GASA DZONGKHAG NINTH PLAN (2002-2007)



ROYAL GOVERNMENT OF BHUTAN

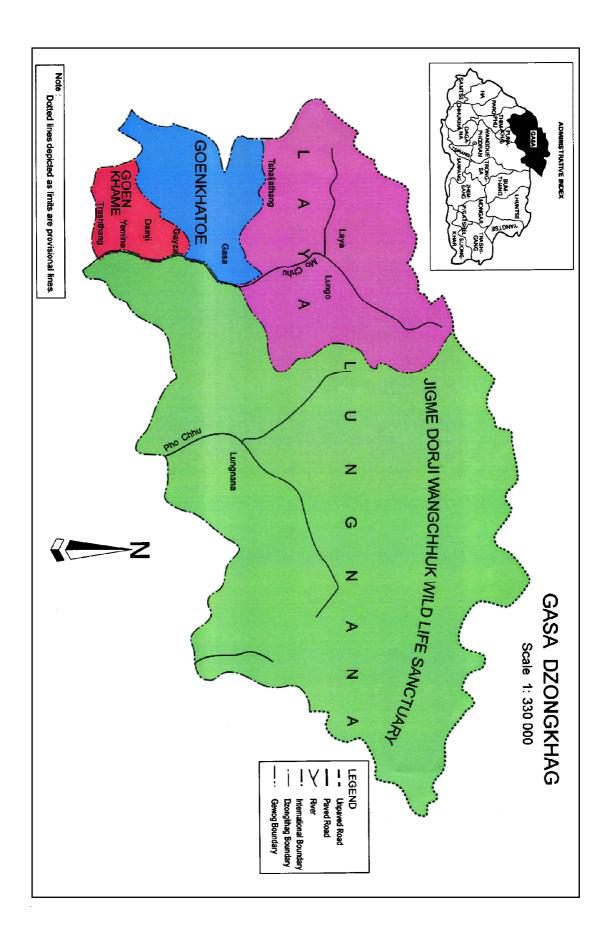


Table of Contents

D	ZONGK	HAG AT A GLANCE	• 1
A	CRONY	MS	- 2
	1	Dzongkhag Profile	3
	1.1	BACKGROUND HISTORY	3
	1.2	LOCATION AND AREA	3
	1.3	Land use and environment	3
	1.4	PEOPLE AND PLACES	4
	1.5	CONSTRAINTS AND POTENTIAL	4
	1.5.1	POTENTIALS:	4
	1.5.2	Constraints:	4
2	DZONG	KHAG DEVELOPMENT PROGRAMME	5
	2.1	Objectives:	
	2.2	Strategies:	5
	2.3	SUMMARY OF PROGRAMMES AND OUTLAY	5
	2.4	Details of Programmes	6
	2.4.1	Agriculture	6
	2.4.1.1	BACKGROUND	6
	2.4.1.2	Programmes	6
	2.4.1.3	BUDGET ESTIMATES	7
	2.4.2	Livestock	7
	2.4.2.1	BACKGROUND	7
	2.4.2.2	Programmes	8
	2.4.2.3	BUDGET ESTIMATES	9
	2.4.3	Forestry	10
	2.4.3.1	BACKGROUND	10
	2.4.3.2	PROGRAMMES	10
	2.4.3.3	BUDGET ESTIMATES	10
	2.4.4	EDUCATION	10
	2.4.4.1	BACKGROUND	10
	2.4.4.2	Programmes	12
	2.4.4.3	BUDGET ESTIMATES	12
	2.4.5	Неаlth	14
	2.4.5.1	BACKGROUND	14
	2.4.5.2	Programmes	14
	2.4.5.3	BUDGET ESTIMATES	16
	2.4.6	URBAN DEVELOPMENT & HOUSING SECTOR	16
	2.4.6.1	BACKGROUND	16
	2.4.6.2	PROGRAMMES	16
	2.4.6.3	Budget Estimate	18
	2.4.7	TELECOMMUNICATION	18
	2.4.8	Roads (4.061 m)	
	2.4.9	Power	
	2.4.9.1	Purchase of 50 solar sets (2.500 m)	
	2.4.10	DZONGKHAG ADMINISTRATION AND MANAGEMENT	
	2.4.10.1	BACKGROUND	

	2.4.10.2	PROGRAMMES	20
	2.4.10.3	BUDGET ESTIMATES	22
3.	BUDGET	ESTIMATES	23
	3.1	DZONGKHAG PLAN BUDGET ESTIMATES	23
	3.2	GEOG PLAN BUDGET ESTIMATES	23
4.	PLAN IM	PLEMENTATION, MONITORING AND EVALUATION	23
	4.1	PLAN IMPLEMENTATION	24
	4.1.1	ANNUAL AND QUARTERLY PLANS AND BUDGETS	24
	4.1.2	MONITORING AND EVALUATION	24
	4.1.3	MONITORING	24
	4.2	EVALUATION	25

Dzongkhag at a Glance

Population and Income	2000
Total household	440
RNR	
RNR extension center	2
Agriculture extension center	1
Livestock extension center	2
Veterinary Hospital	1
Irrigation channels (km)	10.8
Jigme Dorji National Park Hq.	1
Warden Post	1
Guard post	3
Health	
Crude birth rate (per 000)	18.6
Crude death rate (per 000)	9.1
Immunization coverage (%)	100
Infant mortality rate (per 000 live births)	0
Maternal mortality rate (per 000 live births)	0
Number of Basic Health Unit	3
Number of Health Asstt.	2
Education	
Number of community schools	3
Number of junior high schools	1
Number of students in the schools	403
Number of teachers	16
Number of Dratshang	1
Number of shedras and gomdras	2
Electricity	
Number of households supplied with solar sets	115
Water and Sanitation	
Rural water supply schemes	37
Sanitation facilities	343
Communication	
Number of telephone exchanges	1
Number of telephone lines	52
Motorable road (rough)	10
Mule tracks	140
Modular Bridges	1
Bailey Bridge	2
Post offices	1
Trade and Industries	
Number of trading license	51

ACRONYMS

Agriculture Extension Centre
Artificial Insemination
Basic Health Unit
Community Health Programme
Community School
Dzongkhag Forest Extension Service
District Health Supervising Officer
Dzongkhag (District) Yargye (Development) Tshogchung (Committee)
Family Planning
Farmer Field School
Geog (Block) Yargye (Development) Tshogchung (Committee)
Information, Education and Communication
Integrated Pest Management
Jigme Dorji National Park
Livestock Extension Centre
Mother and Child Health
Outreach Clinic
Renewable Natural Resources
RNR Regional Research Centre
Territorial Forest Division
Village Animal
Village Health Worker
Village Management Committee

1. Dzongkhag Profile

1.1 Background History

Formally, Gasa was a dungkhag under Punakha dzongkhag and it was made a separate dzongkhag at the beginning of the 7th Plan in 1992. It consists of four Gewogs – Goenkhatoe, Goenkhamae, Laya and Lunana. Gasa lies on the old trade route to Tibet. The Gasa people take pride in the fact that the Zhabdrung entered Bhutan through Gasa and there are many sacred places and artifacts revered as being blessed by his presence and association. In fact, the map for the Gewogs as drawn by the community use landform associated with the Zhabdrung as reference point. For instance, the Phulakha (pass in the north) is where it is believed that the people of Gasa made their first offerings to the Zhabdrung who had camped there on his way into Bhutan.

