greivances redressed
<b>J</b>	<b>Inclusive Development</b>
42	No of SHG groups assisted under Capital Infusion and Bank linkage
43	Beneficiaries assisted under SC – Corporation
44	Amount sanctioned for (incl. subsidy) beneficiaries assisted under SC – Corporation
46	Beneficiaries assisted under ST – Corporation
47	Amount sanctioned for (incl. subsidy) beneficiaries assisted under ST – Corporation

## Kutumba Vikasam 15-Themes &amp; 35 KPIs

<b>I</b>	<b>Social Security (Pensions for all Eligible)</b>
1	No. of persons covered/getting under NTR Bharosha Pension Programme
2	No. of women covered/getting widow pensions
3	No. of toddy tappers given pensions
4	No. of disabled people receiving disabled pensions
5	No. of people receiving OAPS
<b>II</b>	<b>Food Security (Rice Scheme)</b>
6	No of eligible HHs benefitted under food security programe (5kg Rice for every eligible HHs)
7	No of eligible HHs receiving kerosene supply
8	No of eligible HHs receiving Sankranti Kanuka

9	No of eligible HHs receiving Christmas Gift
10	No of eligible HHs receiving Ramzan Tofa
<b>III</b>	<b>Insurance Security (Chandranna Bima)</b>
11	No covered in Death and Disability Insurance (AABY)
<b>IV</b>	<b>Electricity Security</b>
12	% of farmers covered under 7 hrs free electricity for agriculture
13	% of SC/ST households covered under 50 units electricity payment
<b>V</b>	<b>Gas Security</b>
14	No. of new LPG connection given
15	New Deepam connection given
<b>VI</b>	<b>Water Security</b>
16	Habitations Fully covered water supply
17	Partially Covered Habitations (less than 55 LPCD)
18	Panta Sanjeevani
<b>VII</b>	<b>Housing Security</b>
19	EWS-Urban/Rural IAY houses constructed
<b>VIII</b>	<b>Sanitation Security (Women Self respect)</b>
20	IHHLS-Total No of households covered
<b>IX</b>	<b>Health Security</b>
21	Patients covered under NTR Vaidya Seva
22	No. of Govt. Hospitals doing NTR Vaidya Seva procedures other than 133
23	Institutional deliveries in government and private institutions
24	Mothers dropped back in Talli Bidha express
<b>X</b>	<b>Education Security</b>
25	No. of Students benefitted under Rs.10 lakhs for foreign study
26	No. of cycles distributed to 9th class girl students
27	No. of students given Pratibha Awards
<b>XI</b>	<b>Fodder Security</b>
28	No. of Households benefitted under 50% subsidy Fodder Scheme
29	No. of Jeeva Mitras Trained
<b>XII</b>	<b>Employment Assurance</b>
30	Avg. Number of person days employed per Household (MGNREGS)
<b>XIII</b>	<b>Information (Fiber net) Security</b>
31	Households having Mobile Phones

## INTEGRATED MONITORING FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

32	Households having internet connection
33	Habitations having last mile fibernet connection
<b>XIV</b>	<b>Individual Security (Women Safety)</b>
34	Crime Rate Against Women
<b>XV</b>	<b>Income Security (Livelihood)</b>
35	No of SHG groups assisted under Capital Infusion and Bank linkage

### Our Priorities

- New capital city – Amaravati
- Completion of prioritized irrigation projects
- Infrastructure development
- Road and Rail connectivity
- Drought proofing - Inclusive growth
- Low hanging fruits
- Investment and Growth Planning with forward looking reforms
- Use of Technology – Real Time Governance
- Enhancing Happiness Index
- Smart AP

### Growth vehicles:

- 7 Missions, 5 Grids and 5 Campaigns with holistic monitoring framework of GVA-SDG-SV-KV-KPI

### Key Performance Indicator Monitoring System

- A robust Monitoring and Evaluation framework has been established to monitor the progress and achievement of the Missions / Departments through identified Key Performance Indicators for achieving the vision targets.
- The KPI's are placed for regular uploading of the progress based on indicator's periodicity at district/state level.
- The KPIMS portal facilitates monitoring the performance of identified KPI's for 86 HoDs under 30 Secretariat departments with district level drill down facility.
- Indicators by periodicity of monitoring:

Periodicity	Total
Monthly	308
Quarterly	217
Half - Yearly	21
Seasonal	52
Annual	333
Total	931

### Sustained Double Digit Growth

As per the Advance Estimates, the GSDP at constant (2011-12) Prices for the year 2016-17 is estimated at Rs.5,47,021 crores as against Rs.4,90,134 crores for 2015-16 (First Revised Estimates) indicating a growth of 11.61%. The GSDP at Current Prices for the year 2016-17 is compiled by adding Product taxes and deducting Product subsidies to the GVA at current basic prices and estimated at Rs.699307 crore as against Rs.609934 crore for 2015-16 (FRE).

The state is envisaging double digit growth for the year 2017-18 and is putting in place necessary policies and implementing schemes/programmes to sustain the double digit growth for a period of 14 years. In this endeavour of the government, some of the key sectors of the state economy have responded quickly and positively.

Continuing the ascending trend, the sectors that registered an impressive double digit growth in the year 2016-17 are: Horticulture (16.79%), Livestock (12.18%), Fishing and Aquaculture(30.09%), Mining and Quarrying(12.91%), Manufacturing(10.37%), Electricity (12.53%), Transport (10.42%), communications (15.02%), Real Estate and Ownership of Dwellings (10.39%) and community, Social and personal services also registered above 10%.

Andhra Pradesh, rich in natural and human resources, is keen to leverage its strengths through district specific growth strategies and achieve double digit growth targets. While focus will be on Coast-led growth, manufacturing, agro-processing, pharma, development of physical infrastructure like ports, airports and river ways are some of the key areas identified for pushing the growth significantly.

### Best Practices and Perception Surveys

Moving away from conventional practices, my government is taking up 'Stakeholder perception surveys' to capture the pulse of the people with reference to implementation of various programmes and governance issues to take midcourse corrections. Adoption of best practices from across the states is taken up in the state. Periodic monitoring of Key Performance Indicators at the apex level is helping the departments to re-orient themselves to improve their performance.

### Mori Village – the e-example

As a pilot project, Mori village in the East Godavari District has been developed with the assistance of some global

companies in becoming fully Internet of Things (IoT) compliant transforming the rural economy. The village stands as an e-example in the Country with the accessibility of WiFi, internet connectivity, cable TV in all its households and moving towards less cash economy. Success of this pilot project has encouraged us to scale it to five assembly constituencies in the 1st phase.

### Real Time Governance

The Vision 2029 clearly envisages the importance of Real Time Governance using technology across sectors and practices in the Government. Real Time Governance (RTG) involves real time information, real time response and service, remote control and supervision, virtual audit and inspection and intervention by exception. The Government of Andhra Pradesh has made commendable progress in e-governance initiatives and IOT adoption making RTG a reality in the State.

Several initiatives such as Soil Health Cards, E-Office systems, biometric attendance, street light real time mapping and more have been put in place by the State Government over the last few months. The State officers, employees, staff now use the Microsoft mobile application

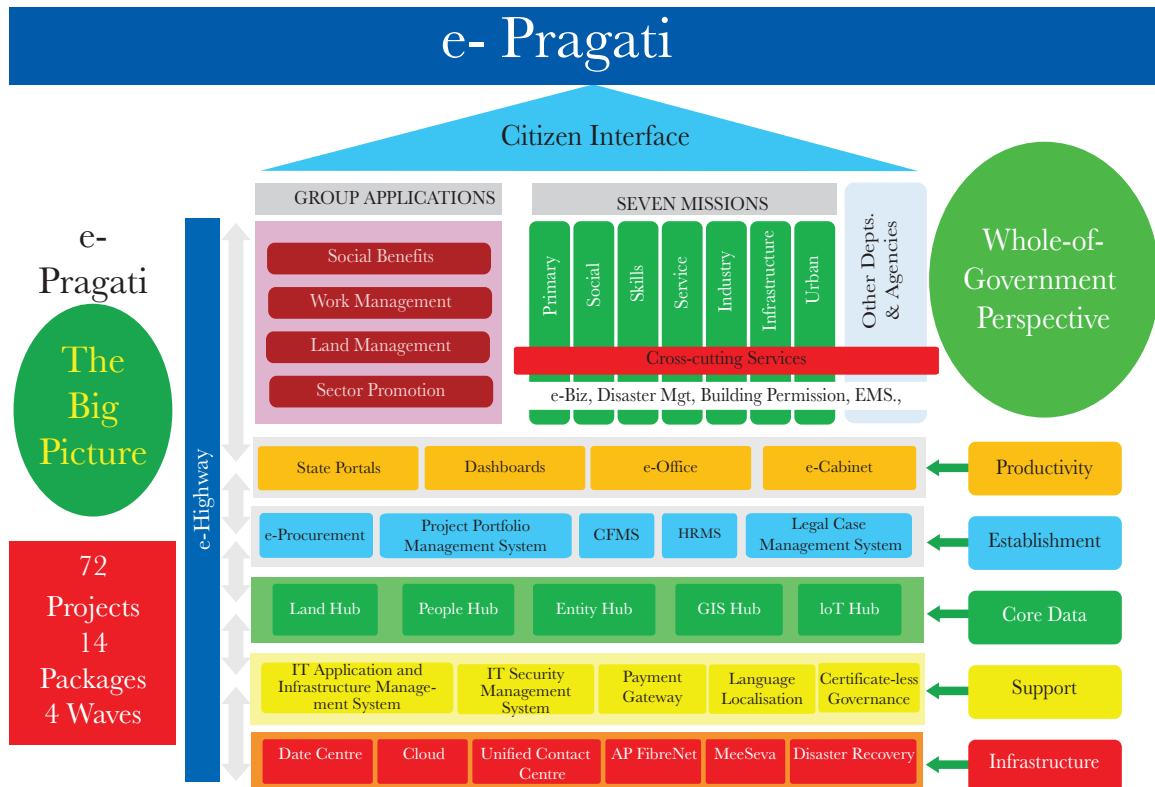
Kaizala to interact, update, assign, poll and implement multiple other project management tasks in real time and with efficiency. The humongous festival of Krishna Pushkaralu was executed with excellence using the same technology along with drones to capture traffic, sanitation and safety status along the banks.

A Command and Communication room set up in Vijayawada where the footage from the entire city – traffic, public places, crowded regions, etc. is available and undergoes rigorous monitoring through business and human intelligence ensuring citizen safety and convenience.

Area, Population, GSDP and PCI (NSDP) of major states and all India are given in Annexure-10.1

### e-Pragathi

The e-Pragathi AP state enterprise Architecture (APSEA), a massive programme covering 30 departments, 315 agencies and 745 services is schedule to be implemented/ rolled out within a definite timespan and provides better services to the citizens and business. This is a framework to provide integrated services to citizens through a free flow of information and to usher in an era of good governance characterized by efficiency, effectiveness, transparency and for sight.



## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.1: GVA/GSDP Estimates at Current Prices from 2011-12 to 2016-17

Rs in Crore

Sl No.	INDUSTRY	Estimates at Current prices					
		2011-12	2012-13	2013-14	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1	2	3	4	5	6	7	8
1	Agriculture, Live Stock, Forestry & Fishing						
1.1	Agriculture	52041	61230	71147	78935	86443	97171
	a)Agriculture	29782	36743	39269	40724	41541	44682
	b)Horticulture	22259	24488	31878	38212	44902	52489
1.2	Live stock	27588	33584	36430	43091	51555	59796
1.3	Forestry & Logging	2503	2530	2805	3462	3406	3355
1.4	Fishing & Aquaculture	11877	14519	18573	22707	31864	43538
	<b>Agriculture Sector</b>	94008	111864	128956	148194	173267	203860
2	Mining & Quarrying	14162	14590	14192	14843	16331	17576
3	Manufacturing	50706	42377	42423	46723	50787	57408
4	Electricity, Gas, Water Supply	10765	7130	10141	11517	12519	12989
5	Construction	37026	37590	40651	46649	49862	54677
	<b>Industry Sector</b>	112660	101687	107408	119732	129499	142651
6	Trade,Hotel & Restaurants	26736	31792	37849	42334	45777	51746
7	Transport,Storage & Communications						
7.1	Railways	2643	3037	3345	4242	4366	4454
7.2	Transport by Other means & Storage	24470	28536	32353	37241	42761	49913
7.3	Communications	5402	6214	7960	9288	10935	13296
8	Financing,Insurance,Real estate & Business Services						
8.1	Banking & Ins.	14256	15843	17105	19009	21255	24154
8.2	Real est.,O'ship of Dwellings	28338	34341	38973	44054	50923	59424
9	Community, Social & Personal Services						
9.1	Public Admn.	13938	15524	17390	22009	25949	30397
9.2	Other Services	27304	30639	35383	42154	52486	61802
	<b>Services Sector</b>	143086	165925	190359	220331	254452	295186
	Gva	349753	379477	426722	488257	557219	641697
	Product Taxes	42439	46565	52635	55121	67193	72365
	Product Subsidies	12790	14638	15085	16908	14478	14755
	<b>GSDP</b>	379402	411404	464272	526470	609934	699307
	NSDP	339996	370196	413164	469909	545638	620974
	Population ('000)	49275	49566	49857	50151	50446	50743
	<b>Per Capita in Rs.</b>	69000	74688	82870	93699	108163	122376

Source: Directorate of Economics and Statistics, A.P.



## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.2: Sector-wise Contribution of GVA at Current Prices from 2011-12 to 2016-17

Sl No.	INDUSTRY	% Contribution					
		2011-12	2012-13	2013-14	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1	2	3	4	5	6	7	8
1	Agriculture, Live Stock, Forestry & Fishing						
1.1	Agriculture	14.88	16.14	16.67	16.17	15.51	15.14
	a) Agriculture	8.52	9.68	9.20	8.34	7.46	6.96
	b) Horticulture	6.36	6.45	7.47	7.83	8.06	8.18
1.2	Live stock	7.89	8.85	8.54	8.83	9.25	9.32
1.3	Forestry & Logging	0.72	0.67	0.66	0.71	0.61	0.52
1.4	Fishing & Aquaculture	3.40	3.83	4.35	4.65	5.72	6.78
	<b>Agriculture Sector</b>	26.88	29.48	30.22	30.35	31.10	31.77
2	Mining & Quarrying	4.05	3.84	3.33	3.04	2.93	2.74
3	Manufacturing	14.50	11.17	9.94	9.57	9.11	8.95
4	Electricity, Gas, Water Supply	3.08	1.88	2.38	2.36	2.25	2.02
5	Construction	10.59	9.91	9.53	9.55	8.95	8.52
	<b>Industry Sector</b>	32.21	26.80	25.17	24.52	23.24	22.23
6	Trade, Hotel & Restaurants	7.64	8.38	8.87	8.67	8.22	8.06
7	Transport, Storage & Communications						
7.1	Railways	0.76	0.80	0.78	0.87	0.78	0.69
7.2	Transport by Other means & Storage	7.00	7.52	7.58	7.63	7.67	7.78
7.3	Communications	1.54	1.64	1.87	1.90	1.96	2.07
8	Financing, Insurance, Real estate & Business Services						
8.1	Banking & Ins.	4.08	4.17	4.01	3.89	3.81	3.76
8.2	Real est., O'ship of Dwellings	8.10	9.05	9.13	9.02	9.14	9.26
9	Community, Social & Personal Services						
9.1	Public Admn.	3.98	4.09	4.08	4.51	4.66	4.74
9.2	Other Services	7.81	8.07	8.29	8.63	9.42	9.63
	<b>Services Sector</b>	40.91	43.72	44.61	45.13	45.66	46.00
	GVA	100.00	100.00	100.00	100.00	100.00	100.00

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.3: Sector-wise Growth Rates of GVA Estimates at Current Prices From 2012-13 to 2016-17

Sl No.	INDUSTRY	% Change over previous year				
		2012-13	2013-14	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1	2	3	4	5	6	7
1	Agriculture, Live Stock, Forestry & Fishing					
1.1	Agriculture	17.66	16.20	10.95	9.51	12.41
	a) Agriculture	23.37	6.88	3.70	2.01	7.56
	b) Horticulture	10.01	30.18	19.87	17.51	16.90
1.2	Live stock	21.74	8.47	18.28	19.64	15.99
1.3	Forestry & Logging	1.08	10.85	23.41	-1.62	-1.49
1.4	Fishing & Aquaculture	22.25	27.92	22.25	40.33	36.64
	<b>Agriculture Sector</b>	18.99	15.28	14.92	16.92	17.66
2	Mining & Quarrying	3.02	-2.73	4.59	10.02	7.62
3	Manufacturing	-16.43	0.11	10.13	8.70	13.04
4	Electricity, Gas, Water Supply	-33.77	42.23	13.57	8.70	3.76
5	Construction	1.52	8.14	14.75	6.89	9.66
	<b>Industry Sector</b>	-9.74	5.63	11.47	8.16	10.16
6	Trade, Hotel & Restaurants	18.91	19.05	11.85	8.13	13.04
7	Transport, Storage & Communications					
7.1	Railways	14.92	10.13	26.84	2.92	2.01
7.2	Transport by Other means & Storage	16.61	13.38	15.11	14.82	16.72
7.3	Communications	15.04	28.10	16.67	17.74	21.59
8	Financing, Insurance, Real estate & Business Services					
8.1	Banking & Ins.	11.13	7.96	11.13	11.82	13.64
8.2	Real est., O'ship of Dwellings	21.18	13.49	13.04	15.59	16.69
9	Community, Social & Personal Services					
9.1	Public Admn.	11.38	12.02	26.56	17.90	17.14
9.2	Other Services	12.22	15.48	19.14	24.51	17.75
	<b>Services Sector</b>	15.96	14.73	15.75	15.49	16.01
	GVA	8.50	12.45	14.42	14.12	15.16
	Product Taxes	9.72	13.04	4.72	21.90	7.70
	Product Subsidies	14.45	3.05	12.08	-14.37	1.91
	GSDP	8.43	12.85	13.40	15.85	14.65
	NSDP	8.88	11.61	13.73	16.12	13.81
	Population ('000)					
	Per Capita Income	8.24	10.96	13.07	15.44	13.14

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.4: GVA/GSDP Estimates at Constant Prices from 2011-12 to 2016-17 in New Base 2011-12

Sl No.	INDUSTRY	GSDP at Constant prices					
		2011-12	2012-13	2013-14	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1	2	3	4	5	6	7	8
1	Agriculture, Live Stock, Forestry & Fishing						
1.1	Agriculture Proper	52041	52569	60624	61383	60010	65528
	a) Agriculture	29782	30479	34194	34299	30888	31515
	b) Horticulture	22259	22090	26429	27084	29122	34013
	Live stock	27588	29247	29721	31185	34911	39164
1.2	Forestry & Logging	2503	2469	2491	2411	2356	2300
1.3	Fishing & Aquaculture	11877	13546	15516	17620	24476	31841
	<b>Agri. Sector</b>	94008	97831	108353	112600	121753	138833
2	Mining& Quarrying	14162	14283	13880	15197	16895	19075
3	Manufacturing	50706	40188	38575	41649	46086	50863
4	Electy., Gas, Water Supply	10765	7345	9815	11012	12227	13758
5	Construction	37026	35571	37076	39696	43381	46813
	<b>Industries Sector</b>	112659	97387	99345	107554	118589	130509
6	Trade,Hotel & Restaurants	26736	29554	33149	36353	40359	44231
7	Transport,Storage & Communications						
7.1	Railways	2643	2897	3105	3674	3614	3487
7.2	Transport by Other means & Storage	24470	26720	28378	31835	35276	38952
7.3	Communications	5402	5845	6988	7946	9123	10494
8	Financing,Insurance,Real estate & Business Services						
8.1	Banking & Ins.	14256	15635	16515	18174	19610	21081
8.2	Real est.,O'ship of Dwellings	28338	32426	34130	36521	39992	44148
9	Community, Social & Personal Services						
9.1	Public Admn.	13938	14468	15318	18596	20847	23101
9.2	Other Services	27304	28252	30303	33622	38655	43058
	<b>Services Sector</b>	143086	155796	167887	186723	207477	228551
	GVA	349753	351014	375585	406877	447819	497894
	Product Taxes	42439	43155	44807	48977	53906	60461
	Product Subsidies	12790	13540	13277	14113	11591	11334
	<b>GSDP</b>	379402	380629	407114	441741	490134	547021
	NSDP	339996	341335	360239	391373	434433	484930
	Population (*000)	49275	49566	49857	50151	50446	50743
	Per Capita in Rs.	69000	68865	72255	78039	86118	95566

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.5: Sector-wise Contribution of GVA at Constant Prices from 2011-12 to 2016-17 in New Base Year 2011-12

Sl No.	INDUSTRY	% Contribution					
		2011-12	2012-13	2013-14	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1	2	3	4	5	6	7	8
1	Agriculture, Live Stock, Forestry & Fishing						
1.1	Agriculture Proper	14.88	14.98	16.14	15.09	13.40	13.16
	a) Agriculture	8.52	8.68	9.10	8.43	6.90	6.33
	b) Horticulture	6.36	6.29	7.04	6.66	6.50	6.83
	Live stock	7.89	8.33	7.91	7.66	7.80	7.87
1.2	Forestry & Logging	0.72	0.70	0.66	0.59	0.53	0.46
1.3	Fishing & Aquaculture	3.40	3.86	4.13	4.33	5.47	6.40
	<b>Agri. Sector</b>	26.88	27.87	28.85	27.67	27.19	27.88
2	Mining & Quarrying	4.05	4.07	3.70	3.73	3.77	3.83
3	Manufacturing	14.50	11.45	10.27	10.24	10.29	10.22
4	Electy., Gas, Water Supply	3.08	2.09	2.61	2.71	2.73	2.76
5	Construction	10.59	10.13	9.87	9.76	9.69	9.40
	<b>Industries Sector</b>	32.21	27.74	26.45	26.43	26.48	26.21
6	Trade, Hotel & Restaurants	7.64	8.42	8.83	8.93	9.01	8.88
7	Transport, Storage & Communications						
7.1	Railways	0.76	0.83	0.83	0.90	0.81	0.70
7.2	Transport by Other means & Storage	7.00	7.61	7.56	7.82	7.88	7.82
7.3	Communications	1.54	1.67	1.86	1.95	2.04	2.11
8	Financing, Insurance, Real estate & Business Services						
8.1	Banking & Ins.	4.08	4.45	4.40	4.47	4.38	4.23
8.2	Real est., O'ship of Dwellings	8.10	9.24	9.09	8.98	8.93	8.87
9	Community, Social & Personal Services						
9.1	Public Admn.	3.98	4.12	4.08	4.57	4.66	4.64
9.2	Other Services	7.81	8.05	8.07	8.26	8.63	8.65
	<b>Services Sector</b>	40.91	44.38	44.70	45.89	46.33	45.90
	GVA	100.00	100.00	100.00	100.00	100.00	100.00

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.6: Sector-wise Growth Rates of GVA Estimates at Constant Prices From 2012-13 to 2016-17 in New Base Year 2011-12

