



**International Fund for saving the Aral Sea**  
Executive Committee  
Interstate Coordination Water Commission  
Interstate Commission for Sustainable Development

**Program of actions on providing assistance  
to the countries of the Aral Sea Basin  
for the period of 2011-2015 (ASBP-3)**

**Almaty 2012**

**The document represents the summary list of project proposals from the Program of actions on providing assistance to the countries of the Aral Sea Basin for the period of 2011-2015 (ASBP-3) which was developed in compliance with Joint Statement of the Heads of States-founders of International Fund for saving the Aral Sea of 28 April 2009 and approved by the IFAS Board.**

# JOINT STATEMENT OF THE HEADS OF IFAS STATES - FOUNDERS

## **Joint Statement of the Heads of the states - founders of the International Fund for saving the Aral Sea**

The meeting of the Presidents of the Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Turkmenistan, and the Republic of Uzbekistan took place in Almaty on April 28, 2009.

During negotiations which took place in the atmosphere of mutual understanding, trust, friendship, and structural cooperation, the Heads of the States of Central Asia discussed issues related to the activities of the International Fund for Saving the Aral Sea, which was established in 1993, with the objective of to implement joint practical activities and programs to address the Aral Sea crises and to improve environmental and socio-economic conditions within the Aral Sea basin.

Heads of the States - Founders of the IFAS, further named "Parties",

guided by centuries-old good neighborly relationships and common history, culture and traditions, good brotherhood and strategic partnership between countries that are responsible for the utmost interests of the people of the region,

based on rich experience of fruitful collaboration and expressing mutual interest to bring inter-government relationships to the higher level,

striving towards mutual assistance and support for achieving Millennium Development Goals and improving socio-economic and environmental conditions within the Aral Sea basin,

emphasizing that the development of mutual collaboration of the states of Central Asia has high importance for ensuring sustainable development and regional safety,

taking into account climate change, intensive degradation of glaciers and snowfields of the Region and water consumption related to the population growth and the development of economies of the countries of the Region,

emphasizing importance of the efforts by the countries of the Region on integrated use and conservation of water resources, combating desertification and land degradation for solving problems of the Aral Sea basin,

giving high priority to project implementation within the framework of the IFAS and taking into consideration interests of the Region,

taking into account that use of water resources of the Central Asian Region is implemented within the interests of all the states-stakeholders of the IFAS by following generally acknowledged principles of the international law,

taking into account activities of the IFAS and its structural organizations oriented towards strengthening regional collaboration on improvement of socio-economic and environmental conditions within the Aral Sea basin,

expressing satisfaction with the accepted General Assembly Resolution of the UN of December 11, 2008 on giving the International Fund for Saving Aral Sea the status of observer in the UN General Assembly,

expressing gratitude to the specialized structural organizations of the UN, international financial institutions, donor countries, other partners in development of assistance and support provided for the countries of the Region,

based on the common endeavor to make contributions for overcoming consequences of the crisis in the Aral Sea basin,

# JOINT STATEMENT OF THE HEADS OF IFAS STATES - FOUNDERS

## **make the following statement:**

1. Parties emphasize the importance of IFAS, activities which provide the possibility to coordinate and solve principal issues through collaboration to overcome the consequences of the crisis of the Aral Sea basin. IFAS will enhance and strengthen the collaboration with the institutions of the UN system including UN Regional Center for Preventive Diplomacy and other international organizations.

2. The Parties express their readiness to further improve the organizational structure and the legal framework of IFAS to improve its efficiency and better interaction with financial institutions and donors to implement projects and programs related to the addressing the Aral Sea basin crisis.

3. Parties task the Executive Committee jointly with the Interstate Commission for Water Coordination, Interstate Commission for Sustainable Development of the IFAS with participation of national experts and donors to develop a Program of actions for the period 2011-2015 (Aral Sea Basin Program - 3) to provide assistance to the countries of the Aral Sea basin and submit it for consideration and approval by the States - Founders of the IFAS.

4. Parties will continue collaboration targeted to the improvement of the environmental and socio-economic situation in the Aral Sea basin.

5. Parties once again confirm their interest in the development of mutually acceptable mechanism on integrated use of water resources and environmental protection in Central Asia taking into account the interests of all states in the region.

6. Parties stressed that constructive negotiations which took place in Almaty in the atmosphere of openness and mutual understanding contributed significantly to the further development of the traditionally known good relationships and mutually beneficial collaboration of the states- founders of the IFAS in solving the problems of the Aral Sea.

7. Heads of the States express their gratitude for the warm reception and welcome by the President of the Republic of Kazakhstan N.A. Nazarbaev in the hospitable land of Kazakhstan.