Laya and Lunana, which are at higher altitude, have very little scope for agriculture development except dry land cropping like buckwheat and barley. The people entirely depend on rearing livestock and the products are bartered with the neighboring Gewogs and Dzongkhags in winter season. Yak rearing is the main occupation. They usually spend winter season at Wangdue and Punakha valley for seasonal works and return with necessary food and clothing items. However, Laya people usually weave their clothing with yak hair specially ladies dress, tent and rope.

Goenkhatoe and Goenkhamae Gewogs are at lower altitude than Laya and Lunana. Therefore, the Gewogs grows paddy, wheat, mustard, millet, buckwheat and vegetables like potato, cabbage, chilly, pumpkin etc. However, damage of crops by wild animals is the main problem encountered by the people.

Gasa is a livestock potential area and there is vast scope for the livestock activity expansion. Jigme Dorji National Park covers the entire Dzongkhag and as such, conservation has been given high priority.

Trashithongmoen Dzong, the Dzongkhag Administration is located at Goenkhatoe Geog, with a satellite town and other Central Department/Organization.

1.2 Location and area

Gasa lies in the extreme northwest of the country. It is bordered by Punakha dzonkghag in the southeast, Thimphu in the southwest, Wangdue in the east and the Tibetan region of China on the extreme north. The Dzongkhag has an area of 4,409.30 Sq. Km., which is 11% of total area of the whole country. The country's two major rivers Pho Chhu and Mo Chhu, pass through the Dzongkhag. The altitude ranges from 1,500 meters to 4,500 meters above sea level. The climate of Gasa ranges from temperate to alpine with extremly cold winters and short and pleasant summer. Rainfall is scanty and virtually no rain in winter in the upper region. However, there is heavy snowfall in the upper region. The average rainfall is about 2,000 mm annually.

1.3 Land use and environment

About 35% of the total area are under scrub forest, 27% under Fir forest, 15% under Mix conifer, 4% under Broad leafed. Tsamdro covers an area of 19% of the total area of the Dzongkhag, which gives great potential for livestock rearing. The soil is sandy and supports dry cultivation.

The main source of cash income for the people is porterage to local as well as the tourist. Sale / bartering of livestock products is another source of income to the people of Laya and Lunana Gewogs. Other cereals and vegetables are grown to limited area due to marketing constraints and depredation by wild animals.

1.4 People and places

The people of Gasa generally speak Dzongkha with a distinctive accent. However, Layaps and Lunaps have their own local dialect in addition to Dzongkha. Layaps and Lunaps mostly lead a pastoral life where, half of the family of each household spend life rearing yaks and sheep at the mountain top during summer and move with the herd towards their settlement in winter. Laya women have distinctive feature with their hand woven hat embroidered with colorful beds. The home/hand woven clothing act as a good barrier against rain and cold climate.

Gasa is famous for Tshachu (Hot Spring) which is two days walk from the nearest motorable road (Trashithang). There are several places of hot springs having different medicinal values as the local community describes. This may be one of the reasons the people of Gasa has less morbidity rate compared to others. Hot springs at Laya and Lunana are also famous, but due to remoteness, only the local community utilizes it. The Dzongkhag has around 13 lhakhangs and chortens Zabsel and Phulakha under Goenkhatoe Gewog, Chorten and Sebgi Goenpa lhakhang at Goenkhamae Gewog, Tashilhakhang, Throe lhakhang, Dung Goenpa lhakhang, Drophel Choling lhakhang, Yonzho lhakhang and Jangchuk Choling lhakhang at Laya Gewog and Bumpa lhakhang, Tshodzong lhakhang and Dzongridra lhakhang at Lunana Gewog.

1.5 Constraints and potential

1.5.1 Potentials:

- * The Dzongkhag has high potential for tourism because of the famous hot springs located at Gasa, Laya (Geyza) and Lunana (Wachey) and famous trekking routes such as the Snowman Trek and Laya-Lhingtshi Trek have already developed while the 7,165 meter Masagang peak, one of Bhutan's 20 virgin peaks for mountaineering stand as another attraction.
- * The extensive temperate and natural grasslands present a good opportunity for the Dzongkhag to pursue dairy development on commercial and economic scales.

1.5.2 Constraints:

- * Physical harsh climatic conditions and rough terrain which makes living very difficult
- * Institutional lack of a proper institutional framework and process to facilitate effective functioning of both DYT and GYT
- Human shortage of both skilled and unskilled manpower to carry out development activities as well as farm activities.
- Economic Harsh climatic condition and absence of road, market, industrial activities etc. The economy of the Dzongkhag is mainly through livestock products and porterage for the tourism.
- * Wild animals Depredation by wild animal on domestic animals.

2. Dzongkhag Development Programme

2.1 Objectives:

The development objectives to be pursued by the Dzongkhag during the 9th plan are as follows:

- * To improve livelihood of community through increase in productivity of crops and livestock;
- * To encourage and promote community participation;
- * To maintain sustainable use and management of natural resources;
- * To promote income generation activities;
- * To improve the outreach and quality of service facilities; and
- * To promote and preserve culture and tradition.

2.2 Strategies:

The above objectives will be achieved through the following strategies:

- * Training of farmers through study tour both within and outside Dzongkhag;
- * Conducting demonstration and on-farm-trials;
- ***** Supply of high yielding variety of seed and seedlings;
- * Supply of improved breeds of livestock;
- * Animal health programme;
- * Formation of institutions such as Tshokpas, Water Users Association and Tshachu Committee;
- * Providing training on marketing of agricultural and horticultural products;
- * Improving market access to agricultural and horticultural products;
- * Introduction of user fees for sustainable use of common resources; and
- * Renovation and rehabilitation of religious and community centers.