Sl No.	INDUSTRY	% Change over previous year				
		2012-13	2013-14	2014-15 (SRE)	2015-16 (FRE)	2016-17 (AE)
1	2	3	4	5	6	7
1	Agriculture, Live Stock, Forestry & Fishing					
1.1	Agriculture Proper	1.02	15.32	1.25	-2.24	9.19
	a) Agriculture	2.34	12.19	0.31	-9.94	2.03
	b) Horticulture	-0.76	19.64	2.48	7.53	16.79
	Live stock	6.01	1.62	4.93	11.95	12.18
1.2	Forestry & Logging	-1.36	0.90	-3.21	-2.28	-2.38
1.3	Fishing & Aquaculture	14.06	14.55	13.56	38.91	30.09
	<b>Agri. Sector</b>	4.07	10.75	3.92	8.13	14.03
2	Mining & Quarrying	0.85	-2.82	9.49	11.18	12.91
3	Manufacturing	-20.74	-4.02	7.97	10.65	10.37
4	Electy., Gas, Water Supply	-31.77	33.62	12.20	11.03	12.53
5	Construction	-3.93	4.23	7.07	9.28	7.91
	<b>Industries Sector</b>	-13.56	2.01	8.26	10.26	10.05
6	Trade, Hotel & Restaurants	10.54	12.17	9.66	11.02	9.59
7	Transport, Storage & Communications					
7.1	Railways	9.62	7.19	18.32	-1.65	-3.50
7.2	Transport by Other means & Storage	9.19	6.21	12.18	10.81	10.42
7.3	Communications	8.19	19.57	13.71	14.81	15.02
8	Financing, Insurance, Real estate & Business Services					
8.1	Banking & Ins.	9.67	5.63	10.04	7.90	7.50
8.2	Real est., O'ship of Dwellings	14.43	5.25	7.01	9.50	10.39
9	Community, Social & Personal Services					
9.1	Public Admn.	3.81	5.88	21.40	12.10	10.81
9.2	Other Services	3.47	7.26	10.95	14.97	11.39
	<b>Services Sector</b>	8.88	7.76	11.22	11.11	10.16
	GVA	0.36	7.00	8.33	10.06	11.18
	Product Taxes	1.69	3.83	9.31	10.06	12.16
	Product Subsidies	5.86	-1.94	6.29	-17.87	-2.22
	GSDP	0.32	6.96	8.51	10.95	11.61
	NSDP	0.39	5.54	8.64	11.00	11.62
	Population ('000)					
	Per Capita in Rs.	-0.20	4.92	8.01	10.35	10.97

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.7: All India Industry-wise Estimates of GVA/GDP from 2011-12 to 2016-17 (AE) at Current Prices

(Rs. In crores)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (AE)
1. Agriculture, forestry & fishing	1501815	1680798	1932693	2067935	2172910	2382289
1.1 Crops	982026	1090588	1248725	1278033	1306918	1442856
1.2 Livestock	327301	375254	431348	508779	564712	619180
1.3 Forestry & Logging	124461	135048	154432	165006	174987	179362
1.4 Fishing and Aquaculture	68027	79908	98188	116117	126293	140892
<b>Agriculture Sector</b>	1501815	1680798	1932693	2067935	2172910	2382289
2. Mining & Quarrying	261035	285776	295716	313844	296041	309178
3. Manufacturing	1409986	1572830	1713445	1883929	2065093	2278149
4. Electricity, gas, water supply & other utility services	186668	215164	259840	279456	321765	338396
5. Construction	777363	847492	919269	977992	1000459	1064068
<b>Industries Sector</b>	2635052	2921262	3188270	3455221	3683358	3989791.046
6. Trade, repair, hotels and restaurants	883582	1054605	1184412	1311475	1425854	1607386
6.1 Trade & repair services	793681	954755	1078272	1197073	1297932	1477752
6.2 Hotels & Restaurants	89901	99850	106140	114402	127922	129634
7. Transport, storage, communication & services related to broadcasting	529535	609479	690032	783862	868513	930777
7.1 Railways	61150	72296	78800	91946	101596	99765
7.2 Road transport	262442	300668	338333	367982	395501	419307
7.3 Water transport	6910	7199	6498	7622	6508	7183
7.4 Air transport	4393	8128	6853	11431	19950	24003
7.5 Services incidental to transport	63602	72054	75719	91030	95725	101821
7.6 Storage	5108	6165	6026	6557	7162	8147
7.7 Communication & services related to broadcasting	125930	142969	177803	207294	242071	270551
8. Financial, Real Estate & Professional Services	1530691	1776023	2069386	2363327	2632432	2896299
8.1 Financial services	480226	536819	599341	659157	721073	794507
8.2 Real estate, ownership of dwelling & professional services	1050465	1239204	1470045	1704170	1911359	2101792
9. Public admn and Def and other services	1025982	1163149	1301475	1488595	1668871	1944243
9.1. Public Administration & Defence	491155	545894	601619	677041	737820	866580
9.2. Other Services	534827	617255	699856	811554	931051	1077663
<b>Services Sector</b>	3969790	4603256	5245305	5947259	6595670	7378704
GVA at basic prices	8106657	9205316	10366268	11470415	12451938	13750786
Product Taxes	890060	1057977	1180444	1290634	1548769	1500242 *
Product Subsidies	260677	316656	310075	327300	325376	
GDP	8736039	9946636	11236635	12433749	13675331	15251028
Population (In million)	1220	1235	1251	1267	1283	1299
Per Capita NNI (Rupees)	63460	71011	79146	86513	94178	103818

\* : Net Taxes on Products

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.8: All India Industry-wise Contribution of GVA at Current Prices from 2011-12 to 2016-17(AE)

(%)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (AE)
1. Agriculture, forestry & fishing	18.53	18.26	18.64	18.03	17.45	17.32
1.1 Crops	12.11	11.85	12.05	11.14	10.50	10.49
1.2 Livestock	4.04	4.08	4.16	4.44	4.54	4.50
1.3 Forestry & Logging	1.54	1.47	1.49	1.44	1.41	1.30
1.4 Fishing and Aquaculture	0.84	0.87	0.95	1.01	1.01	1.02
<b>Agriculture Sector</b>	18.53	18.26	18.64	18.03	17.45	17.32
2. Mining & Quarrying	3.22	3.10	2.85	2.74	2.38	2.25
3. Manufacturing	17.39	17.09	16.53	16.42	16.58	16.57
4. Electricity, Gas, water supply & other utility services	2.30	2.34	2.51	2.44	2.58	2.46
5. Construction	9.59	9.21	8.87	8.53	8.03	7.74
<b>Industries Sector</b>	32.50	31.73	30.76	30.12	29.58	29.02
6. Trade, repair, hotels and restaurants	10.90	11.46	11.43	11.43	11.45	11.69
6.1 Trade & repair services	9.79	10.37	10.40	10.44	10.42	10.75
6.2 Hotels & Restaurants	1.11	1.08	1.02	1.00	1.03	0.94
7. Transport, storage, communication & services related to broadcasting	6.53	6.62	6.66	6.83	6.97	6.77
7.1 Railways	0.75	0.79	0.76	0.80	0.82	0.73
7.2 Road transport	3.24	3.27	3.26	3.21	3.18	3.05
7.3 Water transport	0.09	0.08	0.06	0.07	0.05	0.05
7.4 Air transport	0.05	0.09	0.07	0.10	0.16	0.17
7.5 Services incidental to transport	0.78	0.78	0.73	0.79	0.77	0.74
7.6 Storage	0.06	0.07	0.06	0.06	0.06	0.06
7.7 Communication & services related to broadcasting	1.55	1.55	1.72	1.81	1.94	1.97
8. Financial, real estate & professional services	18.88	19.29	19.96	20.60	21.14	21.06
8.1 Financial services	5.92	5.83	5.78	5.75	5.79	5.78
8.2 Real estate, ownership of dwelling & professional services	12.96	13.46	14.18	14.86	15.35	15.28
9. Public admn and Def and other services	12.66	12.64	12.55	12.98	13.40	14.14
9.1. Public Administration & Defence	6.06	5.93	5.80	5.90	5.93	6.30
9.2. Other Services	6.60	6.71	6.75	7.08	7.48	7.84
<b>Services Sector</b>	48.97	50.01	50.60	51.85	52.97	53.66
GVA at basic prices	100.00	100.00	100.00	100.00	100.00	100.00

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.9: All India Industry- Wise Growth Rates of GVA/GDP Estimates at Current Prices From 2012-13 To 2016-17 (AE)  
(%)

Industry	2012-13	2013-14	2014-15	2015-16	2016-17
1. Agriculture, Forestry & Fishing	11.92	14.99	7.00	5.08	9.64
1.1 Crops	11.05	14.50	2.35	2.26	10.40
1.2 Livestock	14.65	14.95	17.95	10.99	9.65
1.3 Forestry & Logging	8.51	14.35	6.85	6.05	2.50
1.4 Fishing and Aquaculture	17.47	22.88	18.26	8.76	11.56
<b>Agriculture Sector</b>	11.92	14.99	7.00	5.08	9.64
2. Mining & Quarrying	9.48	3.48	6.13	-5.67	4.44
3. Manufacturing	11.55	8.94	9.95	9.62	10.32
4. Electricity, Gas, water supply & other utility services	15.27	20.76	7.55	15.14	5.17
5. Construction	9.02	8.47	6.39	2.30	6.36
<b>Industries Sector</b>	10.86	9.14	8.37	6.60	8.32
6. Trade, repair, hotels and restaurants	19.36	12.31	10.73	8.72	12.73
6.1 Trade & repair services	20.29	12.94	11.02	8.43	13.85
6.2 Hotels & Restaurants	11.07	6.30	7.78	11.82	1.34
7. Transport, storage, communication & services related to broadcasting	15.10	13.22	13.60	10.80	7.17
7.1 Railways	18.23	9.00	16.68	10.50	-1.80
7.2 Road transport	14.57	12.53	8.76	7.48	6.02
7.3 Water transport	4.18	-9.74	17.30	-14.62	10.38
7.4 Air transport	85.02	-15.69	66.80	74.53	20.32
7.5 Services incidental to transport	13.29	5.09	20.22	5.16	6.37
7.6 Storage	20.69	-2.25	8.81	9.23	13.75
7.7 Communication & services related to broadcasting	13.53	24.36	16.59	16.78	11.77
8. Financial, Real Estate & Professional Services	16.03	16.52	14.20	11.39	10.02
8.1 Financial services	11.78	11.65	9.98	9.39	10.18
8.2 Real estate, ownership of dwelling & professional services	17.97	18.63	15.93	12.16	9.96
9. Public admn and Def and other services	13.37	11.89	14.38	12.11	16.50
9.1. Public Administration & Defence	11.14	10.21	12.54	8.98	17.45
9.2. Other Services	15.41	13.38	15.96	14.72	15.75
<b>Services Sector</b>	15.96	13.95	13.38	10.90	11.87
GVA at basic prices	13.55	12.61	10.65	8.56	10.43
Product Taxes	18.87	11.58	9.33	20.00	22.63*
Product Subsidies	21.47	-2.08	5.56	-0.59	
GDP	13.86	12.97	10.65	9.99	11.52
Population	1.2	1.3	1.3	1.3	1.2
Per Capita NNI	11.9	11.5	9.3	8.9	10.2

\* : Net Taxes on Products

Source: Directorate of Economics and Statistics, A.P.



## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.10: All India Industry-wise Estimates of GVA/GDP from 2011-12 to 2016-17(AE) at Constant (2011-12) Prices  
(Rs. In crores)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (AE)
1. Agriculture, Forestry & Fishing	1501815	1524398	1609060	1604260	1616461	1687064
1.1 Crops	982026	983873	1036818	996142	974672	1018329
1.2 Livestock	327301	344333	363511	390395	415906	435587
1.3 Forestry & Logging	124461	124830	132244	135523	138173	141185
1.4 Fishing and Aquaculture	68027	71362	76487	82200	87710	91963
<b>Agriculture Sector</b>	1501815	1524398	1609060	1604260	1616461	1687063.958
2. Mining & Quarrying	261035	259479	267629	307077	344972	349351
3. Manufacturing	1409986	1492763	1568508	1685844	1863835	2007564
4. Electricity, gas, water supply & other utility services	186668	191413	199153	213477	224323	239203
5. Construction	777363	781947	805484	829966	852821	879525
<b>Industries Sector</b>	2635052	2725602	2840774	3036364	3285951	3475643.915
6. Trade, repair, hotels and restaurants	883582	980177	1037337	1125915	1256964	1374401
6.1 Trade & repair services	793681	887365	944506	1027848	1144300	1263662
6.2 Hotels & Restaurants	89901	92812	92831	98067	112664	110739
7. Transport, storage, communication & services related to broadcasting	529535	569313	616968	670577	731548	759450
7.1 Railways	61150	68959	73132	79634	84089	80068
7.2 Road transport	262442	282425	300557	320209	341649	351225
7.3 Water transport	6910	7052	7345	7954	8106	8675
7.4 Air transport	4393	4183	4550	5188	6057	7067
7.5 Services incidental to transport	63602	66481	70172	75347	80495	83023
7.6 Storage	5108	5708	5190	5511	6079	6705
7.7 Communication & services related to broadcasting	125930	134505	156022	176734	205073	222687
8. Financial, Real Estate & Professional Services	1530691	1679124	1864320	2070948	2294193	2443632
8.1 Financial services	480226	529759	578691	630218	671853	715091
8.2 Real estate, ownership of dwelling & professional services	1050465	1149365	1285629	1440730	1622340	1728540
9. Public admn and Def and other services	1025982	1069615	1110789	1201286	1284603	1428123.924
9.1. Public Administration & Defence	491155	501434	510197	544633	569804	639336
9.2. Other Services	534827	568181	600592	656653	714799	788787
<b>Services Sector</b>	3969790	4298229	4629414	5068726	5567308	6005606.435
GVA at basic prices	8106657	8548229	9079248	9709350	10469720	11168314.31
Product Taxes	890060	960949	1010149	1090388	1161389	997166*
Product Subsidies	260677	294053	271577	277049	273580	
GDP	8736039	9215125	9817822	10522686	11357529	12165481
Population (In million)	1220	1235	1251	1267	1283	1299
Per Capita NNI (Rupees)	63460	65568	68717	72712	77524	82112

\* : Net Taxes on Products

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.11: All India Industry- wise Contribution of GVA from 2011-12 to 2016-17(AE) at Constant (2011-12) Prices

(%)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (AE)
1. Agriculture, Forestry & Fishing	18.53	17.83	17.72	16.52	15.44	15.11
1.1 Crops	12.11	11.51	11.42	10.26	9.31	9.12
1.2 Livestock	4.04	4.03	4.00	4.02	3.97	3.90
1.3 Forestry & Logging	1.54	1.46	1.46	1.40	1.32	1.26
1.4 Fishing and Aquaculture	0.84	0.83	0.84	0.85	0.84	0.82
<b>Agriculture Sector</b>	18.53	17.83	17.72	16.52	15.44	15.11
2. Mining & Quarrying	3.22	3.04	2.95	3.16	3.29	3.13
3. Manufacturing	17.39	17.46	17.28	17.36	17.80	17.98
4. Electricity, gas, water supply & other utility services	2.30	2.24	2.19	2.20	2.14	2.14
5. Construction	9.59	9.15	8.87	8.55	8.15	7.88
<b>Industries Sector</b>	32.50	31.88	31.29	31.27	31.39	31.12
6. Trade, repair, hotels and restaurants	10.90	11.47	11.43	11.60	12.01	12.31
6.1 Trade & repair services	9.79	10.38	10.40	10.59	10.93	11.31
6.2 Hotels & Restaurants	1.11	1.09	1.02	1.01	1.08	0.99
7. Transport, storage, communication & services related to broadcasting	6.53	6.66	6.80	6.91	6.99	6.80
7.1 Railways	0.75	0.81	0.81	0.82	0.80	0.72
7.2 Road transport	3.24	3.30	3.31	3.30	3.26	3.14
7.3 Water transport	0.09	0.08	0.08	0.08	0.08	0.08
7.4 Air transport	0.05	0.05	0.05	0.05	0.06	0.06
7.5 Services incidental to transport	0.78	0.78	0.77	0.78	0.77	0.74
7.6 Storage	0.06	0.07	0.06	0.06	0.06	0.06
7.7 Communication & services related to broadcasting	1.55	1.57	1.72	1.82	1.96	1.99
8. Financial, Real Estate & Professional Services	18.88	19.64	20.53	21.33	21.91	21.88
8.1 Financial services	5.92	6.20	6.37	6.49	6.42	6.40
8.2 Real estate, ownership of dwelling & professional services	12.96	13.45	14.16	14.84	15.50	15.48
9. Public admn and Def and other services	12.66	12.51	12.23	12.37	12.27	12.79
9.1. Public Administration & Defence	6.06	5.87	5.62	5.61	5.44	5.72
9.2. Other Services	6.60	6.65	6.61	6.76	6.83	7.06
<b>Services Sector</b>	48.97	50.28	50.99	52.20	53.18	53.77
GVA at basic prices	100.00	100.00	100.00	100.00	100.00	100.00

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.12: All India Industry-wise Growth Rates of Estimates of GVA from 2011-12 to 2016-17 (AE) at Constant (2011-12) Prices (%)

Industry	2012-13	2013-14	2014-15	2015-16	2016-17 (AE)
1. Agriculture, Forestry & Fishing	1.50	5.55	-0.30	0.76	4.37
1.1 Crops	0.19	5.38	-3.92	-2.16	4.48
1.2 Livestock	5.20	5.57	7.40	6.53	4.73
1.3 Forestry & Logging	0.30	5.94	2.48	1.96	2.18
1.4 Fishing and Aquaculture	4.90	7.18	7.47	6.70	4.85
<b>Agriculture Sector</b>	1.50	5.55	-0.30	0.76	4.37
2. Mining & Quarrying	-0.60	3.14	14.74	12.34	1.27
3. Manufacturing	5.87	5.07	7.48	10.56	7.71
4. Electricity, gas, water supply & other utility services	2.54	4.04	7.19	5.08	6.63
5. Construction	0.59	3.01	3.04	2.75	3.13
<b>Industries Sector</b>	3.44	4.23	6.89	8.22	5.77
6. Trade, repair, hotels and restaurants	10.93	5.83	8.54	11.64	9.34
6.1 Trade & repair services	11.80	6.44	8.82	11.33	10.43
6.2 Hotels & Restaurants	3.24	0.02	5.64	14.88	-1.71
7. Transport, storage, communication & services related to broadcasting	7.51	8.37	8.69	9.09	3.81
7.1 Railways	12.77	6.05	8.89	5.59	-4.78
7.2 Road transport	7.61	6.42	6.54	6.70	2.80
7.3 Water transport	2.05	4.15	8.29	1.91	7.03
7.4 Air transport	-4.78	8.77	14.02	16.75	16.67
7.5 Services incidental to transport	4.53	5.55	7.37	6.83	3.14
7.6 Storage	11.75	-9.07	6.18	10.31	10.29
7.7 Communication & services related to broadcasting	6.81	16.00	13.28	16.03	8.59
8. Financial, Real Estate & Professional Services	9.70	11.03	11.08	10.78	6.51
8.1 Financial services	10.31	9.24	8.90	6.61	6.44
8.2 Real estate, ownership of dwelling & professional services	9.41	11.86	12.06	12.61	6.55
9. Public admn and Def and other services	4.25	3.85	8.15	6.94	11.17
9.1. Public Administration & Defence	2.09	1.75	6.75	4.62	12.20
9.2. Other Services	6.24	5.70	9.33	8.85	10.35
<b>Services Sector</b>	8.27	7.71	9.49	9.84	7.87
GVA at basic prices	5.45	6.21	6.94	7.83	6.67
Product Taxes	7.96	5.12	7.94	6.51	12.32 *
Product Subsidies	12.80	-7.64	2.01	-1.25	
GDP	5.48	6.54	7.18	7.93	7.11
Population (In million)	1.2	1.3	1.3	1.3	1.2
Per Capita NNI (Rupees)	3.32	4.80	5.81	6.62	5.92

\* Net Taxes on Products

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - MACRO ECONOMIC AGGREGATES

A 2.13: District-wise, Constituency Gross Value Added (GVA) and Per Capita Income at Current Prices for the year 2014 - 15

Sl. No.	Name of the Assembly Constituency	Total GVA	Per Capita Income (PCI)
1	2	3	4
<b>Ananthapuramu District</b>			
1	Tadipatri	383259	122426
2	Anantapur Urban	363541	110143
3	Singanamala	321386	106166
4	Hindupur	293692	94528
5	Guntakal	284179	86911
6	Rayadurg	267222	80795
7	Dharmavaram	244770	77595
8	Kadiri	228551	72542
9	Penu Konda	201676	67260
10	Puttaparthi	196275	73657
11	Raptadu	193286	70654
12	Kalyandurg	167164	57629
13	Uravakonda	162725	59151
14	Madakasira	145876	53008
<b>Chittoor District</b>			
15	Tirupati	464755	109315
16	Srikalahasti	370887	113545
17	Chittoor	318730	119199
18	Chandragiri	315194	95259
19	Satyavedu	285118	98588
20	Puthalapattu	272215	95117
21	Palamaner	270798	76080
22	Nagari	260655	93590
23	Madanapalle	233025	70796
24	Punganur	230769	75397
25	G.D.Nellore	209703	74870
26	Piler	206969	69203
27	Thambalapalle	185967	65069
28	Kuppam	181922	61115
<b>E.Godavari District</b>			
29	Kakinada (City)	409071	122439
30	Rajahmundry (City)	369540	101128
31	Anaparthi	329274	114208
32	Rajanagaram	316338	115008
33	Prathipadu	290860	101037
34	Jaggampeta	288538	97129
35	Mandapeta	288452	101463
36	Peddapuram	274836	98362
37	Tuni	273850	93432
38	Kothapeta	266144	82761
39	Mummidivaram	247585	78874
40	Amalapuram	247496	85791
41	Rajahmundry (Rural)	238210	86547
42	Ramachandrapuram	237953	89596
43	Rampachodavaram	231214	99041
44	Kakinada (Rural)	230573	86095
45	P. Gannavaram	204262	75934
<b>Guntur District</b>			
46	Razole	182008	70226
47	Pithapuram	167765	53931
48	Guntur West	425913	122369
49	Macherla	413158	127062
50	Guntur East	399415	123430
51	Mangalagiri	345649	103322
52	Chilakaluripet	321052	110922
53	Repalle	311421	106193
54	Tenali	294529	95666
55	Gurazala	292558	89194
56	Prathipadu	271640	84485
57	Vemuru	267091	107402
58	Bapatla	262842	108826
59	Tadikonda	254017	99657
60	Ponnur	251337	89958
61	Vinukonda	249771	78113
62	Sattenapalli	241038	82464
63	Peddakurapadu	230801	82525
64	Narasaraopet	197265	69378
<b>Krishna District</b>			
65	Vijayawada West	635968	166853
66	Vijayawada East	582970	163849
67	Vijayawada Central	558083	161392
68	Kaikaluru	466178	170377
69	Mylavaram	436867	128272
70	Gannavaram	373717	112845
71	Nuzvid	357786	113050
72	Gudivada	348808	133218
73	Penamaluru	340798	103589
74	Avanigadda	272805	98803
75	Penamaluru	340798	103589
76	Avanigadda	272805	98803
77	Pamarru	269256	111107
78	Machilipatnam	259920	103909
79	Nandigama	232540	87797
80	Jaggaihpeta	232392	85647
81	Tiruvuru	220467	82099
82	Pedana	217055	98671
<b>Kurnool District</b>			
83	Kurnool	434497	145541
84	Dhone	269426	93061
85	Nandyal	248859	78257
86	Allagadda	245873	82322
87	Banaganapalle	244518	81982
88	Panyam	241770	67639
89	Srisailem	227699	91543
90	Nandikotkur	224628	81486