*Almaty, April 28, 2009*

**President**

**of the Republic of Kazakhstan**

**N.A. Nazarbaev**

**President**

**of the Kyrgyz Republic**

**K.S. Bakiev**

**President**

**of the Republic of Tajikistan**

**E. Rakhmon**

**President**

**of Turkmenistan**

**G.M. Berdymukhamedov**

**President**

**of the Republic of Uzbekistan**

**I.A. Karimov**

# STATEMENT BY THE DONORS AND IMPLEMENTING AGENCIES

## Statement by the Donors and Implementing Agencies<sup>1</sup> on the Occasion of the Presentation of the Third Aral Sea Basin Program (ASBP-3)

Almaty, 9 December 2010

The shrinking of the **Aral Sea** caused one of the gravest man-made ecological catastrophes of the 20<sup>th</sup> and 21<sup>st</sup> centuries. It has affected the health and livelihoods of millions of people living in the Aral Sea Basin. More generally, water and energy resources issues have already impacted negatively on regional cooperation, and as a consequence, on the economic growth of the countries of Central Asia, and in the coming decades, **unsustainable use of water resource and the consequences of climate change** might further aggravate the environmental and economic situation in the region. In the long run only **regional efforts** can achieve environmental sustainability and effective climate-change adaptation in the Aral Sea basin.

Following the April 2009 Summit Meeting of Heads of States Founders of the International Fund for Saving the Aral Sea, the Third Aral Sea Basin Program (**ASBP-3**) was developed by the Executive Committee (EC) of the International Fund for Saving the Aral Sea (IFAS) and regional organizations, with permanent involvement of the Donor community. ASBP-3 reflects the priorities of the countries and offers an opportunity to IFAS member states to more effectively combine national and regional efforts to improve the environmental and socio-economic situation and achieve environmental sustainability in the Basin. Donors **fully support** the Program and are ready to work together with EC IFAS and the Governments of IFAS member states in its implementation. The availability of Water resources is not *per se* the problem for Central Asia. The challenge is to ensure more effective and integrated management and to share and use water resources for the benefit of all stakeholders.

**EC IFAS has an important role** to play in ASBP-3, as the platform for dialogue and coordination among Central Asian countries on water management issues. For this reason, the institutional structure and legal basis of EC IFAS should be strengthened. Thus, it would be enabled to provide stable, professional support as well as the required transparency and efficiency for the implementation of ASBP-3.

Donors acknowledged that there is a gap between ASBP-3 needs and available resources but the proposed program provides an essential framework to guide future assistance to the region. Donors offer their continued support, it being understood that specific funding decisions will be taken by each donor in accordance with budgetary possibilities and relevant financing procedures. This support includes further strengthening both the institutional and development capacities of EC IFAS and other IFAS technical bodies. At the same time, it is expected that additional funding for ASBP-3 will also be made available by the Central Asian countries, using their own resources.

**Raising donor coordination** to a new level is necessary to ensure the most effective use of available resources and attraction of additional funding. EC IFAS should play a key role in donors' coordination through information exchange, research, monitoring and evaluation.

Donors see their cooperation and dialogue with IFAS member States in the ASBP-3 framework as an opportunity to elaborate mutually advantageous, **environmentally and socially responsible solutions to problems linked to the use of shared water resources** and facilitate effective **climate change** mitigation and adaptation measures.

Finally, donors recommend the establishment of a regular joint process for taking stock and reviewing the progress on the implementation of the approved ASBP-3.

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<sup>1</sup> Hereafter referred to as 'the Donors'

# Decision of the Board of the International Fund for saving the Aral Sea regarding the approval of ASBP-3

## РЕШЕНИЕ

### Правления Международного Фонда спасения Арала

#### Об утверждении Программы действий по оказанию помощи странам бассейна Аральского моря на период 2011-2015 годы (ПБАМ-3)

1. Утвердить Программу действий по оказанию помощи странам бассейна Аральского моря на период 2011-2015 годы (ПБАМ-3).

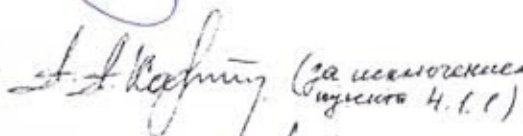
2. Исполнительному комитету МФСА совместно с Межгосударственной координационной водохозяйственной комиссией и Межгосударственной комиссией по устойчивому развитию обеспечить реализацию ПБАМ-3.

За Республику Казахстан



У. Шукеев


За Кыргызскую Республику



(за инициативой  
инициатора Ч. Г. Г.)