2.3 Summary of Programmes and Outlay

The 9th plan outlay for Gasa Dzongkhag is Nu.244.690 million of which Nu.31.311 million is for the 4 geogs.

Table 1. Summary of programmes and outlay

Sl. No.	Programme	Outlay(in million)	Remarks.
1	Agriculture	9.781	
2	Animal Husbandry	14.572	
3	Forest	4.077	
4	Education	105.279	
5	Health	17.778	
6	Roads	4.061	Recurrent cost
7	Power	2.500	Solar sets
8	Urban Development and Housing	9.928	
9	Dzongkhag Administration & Management	45.403	
	Sub-total (Dzongkhag)	213.379	
	Sub-total (Gewog)	31.311	
	Total	244.690	

2.4 Details of Programmes

2.4.1 Agriculture

2.4.1.1 Background

The upper Geogs viz. Laya and Lunana grows only buckwheat, barley and mustard and few vegetables like radish and turnip are for their home consumption. The lower goegs viz. Goenkhatoe and Goenkhamae grows paddy, wheat, buckwheat, barley, mustard and vegetables. The production is limited due to marginal land holdings, wild animal depredation of crops and shortage of farm manpower. The Dzongkhag as a whole has very less population and as such agricultural development is in its infant stage. Recently, potato cultivation is found to be a promising cash crop. Construction of road would play vital role to the Dzongkhag for mass cultivation of any agricultural produce on commercial scale. In order to persuade the people to carry out agricultural activities, the Dzongkhag has the following programmes to be implemented in the coming plan period.

2.4.1.2 Programmes

Purchase of furniture (0.050 m)

Provision is kept for the supply of furniture to the RNR and Agriculture centre including Dzongkhag Headquarters.

Electrification of RNR centres (0.300 m)

It is highly expected that during the 9th Plan either Mini hydels will be established or the HV/LV transmission line from Punakha shall be extended to Gasa. Therefore, electrification to RNR centre and Agriculture Extension Centre is kept under provision.

Construction of staff quarters (1.220 m)

Accommodation in Gasa is the greatest problem faced by the staff. There are neither Government buildings nor Private houses available for accommodation. Presently, the staff are accommodated in temporary sheds with two rooms including kitchen. The water supply and sanitation facilities are in rural style. Construction of accommodation with minimum facilities would encourage other staff on transfer. Therefore, provision is kept to construct at least one building with two units for the Agriculture staff.

2.4.1.3 Budget Estimates

SI.	Programmes/Activity	Unit	Target		Outlay		Remarks
#				Curr.	Cap.	Total	
1	Purchase of furniture	No	4		0.050	0.050	
2	Electrification of RNR centers	No	2		0.300	0.300	
3	Construction of staff quarter	No	1		1.220	1.220	
4	Establishment cost			8.211		8.211	
	Total			8.211	1.570	9.781	

2.4.2 Livestock

2.4.2.1 Background

Two Geogs of the Dzongkhag, viz. Laya and Lunana entirely depend on livestock rearing, mostly yaks, for their sustenance. Every household owns livestock and hence it has a high livestock population as shown in the table below. The other categories of livestock reared are horses/mules and donkeys, which are most important to the people of this Gewog for transportation of goods.

Type of Livestock	Type of Livestock Name of Gewogs					
	Laya	Lunana	Goenkhatoe	Goenkhamae		
Local cattle	64	0	198	294	556	
Mithun	0	0	57	77	134	
Imp. Cattle	0	0	85	98	183	
Yak	3,891	2,483	0	0	6,374	
Local horses	193	4	73	78	348	
Imp. Horses	0	0	16	8	24	
Mules	173	0	38	42	253	
Donkeys	2	0	2	2	6	
Local sheep	0	148	0	5	153	
Imp. Sheep	0	33	5	10	48	
Local pigs	0	0	17	17	34	
Imp. Pigs	0	0	5	28	33	
Local chicken	12	15	79	72	178	
Imp. Chicken	0	20	90	133	243	
Total	4,335	2,703	665	864	8,567	

Table 2. Livestock population of the Dzongkhag, 2001

As shown in the table below, one of the major constraints faced by the livestock in its development is depredation by wild life whose population increases due to protection by the Jigme Dorji National Park. A total of 235 livestock fell prey to the wild animals during the period July 1999 to February 2001.

Sl #	Category of Livestock	Depredation #
1	Cattle	39
2	Horses	44
3	Yaks	131
4	Sheep	21
	Total	235

Table 3. Domestic animals depredated from July 1999 to Feb'2001

Gasa Dzongkhag has more than 36,262 acres of registered Tsamdro and has good potential for livestock development. Further, 23,311 hectares of natural pasture provides added impetus for livestock development. So far the Dzongkhag has been a livestock priority area and shall continue to be the same, particularly for Laya and Lunana gewogs.

2.4.2.2 Programmes

Refresher course and Seminar/Workshop

To update the knowledge and skills of extension staff, it is necessary to carry out refresher courses on improved methods and practices, and 20 such courses will be conducted during the plan period.

Purchase of Extension kits, office furniture/equipment and vehicle (0.400 m)

Extension kits to the extension staff, office furniture and equipment will be purchased to increase the efficiency and effectiveness of service. Only necessary items shall be procured as and when the need arises. The equipment includes one computer for the DAHO office. Regarding vehicle, it is a two-wheeler to communicate from the motorable road to Punakha and Thimphu for reaching research works, slide samples etc. Probably, the motorable road could reach Gasa within the 9th plan.

Establishment of a new Artificial Insemination Centre (0.300 m)

The programme to establish a new AI center at Damji is a spillover from the 8th Plan. The dzongkhag at present do not have any AI centers. The proposed center will cover both Goenkhatoe and Goenkhamae gewogs, which have maximum cattle population in the dzongkhag.

Relocation/construction of a new veterinary hospital (2.800 m)

Goenkhatoe has proposed to construct a new veterinary hospital in the gewog since the present hospital is located far away from the settlement and is difficult to avail the services. The Gewog has already identified the area, which is centrally located and could provide better service. The present building of the center is in traditional Bhutanese style with mud mortar which requires heavy maintenance every year. Therefore, the construction of a new Veterinary Hospital in the new location is proposed during the 9th Plan with a budget estimate of Nu. 2.883 million including compound fencing.