## ANNEXURES - MACRO ECONOMIC AGGREGATES

Sl. No.	Name of the Assembly Constituency	Total GVA	Per Capita Income (PCI)
1	2	3	4
89	Alur	217323	66868
90	Pattikonda	208781	74005
91	Kodumur	207854	58424
92	Adoni	199089	72168
93	Yemmiganur	186385	59755
94	Mantralayam	156666	57575
<b>Prakasam District</b>			
95	Ongole	359824	116065
96	Giddalur	329610	108273
97	Kondapi	317211	104735
98	S.N.Padu	316896	116654
99	Parchur	302337	102704
100	Markapur	295590	105520
101	Kanigiri	274975	88344
102	Addanki	255743	84472
103	Kandulur	243561	85813
104	Chirala	239979	94597
105	Darsi	239496	83385
106	Y.Palem	198842	72976
<b>SPS Nellore District</b>			
107	Sullurpet	367413	112453
108	Gudur	363653	115790
109	Kovur	339176	105455
110	Nellore City	338408	86868
111	Kavali	337578	112378
112	Survepalli	321132	111716
113	Nellore Rural	307825	115390
114	Udayagiri	271913	90509
115	Atmakur	263533	96979
116	Venkatagiri	261465	87909
<b>Srikakulam District</b>			
117	Srikakulam	256658	78238
118	Etcherla	239538	73383
119	Tekkali	195403	68310
120	Palasa	192176	71490
121	Rajam	174926	60039
122	Palakonda	158161	60494
123	Narasannapeta	157023	58936
124	Amadalavalasa	155857	61973
125	Ichapuram	152316	46905
126	Pathapatnam	139259	51038
<b>Visakhapatnam District</b>			
127	Gajuwaka	1030333	264232
128	Bheemunipatnam	493312	141048
129	Pendurthi	422291	114402
130	Visakhapatnam-North	408604	117863
131	Elamanchili	385739	144983

Sl. No.	Name of the Assembly Constituency	Total GVA	Per Capita Income (PCI)
1	2	3	4
132	Visakhapatnam-West	364244	174109
133	Visakhapatnam-South	348475	119147
134	Visakhapatnam-East	336989	125018
135	Anakapalli	331246	119606
136	Narsipatnam	329643	108634
137	Chodavaram	323715	101610
138	Payakaraopeta	311053	90352
139	Paderu	230332	83757
140	Madugula	225420	85006
141	Araku	208509	60643
<b>Vizianagaram District</b>			
142	Vizianagaram	300572	101632
143	Nellimarla	275327	102183
144	Bobbili	216335	73467
145	S.Kota	215742	73684
146	Salur	191047	72959
147	Cheepurupalli	182184	68849
148	Gajapathinagaram	175899	66299
149	Parvathipuram (SC)	168140	69590
150	Kurupam (ST)	148772	57225
151	Undi	459172	160407
152	Ungutur	381640	141394
153	Gopalapuram	351335	116060
154	Bhimavaram	351088	115396
155	Denduluru	338646	123614
156	Tanuku	303450	102614
157	Eluru	302869	102985
158	Polavaram	273307	100538
159	Chintalapudi	267799	80868
160	Tadepalligudem	264460	96452
161	Narasapuram	251652	114236
162	Nidadavole	249448	91567
163	Palacole	218011	89312
164	Achatna	216109	92533
165	Kovvuru	194040	82234
166	Kadapa	369330	111713
167	Pulivendula	323187	108485
168	J.Madugu	270441	85164
169	Rayachoty	265163	80592
170	Rly.Kodur	258555	93069
171	Proddatur	219520	72592
172	Rajampet	214195	67304
173	Badvel	192293	67654
174	Mydukur	183811	67710
175	Kamalapuram	175695	67865

Source: Directorate of Economics and Statistics, A.P.

## ANNEXURES - PUBLIC FINANCE

## A - 3.1: State's Own Tax Revenue

(Rs. Crores)

Sl. No.	Tax Revenue	2014-15 Accounts	2015-16 Accounts	2016-17 RE
1.	Sales Tax	21,672	29,104	36,100
2.	State Excise	3,642	4,386	5,300
3.	Taxes on Motor Vehicles	1,423	2,082	2,681
4.	Stamps and Registration	2,561	3,527	3,500
5.	Land Revenue	28	52	631
6.	Professional Tax	185	250	352
7.	Electricity Duty	118	176	320
8.	NALA	130	196	250
9.	Other Taxes and Duties	97	149	148
	Total	29,857	39,922	49,282

#From 2nd June 2014 to March 2015.

Source Finance Department

## A - 3.2: State's Own Non-Tax Revenue

(Rs. Crores)

Sl. No.	Tax Revenue	2014-15 Accounts#	2015-16 Accounts	2016-17 RE
1.	Mines and Minerals	811	1,523	1,705
2.	Forests	414	471	400
3.	Interest Receipts	371	133	143
4.	Education	1,087	856	724
5.	Medical and Health	72	70	85
6.	Others	1,200	1,867	1,443
	Total	3,955	4,920	4,500

#From 2nd June 2014 to March 2015.

Source Finance Department

## A - 3.3: Resource Flows from the Centre to the State

(Rs. Crores)

Sl. No.	Item	2014-15 Accounts#	2015-16 Accounts	2016-17 RE
I.	Finance Commission	15,557	30,078	33,630
a)	Tax share (Devolution)	11,446	21,879	26,264
b)	Grants	4,071	8,199	7,366
II.	Plan Assistance and EAP	11,998	12,668	17,346
a)	Normal Plan Assistance	11,542	11,978	16,350
1	Grants	11,542	11,978	16,350
2	Loans	-	0	-
b)	Externally Aided Projects	456	690	996
1	Grants	10	5	12
2	Loans	446	685	984
III.	Non-Plan Grants	588	1,746	3,935

## ANNEXURES - PUBLIC FINANCE

Sl. No.	Item	2014-15 Accounts#	2015-16 Accounts	2016-17 RE
IV.	Non-Plan Loans	466	757	-900
a)	Small Savings (Net)	466	757	-900
b)	Others	-	0	0
	Total	28,569	45,249	54,011

#From 2nd June 2014 to March 2015.

Source Finance Department

A 3.4: Composition of Total Expenditure (Rs. Crores)

Sl. No.	Item	2014-15 Accounts#	2015-16 Accounts	2016-17 RE
1.	Revenue Expenditure	75,246	95,950	1,12,306
2.	Capital Outlay	6520	14,172	14,178
3.	Loans & Advances (Net)	914	389	387
	Total Expenditure*	86,906	1,10,510	1,26,871

\* Total Expenditure excludes public debt repayments

#From 2nd June 2014 to March 2015.

Source Finance Department

Annexure 3.5: Composition of Total Debt (Rs. Crores)

Sl. No.	Item	2014-15 Accounts#	2015-16 Accounts	2016-17 RE
1.	Central Loans	16,858	8,958	9,191
2.	Market loans	78,440	94,926	1,14,658
3.	Small Saving Loans	15,178	15,924	15,024
4.	PF	14,822	16,075	17,118
5.	Others	31,175	37,971	36,993
	Total*	1,56,472	1,73,854	1,92,984
	Debt outstanding as percent of GSDP	29.36	28.50	27.60

• Total Debt includes un-apportioned amount of Rs.33,478 crores.

#From 2nd June 2014 to March 2015.

Source Finance Department

Annexure 3.6: Deficits and Interest Payments (Rs. Crores)

Sl. No.	Item	2014-15 Accounts#	2015-16 Accounts	2016-17 RE
1.	Interest Payments	7,903	9,848	12,208
2.	Revenue deficit	13,777	7,302	4,598
3.	Fiscal Deficit	20,746	21,863	19,163

# From 2nd June 2014 to March 2015.

Source Finance Department

## ANNEXURES - PRICES, WAGES AND PUBLIC DISTRIBUTION

A 4.1: Average daily retail prices of essential commodities

(in Rs)

Year (Aprl - March)	Rice (II sort)	Red gram Dal (II sort)	G.Nut Oil	Tamarind (without seed)	Dry Red (Chillie Gr.II)	Onions Gr-II
1	2	3	4	5	6	7
2004-05	10.22	27.18	53.79	40.69	30.66	5.52
2005-06	10.75	26.36	51.28	30.10	27.91	7.26
2006-07	11.28	28.00	57.77	40.88	54.46	6.91
2007-08	11.77	34.35	69.60	28.62	47.53	9.66
2008-09	14.68	40.43	69.59	34.99	55.98	10.21
2009-10	17.23	63.42	66.63	35.26	60.51	12.93
2010-11	17.73	58.47	80.13	54.43	62.74	16.66
2011-12	18.34	55.30	92.89	76.09	92.59	10.79
2012-13	21.55	59.21	115.52	57.24	63.90	13.14
2013-14	24.78	63.22	102.69	64.34	77.01	22.87
2014-15	25.84	70.31	92.73	72.36	83.80	19.36
2015-16	26.50	118.86	104.85	79.08	115.01	25.28
2016-17 (Aprl to Dec, 2016)	27.83	119.68	118.63	89.20	140.14	12.71

Source: Directorate of Economics and Statistics, A.P.

A 4.2 : Consumer price index numbers for rural, urban and combined

(Base: 2010=100)

Month	Andhra Pradesh			All India		
	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Apr-16	133	129	132	129	125	127
May-16	136	132	134	130	127	129
Jun-16	137	133	136	132	128	130
Jul-16	137	133	135	133	129	131
Aug-16	137	132	135	134	128	131
Sep-16	137	131	135	133	128	131
Oct-16	138	132	135	134	129	131
Nov-16	137	131	135	134	128	131
Average	136	132	135	132	128	130

Source: Central Statistics Office, Government of India, New Delhi &amp; Directorate of Economics and Statistics, Hyderabad.



## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

## A.4.3: Ration shops, Ration Cards and Deepam Connections up to Feb 2017

(units in Number)

Sl. No.	District	Ration Shops	Ration Cards			Distribution of Rice in Mts (White+ AAY)	LPG connections under Deepam Scheme
			Annapurna	AAY	White		
1	2	3	4	5	6	7	8
1	Srikakulam	1999	1071	51133	774631	12575	210364
2	Vizianagaram	1398	915	85803	616880	11429	183339
3	Visakapatnam	2018	911	75704	1120222	17504	304800
4	East Godavari	2647	1436	85881	1521380	23178	482199
5	West Godavari	2123	1057	70722	1140228	17562	439212
6	Krishna	2161	527	65756	1179297	17856	378248
7	Guntur	2717	1071	74845	1353155	20118	334513
8	Prakasam	2140	714	47524	893818	13396	253472
9	S.P.S. Nellore	1881	716	59688	807435	12335	231729
10	Y.S.R	1737	651	56891	678050	11508	228470
11	Kurnool	2414	1047	57927	1092991	17628	391377
12	Anantapuramu	2970	832	104873	1089392	19391	220150
13	Chittoor	2849	928	87608	995776	17529	390979
	Total	29054	11876	924355	13263255	212009	4048852

Source: Civil Supplies Department

## A 5.1 : Land utilisation particulars

(Area in Lakh Hectares)

Year	Forest	Barren & Uncultivable Land	Land put to Non Agricultural Uses	Permanent pastures and other Grazing Lands	Misc. Tree crops and Groves not included in Net Area Sown	Culturable Waste	Other Fallow Lands	Current Fallow	Net Area Sown	Geo-graphical Area
1	2	3	4	5	6	7	8	9	10	11
2008-09	34.67	14.30	18.33	2.59	1.83	4.78	7.00	9.44	67.26	160.20
2009-10	34.67	14.25	18.47	2.58	1.80	4.76	8.19	14.23	61.25	160.20
2010-11	34.87	14.09	19.00	2.52	1.76	4.59	7.10	8.31	67.96	160.20
2011-12	34.87	14.07	19.21	2.50	1.75	4.49	7.32	10.37	65.62	160.20
2012-13	34.84	13.43	19.87	2.12	1.65	4.14	8.19	11.34	64.62	160.20
2013-14	34.93	13.41	19.82	2.12	1.60	3.92	7.92	10.87	65.61	160.20
2014-15	36.88	13.47	20.02	2.14	1.60	3.92	8.58	14.01	62.35	162.97
2015-16	36.88	13.47	20.32	2.12	1.57	4.11	8.32	14.10	62.08	162.97

Source: Directorate of Economics and Statistics.

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.2 : District wise Land utilisation particulars 2015-16

(Area in Lakh Hectares)

District	Forest	Barren & Uncultivable Land	Land put to Non Agricultural Uses	Permanent pasture and other Grazing Lands	Misc. Tree crops and Groves not include in Net Area Sown	Culturable Waste	Other Fallow Lands	Current Fallow	Net Area Sown	Geographical Area
1	2	3	4	5	6	7	8	9	10	11
Srikakulam	0.69	0.48	1.02	0.01	0.08	0.01	0.15	0.35	3.05	5.84
Vizianagaram	1.19	0.73	0.78	0.05	0.11	0.04	0.24	0.68	2.72	6.54
Visakapatnam	4.41	1.30	1.10	0.03	0.34	0.10	0.42	0.69	2.77	11.16
East Godavari	4.66	0.83	1.57	0.22	0.06	0.17	0.52	0.42	4.36	12.81
West Godavari	1.33	0.40	1.23	0.12	0.08	0.14	0.17	0.28	4.76	8.51
Krishna	0.76	0.37	1.55	0.11	0.08	0.23	0.29	0.73	4.61	8.73
Guntur	1.62	0.32	1.76	0.16	0.24	0.27	0.42	1.22	5.38	11.39
Prakasam	4.59	1.54	1.83	0.56	0.03	0.59	1.66	0.90	5.92	17.62
SPS Nellore	2.72	0.82	3.14	0.34	0.08	0.69	0.78	0.13	4.38	13.08
YSR	5.01	2.22	1.82	0.09	0.07	0.45	0.89	1.41	3.40	15.36
Kurnool	3.41	1.27	1.43	0.03	0.01	0.46	0.67	1.85	8.52	17.65
Anantapuramu	1.97	1.66	1.50	0.06	0.09	0.49	0.86	4.00	8.50	19.13
Chittoor	4.52	1.53	1.59	0.34	0.30	0.47	1.25	1.44	3.71	15.15
Total	36.88	13.47	20.32	2.12	1.57	4.11	8.32	14.10	62.08	162.97
% of total Geographical Area	22.63	8.27	12.47	1.30	0.96	2.52	5.11	8.65	38.09	100.00

Source: Directorate of Economics and Statistics.

A.5.3 Season wise Rainfall

(in Mm)

	South West Monsoon (June to Sep)		North East Monsoon (Oct to Dec)		Winter period (Jan & Feb)		Hot weather period (Mar to May)		Total (June to May)	
Normal	556.0		296.0		15.7		98.3		966.0	
Year	Actual	% of deviation to normal	Actual	% of deviation to normal	Actual	% of deviation to normal	Actual	% of deviation to normal	Actual	% of deviation to normal
1	2	3	4	5	6	7	8	9	10	11
2008-09	567.5	1	241.6	-18	0.2	-99	61.3	-39	870.6	-10
2009-10	427.8	-23	228.5	-23	12.3	-22	148.4	50	817.0	-16
2010-11	755.6	35	456.1	54	15.8	1	90.7	-8	1318.2	36
2011-12	498.7	-10	174.3	-41	24.7	57	65.4	-34	763.1	-21
2012-13	586.0	5	356.8	20	33.4	113	60.7	-39	1036.9	7
2013-14	518.9	-7	359.1	21	1.2	-92	88.9	-12	968.1	0
2014-15	355.7	-36	170.0	-43	2.5	-84	77.9	-21	606.1	-37
2015-16	523.0	-6	287.2	-3	4.3	-73	98.0	-0.3	912.5	-6
2016-17	534.0	-4	85.0	-71						

Source: Directorate of Economics &amp; Statistics department

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.4 : District wise Rainfall during South-West Monsoon and North-East Monsoon

(in mm.)

Sl. No.	District	South-West Monsoon (June to September 2016)			North-East Monsoon (October to December 2016)		
		Normal	Actual	% Deviation	Normal	Actual	% Deviation
1	2	3	4	5	6	7	8
1	Srikakulam	706	627	-11	276	94	-66
2	Vizianagaram	693	808	17	246	100	-59
3	Visakapatnam	713	851	19	297	93	-69
4	East Godavari	768	802	4	398	59	-85
5	West Godavari	792	797	1	239	44	-81
6	Krishna	685	669	-2	249	93	-63
7	Guntur	526	654	24	229	66	-71
8	Prakasam	388	342	-12	394	103	-74
9	SPS Nellore	331	160	-52	661	198	-70
Coastal Andhra		622	632	2	332	95	-71
10	YSR	394	384	-2	251	78	-69
11	Kurnool	455	467	3	150	15	-90
12	Anantapuramu	338	257	-24	155	27	-83
13	Chittoor	439	342	-22	395	158	-60
Rayalaseema		407	363	-11	238	69	-71
Andhra Pradesh		556	534	-4	296	85	-71

Source: Directorate of Economics and Statistics.

A. 5.5: Category wise Soil types in the state

Sl No.	Soil Category	Area ('000 Ha)	Percentage
1	Gravelly clayey moderately deep Red soils	305	1.87
2	Gravelly clayey moderately deep desert soils	891	5.47
3	Gravelly clayey moderately deep grass land soils	166	1.02
4	Gravelly clayey shallow dark brown soils	872	5.35
5	Gravelly loam to gravelly clayey shallow dark brown soils	44	0.27
6	Gravelly loamy dark brown moderately deep soils	479	2.94
7	Gravelly loamy moderately deep grass land soils	420	2.58
8	Moderately deep black clayey soils	225	1.38
9	Moderately deep calcareous moist clayey soils	237	1.45
10	Moderately deep calcareous black soils	1559	9.57
11	Clayey moderately deep wet soils	22	0.13
12	Clayey to gravelly clayey moderately deep dark brown soils	3040	18.65
13	Dark grayish brown moderately deep moist stratified soils	31	0.19
14	Dark grayish brown moderately deep stratified loamy soils	42	0.26
15	Loamy to clayey skeletal deep Reddish brown soils	3328	20.42
16	Loamy to gravelly clay deep dark reddish brown soils	1219	7.48
17	Shallow gravelly Red soils	1696	10.41

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl No.	Soil Category	Area ('000 Ha)	Percentage
18	Shallow loamy to gravelly clay Red soils	112	0.69
19	Deep black clayey soils	1250	7.67
20	Fine loamy gravelly clayey shallow Reddish brown soils	214	1.31
21	Light gray deep sandy soils	114	0.70
22	Very dark brown moderately deep wetsilty soils	31	0.19
	Total	16297	100.00

Source: AP Space Application Centre

## A 5.6 : Area and production of foodgrains

Year	Area (in Lakh Hects.)	Production (in Lakh Tonnes)
1	2	3
2008-09	42.70	166.16
2009-10	39.93	141.81
2010-11	45.56	149.96
2011-12	41.80	147.73
2012-13	41.54	139.27
2013-14	42.81	156.94
2014-15	39.63	160.02
2015-16	41.36	143.78
2016-17*	41.34	156.85

Source : Directorate of Economics and Statistics

\*As per 2nd Advance Estimates (P)

## A. 5.7 Season wise area under selected crops

Thousand Hectares

Sl. No.	Crop	Season	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
1	2	3	4	5	6	7	8	9	10
1	Paddy	Kharif	1797	1710	1530	1706	1635	1399	1520
		Rabi	975	636	679	877	759	762	620
		Total	2772	2346	2209	2583	2394	2161	2140
2	Jowar	Kharif	9	28	28	33	37	44	14
		Rabi	79	120	136	85	104	130	116
		Total	88	148	164	118	141	174	130
3	Bajra	Kharif	45	29	54	47	25	33	39
		Rabi	3	3	3	2	3	4	3
		Total	48	32	57	49	28	37	42
4	Maize	Kharif	49	82	91	110	100	75	86
		Rabi	184	190	218	242	203	158	205
		Total	233	272	309	352	303	233	291

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No.	Crop	Season	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
1	2	3	4	5	6	7	8	9	10
5	Ragi	Kharif	35	35	34	37	29	27	27
		Rabi	5	5	5	5	5	4	4
		Total	40	40	39	42	34	31	31
6	Other Millets including Wheat	Kharif	28	27	36	26	18	47	25
		Rabi	2	2	2	2	2	4	2
		Total	30	29	38	28	20	51	27
7	Pulses	Kharif	394	230	246	230	198	361	442
		Rabi	979	1082	1092	878	844	1088	1031
		Total	1373	1312	1338	1108	1042	1449	1473
Total Food Grains		Kharif	2328	2141	2018	2190	2041	1986	2153
		Rabi	2228	2039	2136	2091	1922	2150	1981
		Total	4556	4180	4154	4281	3963	4136	4134
8	Groundnut	Kharif	1317	1033	1042	1086	804	682	933
		Rabi	109	103	115	90	70	93	94
		Total	1426	1136	1157	1176	874	775	1027
9	Castor	Kharif	83	151	105	48	46	49	34
10	Sesamum	Kharif	70	27	21	28	21	28	33
		Rabi	28	26	23	33	64	25	36
		Total	98	53	44	61	85	53	69
Total Oil Seeds		Kharif	1556	1275	1236	1238	944	850	1096
		Rabi	314	271	253	199	188	147	151
		Total	1870	1546	1489	1437	1132	997	1247

Source : Directorate of Economics and Statistics

\*As per 2nd Advance Estimates (P)

A 5.8 : Season-wise production of selected crops

(Thousand Tonnes)

Sl. No.	Crop	Season	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
1	2	3	4	5	6	7	8	9	10
1	Paddy	Kharif	5961	7803	6067	6535	7646	6159	7904
		Rabi	5864	3813	4227	5455	5037	5074	4129
		Total	11825	11616	10294	11990	12683	11233	12033
2	Jowar	Kharif	13	61	73	57	55	49	26
		Rabi	143	291	339	209	290	308	289
		Total	156	352	412	266	345	357	315
3	Bajra	Kharif	80	45	95	78	32	59	67
		Rabi	8	7	4	4	7	6	5
		Total	88	52	99	82	39	65	72
4	Maize	Kharif	203	283	364	408	329	276	370
		Rabi	1681	1480	1547	1805	1609	1135	1574
		Total	1884	1763	1911	2213	1938	1411	1944