Construction of staff quarters (0.400 m)

Accommodation in Gasa is the greatest problem faced by the staff. Therefore, provision is kept to construct at least one building with two units for the livestock sector staff.

Renovation of staff quarters (0.120 m)

The Veterinary Hospital at Kolikha is presently utilized as hospital as well as staff quarters due to acute shortage of accommodation in the Dzongkhag. It was constructed during the opening of Dzongkhag with ekra wall and mud mortar and it does not have toilet and kitchen. Therefore, during 9^{th} Plan it is proposed to be provided with toilet, kitchen and other renovation works to be used as staff quarters with partitions. A budget of Nu.0.12 million is proposed for the purpose.

Electrification of veterinary centers (0.100 m)

Presently the veterinary centers are lighted by solar sets. It is envisaged that the Dzongkhag could get hydroelectricity during the 9th Plan. Therefore, electrification of the 3 veterinary centers is proposed during the plan period.

SI.	Programmes/Activity	Unit	Target	Outlay			Remarks
#.				Curr.	Cap.	Total	
1	Refresher course	Nos	20			0.000	
2	Seminar/ Workshops	No	5			0.000	
3	Supply of extension kits					0.000	
4	Purchase of computers	No	2		0.300	0.300	
5	Purchase of furniture				0.100	0.100	
6	Artificial equipment	No	5		0.150	0.150	
7	Construction of Veterinary Hospital	No	1		2.800	2.800	
8	Construction of staff quarter	No.	1		0.400	0.400	
9	A.I. centre at Damji	No	1		0.300	0.300	
10	Renovation of LEC	No	1		0.120	0.120	
11	Electrification		3		0.100	0.100	
12	Establishment cost			10.302		10.302	
	Total			10.302	4.270	14.572	

2.4.2.3 Budget Estimates

2.4.3 Forestry

2.4.3.1 Background

Gasa has about 33% of the area under forest cover and whole of the dzongkhag falls under the Jigme Dorji National Park. The Dzongkhag is rich in flora and fauna and is a habitat of some rare species of animal and birds like Takin, Musk deer, Blue sheep, Snow leopard, Himalayan black bear, tiger, red pandas, Raven, wild pheasants, snow pigeons, the red billed cough, the alpine swift, the snow partridge, the black necked crane and many others.

2.4.3.2 Programmes

Construction of staff quarters (1.200 m)

To ease the present accommodation problem, the Dzongkhag Forestry Sector has proposed to construct one building with 2 units of staff quarters during the 9th Plan. With the strengthening of staff strength as per the restructuring exercise, the staff transferred to Gasa, find it difficult to adjust with the harsh climatic condition.

2.4.3.3 Budget Estimates

SI.	Programmes/Activity	Unit	Target	Outlay		Remarks	
#				Curr.	Cap.	Total	
1	Const. of staff quarter	No	2		1.200	1.200	
2	Establishment cost			2.877		2.877	
	Total			2.877	1.200	4.077	

2.4.4 Education

2.4.4.1 Background

Presently there are one Jr. High School and 3 Community Primary Schools with 403 students as shown in the table below. The overall enrolment percentage for the dzongkhag is 64%.

Table 4. Information on education sector in the dzongkhag

Schools type	No.	Enrolment	Teachers
Jr. High school	1	210	9
Community Primary School	3	193	7
Total	4	403	16

NFE Centres

Gasa Dzongkhag also has 3 NFE Centers. The year of establishment and other related information on NFE are as mentioned below:

Sl	Geog	Location	Year of	Enrol	ment
#			Establishment	Present	Course completed
1	Goenkhatoe	Gasa JHS	1998	12	9
2	Goenkhamae	Yemina (Damji)	1998	10	5
3	Laya	Laya CS	1998	25	34
		Total		47	48

 Table 5. Details of NFE centers

Damji Community School

Damji Community School was established in 1997. The school has children from far-flung villages as the Gewog has scattered village settlements. It has classes from PP to IV. The school has 2 units of staff quarters and an academic building with 6 classrooms. Children coming from remote areas are kept as WFP boarders. The school's enrolment has been increasing with good pace since the school is centrally located. The school has 74 students with 3 teaching staff.

Laya Community School

This school is two days walk from Gasa Dzong. It has classes from PP to IV. The school was opened during 1997 academic session and today it has 82 students with 3 teachers. Although the school is located in the center of the settlements, the students' population has been poor. The parents are not willing to send especially girl child to school as girls have to play a more of traditional role such as looking after the young ones and to help their mother to look after the yak herds in their ranches/pastureland.

Lunana Community School

The community school was opened during 1997 but functioned only from 1998 onwards. It is located on the western side of Pho Chhu. The place where the school is located is known as Lhedhing. There are few households close to the school. Majority of the student's population comes from those villages that are further north of the school. Presently the school has classes from PP to III with 37 students and 2 teachers. The school is a beneficiary of WFP feeding programme. Owing to harsh climatic condition, school functions only for about 5 months from June till end of October.

2.4.4.2 Programmes

Renovation of the existing Jr.High School (10.344 m)

Construction of additional infrastructure (9.444 m)

Budget provisions are kept for the construction of 2 units of staff quarters, 1 unit of Head teacher quarters, 1 unit of Basketball court, 1 water-tank, 1 school entrance gate, 700 meters of water drainage and 300 meters of footpath development. These facilities are not at all available at present in the school.

Purchase of furniture & equipment (0.900 m)

Budget provision is kept for purchase of furniture and 6 nos. of computers for the school. Also purchase of Hilux/Bus is proposed for the school. Presently, the Dzongkhag has only one DCM, which is engaged all the time. Therefore, purchase of vehicle is found of genuine need.

Budget provision is also kept to procure 22 sets of solar sets both for replacement and supply to the Schools. 5 solar sets are required for distribution to Non-Formal Education Centres.

Establishment of High School + 2 (65.923 m)

The Dzongkhag so far does not have any High School. So far, the passed out candidates/students are sent to other schools in other Dzongkhags. This has impact on the Rural Urban migration in the country. As a small measure, the Dzongkhag has proposed to establish a new High School at Bjishong at Damji in Goenkhamae Gewog. The site is located in an isolated area with more than 15 acres fallow dry land. The present road alignment passes through the area and has sufficient water supply. The Health Sector has also proposed to establish a new BHU in the locality that has sufficient area. In future, satellite town can be established and power transmission if extended from Punakha will also pass through this area. Therefore, the Dzongkhag has proposed to establish a new High School +2 with necessary facilities in the plan period.