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No.	Crop	Season	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
1	2	3	4	5	6	7	8	9	10
5	Ragi	Kharif	40	29	36	36	27	25	30
		Rabi	7	9	6	7	7	9	6
		Total	47	38	42	43	34	34	36
6	Other Millets incl. Wheat	Kharif	26	16	33	20	12	44	19
		Rabi	4	3	3	1	2	5	2
		Total	30	19	36	21	14	49	21
7	Pulses	Kharif	144	80	123	131	115	200	294
		Rabi	822	853	1010	948	834	1029	970
		Total	966	933	1133	1079	949	1229	1264
Total Food Grains		Kharif	6467	8317	6791	7265	8216	6812	8710
		Rabi	8529	6456	7136	8429	7786	7566	6975
		Total	14996	14773	13927	15694	16002	14378	15685
8	Groundnut	Kharif	856	355	540	681	330	598	408
		Rabi	250	228	240	200	163	203	208
		Total	1106	583	780	881	493	801	616
9	Castor	Kharif	70	13	47	26	27	28	20
10	Sesamum	Kharif	12	6	5	13	6	5	8
		Rabi	7	7	8	8	22	9	12
		Total	19	13	13	21	28	14	20
Total Oil Seeds		Kharif	1995	1393	1668	1971	1677	1946	2225
		Rabi	377	350	320	271	226	234	237
		Total	2372	1743	1988	2242	1903	2180	2462

Source : Directorate of Economics and Statistics

\*As per 2nd Advance Estimates(P)

## A 5.9 : Season-wise productivity of selected crops

(Kgs./Hectare)

Sl. No.	Crop	Season	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
1	2	3	4	5	6	7	8	9	10
1	Paddy	Kharif	3318	4562	3965	3832	4677	4402	5200
		Rabi	6011	5995	6225	6214	6636	6660	6660
		Total	4265	4951	4660	4641	5298	5198	5622
2	Jowar	Kharif	1447	2151	2652	1747	1487	1110	1829
		Rabi	1809	2430	2481	2438	2770	2369	2490
		Total	1773	2376	2509	2247	2435	2049	24263
3	Bajra	Kharif	1796	1573	1751	1654	1289	1767	1711
		Rabi	2268	2051	1504	1853	1924	1793	1768
		Total	1832	1620	1740	1663	1366	1769	1714
4	Maize	Kharif	4148	3467	4006	3711	3292	3682	4300
		Rabi	9117	7759	7086	7454	7910	7204	7682
		Total	8073	6473	6182	6286	6390	6068	6680
5	Ragi	Kharif	1143	825	1044	983	952	955	1095
		Rabi	1473	1767	1451	1555	1500	1876	1521
		Total	1183	944	1091	1045	1029	1090	1161

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No.	Crop	Season	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17*
1	2	3	4	5	6	7	8	9	10
6	Groundnut	Kharif	650	344	518	627	410	876	437
		Rabi	2279	2219	2082	2218	2325	2190	2214
		Total	775	513	674	749	564	1033	600
7	Castor	Kharif	842	83	454	522	578	564	564
8	Sesamum	Kharif	168	226	232	449	272	183	228
		Rabi	259	279	337	261	347	364	347
		Total	193	252	287	347	328	268	290

Source: Directorate of Economics and Statistics

\*As per 2nd Advance Estimates (P)

## A 5.10 : Source-wise gross area irrigated

(Area in lakh hectares)

Sl. No.	Year	Canals	Tanks	Wells	Others	Total
1	2	3	4	5	6	7
1	2008-09	20.01	4.40	14.36	1.42	40.19
2	2009-10	16.96	3.03	15.01	1.33	36.33
3	2010-11	19.99	4.50	15.61	1.43	41.53
4	2011-12	17.84	3.94	15.99	1.44	39.21
5	2012-13	15.63	3.79	16.34	1.35	37.11
6	2013-14	19.56	3.77	16.23	1.40	40.96
7	2014-15	18.82	3.27	15.32	1.45	38.86
8	2015-16	13.93	3.86	16.43	1.25	35.47

Source: Directorate of Economics and Statistics

## A 5.10A : Source -wise, district wise gross area irrigated 2015-16

(Area in lakh hectares)

District	Canals	Tanks	Wells	Others	Total
Srikakulam	1.16	0.59	0.31	0.06	2.12
Vizianagaram	0.42	0.88	0.55	0.03	1.88
Visakahapatnam	0.54	0.33	0.37	0.24	1.48
East Godavari	3.20	0.23	1.13	0.21	4.77
West Godavari	3.03	0.15	2.93	0.16	6.27
Krishna	1.69	0.16	1.12	0.10	3.07
Guntur	1.52	0.02	1.68	0.14	3.36
Prakasham	0.18	0.08	1.23	0.03	1.52
SPS Nellore	1.44	0.81	1.10	0.06	3.41
YSR	0.01	0.09	1.43	0.02	1.55
Kurnool	0.56	0.07	1.27	0.19	2.09
Ananthapuramu	0.15	0.04	1.54	0.01	1.74
Chittoor	0.03	0.41	1.77	0.00	2.21
Andhra Pradesh	13.93	3.86	16.43	1.25	35.47

Source: Directorate of Economics and Statistics

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.11 : Source-wise net area irrigated

(Area in lakh hectares)

Sl. No.	Year	Canals	Tanks	Wells	Others	Total
1	2	3	4	5	6	7
1	2008-09	13.96	4.10	10.13	1.19	29.38
2	2009-10	13.08	2.75	10.24	1.15	27.22
3	2010-11	14.31	4.12	10.66	1.21	30.30
4	2011-12	14.92	3.67	11.22	1.24	31.05
5	2012-13	11.75	3.46	11.58	1.22	28.01
6	2013-14	14.30	3.39	11.21	1.24	30.14
7	2014-15	14.29	2.93	10.80	1.25	29.27
8	2015-16	10.81	3.63	11.93	1.06	27.43

Source: Directorate of Economics and Statistics

A 5.11A : Source –wise, district wise net area irrigated 2015-16

(Area in lakh hectares)

District	Canals	Tanks	Others	Wells	Total
Srikakulam	1.14	0.57	0.05	0.11	1.87
Vizianagaram	0.39	0.81	0.02	0.37	1.59
Visakahapatnam	0.47	0.30	0.21	0.19	1.17
East Godavari	1.80	0.21	0.16	0.66	2.83
West Godavari	1.63	0.13	0.10	1.83	3.69
Krishna	1.69	0.16	0.09	0.70	2.64
Guntur	1.51	0.02	0.13	1.20	2.86
Prakasham	0.18	0.08	0.03	1.19	1.48
SPS Nellore	1.30	0.80	0.05	0.93	3.08
YSR	0.01	0.09	0.02	1.21	1.33
Kurnool	0.52	0.06	0.18	0.99	1.75
Ananthapuramu	0.14	0.03	0.02	1.20	1.39
Chittoor	0.03	0.37	0.00	1.35	1.75
Andhra Pradesh	10.81	3.63	1.06	11.93	27.43

Source: Directorate of Economics and Statistics

A 5.12 : Distribution of Land holdings by size classes, 2005-06 and 2010-11

Size Group	No. of Holdings (Lakh)		Percentage to Total		Area (Lakh Hect.)		Percentage to Total		Average Size of Holdings (Hect.)	
	2005-06	2010-11	2005-06	2010-11	2005-06	2010-11	2005-06	2010-11	2005-06	2010-11
1	2	3	4	5	6	7	8	9	10	11
Marginal	46.19	49.84	64.00	65.40	20.01	21.60	24.44	26.68	0.43	0.43
Small	14.92	15.91	20.68	20.88	21.11	22.51	25.78	27.80	1.41	1.41
Semi-medium	8.13	7.96	11.27	10.44	21.52	21.00	26.27	25.94	2.65	2.64
Medium	2.64	2.30	3.66	3.02	14.91	12.82	18.21	15.83	5.65	5.57
Large	0.28	0.20	0.39	0.26	4.34	3.04	5.30	3.75	15.50	15.20
Total	72.16	76.21	100.00	100.00	81.89	80.97	100.00	100.00	1.13	1.06

Source: Directorate of Economics and Statistics



## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.13 : Distribution of Land holdings by size classes, 2010-11

(Holdings in Lakh Nos and Area in Lakh Hectares)

District	Marginal		Small		Semi Medium		Medium		Large		Total		Average size of Holdings (Ha)
	Hold-ings	Area	Hold-ings	Area	Hold-ings	Area	Hold-ings	Area	Hold-ings	Area	Hold-ings	Area	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Srikakulam	4.27	1.57	0.71	0.97	0.22	0.58	0.05	0.28	0.00	0.09	5.26	3.49	0.66
Vizianagaram	3.45	1.28	0.67	0.93	0.26	0.71	0.07	0.41	0.01	0.10	4.47	3.42	0.77
Visakapatnam	3.61	1.37	0.69	0.95	0.32	0.87	0.12	0.65	0.01	0.16	4.75	4.00	0.84
East Godavari	5.63	2.04	0.87	1.20	0.37	0.99	0.11	0.63	0.01	0.16	6.99	5.01	0.72
West Godavari	4.29	1.73	0.87	1.21	0.38	1.01	0.11	0.61	0.01	0.13	5.66	4.70	0.83
Krishna	3.96	1.73	0.98	1.36	0.44	1.19	0.13	0.70	0.01	0.10	5.52	5.08	0.92
Guntur	5.36	2.48	1.51	2.09	0.58	1.56	0.14	0.76	0.01	0.12	7.61	7.01	0.92
Prakasam	3.79	1.82	1.70	2.43	0.93	2.48	0.26	1.46	0.02	0.30	6.71	8.48	1.26
SPS Nellore	3.09	1.32	0.92	1.29	0.40	1.07	0.14	0.78	0.02	0.32	4.57	4.79	1.05
Y.S.R	2.42	1.21	1.23	1.77	0.62	1.62	0.13	0.70	0.01	0.12	4.41	5.42	1.23
Kurnool	2.82	1.58	1.88	2.68	1.12	3.03	0.46	2.62	0.04	0.59	6.33	10.50	1.66
Ananthapuramu	2.59	1.47	2.44	3.59	1.75	4.47	0.46	2.58	0.04	0.67	7.28	12.78	1.76
Chittoor	4.55	1.99	1.44	2.03	0.55	1.42	0.12	0.64	0.01	0.18	6.67	6.26	0.94
Total	49.84	21.60	15.91	22.51	7.96	21.00	2.30	12.82	0.20	3.04	76.21	80.97	1.06

Source: Directorate of Economics and Statistics

A 5.14 : Consumption of fertilizers

(Lakh MTs.)

Product	2015-16		2016-17	
	Allotment	Consumption	Allotment	Consumption
Urea	17.50	15.47	16.00	6.50
DAP	4.70	3.77	4.75	1.79
MOP	3.50	2.13	3.30	1.11
Complex	13.50	11.81	13.25	4.95
SSP	4.00	2.13	2.50	1.06
Others	1.23	0.58	1.15	0.22
Total	44.43	35.89	40.95	15.63

Source: Agriculture Department

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

## A 5.15 : Consumption of fertilizers in terms of Nutrients

(Lakh MTs.)

S. No	Year	N	P	K	Total
1	2005-06	8.75	4.24	2.24	15.23
2	2006-07	8.50	4.27	2.04	14.81
3	2007-08	8.98	4.34	2.64	15.96
4	2008-09	9.86	5.25	3.06	18.17
5	2009-10	10.21	5.62	3.09	18.92
6	2010-11	10.82	6.28	3.06	20.16
7	2011-12	11.11	6.18	2.15	19.44
8	2012-13	9.93	4.40	1.71	16.04
9	2013-14	11.35	4.61	1.84	17.80
10	2014-15	10.76	4.44	2.19	17.39
11	2015-16	10.23	4.90	1.85	16.98
12	2016-17(Kharif)	4.34	2.18	0.88	7.39

Source: Agriculture Department

## A.5.16: Details of Crop Insurance

(Nos. in lakhs &amp; Rs.in lakhs)

Sl. No.	Year	Season	Farmers Covered	Area Covered in Ha.	Sum Insured	Full Premium	Premium Subsidy	Claim	No. of farmers benefited
1	2	3	4	5	6	7	8	9	10
1	2005-06	Kharif	13.94	24.64	235818	6910	426	49030	6.43
		Rabi	1.19	1.79	21932	450	27	334	0.08
2	2006-07	Kharif	14.10	23.06	269838	7762	457	52866	6.00
		Rabi	1.67	2.75	33795	741	33	1754	0.35
3	2007-08	Kharif	15.12	25.38	304508	9357	571	678	0.12
		Rabi	1.11	1.87	26313	554	32	396	0.09
4	2008-09	Kharif	11.93	20.49	243298	7805	454	77897	6.81
		Rabi	2.48	4.65	53173	1103	62	3616	0.48
5	2009-10	NAIS(K)	18.92	29.41	420387	12948	809	51895	8.40
		WBCIS(K)	0.17	0.12	14306	1159	35	1734	0.16
		Rabi	1.38	2.24	39955	849	53	2190	0.44
6	2010-11	NAIS(K)	16.36	24.72	440584	13559	846	75984	7.51
		WBCIS(K)	0.11	0.08	5981	647	323	66	0.01
		NAIS(R)	2.85	3.77	66725	1356	76	6265	0.45
		WBCIS(R)	0.0016	0.0032	236	28	14	44	0.00
		MNAIS(R)	0.31	0.43	12596	771	367	44	0.00
7	2011-12	NAIS(K)	9.87	12.43	293519.81	8244.66	618.04	13972.73	1.72
		WBCIS(K)	7.70	13.56	272770.35	27260.46	117624.26	15873.00	5.69
		MNAIS(K)	0.22	0.30	10785.08	578.01	250.66	20.91	0.01
		NAIS(R)	2.09	3.30	74959.14	1525.07	88.65	8335.00	0.56
		WBCIS(R)	0.09	0.079	6381.45	733.90	366.95	974.75	0.07
		MNAIS(R)	0.46	0.69	18048.71	1106.40	416.72	670.67	0.10

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No.	Year	Season	Farmers Covered	Area Covered in Ha.	Sum Insured	Full Premium	Premium Subsidy	Claim	No. of farmers benefited
1	2	3	4	5	6	7	8	9	10
8	2012-13	NAIS(K)	5.31	7.27	187109.22	5599.42	448.02	4714.67	0.60
		WBCIS(K)	7.74	13.51	330195.00	33004.95	21329.86	28407.00	5.26
		MNAIS(K)	4.93	4.93	200816.24	15925.84	7847.10	42455.40	2.77
		NAIS(R)	1.79	2.67	86963.56	1748.80	107.72	14938.54	0.46
		WBCIS(R)	0.09	0.78	5496.72	633.77	316.88	884.23	0.07
		MNAIS(R)	0.26	0.32	13772.57	680.78	279.92	257.42	0.04
9	2013-14	MNAIS(K)	4.75	4.79	2154.72	24227.38	14033.60	32877.35	2.60
		WBCIS(K)	7.13	12.39	331499.94	33141.95	21480.10	25102.90	5.06
		NAIS(K)	3.95	3.90	137090.00	4112.31	826.36	5748.02	0.70
		NAIS ( R )	0.91	1.15	41684.47	815.09	826.36	280.23	0.10
		MNAIS ( R )	0.13	0.16	7912.55	402.29	169.00	280.21	0.02
		WBCIS ( R )	0.07	0.09	4646.89	535.67	268.00	445.00	0.05
10	2014-15	MNAIS ( K )	1.68	1.86	78680.70	9338.18	5613.18	1127.21	0.16
		WBCIS ( K )	0.93	1.68	45459.14	4543.59	2271.79	4514.17	0.78
		MNAIS ( R )	0.99	1.13	59744.00	2479.98	1062.98	1375.72	0.07
		NAIS ( R )	0.92	1.68	31669.00	699.79	45.69	1069.52	0.12
		WBCIS ( R )	0.03	0.04	3117.00	358.95	179.47	178.00	0.03
11	2015-16	MNAIS ( K )	3.56	3.32	156277.00	20430.00	12461.00	60.00	0.70
		WBCIS ( K )	7.04	12.08	312966.66	32484.00	15646.04	137.62	2.68

Source: Agriculture Department

## A 5.17 : Disbursement of Agriculture Credit as on 30th September 2016

(Amount in Rs Crore.)

Sl. No.	District	Short term production loans	Agricultural term loans Including Infrastructure and Ancillary Activities	Total Agriculture loans disbursed	% of Achievement
1	2	3	4	5	6
1	Srikakulam	1369.99	320.54	1690.53	47.30
2	Vizianagaram	1076.12	221.60	1297.72	54.49
3	Visakhapatnam	1364.62	518.54	1883.16	53.57
4	East Godavari	3189.25	1766.65	4955.90	47.18
5	West Godavari	3508.46	954.89	4463.35	45.84
6	Krishna	3177.23	1215.90	4393.13	59.49
7	Guntur	4885.88	730.26	5616.14	49.80
8	Prakasam	2945.81	739.31	3685.12	55.51
9	SPS Nellore	1748.75	687.51	2436.26	48.86
10	Y.S.R	2122.63	460.99	2583.62	52.61
11	Kurnool	2453.16	530.21	2983.37	55.19
12	Ananthapuramu	3514.02	341.96	3855.98	59.34
13	Chittoor	2645.38	635.78	3281.16	53.01
	Total	34001.30	9124.14	43125.44	51.96

Source: Finance (Institutional Finance) Department

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A.5.18 : Loan and Other Eligibility Cards issued and credit extended to licensed cultivators during 2016-17

Sl. No	District	No. of LECs issued			No. of licensed cultivators sanctioned crop loans	
		Renewal of old LECs	New LECs	Total	Cultivators	Amount (Rs in Cr)
1	Srikakulam	9683	7656	17339	245	0.92
2	Vizianagaram	11104	2869	13973	577	2.96
3	Visakhapatnam	8693	1550	10243	825	1.65
4	East Godavari	104359	33351	137710	45926	101.35
5	West Godavari	222716	75420	298136	17841	41.48
6	Krishna	7310	3602	10912	1656	6.22
7	Guntur	5663	15853	21516	1046	6.49
8	Prakasam	2311	0	2311	828	5.08
9	Nellore	8074	2869	10943	850	5.03
10	YSR	3907	4363	8270	547	1.84
11	Kurnool	7910	11588	19498	784	4.95
12	Anantapuramu	7657	21726	29383	815	4.15
13	Chittoor	10474	0	10474	0	0.00
	Total	409861	180847	590708	71940	182.12

Source: Agriculture Department

A.5.19 District wise Eligible farmers under debt redemption scheme

S. No	District Name	1st installment (2014-15 & 2015-16)		2nd Installment (2016-17)		Horticulture (2016-17)	
		No of loan Accounts	Amount (Rs. cr.)	No of loan Accounts	Amount with 10% interest (Rs.cr.)	No of loan accounts	Amount (Rs.cr.)
1	Srikakulam	296510	410.86	146709	113.38	7751	14.88
2	Vizianagaram	215719	316.97	91059	69.16	4424	9.27
3	Visakhapatnam	216712	325.03	100583	87.21	10506	14.02
4	East Godavari	461701	626.08	249712	192.75	31507	39.97
5	West Godavari	493121	640.22	335456	288.56	14239	23.63
6	Krishna	444985	580.44	296324	255.32	8608	15.60
7	Guntur	667243	931.18	522321	535.12	19918	24.05
8	Prakasam	459385	602.55	367888	378.11	2691	6.98
9	SPS Nellore	282472	398.02	193003	170.12	17349	36.16
10	YSR	352060	465.14	254317	226.26	37591	68.22
11	Kurnool	430830	687.81	270110	277.13	2295	5.20
12	Anantapuramu	806722	1063.47	545759	458.34	7436	17.56
13	Chittoor	370682	516.92	266312	251.35	58265	108.93
	Total	54,98,142	7564.69	36,39,553	3302.81	222580	384.47

Source: Agriculture Department

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

## A 5.20 Component wise physical Target and achievements under ATMA

(Amount Rs. in lakhs)

S. No.	Components	2015-16		2016-17 (up to Oct,2016)	
		Target	Achievement	Target	Achievement
1	State level activities (Trgs. to Extn. functionaries)	78	20	20	6
2	District level activities				
a)	Trainings to Farmers	3830	1662	2189	920
b)	Demos	6125	4437	8172	3535
c)	Exposure visits	535	156	364	76
d)	Capacity building of FIGs	1245	635	1000	328
e)	Farmer Awards	170	0	170	0
f)	Kisan Melas	26	26	26	12
g)	Farmer Scientist Interaction	26	16	26	16
h)	Field Days	170	237	340	95
i)	Farm schools	170	96	170	78
j)	Other activities	60	180	541	34
	Total	12435	7465	13018	5100

Source: Agriculture Department

## A 5.21 : Area and production of major Horticulture crops

(Area in Hectares &amp; Production in Tonnes)

Sl. No	Name of the Crop	2015-16 (Final Estimates)		2016-17 (1 <sup>st</sup> AE)	
		Area in Ha	Production MTs	Area in Ha	Production MTs
A	Total Fresh Fruits	577025	10088818	598112	10663469
	Banana	75720	3570618	86324	4083646
	Mango	327308	2803663	338555	2797296
	Lime/Lemon	34264	563741	35654	587091
	Sweet Orange	77940	1265159	76105	1238804
	Custard Apple	1389	11347	1302	11015
	Grapes	732	14640	831	16618
	Guava	6041	109029	6432	110127
	Papaya	10928	987944	11765	1058031
	Pomegranate	8385	113275	7526	104414
	Sapota	11849	148758	11706	149650
	Pineapple	3794	55380	3792	55208
	Jackfruit	181	6278	181	6278
	Ber	1214	23758	1375	29037
	Aonl/Amla	994	21808	1006	19945
	Watermelon	7238	206602	6678	196955
	Muskmelon	6000	151500	5358	158340
	Others	3048	35320	3522	41014
B	Total Vegetables	238399	5442773	228046	5569125
	Beans	15109	163788	14930	170730

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No	Name of the Crop	2015-16 (Final Estimates)		2016-17 (1 <sup>st</sup> AE)	
		Area in Ha	Production MTs	Area in Ha	Production MTs
	Bitterguard	6970	109283	6054	101855
	Bhendi	17976	225474	14534	189445
	Bottlegourd	2445	33793	2600	50598
	Brinjal	17062	419062	15725	399108
	Cabbage	2346	40578	2475	43617
	Capsicum	132	2178	86	1911
	Carrot	2254	43758	2279	44674
	Cauliflower	2697	36014	2598	45813
	Cucumber	4977	90578	4155	88954
	Parwal/Pointed Guard	899	25911	1417	63675
	Radish	777	14341	719	13297
	Pumpkin	375	8037	425	9037
	Elephant Foot Yam	3609	207521	3543	201576
	Onion	45021	885417	45886	924523
	Garlic	0	0	0	0
	Peas	11	66	11	66
	Potato	2606	38860	2850	44600
	Sweet Potato	517	10716	590	11446
	Tapioca	10978	164772	11006	164310
	Tomato	59079	2236556	56884	2282925
	Chillies Green	17015	340398	16768	395838
	Others	25544	345673	22511	321127
C	Total Flowers	18254	147281	18960	163851
	Chrysanthemum	2602	25542	2827	28211
	Jasmine	2709	15128	2758	14996
	Marigold	6966	66544	7153	78247
	Rose	477	2871	538	3049
	Tube Rose	1617	18525	1666	19605
	Crossandra	2307	5587	2384	6369
	Others	1576	13085	1634	13374
D	Plantation Crops	460596	3035518	458340	2609803
	Arecanut	1371	1988	1380	1988
	Cashewnut	124876	105324	122491	121725
	Cocoa	23691	22321	23779	22138
	Coconut (Lakh nuts)	103948	14277	103980	14309
	Oilpalm	149510	2883004	149510	2441072
	Coffee	57200	22880	57200	22880

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No	Name of the Crop	2015-16 (Final Estimates)		2016-17 (1 <sup>st</sup> AE)	
		Area in Ha	Production MTs	Area in Ha	Production MTs
E	Total Spices	232052	1130087	236796	1243589
	Ajwan	7471	7471	7471	74710
	Chillies(Dried)	156068	793488	161154	853605
	Coriander	17504	35693	15496	21311
	Ginger	1165	22476	1706	15050
	Pepper	16000	2400	16009	2402
	Tamarind	6719	84607	6687	84127
	Betelvine	2902	37984	3128	41234
	Turmeric	20835	121439	21956	128611
	Other Spices	3388	24529	3189	22539
F	Total Medicinal & Aromatic Plants	1178	824	1028	524
	Palm Rosa	25	3	25	3
	Lemon Grass	25	5	175	305
	Aswagandha	939	470	939	470
	Other Medicinal Plants	39	47	39	47
	Grand Total	1527504	19845301	1541282	20250361

Source: Horticulture Department

Note: Total Production excludes Coconut.