Sl.no	Programme	Unit	Target	Budget		Remarks	
				Cur.	Cap.	Total	
Ι	Gasa Junior High School						
1	Staff Quarter	block	1		4.815	4.815	
2	Headteacher's Quarter	unit	1		1.989	1.989	
3	Basketball Court	1	1		0.600	0.600	
4	Water Tank	1	1		0.513	0.513	
5	Entrance gate	1	0		0.000	0.000	
6	Electrification (Solar)	10	10		0.450	0.450	
7	Footpath (Precast)	300mtr.	3		0.277	0.277	
8	Const.of drainage	400 mtr.			0.500	0.500	

2.4.4.3 Budget estimates

9	Retaining wall	50 mtr.	1		0.300	0.300	
10	Furniture (Lumpsum)				0.500	0.500	
11	Computers & Accessories	10	10		0.400	0.400	
	Sub-total				10.344	10.344	
II	Khamae : Bjishong High						
	School (New Proposal)					0.000	
1	Staff Quarter	Unit	1		4.814	4.814	
2	Headteacher's Quarter	unit	1		1.989	1.989	
3	Basketball Court		1		0.600	0.600	
4	Carertaker's Quarter	Unit	0		0.000	0.000	
5	Water Tank		1		0.513	0.513	
6	Entrance gate		0		0.000	0.000	
7	Electrification (Solar)	set	30		1.350	1.350	
8	Purchase of Hilux (Lumpsum)		1			0.000	
9	Footpath (Precast)	300mtr.			0.900	0.900	
12	Furniture (Lumpsum)				0.500	0.500	
13	Computers & Accessories		10		0.400	0.400	
14	Warden's Quarter	Unit	1		0.700	0.700	
15	Matron's quarter	Unit	1		0.700	0.700	
16	Administrative Block	Block	1		3.571	3.571	
17	Hostel (64 bedded)	block	4		14.316	14.316	
18	Hostel toilet	block	2		2.933	2.933	
19	6 Classroom block	block	2		6.945	6.945	
20	Lab. And Library	block	1		9.988	9.988	
21	Playfield		1		0.148	0.148	
22	Auditorium		1		9.510	9.510	
23	Gymnesium		1		0.000	0.000	
24	Kitchen & Store		1		3.058	3.058	
25	Volley B Court		1		0.050	0.050	
26	Archery		1		0.000	0.000	
27	Fencing		0		0.000	0.000	
28	Land Acquisition	13 acres			0.200	0.200	
29	Water Supply (Lumpsum)				1.500	1.500	
30	AP Toilets		2		1.240	1.240	
	Sub-total				65.923	65.923	
	Establishment Cost*			29.012	0.000	29.012	
	Total			29.012	76.267	105.279	

*includes all recurrent costs

2.4.5 Health

2.4.5.1 Background

Gasa Dzongkhag is one of the most isolated and has poor communication network coupled with dispersed population pattern, which makes provision of access to the health care services difficult. During 8th Plan various activities were carried out to improve access of health facilities and services to the general public and the effort continues. Yet, to facilitate easier access, a lot of activities are required in addition to continuing effort.

Presently, Gasa has three Basic Health Units, three permanent Out Reach Clinics and nine temporary Out Reach Clinics. There are 15 Village Health Workers in the dzongkhag taking care of basic health service in the villages. However, the coverage is constrained by inaccessibility of villages due to rough topography and scattered settlement.

Almost every village in the Dzongkhag have spring water sources. So far, only 37 Rural Water Supply schemes have been completed covering 342 households. 343 households have latrines and 223 households have garbage pits.

2.4.5.2 Programmes

Construction of a new BHU at Damji (3.800 m)

So far, the Health facilities for Goenkhamae is extended from Goenkhatoe BHU. Only ORC are constructed at Damji and Tarshithang. The construction of BHU at Damji was genuine for catering Health services to the population and was included in the 8th Plan. Due to certain reasons, it could not be materialized. The people face lot of difficulties in attending BHU in Gasa which is one day's walk from Damji. As such, it is imperative to construct one BHU Gr.II at Damji. If the proposal is approved, 5 acres of land needs to be acquired from community for the BHU construction. The BHU will cater to 75 households with a population of 573.

Development of IEC materials

Adequate and updated IEC materials, such as posters, pamphlets and leaflets with pictures in local context and printed in Dzongkha should be developed and distributed. Such IEC materials are inadequate at the BHU level. The materials should be available for free distribution to the general public for enhancing awareness and practice of healthy behavior.

Purchase of furniture, Solar sets and Ambulance (3.400 m)

As in the past plan, purchase of new furniture for the newly constructed BHU at Gasa and the proposed new BHU at Damji has to be made on need basis. Similarly, procurement of solar sets has to be made in case the supply of electricity is not feasible either from Punakha to Gasa or by establishing a hydropower station in Gathana. The provision also includes for the replacement of solar sets in remote BHUs.

Purchase of Ambulance for Gasa BHU has been proposed based upon the numerous difficulties encountered in the past. The Dzongkhag Administration does not have pool vehicle to spare for the referred patient to Punakha/Thimphu General Hospital. On the other hand, there are no private vehicles in Gasa for hire during emergency. Therefore, to evacuate patient during the hour of need and supply of medical items in time, the proposal is made to purchase an ambulance.

Construction of staff quarters and drainage for Laya BHU (0.900 m)

With the establishment of Indigenous unit at Gasa BHU, one In-charge is already posted at Gasa. The newly constructed BHU at Gasa has only three units of staff quarter which are already occupied by HA, ANM and BHW. Therefore, one more staff quarter for Gasa BHU is required to be constructed during the 9th Plan.

The Laya BHU has been constructed in Govt. vacant land in the heart of villages adjacent to Community School. The location is marshy during summer and spring water comes out from every corners. In order to prevent the water logging, proposal of constructing drainage is kept during the 9th Plan.

Fencing of Lunana BHU (0.150 m)

The Lunana BHU is not fenced so far. In order to keep away stray animals, the proposal of construction of compound fencing for the BHU is proposed in the 9th Plan.

Strengthening of reproductive health service

There is a dramatic progress in the field of reproductive health care activities as indicated by the decline in birth rate. Therefore, the following three activities needs to be carried out seriously as follows:

- Regular FP and related activities need to be carried out at the community level.
- Counseling and Interpersonal Communications will be emphasized for those individuals and couples having more than 3 children and those with too close birth spacing.

Strengthening of sanitation/hygiene

The sanitation/hygiene at the community level has not improved much. The water supply systems are not being looked after properly. The separation of animal sheds from the houses could not be fully achieved. The waste disposal practices are improper and unacceptable in most of the places. Kitchen gardening at every household is gaining momentum. To address the above problems, the following areas shall be focused:

- Periodic health education through mass cleaning campaign to improve the sanitation and hygiene status in the villages;
- Adequate distribution of IEC materials to general public;
- Revitalization of the role of Tshogpas and VHWs at the community level;
- Constant supervision by the health staff;
- Regular health education session at all levels, in the BHUs, ORCs and during meeting, etc; and
- Taking administrative action from Dzongkhag Authority with those who do not follow the rules of maintaining sanitation and hygiene conditions.

2.4.5.1 Budget estimates

Sl.	Programmes/Activity	Unit	Target	Outlay			Remarks
#				Curr.	Cap.	Total	
1	Construction of BHU	No	1		3.800	3.800	Damji
2	Construction of staff quarter	No	1		0.600	0.600	Gasa BHU
3	Furniture				0.150	0.150	
4	Fencing of BHU	No	1		0.150	0.150	Lunana BHU
5	Construction of drainage	Meter	250		0.250	0.250	Laya BHU
6	Supply of solar	Sets	30		1.100	1.200	All BHUs
7	Purchase of ambulance	No	1		1.250	1.250	
8	Purchase of a Scooter	No	1		0.035	0.035	
9	Drugs & Non-drugs				0.000		
10	Incountry workshops and						
	seminars				0.000		
11	Observation of global days					0.000	
12	Establishment cost*			11.443		11.443	
	Total			11.443	6.335	17.778	

* Includes all recurrent costs

2.4.6 Urban Development & Housing Sector

2.4.6.1 Background

Gasa has a small population and a small town comprising presently of 10 shops. During the 8th Plan, the Dzongkhag has demarcated the Municipal boundary with separate commercial and residential zones. There are already several applications seeking plots for commercial as well as residential purposes. The town will be further developed once the road reaches Gasa.

2.4.6.2 Programmes

Construction of urban water supply (3.000 m)

The urban center at Gasa has the Rural Water Supply Scheme covering all the existing government institutions, private houses and commercial establishment in the town area. With the increase in the number of government institutions and commercial housing, the water supply is in acute shortage. Therefore, the Dzongkhag proposes to construct a Urban Water Supply system for the this area.

Construction of market shed (1.500 m)

With the coming up of motorable road to Gasa, the urban area shall be expanded. Land demarcation for 30 commercial and 45 residential plots has already been completed. Public toilets has also already been constructed. Once the plots are developed and buildings constructed, there is an immediate need for Sunday market. As such, the Dzongkhag proposed for the construction of 10 market sheds like in other Dzongkhags.

Construction of town drainage system (1.200 m)

Presently there is no drainage system for storm water and sewerage. With the completion of urban water supply, the outlet for disposal of used water should be made properly. Based upon the size of the town area, the Dzongkhag propose to construct 1 kilometer of drainage system during the 9th Plan.

Construction of town Footpath (1.600 m)

At the moment, the Gasa has a small commercial area with 12 shops. In the past urban development activities like plot demarcation, plot allotment, town water supply and toilets were taken up. As such, construction of footpath is proposed in the 9th Plan.

Solid Waste System (0.100 m)

Construction of solid waste disposal for the commercial area as well as residential areas shall be carried out in the 9^{th} Plan.

Site development (0.300 m)

The present landscape of the urban area has to be developed so that construction of buildings can be carried out smoothly. With the roads coming up, it is expected to do site development within the 9th Plan and completion of town settlement.

Housing (2.000 m)

In order to implement Municipal rules and regulations efficiently and effectively, a separate office cum residence for the UDHD is proposed for construction in the 9th Plan.

2.4.6.3 Budget Estimate

Sl. No.	Programme/Activity	Unit	Target	Outlay (in million)			Remarks
				Current	Capital	Total	
1	Construction of Urban Water						
	supply system.	No.	1		3.000	3.000	
2	Construction of Hat sheds.	No.	10		1.500	1.500	
3	Construction of urban						
	drainage system	Km	1		1.200	1.200	
4	Site development				0.300	0.300	
5	Footpath	Km	2		1.600	1.600	
6	Solid Waste System				0.100	0.100	
7	Housing				2.000	2.000	
8	Establishment cost*			0.228		0.228	
	Total			0.228	9.700	9.928	

* Includes all recurrent costs

2.4.7 Telecommunication

Only the Dzongkhag Headquarters (Goenkhatoe Gewog) is connected with Telecommunication facility with 54 telephone lines and other three Gewogs are connected with wireless equipment.

All gewogs in the Dzongkhag are far away from the Dzongkhag Headquarters. During the GYT and DYT, the communities have proposed to have telephone connection during 9th Plan in every Gewog. Even though, the Gewogs are connected with Wireless sets, the communication is poor. The wireless stations are located far away from Gup's office and extension centers. Delivery of mails through postal service takes more than 15 days in some area during summer season and some places are completely cut-off for almost 7 months during autumn, winter and spring. Therefore, the proposal of installing telephone in all Gups' offices is submitted during the 9th Plan. Once, the Gup's office is connected, other interested community members will install as required. At Khamae gewog, JDNP, RNR center, BHU, Schools will also need the telephone connection. Similarly at Laya and Lunana gewogs, Schools, BHUs, RNR centers shall be connected with the telephones.

2.4.8 Roads (4.061 m)

Motorable road from Tarshithang to Damji is under construction from the 8th Plan under the Royal Command. The construction could not take place as scheduled since the alignment was running through Takin habitat area and moreover the road was not benefiting rural villages. Therefore, the alignment has been changed and around six villages will be connected with the road. The length of the road has been increased from original 12 km to 18 Km and so far only around 10 Km of the road has been constructed.

Even though, the road construction from Trashithang to Damji was planned for completion within the 8th Plan, it could not be completed due to change in alignment because of the reasons explained above, clearance procedures and delay in awarding contract. During the 9th Plan, it is proposed that the road construction be completed upto Gasa dzong, which involves completion of Trashithang-Damji road and construction of additional 35 Km from Damji to Gasa. The construction of this road would be carried out by the Department of Roads. A sum of Nu.4.061 million is kept as establishment cost for Road sector.