## A 5.22 : Livestock population as per 2012 census

Nos. in thousands

Sl. No.	District	Cattle	Buffaloes	Sheep	Goat	Pig	Poultry
1	2	3	4	5	6	7	8
1	Srikakulam	790.03	126.33	575.05	212.30	4.73	2726.06
2	Vizianagaram	481.63	220.65	252.61	173.75	10.15	3537.88
3	Visakhapatnam	408.43	218.68	423.12	324.02	7.94	5714.51
4	East Godavari	375.24	642.21	246.72	292.20	32.15	13987.58
5	West Godavari	188.11	620.18	436.81	193.22	10.32	16206.53
6	Krishna	79.42	696.12	508.06	151.12	10.19	11751.99
7	Guntur	110.07	1007.94	621.12	213.25	9.22	6975.53
8	Prakasam	74.85	970.37	1406.58	406.24	10.08	1237.86
9	SPS Nellore	115.97	624.66	1051.94	351.43	5.36	1491.09
10	Y.S.R	139.14	466.93	1403.22	457.90	9.31	1562.51
11	Kurnool	408.62	412.81	1504.67	506.17	17.79	1201.43
12	Ananthapuramu	617.27	371.12	3879.84	785.21	21.78	1589.28
13	Chittoor	926.87	84.37	1250.08	428.72	8.28	12600.85
	Total	4715.65	6462.37	13559.82	4495.53	157.3	80583.1

Source: Animal Husbandry Department

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.23 : Production estimates@ of Milk, Eggs and Meat

Sl. No.	Year	Milk ('000 M.Ts.)	Meat ('000 M.Ts.)	Eggs (Lakh Nos.)
1	2	3	4	5
1	2004-05	5358.35	229.89	107601
2	2005-06	5290.28	263.72	101077
3	2006-07	5505.66	272.41	95218
4	2007-08	6193.23	313.25	105058
5	2008-09	6640.02	310.45	108925
6	2009-10	7237.82	349.43	113932
7	2010-11	7734.39	383.65	116383
8	2011-12	8402.04	440.06	122440
9	2012-13	8810.00	477.65	128740
10	2013-14	9082.73	488.75	127269
11	2014-15	9656.02	527.66	130958
12	2015-16	10816.95	566.13	141767
13	2016-17 (upto Sep,2016)	5957.07	314.20	77872.00

Source: Animal Husbandry Department

@ Estimates based on sample surveys; Eggs includes both commercial and desi and Meat includes chicken meat

A 5.24 : Production estimates@ of Milk, Meat and Eggs during 2016-17 (upto Sep,2016)

Sl. No.	District	Milk ('000 M.Ts.)	Meat ('000 M.Ts.)	Eggs (Lakh Nos.)
1	2	3	4	5
1	Srikakulam	287.56	10374	864
2	Vizianagaram	289.70	14386	2034
3	Visakhapatnam	327.23	19854	5262
4	East Godavari	504.64	21526	21576
5	West Godavari	556.38	19955	16190
6	Krishna	672.74	36138	12908
7	Guntur	619.72	27982	8119
8	Prakasam	644.87	37365	1302
9	SPS Nellore	312.06	14288	1172
10	Y.S.R	219.31	13986	835
11	Kurnool	526.12	40613	827
12	Ananthapuramu	355.64	24753	1172
13	Chittoor	641.11	32982	5611
	Total	5957.07	314202	77872

Source: Animal Husbandry Department

@ Estimates based on sample surveys; Eggs includes both commercial and desi and Meat includes chicken meat



## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.25: District wise Animal Husbandry institutions in the year 2015-16

Sl No	DISTRICT	Veterinary Polyclinic	Super Specialty Veterinary Hospital	Veterinary Hospital	Veterinary Dispensaries	Rural Live Stock Units	Total
1	2	3	4	5	6	7	8
1	Srikakulam	1	0	13	83	99	196
2	Vizianagaram	1	0	11	69	74	155
3	Visakhapatnam	0	0	16	87	62	165
4	East Godavari	1	0	15	151	76	243
5	West Godavari	1	0	11	102	92	206
6	Krishna	1	1	17	114	190	323
7	Guntur	1	0	16	126	141	284
8	Prakasam	1	0	8	119	103	231
9	SPS Nellore	1	0	15	101	100	217
10	YSR	1	0	15	135	171	322
11	Kurnool	1	1	12	102	131	247
12	Ananthapuramu	1	0	16	110	61	188
13	Chittoor	1	0	15	121	205	342
	Total	12	2	180	1420	1505	3119

Source: Directorate of Animal Husbandry

A.5.26: Animal Husbandry performance indicators, 2015-16 (upto Dec,2016)

Sl. No	Indicator	Units	Target	Achievement (upto Dec, 2016)	% of Achievement
1	2	3	4	5	6
1	Curative Treatment	Lakh Nos.	357.80	308.14	86.12
2	Preventive Treatment	Lakh Nos.	450.60	351.30	77.96
3	Castrations	Lakh Nos.	2.93	2.55	87.11
4	Vaccinations	Lakh Nos.	639.00	506.32	79.24
5	Artificial Inseminations	Lakh Nos.	20.06	14.60	72.78
6	Calf Births	Lakh Nos.	7.60	6.23	81.94
7	Rythu Sadassus	Nos.	42500	34426	81.00
8	Fertility Camps	Nos.	12600	11489	91.18

Source: Animal Husbandry Department

A 5.27 : Fish and Prawn production

(lakh tonnes)

Sl. No	Year	Marine Fish (incl. Marine Shrimp)	Inland Fish (incl. fresh water prawn & brackish water shrimp)	Total
1	2	3	4	5
2	2000-01	1.83	3.17	5.00
3	2001-02	2.05	3.69	5.74
4	2002-03	2.48	5.27	7.75
5	2003-04	2.64	5.97	8.61
6	2004-05	2.11	5.58	7.69

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No	Year	Marine Fish (incl.Marine Shrimp)	Inland Fish (incl.fresh water prawn & brackish water shrimp)	Total
1	2	3	4	5
7	2005-06	2.19	5.95	8.14
8	2006-07	2.41	6.01	8.42
9	2007-08	2.55	6.83	9.38
10	2008-09	2.91	8.10	11.01
11	2009-10	2.93	8.65	11.58
12	2010-11	2.91	11.33	14.24
13	2011-12	3.79	10.23	14.03
13	2012-13	4.14	11.74	15.88
14	2013-14	4.38	13.31	17.69
15	2014-15	4.75	15.03	19.79
16	2015-16	5.20	18.32	23.52
17	2016-17(upto Nov,16)	3.31	15.27	18.58

Source: Commissioner of Fisheries

## A.5.28:District-wise Forest area

(Sq.Kms)

Sl No.	District	Very Dense Forest	Moderate Dense Forest	Open Forest	Scrub Forest	Non Forest	Water Bodies	Total
1	Srikakulam	0.00	11.52	216.01	315.56	174.90	3.72	721.71
2	Vizianagaram	0.06	529.98	488.87	122.82	74.38	3.17	1219.28
3	Visakhapatnam	104.66	2219.75	1210.37	735.59	357.13	3.87	4631.37
4	East Godavari	190.33	2995.51	874.32	180.73	314.50	154.29	4709.68
5	West Godavari	91.91	877.60	83.96	134.24	59.01	0.88	1247.60
6	Krishna	0.00	2.99	369.05	172.75	47.87	51.85	644.51
7	Guntur	1.21	129.17	346.07	1179.52	129.44	40.80	1826.21
8	Prakasam	30.44	670.41	2022.98	1683.07	63.63	9.14	4479.67
9	SPS Nellore	50.80	486.64	470.50	1058.72	282.39	30.91	2379.96
10	YSR	104.52	1057.57	2218.17	1454.68	211.10	6.87	5052.91
11	Kurnool	6.32	973.38	830.59	740.46	941.99	62.04	3554.78
12	Ananthapuramu	0.00	5.79	84.15	863.14	989.15	3.37	1945.60
13	Chittoor	70.51	1838.27	1746.66	669.09	170.35	1.22	4496.10
	Total	650.76	11798.58	10961.70	9310.37	3815.84	372.13	36909.38

Source: Forest Department

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

## A 5.29: Revenue achieved from forest produce

(Rs.Lakh)

Sl No.	Description	2013-14	2014-15	2015-16	2016-17 (upto Nov,16)
1	Timber	118.79	247.528	438.204	371.154
2	Bamboo	1299.93	1274.539	1418.839	696.216
3	Firewood & Charcoal	38.927	27.398	4.218	1.296
4	Other Forest Produce	6.319	28.768	11.153	0.450
5	Beedi Leaves	13.34	5.156	13.930	19.290
6	Teak Plants	1273.59	1208.053	1440.420	805.218
7	Cashew Plants	43.66	32.717	39.000	1.770
8	Other Plantations	1063.03	265.457	204.292	21.744
9	Red Sanders	12.02	0.000	0.000	0.000
10	Thinnings	28.76	49.370	1.560	17.560
	Departmental extractions	3898.37	3138.986	3571.6152	1934.698

Source: Forest Department

## A. 5. 30 : Protected areas of the forest department in the State

Sl. No	Protected Area	District	Sanctuary Area in Sq.Kms.
1	Coringa WLS	East Godavari	235.70
2	Kolleru WLS	West Godavari & Krishna	308.55
3	Krishna WLS	Krishna, Guntur	194.81
4	Rajiv Gandhi WLS (Tiger Reserve)	Kurnool, Prakasam & Guntur	2131.31
5	Rollapadu WLS	Kurnool	6.14
6	GundlaBrahmeswara WLS (Extended Core)	Kurnool &Prakasam	1194.00
7	Sri Lankalleswara WLS	YSR	464.42
8	Nelapattu WLS	SPS Nellore	4.58
9	Pulicat WLS	SPS Nellore	600.00
10	Koundinya WLS	Chittoor	357.60
11	Sri Venkateshwara WLS	Chittoor	525.97
12	Sri Venkateshwara NP(Part of S.V.WLS)	Chittoor	
13	Kambalakonda WLS	Visakhapatnam	70.70
14	Sri PenusilaNarasimha WLS	SPSR Nellore & YSR	1030.90
15	Rajiv Gandhi NP	YSR	2.30
16	Papikonda NP	East Godavari and Khammam part & West Godavari	1012.90
	Total		8139.89

Source: Forest Department

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A.5.31: Progress on compensatory afforestation under forest (conservation) Act 1980

Sl. No.	Item	2014-15	2015-16	2016-17 (asper QPR 2016)
1	Area Diverted in Ha	30430.501	26317.056	26757.419
2	C.A. Stipulation in Ha			
	In Forest Land in Ha	4434.681	4187.86	4003.624
	In Non Forest Land in Ha	31168.504	28812.185	23457.206
	Total	35603.185	33000.045	27460.83
3	Addl C.A. Penal C.A. & Safety Zone in Ha	1980.132	2336.379	2253.708
4	Financial amount required to be deposited by user agency (Rs in La.)	39692.656	45950.158	49368.339
5	Fund made available by user agency (Rs in Lakhs.)	40323.408	46448.993	49517.499
6	Implementation of stipulation Area afforested in Ha			
	On Forest Land in Ha	6156.308	5844.925	5793.116
	On Non Forest land in Ha	26106.381	24364.413	19264.984
	Total	32262.689	30209.338	25058.10
7	Amount spent (Rs in Lakhs)	27786.432	18226.583	19049.645
8	Balance area to be afforested in Ha			
	On Forest Land in Ha	1162.686	725.600	659.659
	On Non Forest land in Ha	7461.274	4484.482	4089.782
	Total	8623.960	5210.082	4749.441

Source:- Forest Department

A.5.32 :District-wise achievements made under Sericulture sector ( Oct- 2016)

Sl. No.	District	Employment Generation (lakh Nos)	Mulberry (cumulative area in acres)	DFLs Brushing BV & CB (in lakh)	Cocoon Production (BV & CB) (in MTs.)	Raw Silk Production (BV & CB) (in MTs.)	Sericulture Farmers (Number)
1	2	3	4	5	6	7	8
1	Srikakulam	2200	440	0.548	32.03	7.829	180
2	Vizianagaram	2615	523	0.866	54.715	71.759	367
3	Visakhapatnam	2408	481.5	0.562	31.019	19.077	441
4	East Godavari	7616	1523.25	4.366	284	35.002	833
5	West Godavari	6255	1251	3.772	244.805	40.785	1080
6	Krishna	3825	765	2.245	127.404	4.521	424
7	Guntur	4520	904	2.427	129.34	7.619	402
8	Prakasham	12725	2545	8.351	497.995	4.804	1363
9	SPS Nellore	2925	585	0.879	55.087	18.301	443
10	YSR	8600	1720	5.197	295.385	47.351	1242
11	Kurnool	13203	2640.5	6.131	316.191	42.054	2377
12	Anatapuramu	167384	33476.75	166.362	10577.19	1505.462	27820
13	Chittoor	162610	32522.07	149.202	10451.044	1481.618	29065
	Total	396886	79377.07	350.908	23096.205	3286.182	66037

Source: Sericulture Department

## ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

## A.5.33 :District wise collection of Market fee

(Amount Rs. in lakhs)

Sl. No	District	2014-15	2015-16	2016-17 (up to Nov 2016)
1	2	3	4	5
1	Srikakulam	1826.83	2197.86	804.52
2	Vizianagaram	1153.11	954.61	1073.22
3	Visakhapatnam	1138.95	962.04	685.67
4	East Godavari	5215.85	6790.82	3060.49
5	West Godavari	5847.46	7096.20	3589.66
6	Krishna	4866.05	5021.90	2392.72
7	Guntur	10756.09	11216.85	6010.71
8	Prakasam	2740.16	2092.11	1558.46
9	SPS Nellore	1639.17	1925.96	1549.59
10	YSR	1341.37	1259.32	847.05
11	Kurnool	4393.18	4187.82	1772.00
12	Ananthapuramu	1194.36	1417.13	628.45
13	Chittoor	1641.31	1883.01	1825.81
Total		43753.89	47005.63	25798.35

Source: Commissioner, Agricultural Marketing

## A.5.34 : District wise Godowns in Agriculture Market Committees

Sl. No	Name of the District	Existing Godowns		Godowns under utilisation	
		No.of Godowns	Capacity (MTs)	No.of Godowns	Utilization (MTs)
1	Srikakulam	53	34500	44	28700
2	Vizianagaram	50	30460	33	21180
3	Visakhapatnam	26	13860	9	5072
4	East Godavari	53	40885	46	36170
5	West Godavari	96	66810	70	49270
6	Krishna	174	166000	134	138440
7	Guntur	161	119805	134	103220
8	Prakasam	69	59030	47	41960
9	Nellore	52	46250	40	38400
10	YSR	75	45810	33	25190
11	Kurnool	73	37600	66	54210
12	Anantapuramu	76	45770	66	38420
13	Chittoor	97	90860	39	32150
Andhra Pradesh		1055	797640	761	612382

Source: Commissioner, Agricultural Marketing

## ANNEXURES - INDUSTRIES

A 6.1 : Large &amp; Mega Industrial Projects gone into production

District	Up to March, 2016			During 2016-17 (upto Dec, 2016)			Total		
	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)
1	2	3	4	5	6	7	8	9	10
Srikakulam	101	1495.00	15063	0	0	0	101	1495.00	15063
Vizianagaram	63	3146.30	34848	3	43.60	600	66	3189.90	35448
Visakhapatnam	199	17174.00	75227	5	709.85	1298	204	17883.85	76525
East Godavari	219	13880.00	50343	3	399.00	750	222	14279.00	51093
West Godavari	166	2051.27	27572	2	72.00	550	168	2123.27	28122
Krishna	178	5705.81	35583	6	1241.01	1849	184	6946.82	37432
Guntur	207	6275.12	44658	2	29.78	250	209	6304.90	44908
Prakasam	88	1756.09	16926	6	410.44	1140	94	2166.53	18066
SPS Nellore	150	5320.50	39896	18	1156.00	5272	168	6476.50	45168
YSR	45	6213.80	17359	2	194.00	90	47	6407.80	17449
Kurnool	138	6644.00	21417	4	220.00	238	142	6864.00	21655
Ananthapuramu	92	5782.00	26619	3	182.36	7219	95	5964.36	33838
Chittoor	164	6399.00	38375	3	393.00	4500	167	6792.00	42875
Andhra Pradesh	1810	81842.89	443886	57	5051.04	23756	1867	86893.93	467642

Source: Industries Department

A 6.2 : Micro Small and Medium Enterprises established

District	2015-16			2016-17(upto Dec, 2016)			Total	
	Units (No.)	Investment (Rs. Crore)	Employment (No.)	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)	Investment (Rs. Crore)	Employment (Nos.)
1	2	3	4	5	6	7	8	9
Srikakulam	346	161.78	5953	1024	171.14	4918	332.92	10871
Vizianagaram	349	194.13	5380	488	108.53	3711	302.66	9091
Visakhapatnam	1665	1023.64	31138	880	430.38	20825	1454.02	51963
East Godavari	1136	399.02	11676	263	116.68	3207	515.7	14883
West Godavari	552	459.85	5343	380	202.29	4041	662.14	9384
Krishna	645	285.55	7279	571	293.61	7610	579.16	14889
Guntur	962	327.09	6555	1056	337.82	11276	664.91	17831
Prakasam	471	277.31	6110	375	248.40	5926	525.71	12036
SPS Nellore	514	206.86	5241	274	155.85	12093	362.71	17334
YSR	131	76.87	1436	91	46.28	710	123.15	2146
Kurnool	204	76.34	1897	803	176.42	5827	252.76	7724
Ananthapuramu	245	161.78	5158	331	112.70	4819	274.48	9977
Chittoor	437	298.03	7355	313	142.20	4165	440.23	11520
Andhra Pradesh	7657	3948.25	100521	6849	2542.30	89128	6490.55	189649

Source: Industries Department.

## A.6.3: Status of Special Economic Zones as on 31-3-2016

Sl. No	District	SEZs (Nos.)	Employment (Nos.)	Value of Production* (Rs Cr)	Investment including FDIs (Rs Cr)	Physical Exports* (Rs Cr)	Imports* (Rs Cr)
1	2	3	4	5	6	7	8
1	Srikakulam	1	2085	152.95	1,022.38	139.09	468.81
2	Vizianagaram	-	-	-	-	-	-
3	Visakhapatnam	10	49,907	9,559.57	16,304.06	7,008.17	8,795.16
4	East Godavari	3	1,761	1,224.37	494.79	1,212.76	976.69
5	West Godavari	-	-	-	-	-	-
6	Krishna	1	357	27.42	79.81	25.65	0.16
7	Guntur	-	-	-	-	-	-
8	Prakasham	1	1,609	570.44	387.96	513.69	141.10
9	SPSR Nellore	5	14,150	1,360.55	1,500.42	1,238.67	946.15
10	YSR	-	-	-	-	-	-
11	Kurnool	-	-	-	-	-	-
12	Ananthapuramu	1	242	-	1.53	-	-
13	Chittoor	1	2,671	868.50	1,738.39	660.88	1,426.14
	Andhra Pradesh	23	72,782	13,763.81	21,529.34	10,798.92	12,754.21

\* The information is for Financial Year 2015-16 till 31.03.2016

Source: AP Industries Infrastructure Corporation

## A 6.4 : Index of Industrial Production(Base Year = 2004-05)

Sl. No	Industry Code	Industry Group	Weight	2014-15	2015-16	April-Oct 2015	April-Oct 2016	% of Growth over April-Oct 2015
1	2	3	4	5	6	7	8	9
1	15	Food Products & Beverages	103.8	127.4	152.0	150.8	112.4	-25.5
2	16	Tobacco products.	30.0	101.4	85.3	101.0	61.3	-39.3
3	17	Textiles.	26.0	112.2	104.1	106.3	95.5	-10.2
4	18	Wearing Apparel, Dressing & Dying of Fur	0.7	188.3	200.8	208.3	141.0	-32.3
5	19	Tanning and Dressing of Leather & Products	0.4	25.1	15.1	16.5	6.7	-59.4
6	20	Wood and Wood Products & Cork	1.1	123.8	44.5	55.4	18.8	-66.1
7	21	Paper & Paper Products	17.0	157.7	177.1	178.2	221.4	24.2
8	22	Publishing, Printing, & Reproduction of recorded Media	10.3	52.6	46.5	44.7	46.2	3.4
9	23	Coke, Refined Petroleum	51.6	113	110.0	109.6	100.5	-8.3
10	24	Chemicals & Chemical Fertilisers	86.0	113.7	122.5	117.4	119.4	1.7
11	25	Rubber & Plastic Products.	21.7	185.8	196.8	208.5	237.0	13.7
12	26	Other Non-Metallic Products.	40.7	123.9	132.8	144.1	118.2	-18.0
13	27	Basic Metals	151.7	196.2	110.9	105.1	132.8	26.4
14	28	Fabricated Metal Products	10.2	168.0	176.2	197.0	206.8	5.0
15	29	Machinery & Equipment	19.8	15.9	18.8	18.7	19.4	3.7
16	30	Office Accounting & Computing Machinery	0.3	99.7	121.4	114.9	69.2	-39.8
17	31	Electrical Machinery & Parts	30.0	210.9	278.8	268.2	400.2	49.2
18	32	Radio, Television	12.3	262.5	1369.4	1250.9	1584.3	26.7

## ANNEXURES - INDUSTRIES

Sl. No	Industry Code	Industry Group	Weight	2014-15	2015-16	April-Oct 2015	April-Oct 2016	% of Growth over April-Oct 2015
1	2	3	4	5	6	7	8	9
19	33	Medical, Precision & Optical	1.8	110.2	142.3	156.8	153.8	-1.9
20	34	Motor Vehicles, Trailers	6.9	89.1	96.1	92.2	107.3	16.4
21	35	Other Transport Equipment	6.2	66.1	82.7	83.4	16.8	-79.9
22	36	Furniture, Manufacturing n.e.c	2.5	44.2	48.8	43.0	71.3	65.8
	I	Mining & Quarrying	212.0	492.9	678.7	387.2	466.1	20.4
	II	Manufacturing	631.0	142.8	152.8	150.0	160.4	6.9
	III	Electricity	157.0	176.2	183.0	181.4	202.9	12.0
		General Index.	1000.0	222.2	270.1	207.3	231.9	11.9

Source: Directorate of Economics & Statistics

## A.6.5: Annual Survey of Industries

Sl. No.	Item	Unit	2008-09	2009-10	2010-11	2011-12	2012-13	CSO Data	
								2012-13	2013-14
1	2	3	4	5	6	7	8	9	
1	Factories	Nos.	9972 (1.60)	9742 (-2.31)	10358 (6.32)	11195 (8.08)	12549 (12.09)	12503	12941 (3.50)
2	Fixed Capital	Rs. Crores	44680.42 (21.94)	90087.59 (101.63)	104194.94 (15.66)	185818.93 (78.34)	135942.23 (-26.84)	130818.48	148626.43 (13.61)
3	Working Capital	Rs. Crores	11152.40 (45.03)	9456.18 (-15.21)	4364.89 (-53.84)	16077.87 (268.35)	16383.94 (1.90)	19833.15	22224.32 (12.06)
4	Outstanding Loans	Rs. Crores	21649.47 (24.56)	24399.47 (12.70)	34128.63 (39.87)	33970.17(-0.46)	52312.89 (53.99)	63088.24	72703.80 (15.24)
5	All Workers	Nos.	358070 (9.40)	354628 (-0.96)	488432 (37.73)	369554 (-24.33)	405564 (9.74)	406048	415127 (2.24)
6	All Employees	Nos.	449426 (10.63)	439780 (-2.15)	609827 (38.67)	455007 (-25.39)	500799 (10.06)	503615	522057 (3.66)
7	Wages to workers	Rs. crores	2165.17 (2.73)	2586.85 (19.48)	3284.18 (26.96)	3744.71 (14.02)	4442.75 (18.64)	4251.06	5219.45 (22.78)
8	Total Emolument	Rs. crores	3619.35 (3.47)	4416.16 (22.02)	5203.02 (17.82)	6695.52 (28.69)	7629.16 (13.94)	7184.63	8903.74 (23.93)
9	Fuel etc. consumed	Rs. Crores	5948.65 (25.39)	7423.31 (24.79)	7099.43 (-4.36)	8828.53 (24.36)	12806.87 (45.06)	13055.22	14415.77 (10.42)
10	Material consumed	Rs. Crores	94805.96 (26.32)	85131.89 (-10.20)	102645.64 (20.57)	132228.67 (28.82)	141083.94 (6.70)	132526.46	180968.99 (36.55)
11	Total Input	Rs. Crores	112981.02 (27.41)	105922.45 (-6.25)	126565.34 (19.49)	167855.77 (32.62)	183526.99 (9.33)	175808.68	235587.37 (34.00)
12	Products & by Products	Rs. Crores	122834.37 (23.23)	120669.95 (-1.76)	151704.72 (25.72)	184554.29 (21.65)	185564.97 (0.54)	177308.65	224839.96 (26.81)
13	Total Output.	Rs. Crores	131834.12 (22.25)	131721.23 (-0.09)	165084.48 (25.33)	206118.86 (24.86)	215029.62 (4.32)	207128.19	262683.82 (26.82)
14	Depreciation	Rs. Crores	3052.20 (10.37)	7249.62 (137.52)	6358.19 (-12.30)	6677.51 (5.02)	7893.05 (18.20)	7497.09	8468.64 (12.96)
15	Net Value Added	Rs. Crores	15800.89 (-3.64)	18549.15 (17.39)	32160.95 (73.38)	31585.58 (-1.79)	23609.58 (-25.25)	23822.42	18627.80 (-21.81)
16	Gross Value Added	Rs. Crores	18853.09 (-1.62)	25798.77 (36.84)	38519.14 (49.31)	38263.09 (-0.66)	31502.63 (-17.67)	31319.51	27096.45 (-13.48)

Source: Directorate of Economics & Statistics, AP

Figures in brackets indicate percentage of increase / decrease over the previous year

The above data from 2008-09 to 2012-13 is Pooled Data of Central & State sample survey of ASI results & for 2013-14 CSO data only.

Growth rate of 2013-14 is arrived by considering CSO data of 2012-13.



## A 6.6 : Production of Crude Oil, Natural Gas and Limestone

Sl. No.	Year	Crude Oil (Tonnes)	Growth Rate (%)	Natural Gas (mcm)	Growth Rate (%)	Limestone (000 Tonnes)	Growth Rate (%)
1	2	3	4	5	6	7	8
1	2011-12	303584	--	1353	--	65036	--
2	2012-13	295329	-2.72	1228	-9.24	61367	-5.64
3	2013-14	274030	-7.21	1143	-6.92	61471	0.17
4	2014-15	256662	-6.33*	514	55.03*	31925	48.06**
5	2015-16	294792	15	555	8	30965	-3**
6	2016-17 up to Oct,2016	155565	--	455		20974	--

Source: Directorate of Mines and Geology, department, A.P

(\*) Due to Nagaram blow out, ONGC has closed 40 oil/gas wells. Hence the production decreased.

(\*\*) Due to lack of market, the Cement Industries are running with 50% working capacity. Hence, Limestone production decreased.

## A 6.7: Mineral Revenue

(Rs.in lakhs)

Sl. No	District	2013-14	2014-15	2015-16	2016-17 (up to Oct, 16)
1	2	3	4	5	6
1	Srikakulam	4389.38	4358.84	5737.58	3251.18
2	Vizianagaram	2062.00	2164.48	2344.34	1499.6
3	Visakhapatnam	3287.06	4108.55	5226.33	3614.40
4	East Godavari	2838.94	4537.67	5136.35	2528.49
5	West Godavari	1449.44	1797.13	2515.07	1525.22
6	Krishna	7263.10	7414.32	8585.20	6303.25
7	Guntur	6864.83	7032.14	11263.50	7499.39
8	Prakasam	13000.49	13359.04	17615.31	12618.73
9	SPS Nellore	3556.40	2967.49	3817.28	3716.97
10	YSR	11474.73	10840.50	28501.35	7377.91
11	Kurnool	11715.57	13880.55	14148.43	10661.50
12	Ananthapuramu	4093.42	4687.62	5998.86	5156.95
13	Chittoor	6120.97	6292.03	7665.08	4414.20
	Sub Total	78116.33	83440.36	118554.65	70167.79
	Oil and Gas	8993.56	11869.92	29544.17	15799.00
	Cess on others	1353.87	1300.89	1506.54	--
	Grand Total	88463.76	96611.17	149605.36	85966.79

Source: Directorate of Mines and Geology department, AP

## A 6.8 : Industrial Unrest in 2016 (April to Sep, 2016)

Sl. No.	Industry	Nature of unrest	Date	No. of workers involved	No of days unrest	No. of Mandays Lost
1	2	3	4	5	6	7
1	Uma Jute and Twine Mills Kothavalasa Vizianagram District	Lockout	8.2.2016	646	183	101422
2	A.P. Fibres Ltd Saluru Vizianagaram District	Lockout	29.2.2016	1150	183	180550
3	Neelam Jute Mills G.Sidagam Srikakulam District	Lockout	14.3.2016	740	183	96940
4	East India Commercial Company Ltd, Kothuru Eluru Mandal West Godavari district	Strike	4.5.2016	2560	31	76800
5	International Paper APPM Ltd Rajahmundry East Godavari district	Strike	9.8.2016	927	24	26883
	Total			482595		

Source: Labour Department

## ANNEXURES - ECONOMIC INFRASTRUCTURE

A 7.1 : Irrigation Potential created upto November 2016

(lakh Acres)

Sl No	District	Major Irrigation	Medium Irrigation	Total	Minor Irrigation	APSIDC	Total
1	2	3	4	5	6	7	8
1	Srikakulam	3.89	0.30	3.86	2.75	0.23	6.84
2	Vijayanagaram	0.54	0.93	1.36	2.21	0.09	3.66
3	Visakhapatnam	0.35	0.39	0.74	2.31	0.06	3.11
4	East Godavari	7.34	0.93	8.27	1.30	0.40	9.98
5	West Godavari	7.54	0.53	8.07	1.12	0.43	9.62
6	Krishna	10.27	0.16	10.43	1.04	1.12	12.58
7	Guntur	11.87	0	11.87	0.32	2.16	14.35
8	Prakasam	5.76	0.18	6.24	1.40	0.15	7.79
9	SPS Nellore	5.94	0.20	6.14	2.83	0.47	10.44
10	YSR	3.52	0.60	4.12	1.08	0.07	5.26
11	Kurnool	6.01	0.37	6.38	0.80	0.66	7.84
12	Anantapuramu	1.74	0.41	2.15	1.42	0.17	3.74
13	Chittoor	0.23	0.22	0.45	3.00	0.02	3.48
	Anicuts and open head channels in Minor Irrigation				4.02		4.02
		65.00	5.52	70.51	25.60	7.38	103.500

Source: Water Resources Department

A 7.2 : Irrigation Potential under Major &amp; Medium Projects (AIBP)

Sl. No	Name of the Project	Irrigation Potential (Ha)					Cumulative IP creation (up to Oct.2016)	Cumulative Expenditure Rs in crore up to (Oct.2016)
		Ultimate IP	IP created prior to AIBP	Targeted IP under AIBP				
				New	Stabilisation	Total under AIBP		
1	2	3	4	5	6	7	8	9
<b>A. Projects Completed under AIBP</b>								
1	Cheyeru (Annamayya)	5261	0	5261		5261	5261	40.74
2	Somsila	167670	129195	38475		38475	37099	570.64
3	N S P	895000	821915	27944		27944	25071	91.70
4	Madduvalasa	9996	0	6071	3925	9996	9996	99.19
5	Vamsadhara Ph-I St -II	25204	8094	17110		17110	17110	73.24
6	Swarnamukhi	4656	0	4656		4656	3651	41.12
7	Veligallu	9713	0	9713		9713	9713	65.96
	Sub Total (Completed)	1117500	959204	109230	3925	113155	107901	982.60
<b>B. Projects deleted under AIBP</b>								
8	Kanupur canal	7638	7077	561		561		0.71
<b>C. Projects Ongoing under AIBP</b>								
9	Yerracalva	9996	3035	6961		6961	6070	93.60
10	Maddigedda	1710	1100	610		610	610	8.93
11	Gundalakamma	32400	0	32400		32400	27914	586.02
12	Musurumilli	9164	0	9164		9164	9164	150.85
13	Tarakarama thirthasgar	10000	0	6693	3307	10000	0	192.56

## ANNEXURES - ECONOMIC INFRASTRUCTURE

Sl. No	Name of the Project	Irrigation Potential (Ha)					Cumulative IP creation (up to Oct.2016)	Cumulative Expenditure Rs in crore up to (Oct.2016)
		Ultimate IP	IP created prior to AIBP	Targeted IP under AIBP				
				New	Stabilisation	Total under AIBP		
1	2	3	4	5	6	7	8	9
14	Thotapalli Barrage	74463	0	48563	25900	74463	25900	684.63
15	Tadipudi LIS	83609	0	83609		83609	62138	396.36
16	Pushkara	75235	4051	71184		71184	54674	437.06
Sub Total (Ongoing)		296577	8186	259184	29207	288391	186470	2550.02
Grand Total		1421715	974467	368975	33132	402107	294371	3533.32

Source: Water Resources Department

## A 7.3 : Minor Irrigation Census

Sl. No	Name of Scheme	1st Census (1986-87)	2nd Census (1993-94)	3rd census (2000-01)	4th census (2006-07)	5th census 2013- 14 (provisional)	% variation of 2nd over 1st census	% variation of 3rd over 2nd census	% variation of 4th over 3rd census	% variation of 5th over 4th census (provisional)
1	2	3	4	5	6	7	8	9	10	11
1	Dug wells	385569	454602	449946	376617	211984	17.90	-1.02	-16.30	-43.71
2	Shallow Tube Wells	98664	172983	232741	321203	190388	75.33	34.55	38.01	26.35
3	Medium Tube Wells					215441				
4	Deep Tube Wells	12666	29987	83012	218801	370347	136.75	176.83	163.57	69.26
Total Ground Water Schemes		496899	657572	765699	916621	988160	32.34	16.44	19.71	7.80
5	Surface Flow Irrigation Schemes	46020	45297	44292	45204	51365	-1.57	-2.22	2.06	13.63
6	Surface Lift Irrigation Schemes	6362	7168	8994	10671	14803	12.67	25.47	18.65	38.72
Total Surface Irrigation Schemes		52382	52465	53286	55875	66168	0.16	1.56	4.86	18.42
Total Minor Irrigation Schemes		549281	710037	818986	972494	1054328	29.27	15.34	18.74	8.41

Source: Directorate of Economics and Statistics

## A.7. 4 Ground water Level Ranges in (percentage)

Sl No	District	Depth to Water Level Ranges					
		During Jan-2016 (%)			During Feb-2017 (%)		
		0 – 3m	3 – 8m	>8m	0 – 3m	3 – 8m	>8m
1	2	3	4	5	6	7	8
1	Srikakulam	36	48	17	27	54	19
2	Vijayanagaram	22	57	22	13.60	59.10	27.30
3	Visakhapatnam	24	51	24	11.90	53.70	34.30
4	East Godavari	34	38	28	26.70	43.30	30.00
5	West Godavari	12	21	68	10.80	26.20	63.10
6	Krishna	16	46	37	15.00	44.90	40.20

## ANNEXURES - ECONOMIC INFRASTRUCTURE

Sl No	District	Depth to Water Level Ranges					
		During Jan-2016 (%)			During Feb-2017 (%)		
		0 – 3m	3 – 8m	>8m	0 – 3m	3 – 8m	>8m
1	2	3	4	5	6	7	8
7	Guntur	20	42	39	26.10	39.10	34.80
8	Prakasam	17	34	49	3.60	19.30	77.10
9	SPS Nellore	60	35	5	13.00	45.70	41.30
10	YSR	15	41	44	4.80	26.90	68.30
11	Kurnool	10	35	54	22.00	38.30	39.70
12	Anantapuramu	4	23	73	2.80	9.20	88.00
13	Chittoor	26	36	38	6.40	24.50	69.10
Total		21	37	42	13.60	34.40	52.00

Source: Ground water Department

## A 7.5 : Power Generation and Distribution

Sl. No.	ITEM	Unit	AP as on 31-3-2016	During 2016-17	As on 31-10-2016 (Prov)
1	2	3	4	5	6
1	Installed Capacity				
a)	A.P. GENCO	MW	5621.44	0.00	5621.44
1	Thermal	“	2348.15		2348.15
2	Hydel	“	1671.29		1671.29
3	Wind	“	2.00		2.00
	AP Power Development Corp. Ltd.	“	1600.00		1600.00
b)	Joint Sector				
	Gas (A.P.G.P.C.L.)58.8x58.32%	“	34.29		34.29
c)	Private Sector	“	4991.87	1486.93	6478.80
1	Gas-IPPS	“	2329.49	520.00	2849.49
2	Small Hydro	“	89.10		89.10
3	Wind	“	1416.32	570.30	1986.62
4	Bagasse Co-Generation & Bio-mass Projects	“	428.57	4.77	433.34
5	Mini Power Plants	“	82.00		82.00
6	Solar		579.19	385.86	965.05
7	Others (Iso.Gas Wells+Waste Heat+Incl. Waste +Municipal Waste)	“	67.20	6.00	73.20
d)	Share from Central Sector	“	1795.95	-45.10	1750.85
1	NTPC Ramagundam (1-6)	3*200+ 3*500	304.82	1.29	306.110
2	NTPC Ramagundam (7)	1*500	76.43	0.30	76.730
3	NTPC Talcher Stage II (Units3,4,5&6)	4*500	193.20	0.23	193.43
4	Simhadri TPS (NTPC StageI)	2*500	461.10	0.01	461.11
5	Simhadri TPS (NTPC StageII)	2*500	211.90	0.10	212.00
6	Neyveli (Tamilnadu ) Stage I	630	49.72	0.32	50.04
7	Neyveli (Tamilnadu ) Stage II	840	89.57	0.49	90.06
8	Vallur Stage I &II &III	3*500	91.95	0.63	92.58
9	Tuticorin, Tamilnadu Unit I	1*500	127.37	0.68	128.05
10	M.A.P.P.(Tamilnadu)	440	19.02	0.13	19.15
11	Kaiga Nuclear Power Plant – I& II	2*220	58.59	0.36	58.95
12	Kaiga Nuclear Power Plant – III& IV	2*220	62.28	0.36	62.64
13	Kudamkulam Unit I	1*1000	50.00	-50.00	0.00
	Total (A.P.GENCO + Private + Central)		12443.55	1441.83	13885.38
2	Energy Generated (Cumulative)				
1	Thermal	MU	22044.69		14024.46

## ANNEXURES - ECONOMIC INFRASTRUCTURE

Sl. No.	ITEM	Unit	AP as on 31-3-2016	During 2016-17	As on 31-10-2016 (Prov)
1	2	3	4	5	6
2	Hydel	“	2441.99		1212.59
	TOTAL	“	24486.68		15237.05
3	Energy purchased and imported	MU	25708.76		16612.69
4	Energy available for use (2+3)	MU	50195.44		31849.74
5	Maximum Demand during the year (At Generation Terminal)	MW	7391 (22-03-2016)		7965 (23-08-2016)
6	Max. Grid Consumption during the year	MU	162.09 (23-03-2016)		178.15 (23-08-2016)
7	Per capita consumption (2015-16)	Kwh	987		
8	Transmission of Lines				
	APTRANSCO Lines		20414.38	854.62	21269
a)	400 kV	Ckm	2635.19	433.96	3069.15
b)	220 kV	“	8850.98	245.04	9096.02
c)	132 kV	“	8928.21	175.62	9103.83
	DISCOM's Lines		513702.72	8820.44	522523.2
d)	33 kV	km	24639.19	120.97	24760.16
e)	11 kV	“	192080.66	4676.80	196757.46
f)	LT	“	296982.87	4022.67	301005.54
	Total		534117.10	9675.05	543792.15
9	APTRANSCO Sub Stations				
a)	400 kV	No.	6	2	8
b)	220 kV	No.	75	1	76
c)	132 kV	No.	179	6	185
	DISCOM's				
d)	33 kV	No.	2728	19	2747
	Total		2988	28	3016
10	Distribution Transformers				
		No.	685270	26505	711775
11	Electrification of Towns, Villages, Hamlets etc.				
a)	Towns	No.	112	0	112
b)	Villages	No.	16449	0	16449
c)	Hamlets	No.	23475	0	23475
d)	Tribal Hamlets\Habitations	No.	5264	543	5807
d)	Dalitwadadas	No.	36312	0	36312
e)	Weaker Section Colonies	No.	21725	0	21725
12	Consumers Served				
a)	Domestic	Lakh Nos.	131.77	5.20	136.97
b)	Non-domestic	“	11.74	0.43	12.17
c)	Industrial	“	1.38	0.03	1.41
d)	Cottage Industries	“	0.16	0.00	0.17
e)	Agriculture Services (including RESCOs)		15.82	0.46	16.28
f)	Public Lighting / Local Bodies	“	0.95	0.02	0.97
g)	General Purpose	“	1.07	0.02	1.10
h)	Temporary	Nos.	2483	127	2610
	L.T.Total	Lakh Nos.	162.91	6.18	169.09
	H.T.Total	Lakh Nos.	0.08	0.00	0.08
	Grand Total	Lakh Nos.	163.00	6.18	169.18

Source: A.P. TRANSCO

\* Provisional

## ANNEXURES - ECONOMIC INFRASTRUCTURE

## A 7.6 : Registered Motor Vehicles

(Numbers)

Sl. No.	Class of Vehicle	As on March 2013	As on March 2014	As on March 2015	As on Mar, 2016	As on Dec 2016
1	2	3	4	5	6	7
1	Auto Rickshaws	309844	351396	397126	444132	481034
2	Contract Carriage Vehicles	2533	2737	3022	3222	3461
3	Educational Institute Buses	17614	19248	20471	21910	23579
4	Goods Carriage	421576	461866	499408	542550	583649
5	Maxi Cabs	15814	18601	20087	20790	21708
6	Motor Cycles	4871760	5431832	6147523	6826237	7471397
7	Motor Cars	388304	434516	486307	540627	589276
8	Motor Cabs	47555	50580	53237	56797	59447
9	Private Service Vehicles	1529	1633	1735	1785	1898
10	Stage Carriage Vehicles	11978	12225	13041	13912	14951
11	Tractor And Trailers	181880	200144	220017	239043	259506
12	Others (transport & non transport)	13989	17365	20288	23700	26338
	Total	6284376	7002143	7882262	8734705	9536244

Source: Transport Department

## A 7.7 : APSRTC Performance

Sl. No.	Item	Unit	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17 (upto Oct, 2016)
1	2	3	4	5	6	7	8	9	10
1	Buses on Road (Held as on last day)	No.	12241	12471	12281	12235	12229	12256	11962
2	Avg. Buses operated	No.	12052	12079	12229	10147	12023	12023	11931
3	Scheduled Buses (As on last day)	No.	11518	11635	11513	11337	11193	11283	10929
4	Kms. Operated	Kms.	170	170	172	138	165	162.38	99.3468
5	Seat / Kms.	No.	8978	8299	8341	6665	7885	7775	4757
6	Passenger / Kms.	No.	5766	5842	5597	5617	5294	5594	3245
7	Passengers Carried	Crs.	209	218	216	182	232	62.78	69.75
8	Occupation Ratio	%	67	70	69	67	70	69.48	68.23
9	Accidents	No.	1879	1583	1532	1080	1320	1108	592
10	Accident Rate (Per lakh kms.)	No.	0.11	0.09	0.09	0.08	0.08	0.08	0.07
11	HSD oil Km.Pl	Kms.	5.20	5.21	5.22	5.21	5.23	5.19	5.16
12	LUB oil Km Pl	Kms.	3113	3566	5351	5407	5183	5390	5200
13	Employees		64089	64639	64127	63141	61806	59372	57651
14	Staff per Bus	No.	5.87	5.77	5.76	5.62	5.54	5.41	5.52

Source: Andhra Pradesh State Road Transport Corporation.