Due to absence of motorable road, the Dzongkhag could not bring socio-economic development at par with other Dzongkhags. The road would also facilitate visit of foreign/local tourists to the Hot Spring (Tshachu) and Laya and Lunana trekking.

2.4.9 Power

Gasa has only solar power for both domestic/office lighting. Feasibility studies were carried out for the construction of Mini Hydel Project at Gathana (Goenkhamae Gewog), at Zameyna (Goenkhatoe Gewog) and at Laya. The Dzongkhag proposes for the construction of HV/LV transmission line from Sirigang (Punakha) to Damji and Gasa in the event the government is not able to construct the above studied mini hydel stations. The programmes will be implemented directly by the Department of Power.

2.4.9.1 Purchase of 50 solar sets (2.500 m)

The next option opted by the people is the purchase of solar sets for all four Gewogs including the urban center. Based upon the reliability of solar sets which were installed in the 8th Plan, the rural communities have proposed for the supply of solar sets in the 9th Plan. If, the proposal of HV/LV lines and Mini hydel stations comes through then only 50 sets of solar would be required for Lunana Gewog. A budget of Nu.2.5 million would be required to purchase of 50 solar sets as detailed above.

2.4.10 Dzongkhag administration and management

2.4.10.1 Background

The Dzongkhag administration has 10 sub-sectors headed by Dasho Dzongdag as the Chief Executive. The administrative section manages all the personnel administration and financial disbursement and the technical sectors manage their own programmes and reports to the Dzongdag. In total, the Dzongkhag has 106 staff including all the sectors, administration, finance and extension staff.

The Dzongkhag Administration also looks after the maintenance and rehabilitation of 13 lhakhangs in four Gewogs.

2.4.10.2 Programmes

Capacity building

In order to acquint the staff and DYT/GYT members with the government policies, directives etc, the Dzongkhag has kept provision to meet the expenses incurred to conduct the training / workshops from time to time during the plan period.

Construction of staff quarter (Nu.2.000 m).

At least construction of five units of staff quarters are proposed during the 9th Plan. The Dzongkhag being located away from motorable road, the local people have not constructed any buildings for rental purposes. Presently, the staff are accommodated in temporary sheds with one living room cum kitchen. Therefore, if government approves, the Dzongkhag wish to construct 5 units of staff quarters under Dzongkhag Administration and Management.

Construction of store cum Guest house at Damji (Nu.0.630 m)

The only motorable road from Trashithang to Damji under the Royal command is expected to be completed within 8th Plan. Once, the road reaches to Damji, most of the construction materials will be stored at Damji and only materials for Lunana will be stored at Trashithang (the existing store). Place like Damji does not have any facilities like shops, hotel and restaurant. Therefore, it is imperative to construct a Dzongkhag store cum Guesthouse to accommodate staff during transit from Gasa to other Dzongkhags.

Construction of Immigration check-post at Tarshithang (Nu.1.500m)

Trashithang being both the entry and exit point for the Dzongkhag, it is felt necessary to construct a joint check-post comprising of RBP, Forest, Revenue and Immigration so that import/export and inspection on security reasons can be made. Therefore, a sum of Nu.1.5 million is proposed for the above construction.

Construction of transit camps (Nu.1.800m)

The journey through mule track from Laya to Lunana takes 6 days. There are no villages and proper sites to spend the night while traveling. The proposal during the 9th Plan is to construct 4 transit camps at essential areas. Although, there is need for more camps but seeing the capacity of the people, it is proposed to construct only 4 camps. It is also proposed that the fund may be made available from JDNP.

Electrification of Dzong and staff quarters (Nu.2.000 m)

It is envisaged that during the 9th Plan either transmission line from Sirigang (Punakha) or Mini hydel will be commissioned for the electrification of Gasa. Therefore, the proposed budget is meant for the electrification of Dzong, Dzongdag's residence and staff quarters.

Dzong site development including lake (Nu.0.300 million)

There are numerous areas to develop the Dzong and the Tsho (lake). An outpost for the duty near the gate is essential, Plantation of trees around the lake, waterwheel and cleaning of the lake are the major works foreseen. Therefore, a sum of Nu.0.300 m is kept under provision during the 9FYP.

Renovation of dochey & cheri (Nu.0.500 m)

The annual Tshechu of Gasa Dzongkhag is conducted at Phulakha lhakhang and at Trashithongmoen Dzong. The present dochey and chari were made long time ago and not properly laid. Cheri around the Dzong need repair. Important meetings are also conducted in this area. Therefore, it is proposed to redo the dochey and chari in proper manner in the 9th Plan.

Renovation of lhakhangs (Nu.1.800 m)

Even in the 8th Plan, the Dzongkhag has carried out the renovation of lhakhangs. However, there are still numerous lhakhangs, which needs attentions for renovation and restoration. The people are eager to receive government assistance for the renovation of their lhakhangs. Therefore, basing upon the people's participation and capacity of the technical manpower in the Dzongkhag, Nu.1.800 m is kept under provision during the 9th Plan.

Restoration of Wapcho Dzong (Nu.0.500 m)

During Mid-Term Review of Gasa Dzongkhag, Hon'ble Home Minister has highlighted the importance of restoring Wapcho Dzong which is opposite to Trashithongmoen Dzong. The Dzongkhag officials during the formulation of 9th Plan proposal at Goenkhatoe and Goenkhamae Geog has visited the site and found it to be of great importance to restore like Drugyel Dzong in Paro. Gasa being a tourist spot, restoration of the Dzong would be of great value from different angles. Therefore, restoration of Wapcho Dzong is proposed in the 9th Plan.

Construction of Cham shed & laying of dochey at Phulakha (Nu.2.000 m)

As mentioned earlier, the Annual Tshechu of Gasa is conducted at Phulakha as well as at Dzong. The Phulakha lhakhang is a government lhakhang, which was renovated in the 8th Plan. However, so far the courtyard is not laid with dochey and no shed is constructed for the champas. Therefore, it is proposed to carry out the above work with a budget proposal of Nu.2.000 m. in the 9th Plan.

Improvement of cremation ground (Nu.0.200 m)

Gasa Dzongkhag is also having a famous Duthroy (cremation ground). So far, there were no proposals to improve the ground like in other areas. Based upon the need and capacity of the Dzongkhag, water supply was given, though not in the plan. The DYT/ GYT members felt necessary to improve the cremation ground with basic necessity like roofing, kitchen and prayer room. It is accepted by the members that only Nu.0.200 m will be provided through government and rest will be contributed by the community for the completion.