## ANNEXURES - ECONOMIC INFRASTRUCTURE

A 7.8 : Post Offices in the State as on 31st March 2016

Sl. No.	District	Head Post Offices	Mukhya Dak Ghars	Sub Post Offices	Branch Post Offices	Total
1	2	3	4	5	6	7
1	Srikakulam	5	-	71	492	568
2	Vizianagaram	4	-	66	585	655
3	Visakhapatanm	5	1	108	586	700
4	East Godavari	6	2	148	687	843
5	West Godavari	6	1	140	609	756
6	Krishna	6	-	159	653	818
7	Guntur	4	2	155	681	842
8	Prakasam	4	-	94	787	885
9	SPS Nellore	3	-	100	696	799
10	Y.S.R	4	-	102	723	829
11	Kurnool	3	1	136	657	797
12	Ananthapuramu	4	-	119	814	937
13	Chittoor	5	1	119	768	893
	Total	59	8	1517	8738	10322

Source: Chief Postmaster General

A 7.9 : Status of Telephone Connections 2016-17 (up to Nov,2016)

Sl. No.	District	Telephone Exchanges (LL+WLL)	Land Line Connections	Public Telephones (Local+STD)	Wireless Subscribers (prepaid & postpaid)	Wireless Subscribers (WLL) (prepaid & postpaid)
1	2	3	4	5	6	7
1	Srikakulam	123	17571	302	340291	957
2	Vizianagaram	117	19610	276	348133	1096
3	Visakhapatanm	171	92774	1036	743157	3039
4	East Godavari	208	86884	1800	835541	2631
5	West Godavari	204	81297	2745	555646	1263
6	Krishna	233	111436	2931	575594	954
7	Guntur	223	95618	1921	519261	759
8	Prakasam	184	27223	465	306513	590
9	SPS Nellore	191	40248	385	542406	1195
10	Y.S.R	130	19161	410	322701	931
11	Kurnool	208	34885	841	426656	247
12	Ananthapuramu	168	35304	741	492894	455
13	Chittoor	226	48974	501	484938	923
	Total	2386	710985	14354	6493731	15040

Source: CGM, Telecom, BSNL

## ANNEXURES - SOCIAL INFRASTRUCTURE

A 7.10 : District wise No of Bank branches, Deposits, Advances as on 30th September 2016

Sl No	District.	No. of Branches	Deposits (Rs.Crore)	Advances (Rs. Crore)	Credit-Deposit Ratio (%)
1	2	3	4	5	6
1	Srikakulam	295	7754.48	7039.98	90.79
2	Vizianagaram	292	6542.84	6147.46	93.96
3	Visakhapatnam	754	38332.95	30297.41	79.04
4	East Godavari	751	22579.34	31772.51	140.71
5	West Godavari	596	16405.33	23490.23	143.19
6	Krishna	791	33468.85	31174.28	93.14
7	Guntur	795	22490.37	32011.27	142.33
8	Prakasam	458	10612.86	16396.62	154.50
9	SPS Nellore	411	11112.35	17015.20	153.12
10	Y.S.R	373	12058.96	11482.61	95.22
11	Kurnool	450	12545.52	14539.78	115.90
12	Ananthapuramu	452	15465.39	14287.95	92.39
13	Chittoor	589	30020.53	18153.15	60.47
	Total	7007	239389.77	253808.45	106.02

Source: Finance (Institutional Finance) Department

A 8.1 : Population

Sl. No.	District	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8
1	Srikakulam	1555369	1769968	1959352	2321126	2537593	2703114
2	Vizianagaram	1411055	1589558	1804196	2110943	2249254	2344474
3	Visakhapatnam	1665213	2035831	2576474	3285092	3832336	4290589
4	East Godavari	2608375	3087262	3701040	4541222	5021502	5285824
5	West Godavari	1978257	2374306	2873958	3517568	3857768	3995742
6	Krishna	2076956	2493574	3048463	3698833	4187841	4517398
7	Guntur	2327246	2844488	3434724	4106999	4465144	4887813
8	Prakasam	1671726	1919995	2329571	2759166	3059423	3397448
9	SPS Nellore	1408891	1627740	2014879	2392260	2668564	2963557
10	Y.S.R	1342015	1577267	1933304	2270720	2601797	2882469
11	Kurnool	1570955	1982090	2407299	2973024	3529494	4053463
12	Ananthapuramu	1767464	2115321	2548012	3180863	3640478	4081148
13	Chittoor	1905344	2267413	2737316	3261118	3745875	4174064
	Andhra Pradesh	23288866	27684813	33368588	40418934	45397069	49577103
	INDIA	439234771	548159652	683329097	846421039	1028610328	1210854977

Source: Census of India, Government of India

\*Data merged from Khammam villages



## ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.2 : Percentage Decadal Variation of Population and Sex Ratio

Sl. No.	District	Percent Decadal Variation					Sex Ratio ( No. of Females per 1000 Males)					
		1961-71	1971-81	1981-91	1991-01	2001-11*	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Srikakulam	13.80	10.70	18.46	9.33	6.52	1,047	1,033	1,023	1,012	1,014	1,015
2	Vizianagaram	12.65	13.50	17.00	6.55	4.23	1,017	1,009	1,006	1,000	1,009	1,019
3	Visakhapatnam	22.26	26.56	27.50	16.66	11.96	1,000	992	981	975	985	1,006
4	East Godavari	18.36	19.88	22.70	7.93	5.26	999	996	993	998	993	1,007
5	West Godavari	20.02	21.04	22.39	8.13	3.58	992	994	991	994	991	1,004
6	Krishna	20.06	22.25	21.33	13.22	7.87	962	964	971	969	978	992
7	Guntur	22.23	20.75	19.57	8.72	9.47	976	974	973	970	984	1,003
8	Prakasam	14.85	21.33	18.44	10.88	11.05	991	987	978	970	971	981
9	SPS Nellore	15.53	23.78	18.73	11.55	11.05	989	986	978	980	984	985
10	Y.S.R	17.52	22.59	17.47	14.78	10.79	957	958	959	955	974	985
11	Kurnool	26.17	21.45	23.50	18.72	14.85	977	969	962	953	965	988
12	Ananthapuramu	19.68	20.44	24.81	14.34	12.10	946	947	946	946	958	977
13	Chittoor	19.00	20.72	19.14	14.86	11.43	957	960	966	966	982	997
	Andhra Pradesh	18.88	20.53	21.13	11.89	9.21	984	981	978	976	983	997
	INDIA	24.80	24.66	23.85	21.54	17.70	941	930	934	927	933	943

Source: Census of India, Government of India

\*Data merged from Khammam villages

A 8.3 : Percentage of Urban Population to Total Population and Density of Population

Sl. No.	District	Percent of Urban Population to Total Population					Density of Population ( Persons per Sq. Km.)					
		1971	1981	1991	2001*	2011*	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Srikakulam	10.65	10.89	12.50	10.98	16.16	266	303	336	398	435	463
2	Vizianagaram	-	15.94	17.22	18.33	20.94	216	243	276	323	344	359
3	Visakhapatnam	22.30	31.28	39.83	39.95	47.45	149	182	231	294	343	384
4	East Godavari	19.23	22.21	23.80	22.94	24.85	241	286	342	420	392	413
5	West Godavari	17.71	20.77	20.71	19.46	20.24	256	307	371	454	453	470
6	Krishna	27.25	32.54	35.82	32.08	40.81	238	286	349	424	480	518
7	Guntur	24.98	27.53	28.89	28.80	33.81	204	250	302	361	392	429
8	Prakasam	11.07	14.99	16.45	15.28	19.56	95	109	132	157	174	193
9	SPS Nellore	15.77	20.76	23.79	22.45	28.94	108	123	154	183	204	227
10	Y.S.R	14.18	19.37	24.03	22.59	33.97	87	103	126	148	169	188
11	Kurnool	20.30	24.49	25.84	23.16	28.35	89	112	136	168	200	230
12	Ananthapuramu	17.77	20.84	23.50	25.26	28.07	92	111	133	166	190	213
13	Chittoor	13.45	16.88	19.80	21.65	29.50	126	151	181	215	247	275
	Andhra Pradesh	18.35	22.14	24.77	24.13	29.47	145	173	208	252	279	304
	INDIA	17.98	19.51	22.87	25.49	31.14	144	177	216	273	325	382

Source: Census of India, Government of India

\*Data merged from Khammam villages

## ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.4 : Literacy Rates (Percentage of Literates to Population ages 7 years and above)

Sl. No.	District	1981			2001			2011		
		Males	Fe-males	Total	Males	Fe-males	Total	Males	Fe-males	Total
1	2	3	4	5	6	7	8	9	10	11
1	Srikakulam	32.65	13.02	22.72	67.19	43.68	55.31	71.61	52.08	61.74
2	Vizianagaram	30.98	12.55	21.74	62.37	39.91	51.07	68.15	49.87	58.89
3	Visakhapatnam	36.49	18.99	27.83	69.68	50.12	59.96	74.56	59.34	66.91
4	East Godavari	41.71	28.86	35.31	69.54	60.30	64.93	74.10	66.95	70.50
5	West Godavari	43.58	31.59	37.61	77.68	68.55	73.13	77.65	71.01	74.32
6	Krishna	48.60	34.61	41.71	74.39	63.19	68.85	78.30	69.18	73.74
7	Guntur	45.25	26.60	36.06	71.24	53.74	62.54	74.79	60.09	67.40
8	Prakasam	40.52	18.01	29.39	69.35	45.08	57.38	72.92	53.11	63.08
9	SPS Nellore	41.04	23.09	32.16	73.67	56.38	65.08	75.74	61.99	68.90
10	Y.S.R	43.91	17.77	31.11	75.83	49.54	62.83	77.78	56.77	67.30
11	Kurnool	39.96	17.06	28.73	65.96	40.03	53.22	70.10	49.78	59.97
12	Ananthapuramu	40.84	16.52	29.02	68.38	43.34	56.13	73.02	53.97	63.57
13	Chittoor	43.06	20.24	31.85	77.62	55.78	66.77	79.83	63.28	71.53
	Andhra Pradesh	39.26	20.39	29.94	71.28	52.72	62.07	74.77	59.96	67.35
	INDIA	46.89	24.82	36.23	75.26	53.67	64.84	80.90	64.60	73.00

Source: Census of India, Government of India

\*Data with merged villages from Khammam District

A 8.5 : Enrolment of Children in Schools

Sl. No	Year	Pre Primary	I-V Classes	VI-VIII Classes	IX-X Classes	XI-XII Classes	Total
1	2	3	4	5	6	7	8
1	2000-01	122747	5159190	1150000	1066508	2717	7501162
2	2001-02	239959	4888813	1261983	1159476	2659	7552890
3	2002-03	236448	4645175	1378157	1263455	2523	7525758
4	2003-04	157497	4286794	1382624	1395761	2666	7225342
5	2004-05	36199	2039848	665865	709635	1242	3452789
6	2005-06	154391	3955616	1387230	1598020	3443	7098700
7	2006-07	285781	3920406	1387937	1639163	3569	7236856
8	2007-08	267712	3814748	1376052	1670370	2785	7131667
9	2008-09	281988	3775763	1341770	1708002	6139	7113662
10	2009-10	162415	3808746	1323400	1728719	9765	7033045
11	2010-11	158537	3827465	1355780	1709061	11487	7062330
12	2011-12	23416	786908	279710	332618	7245	1429897
13	2012-13	168192	3810085	1417557	1783305	18771	7197910
14	2013-14	163138	3851333	2097833	1195459	29504	7337267
15	2014-15	87309	3747680	2098400	1263420	35962	7232771
16	2015-16	NA	3548246	2072730	1281701	NA	6902677
17	2016-17	NA	3475771	2084949	1286577	NA	6847297

Source: Directorate of School Education (Provisional data of U-DISE 2016-17)

## ANNEXURES - SOCIAL INFRASTRUCTURE

## A 8.6 : School Dropout Rates

Year	Class I – V			Class I – VIII			Class I – X		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10
2001-02	27.31	29.46	28.36	52.42	60.46	56.30	NA	NA	NA
2002-03	26.33	25.58	25.97	47.05	53.64	50.29	68.34	74.23	71.16
2003-04	29.51	30.34	29.92	47.65	53.45	50.53	64.92	71.13	67.91
2004-05	21.84	22.79	22.31	45.91	50.39	48.12	61.91	67.35	64.55
2005-06	17.09	17.59	17.36	42.45	46.20	44.31	60.85	66.18	63.48
2006-07	19.05	19.15	19.11	37.22	40.54	38.87	60.78	65.18	62.96
2007-08	11.85	11.64	11.75	29.66	32.85	31.25	59.21	62.72	60.95
2008-09	8.10	7.26	7.69	29.24	30.43	29.83	54.97	57.75	56.35
2009-10	9.27	8.58	8.93	20.69	21.38	21.03	49.31	51.08	50.18
2010-11	10.56	9.33	9.95	15.35	15.99	15.66	42.95	45.44	44.19
2011-12	7.51	7.40	7.45	14.94	14.96	14.95	41.23	42.75	41.98
2012-13	5.83	6.34	6.08	20.33	20.42	20.38	32.84	34.00	33.41
2013-14	3.16	3.25	3.20	19.37	18.95	19.16	26.20	27.48	26.83
2014-15	4.88	4.30	4.60	14.91	16.59	15.74	24.54	25.93	25.23
2015-16	8.57	8.97	8.76	18.42	10.96	14.75	23.12	24.64	23.87
2016-17	9.74	9.62	9.68	12.28	13.30	12.77	19.20	22.19	20.67

Source: Directorate of School Education(Provisional data of U-DISE 2016-17)

## A 8.7 : Performance in SSC Examinations

Year	Number Appeared			Number Passed			Pass Percentage		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10
2000-01	174757	127726	302483	111233	82107	193340	63.65	64.28	63.92
2001-02	183514	138698	322212	122201	91380	213581	66.59	65.88	66.29
2002-03	193433	148901	342334	141232	108858	250090	73.01	73.11	73.05
2003-04	214246	168937	383183	167131	131088	298219	78.01	77.60	77.83
2005-06	236549	193610	430159	166777	137064	303841	70.50	70.79	70.63
2006-07	261978	231124	493102	188119	165477	353596	71.81	71.60	71.71
2007-08	265305	237482	502787	203398	181870	385268	76.67	76.58	76.63
2008-09	273666	249858	523524	214909	196248	411157	78.53	78.54	78.54
2009-10	279757	260708	540463	227018	211017	438030	81.15	80.94	81.05
2010-11	278864	263042	541906	232721	218535	451256	83.45	83.08	83.27
2011-12	282479	266004	548483	248083	235776	483859	87.82	88.64	88.22
2012-13	287170	267540	554710	258624	242509	501133	90.06	90.64	90.34
2013-14	290016	272297	562313	263423	249167	512590	90.08	91.50	91.20
2014-15	310958	295617	606575	283433	271103	554536	91.15	91.71	91.42
2015-16	316965	300065	617030	298884	284382	583266	94.30	94.77	94.53

Source: Directorate of School Education(Provisional data of U-DISE 2016-17)

## ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.8 : Category- wise and District-wise Junior Colleges in the State 2016-17

District	Government	Govt Model	Private Aided	Composite	Private Unaided	Vocational	Govt. Voc Colleges	Incentive	APRJC	Govt of India	Social Welfare	Tribal Welfare	Disabled Welfare	Co-operative	Railway	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Srikakulam	43	14	0	0	89	11	0	3		0	11	4	0	2	0	177
Vizianagaram	22	16	2	3	70	32	0	5	1	0	9	6	0	0	0	166
Visakhapatnam	36	5	8	3	175	50	1	4	0	1	10	8	0	3	0	303
East Godavari	42	2	13	4	190	81	1	3	0	0	12	6	0	4	0	357
West Godavari	33	0	9	5	131	58	0	6	0	0	8	3	0	8	0	261
Krishna	24	2	14	14	195	32	0	12	1	1	8	1	0	9	1	314
Guntur	22	14	23	18	190	34	1	8	2	1	8	0	1	4	0	325
Prakasam	30	11	12	3	101	20	0	2	0	0	11	1	0	3	0	194
S.P.S.Nellore	26	10	7	5	122	12	0	5	1	0	10	1	0	1	0	200
Y.S.R.	26	10	23	6	102	18	2	5	0	0	13	0	0	1	0	204
Kurnool	42	36	10	2	110	21	1	8	2	1	10	3	0	3	0	248
Anantapuramu	41	25	6	1	110	8	1	12	1	1	10	1	0	1	1	218
Chittoor	60	18	3	4	164	23	1	11	1	1	11	1	0	0	0	297
Andhra Pradesh	447	163	130	68	1749	400	8	84	9	6	131	35	1	39	2	3264

Source: Intermediate Education

A 8.9 : District-wise General and Vocational courses results in Junior Colleges 2015-16

Sl. No	District	General			Vocational		
		Appeared	Pass	%	Appeared	Pass	%
1	2	3	4	5	6	7	8
1	Srikakulam	24697	16636	67.4	1391	1249	89.8
2	Vizianagaram	18809	12580	66.9	1647	1371	83.2
3	Vishakhapatnam	42461	32648	76.9	2828	2154	76.2
4	East Godavari	37525	25662	68.4	4059	2074	51.1
5	West Godavari	27078	20961	77.4	2493	1500	60.2
6	Krishna	57448	48046	83.63	910	617	67.80
7	Guntur	41927	31880	76.03	524	397	75.76
8	Prakasam	21760	15008	69.0	515	400	77.7
9	SPS Nellore	24742	19334	78.1	898	756	84.2
10	YSR	18921	12383	65.4	665	543	81.7
11	Kurnool	31057	21990	70.8	1618	1229	76.0
12	Anantapuramu	26950	18566	68.9	1844	1412	76.6
13	Chittoor	38566	28341	73.5	2316	1731	74.7
	Total	411941	304035	73.81	21708	15433	71.09

Source: Intermediate Education

## ANNEXURES - SOCIAL INFRASTRUCTURE

A.8.10 : Category Wise Enrolment of Students in Govt Degree Colleges 2016-17

SL No	District	Govt. Degree Colleges	Men	Women	Total	SC	ST	BC	OC
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	12	3321	3708	7029	1229	879	4561	360
2	Vizianagaram	5	1019	888	1907	214	434	1169	90
3	Visakhapatnam	12	4228	3841	8069	904	3299	3042	824
4	East-Godavari	15	5289	4379	9668	2432	1026	3980	2230
5	West-Godavari	15	3142	2294	5436	1933	345	1980	1178
6	Krishna	9	1319	1101	2420	968	117	828	507
7	Guntur	6	1018	2286	3304	1152	258	1123	771
8	Prakasam	8	857	1075	1932	858	121	544	409
9	SPS Nellore	9	1264	1253	2517	938	119	664	796
10	YSR	12	3163	2750	5913	1690	177	2055	1991
11	Kurnool	14	5557	5505	11062	3421	419	4180	3042
12	Anantapuramu	13	10505	6117	16622	4162	994	8379	3087
13	Chittoor	16	5126	4073	9199	3707	520	3735	1237
	Andhra Pradesh	146	45808	39270	85078	23608	8708	36240	16522

Source: Commissioner, Collegiate Education

A.8.11: Category Wise Enrolment of Students in Private Aided Degree Colleges 2016-17

SL No	District	Pvt.Aided Colleges	Men	Women	Total	SC	ST	BC	OC
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	1	231	116	347	24	80	220	23
2	Vizianagaram	5	4022	2955	6977	925	782	4782	488
3	Visakhapatnam	8	2440	1895	4335	606	307	2397	1025
4	East-Godavari	11	5235	3891	9126	2015	572	4045	2494
5	West-Godavari	14	8529	9534	18063	3818	308	7979	5958
6	Krishna	24	4398	10143	14541	2761	616	5364	5800
7	Guntur	32	13872	6120	19992	5334	959	5526	8173
8	Prakasam	9	2355	398	2753	790	147	1098	718
9	SPS Nellore	9	2972	2118	5090	2090	281	1358	1361
10	YSR	9	4129	3248	7377	1396	141	2499	3341
11	Kurnool	9	5423	3136	8559	2011	181	3038	3329
12	Anantapuramu	4	1376	450	1826	308	193	904	421
13	Chittoor	6	576	655	1231	266	76	387	502
	Andhra Pradesh	141	55558	44659	100217	22344	4643	39597	33633

Source: Commissioner, Collegiate Education

## ANNEXURES - SOCIAL INFRASTRUCTURE

## A 8.12: Jawahar Bala Aarogya Raksha

S. No.	Intervention	2015-16	2016-17 (upto October, 2016)
1	Schools Screening	42894	24986
2	Screening Children (in lakh Nos)	75.34	23.53
3	Children Treated by PHC/UHC MOs team(in lakh Nos)	8.70	7.45
4	Referral to higher centres	120290	8594
5	Treated Surgical. a) Aarogyasree & b) Non Aarogyasree.	56081	4944
6	Eye Screening(in lakh Nos)	2.97	0.80
7	Spectacles Distributed(in lakh Nos)	0.70	0.23
8	Albendazole Tabs (in lakh Nos)	74.25	69.83
9	Iron Folic Acid Tabs(Big & Small) (in lakh Nos)	1073.16	659.83
10	IEC posters(in lakh Nos)	2.27	0.84
11	School Health and Education Record(in lakh Nos)	-	44.86
12	No. of Aarogya Clubs(in lakh Nos)	3.72	5.66
13	No. of Schools having sick & Referral Registers(in lakh Nos).	0.21	0.21
14	RBSK Target:(in lakh Nos)	88.00	84.00
15	Mobile Health Teams:	-	450
16	District Early Intervention Centre	13	16

Source: Commissioner of Family Welfare

## A 8.13 : Family Welfare Program

(Nos. Lakh)

Item	2012-13	2013-14	2014-15	2015-16	2016-17 (upto Oct, 2016)
1	2	3	4	5	6
IUD	1.86	1.85	1.91	1.72	0.96
Oral Pill Users	1.44	1.26	1.40	1.50	1.72
Contraceptive Condoms Users	2.38	2.04	2.13	2.36	2.92
Vasectomies	0.04	0.02	0.03	0.02	0.01
Tubectomies	3.09	2.94	2.89	2.49	1.33
Total Sterilization	3.13	2.96	2.92	2.51	1.34
Medical Termination of Pregnancy	0.016	0.015	0.021	0.024	0.015
Deliveries conducted by 24 hours PHC	0.46	0.49	0.54	0.45	0.24
Beneficiaries under Janani Suraksha Yojana	2.14	2.43	2.62	2.64	1.35
TT (Pregnant Women)	9.47	9.34	8.69	8.19	6.10
DPT	8.18	8.09	8.13	4.61	2.90
Polio	8.22	8.09	8.11	7.91	4.39
BCG	8.29	8.29	798	7.69	4.43
Measles	8.15	7.81	7.98	8.06	4.71
Full Immunisation	8.15	7.79	7.96	8.06	4.71
Hepatitis -B	8.19	8.08	8.10	3.81	2.98
Vitamin - A	5.96	7.74	8.52	7.99	4.65
Pentavalent	-	-	-	4.22	4.35
Emergency cases transported	6.05	5.96	5.99	5.73	3.33

Source: Commissioner Family Welfare

## ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.14 : Health Camps conducted under NTR Vaidya Seva Scheme 2016-17 (from April to October, 2016)

Sl. No	District	Cards covered (lakhs)	Camps Conducted	Patient Screened	Patient Referred	Out - patient	In - patient	Therapies preauthed
1	2	3	4	5	6	7	8	9
1	Srikakulam	8.63	35	7682	66	8671	15279	14421
2	Vizianagaram	7.27	35	9425	58	7277	14649	13779
3	Visakhapatnam	13.07	35	8624	69	7030	21132	19538
4	East Godavari	17.15	30	7030	18	29653	32117	30376
5	West Godavari	13.10	35	5356	17	28062	22397	21656
6	Krishna	12.96	0	0	0	18242	23753	22875
7	Guntur	15.12	7	1739	5	31627	28937	27211
8	Prakasam	9.89	56	12035	18	24022	19362	18439
9	SPS Nellore	9.28	21	6658	6	15013	20608	19634
10	Y.S.R.	8.15	17	3930	25	12372	16591	15125
11	Kurnool	12.47	54	4265	3	6293	18483	16979
12	Ananthapuramu	12.61	0	0	0	5211	15720	14777
13	Chittoor	11.25	28	7528	118	10822	20358	18833
	Andhra Pradesh	150.95	353	74272	403	204295	269386	253643

Source: Dr. NTR Vaidya seva Trust

A 8.15 Integrated Disease Surveillance Project (IDSP) of average reporting % of SPL form 48 weeks -2016

District	Suspected Cases (S)			Presumptive Cases (P)			Laboratory Confirmed Cases (L)		
	Reporting units	Avg	%	Reporting units	Avg	%	Reporting units	Avg	%
Srikakulam	481	476	99%	88	88	100%	80	80	100%
Vizianagaram	435	427	98%	101	90	89%	76	61	81%
Visakhapatnam	583	581	100%	120	118	99%	120	118	98%
East Godavari	839	753	90%	150	118	78%	126	104	83%
West Godavari	638	609	95%	97	93	96%	97	93	96%
Krishna	584	573	98%	94	92	98%	94	92	98%
Guntur	677	677	100%	129	129	100%	111	111	100%
Prakasam	544	530	97%	108	100	93%	108	92	85%
SPS Nellore	477	473	99%	107	105	98%	80	79	99%
YSR	475	474	100%	91	91	100%	82	82	100%
Kurnool	542	542	100%	122	120	98%	105	105	100%
Anantapuramu	586	586	100%	100	100	100%	100	100	100%
Chittoor	644	642	100%	114	111	98%	110	107	98%
Total	7505	7344	98%	1421	1355	95%	1289	1225	95%

Source: Director of Public Health and Family Welfare

## ANNEXURES - SOCIAL INFRASTRUCTURE

## A.8.16 Details of National Programme for Prevention and Control of Fluorosis

School survey	Nellore	Guntur	Prakasam	Total
No. of schools covered	25	17	16	58
No. of children surveyed	654	384	540	1578
No. of Children with suspected Dental Fluorosis	216	79	129	424
No. of urinary tests carried out in school children with suspected Dental Fluorosis	180	58	112	350
No. of Children with confirmed Dental Fluorosis	108	53	68	229
Percentage children with confirmed Dental Fluorosis.	16.5%	13.8%	12.6%	14.5%
Community Survey				
No. of Households surveyed	740	869	476	2085
No. of Persons examined	2735	3366	1621	7722
No. of suspected cases of Dental Fluorosis	389	402	266	1057
No. of urinary tests of suspected Dental Fluorosis carried out	135	48	63	246
No. of confirmed cases of Dental Fluorosis	110	48	48	206
Percentage of confirmed Dental Fluorosis	4.0%	1.43%	2.96%	2.67%
No. of suspected cases of Skeletal Fluorosis (with or without Dental Fluorosis)	14	46	9	69
No. of Urinary tests of suspected Skeletal Fluorosis carried out	14	13	0	27
No. of confirmed cases of Skeletal Fluorosis	14	13	0	27
Percentage of Skeletal Fluorosis.	0.5%	0.38%	0	0.35%
Water Analysis				
No. of samples tested	101	78	84	263
Samples found above 1ppm	54	43	36	133
Urinary Analysis				
Total samples analyzed	299	119	175	593
No. above prescribed limit	232	114	116	462
Percentage samples above limit.	77.6%	95.8%	66.3%	77.9%

Source: Director of Public Health and Family Welfare

## A.8. 17 : SACS Key establishments and service facilities during 2016-17 upto Nov,2016

Sl. No	Name of the service center	Centers
1a	Integrated Counselling & Testing Centers(Stand alone ICTC)	215
1b	Facility Integrated ICTCs (in PHCs i.e. FI-ICTCs)	1133
1c	ICTCs in (PPP Model) Private Hospitals	179
1d	Mobile ICTCs	15
1	Total ICTCs	1542
2	Anti-Retroviral Therapy (ART) Centers	40
3	Link ART Centers	114
4	Link ART Centers(+)	43
5	Blood Banks	134
6	Blood storage centres	57
7	Designated STI/RTI Centers (Suraksha Clinics)	55
8	Targeted Interventions	87
9	No. of districts in which LWS is implemented(except Guntur)	12
10	Government supported Community Care Centers	12
11	Adolescent Education programmes in secondary schools	7554
12	Red Ribbon Clubs in degree colleges	1327
13	SRL	7

Source: Aids Control Society



## ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.18 : Houses Completed under Weaker Sections Housing Programme

Sl. No.	District	2015-16			2016-17 (upto Feb 2017)		
		Rural	Urban	Total	Rural	Urban	Total
1	2	3	4	5	6	7	8
1	Srikakulam	4363	80	4443	3460	61	3521
2	Vizianagaram	5015	133	5148	2752	86	2838
3	Visakhapatnam	6346	63	6409	5997	44	6041
4	East Godavari	7686	820	8506	4006	141	4147
5	West Godavari	3842	174	4016	4913	64	4977
6	Krishna	3781	53	3834	2493	65	2558
7	Guntur	4439	181	4620	2869	1282	4151
8	Prakasam	2916	88	3004	2346	37	2383
9	SPS Nellore	3692	81	3773	3716	133	3849
11	YSR	3671	155	3826	1884	221	2105
13	Kurnool	7679	73	7752	2991	335	3326
12	Anantapuramu	4664	92	4756	3445	96	3541
10	Chittoor	4356	1060	5416	2066	98	2164
	Total:	62450	3053	65503	42938	2663	45601

A 8.19: Number of Houses Completed under Weaker Sections Housing Programme

Sl. No.	Year	Rural	Urban	Total	Sl. No.	Year	Rural	Urban	Total
1	2	3	4	5	1	2	3	4	5
1	1993-94	116592	19051	135643	13	2005-06	114315	46170	160485
2	1994-95	96292	22215	118507	14	2006-07	169372	66863	236235
3	1995-96	207156	21214	228370	15	2007-08	314143	21729	335872
4	1996-97	251180	17809	268989	16	2008-09	1080766	67808	1148574
5	1997-98	148043	4884	152927	17	2009-10	431649	36944	468593
6	1998-99	228657	16897	245554	18	2010-11	288017	23325	311342
7	1999-2000	146278	14785	161063	19	2011-12	273189	23643	296832
8	2000-01	143730	6873	150603	20	2012-13	253315	19689	273004
9	2001-02	127893	1463	129356	21	2013-14	214046	17912	231958
10	2002-03	145957	6611	152568	22	2014-15	25050	4292	29342
11	2003-04	238261	14813	253074	23	2015-16	62450	3053	65503
12	2004-05	48960	19415	68375	24	2016-17 (upto Feb, 2017)	42938	2663	45601
Total							5168249	500121	5668370

Source: A.P. State Housing Corporation Limited.

A 8.20 : Houses Constructed 2016-17 up to Oct, 2016 (AP State Housing Board)

Sl. No.	District	HIG (800-1400 Sft)	MIG (400-650 Sft)	LIG (250-400 Sft)	EWS	Total	Developed Plots
1	2	3	4	5	6	7	8
1	Srikakulam	0	971	524	153	1648	13
2	Vijayanagaram	3	414	564	15	996	100
3	Vishakhapatnam	195	2081	1650	237	4163	166
4	East Godavari	135	773	968	187	2063	10
5	West Godavari	176	902	1075	523	2676	154
6	Krishna	564	2325	795	0	3684	49
7	Guntur	115	525	267	0	907	0
8	Prakasam	6	405	263	0	674	3
9	SPS Nellore	60	596	1295	100	2051	355
10	YSR	422	412	857	0	1691	70
11	Kurnool	215	856	839	246	2156	0
12	Ananthapuramu	26	576	1130	105	1837	376
13	Chittoor	12	179	245	0	436	0
	Total	1929	11015	10472	1566	24982	1296
	Percentage	7.72	44.09	41.92	6.27	100.00	

Source: AP State Housing Board

## ANNEXURES - SOCIAL INFRASTRUCTURE

## A.8.21 District wise initiatives of Smart ward towards Smart Andhra upto Feb 2017

Sl. No	District	No. of applications received.	No. of HH sanctioned by ULB	No. of Households open site photo-GEO tagging completed	No. of Households IHHTs Completed	% of IHHT completed
1	2	3	4	5	6	7
1	Srikakulam	8600	7868	7516	7068	90
2	Vizianagaram	14587	9919	9543	8597	87
3	Visakhapatnam	17866	15953	15754	15506	97
4	East Godavari	14862	13620	13214	12548	92
5	West Godavari	7126	6496	6443	6357	98
6	Krishna	13926	12745	12481	12133	95
7	Guntur	24726	22554	22292	21870	97
8	Prakasam	13636	13210	12887	12483	94
9	SPS Nellore	21353	19175	18240	16521	86
10	Kurnool	21870	19422	18803	18095	93
11	YSR	12355	11134	10689	10188	91
12	Anantapuramu	27307	23710	23440	22765	96
13	Chittoor	8986	5572	5424	5219	93
	Total :	207200	181378	176726	169350	93

Source: Municipal Administration And Urban Development (Swachhandra Corporation)

## A. 8.22. Component wise progress under IWMP and activities taken up under Natural Resource Management

Sl. No.	Name of the Structure	No. of Activities	Expenditure (Rs. Crores)	No. of Beneficiaries
1	Check Dam	4887	139.46	1,07,110
2	Check Wall	1266	13.17	
3	Percolation Tanks (PTs)	1848	47.88	
4	Mini Percolation Tanks (MPTs)	1545	9.37	
5	Farm Ponds	8439	29.60	
6	Dugout Ponds & Percolation Ponds	12797	53.13	
7	Repairs to Existing Water Harvesting Structures	3307	30.94	
8	Rock Fill Dams (RFDs)	8093	34.30	
9	Loose Boulder Structures (LBSs)	9922	13.22	
10	Water Absorption Trench (WAT)	1313	6.87	
11	Staggered contour Trench (SCT)	1321	13.60	
12	Peripheral trench	65	1.81	
13	Horticulture (Acres)	63447	271.69	
14	Other Plantation (Afforestation)	11343	39.71	
15	Others (Earthen bunding, Sunken pits&Gabion)	905	0.37	
	Total	130498	705.12	1,07,110

Source: Rural Development department

## ANNEXURES - SOCIAL INFRASTRUCTURE

## A. 8.23 Details of RIGP Mandal, FPGs, FPOs for implementation of rural value chains

S. No	District	RIGP Mandal	Value chains	No of FPOs	No of FPGs formed	No of FPG members	A/Cs. Opened
1	Srikakulam	11	Coconut (1), Paddy (4), Vegetables (2), Cashew (3), Fisheries (1)	11	176	2272	16
2	Vizianagaram	12	Vegetables (2), Ground nut (2), Paddy (2), Cashew (5), Maize (1), Small ruminants (1)	13	527	7745	180
3	Visakhapatnam	14	Turmeric (5), Vegetables (3), Cashew (4), Small ruminants (1)	13	432	6598	126
4	East Godavari	10	Cashew (7), Pulses (1), Maize (1), Fisheries (1)	10	439	7770	11
5	West Godavari	8	Maize (4), Paddy (2), Vegetables (1), Small Ruminants (1)	8	257	4753	58
6	Krishna	8	Maize (1), Pulses (1), Chillies (2), Mango (2), Small ruminants (1)	7	147	2450	74
7	Guntur	10	Cotton (4), Millets (1), Chillies (5), Small Ruminants (1)	11	233	3701	30
8	Prakasam	15	Paddy (3), Red gram (7), Black gram (1), Bengal gram (4), Small ruminants (2)	17	286	3735	62
9	SPS.Nellore	11	Black gram (6), Ground nut (2), Bengal gram (1), Small ruminants (2)	11	119	1748	5
10	Kurnool	17	Ground nut (4), Cotton (5), Maize (1), Bengal gram (1), Jowar (1), Red gram (4), Chillies (1), Small ruminants (1)	18	212	3179	1
11	YSR	10	Fruits (1), Bengal gram (3), Jowar (1), Tomato (1), Ground nut + Red gram (3), Chillies (1), Small ruminants (1)	11	346	4947	66
12	Anantapuramu	12	Ground nut+ red gram (12), Small ruminants (3)	15	553	9602	68
13	Chittoor	12	Mango (3), Vegetables (3), Ground nut (1), Tamarind (1), Small ruminants (4)	12	555	8079	247
	Total	150		157	4,282	66,579	944

Source: SERP - Rural Development department

## A 8.24 : NTR Bharosa - Category wise Pensions distributed up to Oct 2016

(Number)

S.No	District	Old Age	Weavers	Widow	Disabled	Disabled	Toddy	ART Pensions	Grand Total
					(>80)	(<80)	Toppers		
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	142911	4071	100099	8048	23024	652	2217	281022
2	Vizianagaram	120883	2338	94413	15132	20809	989	2350	256914
3	Visakhapatnam	150811	2328	134908	12818	26802	1068	3529	332264
4	East Godavari	228854	8381	178466	24882	37187	3269	5558	486597
5	West Godavari	183747	3225	106813	25393	19016	1979	3538	343711
6	Krishna	144186	5141	134788	22992	23766	2712	3536	337121
7	Guntur	183323	6341	131261	19824	22806	857	5203	369615
8	Prakasam	159630	6523	103339	13662	20631	163	3944	307892
9	SPS Nellore	115113	4567	96490	8979	21199	966	2618	249932
11	YSR	127079	9311	84398	11128	21414	64	1364	254758
13	Kurnool	142778	3580	126453	20940	19208	159	240	313358
12	Ananthapuramu	201168	11352	120759	16860	38798	188	3124	392249
10	Chittoor	201774	5611	136746	17424	29040	326	2278	393199
	Total	2102257	72769	1548933	218082	323700	13392	39499	4318632

Source: SERP - Rural Development department

## ANNEXURES - POVERTY, EMPLOYMENT AND UNEMPLOYMENT

## A 9.1 : Poverty in Andhra Pradesh\*\* and All India

Year	Andhra Pradesh			All India		
	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Percentage of People below Poverty Line						
1973-74#	48.41	50.61	48.86	56.44	49.01	54.88
1977-78#	38.11	42.55	39.31	53.07	45.24	51.32
1983#	26.53	36.30	28.91	45.65	40.79	44.48
1987-88#	20.92	40.11	25.86	39.09	38.20	38.86
1993-94#	15.92	38.33	22.19	37.27	32.36	35.97
2004-05#	11.20	28.00	15.80	23.30	25.70	27.50
1993-94*	48.10	35.20	44.60	50.10	31.80	45.30
2004-05*	32.30	23.40	29.90	41.80	25.70	37.20
2009-10*	22.80	17.70	21.10	33.80	20.90	29.80
2011-12*	10.96	5.81	9.20	25.70	13.70	21.92
Number of People below Poverty Line						
						(Lakh)
1973-74#	178.21	47.48	225.69	2612.90	600.46	3213.36
1977-78#	149.13	48.41	197.54	2642.47	646.48	3288.95
1983#	114.34	50.24	164.58	2519.57	709.40	3228.97
1987-88#	96.38	64.05	160.43	2318.80	751.69	3070.49
1993-94#	79.49	74.47	153.97	2440.31	763.37	3203.68
2004-05*	187.07	51.33	238.80	3266.63	807.59	4076.10
2009-10*	127.90	48.70	176.60	2782.10	764.70	3546.80
2011-12*	61.80	16.98	78.78	2166.58	531.25	2697.83

Source: Planning Commission, Government of India.

Note: \* As per Tendulkar Committee report #As per Lakadawala Methodology Report

\*\*For united Andhra Pradesh

## A 9.2 : Labour Force Participation Rates per 1000 Population

(Current daily status)

Year	Andhra Pradesh			All India		
	Males	Females	Persons	Males	Females	Persons
1	2	3	4	5	6	7
Rural						
1999-2000	582	387	484	515	220	370
2004-05	586	399	492	531	237	387
2009-10	578	376	477	536	197	371
2011-12	584	375	477	534	180	361
Urban						
1999-2000	517	158	341	528	123	335
2004-05	567	210	388	561	150	364
2009-10	545	170	363	550	129	350
2011-12	567	166	368	555	136	354

Source: National Sample Survey Office, Government of India.

## ANNEXURES - POVERTY, EMPLOYMENT AND UNEMPLOYMENT

A 9.3 : Work Force Participation Rates per 1000 Population

(Current daily status)

Year	Andhra Pradesh			All India		
	Males	Females	Persons	Males	Females	Persons
1	2	3	4	5	6	7
Rural						
1999-2000	535	355	445	478	204	344
2004-05	528	350	439	488	216	355
2009-10	536	347	441	501	182	346
2011-12	555	354	452	504	169	340
Urban						
1999-2000	480	144	315	490	111	309
2004-05	523	192	358	519	133	334
2009-10	522	154	343	522	117	329
2011-12	536	150	345	528	125	335

Source: National Sample Survey Office, Government of India.

A 9.4 : Unemployment Rates\* on usual Principal and Subsidiary status

NSSO Round	Andhra Pradesh		All India	
	Rural	Urban	Rural	Urban
1	2	3	4	5
50th Round (1993-94)	4	30	12	45
55th Round (1999-2000)	8	39	15	47
61st Round (2004-2005)	7	36	17	45
66th Round (2009-2010)	12	31	16	34
68th Round (2011-12)	12	43	17	34

Source: National Sample Survey Office Reports

Note: Unemployment rate is number of unemployed based on Principal Status + Subsidiary Status (PS+SS) per 1000 population of labour force

A 9.5 : Employment Registrations and Live Register at the end of November, 2016

Sl. No.	Employment Exchanges	Live registrations
1	2	3
1	Srikakulam	53,385
2	Vizianagaram	59,220
3	Visakhapatnam	1,18,895
4	East Godavari	82,155
5	West Godavari	64,368
6	Krishna	73,457
7	Guntur	51,926
8	Prakasam	53,187
9	SPS Nellore	53,186
10	YSR	70,670
11	Kurnool	90,768
12	Anantapuramu	49,629
13	Chittoor	64,425
	Professional & Executive Exchange	37,288
	Total	9,22,559

Source: Employment and Training Department

## ANNEXURES - INTEGRATED MONITORING FRAMEWORK FOR SUSTAINABLE DEVELOPMENT

A 10.1: Area, Population, GSDP and PCI (NSDP) of Major States and all India

Sl. No.	State	Area in 000' sq. kms	Area Rank	Population (Census-2011) (In Cr.)	Rank	Urban Population (In Cr.)	% urban pop.	Rank in urban pop.	Size of GSDP 2014-15 (Lakh Crore )	Rank	Size of GSDP 2014-15 (Lakh Crore )	GSDP Growth Rates at Constant Prices			Rank on GSDP Growth Rates			2014-15 PCI at Current Prices (In Rs.)	PCI Rank (2014-15)	2015-16 PCI at Current Prices (In Rs.)	PCI Rank (2015-16)
												2013-14	2014-15	2015-16	2013-14	2014-15	2015-16				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	Maharashtra	307.7	3	11.24	2	5.08	45	3	17.92	1		6.24	5.76		8	14		134081	3		
2	Tamilnadu	130.1	9	7.21	6	3.49	48	1	10.93	2	12.13	6.89	6.94	8.79	4	8	3	130197	5	143547	3
3	Uttar Pradesh	240.9	4	19.98	1	4.45	22	13	10.43	3	11.54	6.4	6.3	7.13	6	10	8	43861	14	48520	9
4	Karnataka	191.8	6	6.11	8	2.36	39	5	9.2	4	10.4	9.76	6.48	6.45	1	9	9	132749	4	148485	2
5	Gujarat	196.2	5	6.04	9	2.57	43	4	8.96	5		7.56	8.1		3	3		124518	7		
6	Rajasthan	342.2	1	6.85	7	1.7	25	12	6.12	6		6.07	6.11		9	13		76881	10		
7	Andhra Pradesh	163	7	4.96	10	1.46	29	10	5.33	7	6.03	8.5	7.98	10.99	2	4	1	95689	9	107532	5
8	Telangana	112.1	10	3.5	12	1.36	39	6	5.2	8	5.83	6.43	8.82	9.24	5	2	2	129182	6	143023	4
9	Kerala	38.9	16	3.34	13	1.59	48	2	5.27	9		3.9	7.46		14	7		139382	2		
10	Madhya Pradesh	308.3	2	7.26	5	2.01	28	11	4.85	10	5.65	3.71	6.22	8.68	15	12	4	56516	12	65388	7
11	Haryana	44.2	15	2.54	16	0.88	35	8	4.42	11	4.93	5.56	7.98	8.2	10	5	5	165728	1	182196	1
12	Bihar	94.2	11	10.41	3	1.18	11	16	3.74	12	4.14	4.98	13.02	7.14	11	1	7	31380	15	34168	10
13	Punjab	50.4	14	2.77	15	1.04	37	7	3.68	13		6.32	4.92		7	15		114561	8		
14	Odisha	155.7	8	4.2	11	0.7	17	14	3.1	14	3.32	4.72	6.24	6.16	13	11	10	63108	11	66890	6
15	Assam	78.44	13	3.12	14	0.44	14	15	1.98	15	2.24	4.88	7.88	7.73	12	6	6	54618	13	60952	8
16	West Bengal	88.8	12	9.13	4	2.91	32	9													
	ALL India GDP (base 2011-12)	3288		121.09					124.88		135.8	6.64	7.24	7.56				86879		93293	

Source: Directorate of Economics and Statistics, A.P.











**PLANNING DEPARTMENT**  
GOVERNMENT OF ANDHRA PRADESH