Maintenance of Tshachu (Nu.0.500 m)

Gasa Tshachu being one of the famous Hot Springs in the country, the Dzongkhag felt necessary to keep a minimum budget provision. The budget provision includes for similar Tshachu at Lungo (Laya) and Wachey (Lunana).

Purchase of fire hydrant (Nu.0.750 m)

So far, the Dzongkhag does not have any equipment to prevent fire hazard. As a precautionary measure, the Dzongkhag has proposed to procure transportable fire extinguishers, which is easily available in the market. A sum of Nu 0.075 million is proposed.

SI.	Programme / Activity	Unit	Target	Budget			Remarks
No.				Current	Capital	Total	
1	DYT/GYT training						
2	Constructions:						
	a) Staff quarter	Unit	5		2.000	2.000	Gasa
	b) Guest house cum store at	No	1		0.630	0.630	Goenkhamae
	Damji						
	c) Check-post at Tarshithang	No	1		1.500	1.500	Goenkhamae
	d) Transit camps	No	4		1.800	1.800	Lunana
	e) Dzong & staff quarters	No	6		2.000	2.000	Gasa
	electrification						
3	Culture & tradition:						
	a) Reno.of dochey and cheri.	No	1		0.500	0.500	
	b) Dzong site and lake	No	2		0.300	0.300	
	development.						
	c) Maint. Of Tshachus	No	10		0.500	0.500	
	d) Reno. Of lhakhangs	No	4		1.800	1.800	
	e) Repair of Wapcho Dzong.	No	1		0.500	0.500	
	f) Tshechu cham shed &	No	1		2.000	2.000	
	dochey at Phulakha.						
	g) Improvement of cremation	No	1		0.200	0.200	
	ground.						
4	Improvement of						
	Communications:						
	a) Telephones	No	4				At gups
	b) Motorable road	Km	30				offices.
							Damji to
							Gasa.
6	Purchase of Fire hydrant	No	15		0.075	0.075	Dzongkhag
7	Establishment			31.598	0.000	31.598	
	Total			31.598	13.805	45.403	

2.4.10.3 Budget Estimates

3 Budget Estimates

3.1 Dzongkhag plan budget estimates

Sl.#	Sector		Outlay					
		Current	Capital	Total	Remarks			
1	Agriculture	8.211	1.570	9.781				
2	Livestock	10.302	4.270	14.572				
3	Forest	2.877	1.200	4.077				
4	Education	29.012	76.267	105.279				
5	Health	11.443	6.335	17.778				
6	Roads	4.061	0.000	4.061				
7	Post and Telecom	0.000	0.000	0.000				
8	Power *	0.000	2.500	2.500				
9	Trade and Industry	0.000	0.000	0.000				
10	UDHS	0.228	9.700	9.928				
11	Dzongkhag Administra.	31.598	13.805	45.403				
	Total	97.732	115.647	213.379				

3.2 Geog plan budget estimates

Sl. #	Sector				
		Current	Capital	Total	Remarks
1	Agriculture	0.000	4.390	4.399	
2	Livestock	0.000	1.980	1.980	
3	Forest	0.000	0.690	0.690	
4	Education	0.000	1.540	1.540	
5	Health	0.000	1.801	1.801	
6	Roads	0.000	17.309	17.309	
7	Geog Administration	1.192	2.400	3.592	
	Total	1.192	30.109	31.311	

4. Plan Implementation, Monitoring and Evaluation

The DYT Chathrim 2002 delineates specific roles and responsibilities to all functionaries involved in development administration and management in the Dzongkhag. It is, however, deemed necessary to underscore some essential processes that must be observed in executing the above roles and responsibilities.

The financial powers and authority of the Dzongkhag Administration for the implementation of the planned activities are also enshrined in the DYT Chathrim 2002.

4.1 Plan implementation

The plan implementation shall be done through the mechanism of Annual Planning and Budgeting.

The process is as underlined below:

4.1.1 Annual and Quarterly Plans and Budgets

Based on the Dzongkhag Five-Year Plan, the Dzongkhag Administration will prepare the draft Annual Plan and Budget (AP&B) using the approved format and schedule. The Dzongkhag Planning Officer will coordinate the preparation of AP&B. After the DYT approves the draft Dzongkhag AP&B, which should incorporate the Gewog Annual Plan and Budget received from the GYTs, it will be submitted to the Planning Commission Secretariat and the Ministry of Finance.

The Planning Commission Secretariat will coordinate meetings at the central level with the Ministry of Finance and other line ministries for government approval of Dzongkhag AP&B and release of funds. Once the approval is obtained, the Dzongkhag Administration will develop a Quarterly Work Plan and Budget (QWP&B) for the dzongkhag activities in consultation with the sectoral staff. The draft QWP& B must be approved by the DYT. The Dzongkhag Administration will implement the approved QWP&B with lead roles taken by the concerned sectoral staff for their respective sectors.

4.1.2 Monitoring and evaluation

The DYT Chathrim 2002 mandates the DYT for overall monitoring and evaluation of the planned development activities within the Dzongkhag. In order for the DYT to carryout these M/E functions, it is necessary to have the following specific M/E tasks for different functionaries within the Dzongkhag Administration:

4.1.3 Monitoring

The sectoral heads, co-ordinated by the Dzongkhag Planning Officer, will be responsible for progress and performance monitoring of the planned activities. The Dzongkhag Sector heads should visit the Gewogs at least once a month to monitor the progress of the activities and the technical performance of their sector staff.

Based on the quarterly progress reports the dzongkhag receives from the Gewog Administration, and based on the frequent visits to the Gewogs and the activity sites, quarterly sectoral progress reports will be submitted to the concerned ministry. It should be mandatory for the ministries to provide feed-back to the Dzongkhags on the reports received with copies endorsed to the Planning Commission Secretariat.

There shall be a regularly organised forum of quarterly review workshops with the technical staff and other responsible persons for implementation, where the progress and the implementation of all activities shall be reviewed. Through this process, problems and bottlenecks should be discussed and resolved. The Dzongkhag administration will seek technical back-up services from relevant central agencies when required. At the end of the year, the Dzongkhag administration will prepare the Annual Dzongkhag Progress Report (ADPR) and submit it to the government through the Planning Commission and Ministry of Finance.

4.2 Evaluation

To assess the impact of dzongkhag development projects and programs, the Planning Commission, Ministry of Finance, Sectoral Ministries and Agencies will launch periodic evaluation missions in coordination with the Dzongkhag Administration.