А. Карашев

За Республику Таджикистан



с учетом замечаний и предложений

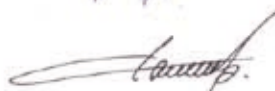
М. Алимардон

За Туркменистан



А. Язмырадов

За Республику Узбекистан



Э. Ганиев

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# SUMMARY

## Background and Approach

Since the early 1990s the issue of water in the Aral Sea Basin has been seen in the context of regional security and stability. Water resources in Central Asia are not enough and they are not used effectively. As a result, they become a potential source of disputes.

Recognising this situation, the Heads of the Central Asia states established the International Fund for saving the Aral Sea (IFAS). The member states of IFAS are: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

In the last third of XX century, the Central Asia faced one of the planet's worst environmental disasters - shrinking of the Aral Sea, formerly the World's fourth-largest lake. The shrinking of the Aral Sea was caused by the excessive diversion of water for irrigation purposes of virgin lands in the basin. During 1960 and 1990, the irrigated area increased almost by two times (from 4,3 mln ha to 8,2 mln ha), which resulted in the doubled increase of water withdrawal for irrigation. This led to the reduction of the water level in the Aral sea by more than 20 m, while the water area has reduced to more than 3 times.

At present, the irrigated area in the Aral sea basin, taking into account the actual number of population living in there is as follows: Kazakhstan – 0,18 ha per person, Kyrgyzstan – 0,19 ha/person, Tajikistan – 0,1 ha/person, Turkmenistan – 0,26 ha/person, Uzbekistan – 0,15 ha/person.

The objectives of IFAS and its organizations are implementing joint actions and perspective programs to overcome the consequences of the Aral Sea crisis and improving the ecological and socio-economic situation in the Aral Sea Basin.

Guided by the decision of the Heads of States of April 28, 2009, the Executive Committee of IFAS (EC IFAS) jointly with the Interstate Commission for Water Coordination (ICWC), Interstate Commission for Sustainable Development (ICSD) with participation of national experts and donors drafted the ASBP-3.

Under the guidance of the EC IFAS Chairman Saghit Ibatullin the country representatives to EC IFAS Murat Bekniyazov, Marat Narbayev, Manas Omorov, Khairullo Ibodzoda, Mavlon Kazakov, Kurbangeldy Ballyev, Normuhammad Sheraliev, as well as national experts from CA countries, international consultants: Anatoly Krutov, Andriy Demidenko, Michael Kalinin and others were directly involved in this joint work.

The project preparation process involved extensive consultations among national and international experts to develop program priorities and project proposals. EC IFAS was in continual dialogue with the donor community, in particular with the World Bank, European Union, USAID, GTZ, and SDC, in order to get their comments and ideas.

Thus, ASBP is a joint effort and an on-going process, which involves all national governments of the Region, civil society and the international donor community.



# SUMMARY

ASBP-3 works in four directions:

- Integrated Use of Water Resources
- Environmental protection
- Socio-economic development
- Improving institutional and legal instruments

The ASBP-3 Program reflects the priorities of the IFAS member states. It was elaborated for the period of 2011-2015 years and aims to familiarize all parties concerned with the challenges facing the Aral Sea Basin, including decision makers, representatives of international financial institutions, international development agencies, specialists, and the public at large. The ASBP-3 program includes future regional projects to be mainly financed by international donors; on-going national projects supported by national governments; and on-going regional and national projects funded by international donors.

The main objective of ASBP-3 is to improve the living conditions of the people in the region. In other words, to improve the socio-economic and environmental situation by applying the principles of integrated water resources management, to develop a mutually acceptable mechanism for a multi-purpose use of water resources and to protect the environment in Central Asia taking into account the interests of all the states in the region.

EC IFAS will coordinate and inform the donor community on priority activities with regard to the four directions of ASBP-3, and implement projects. In addition, EC IFAS will monitor the implementation of ASBP-3.

Coordination of all implementing projects, as well as coordination of the current Program are done by IFAS Board.

## **EC IFAS: Mission, Vision, Strategy**

The mission of EC IFAS is to coordinate cooperation at national and international levels in order to use water resources more effectively, and to improve the environmental and socio-economic situation in the Aral Sea Basin. EC IFAS presents IFAS in international organizations and institutions.

The overall mission of EC IFAS is serving the people of the Aral Sea Basin. The main concept of EC IFAS activities is "Improved living conditions for the people of Central Asia".

The strategy of EC IFAS is to work more effectively to fulfill this mission. However, in order to successfully implement the ASBP-3 projects, the capacities of EC IFAS and its bodies need to be strengthened.

# 1. INTRODUCTION

Located in the heart of Central Asia, the Aral Sea Basin consists of the drainage area of the two major rivers, Amu Darya and Syr Darya. The rivers descend from the slopes of the Tien Shan Mountains and the Pamirs. They run through Afghanistan, Tajikistan, Kyrgyzstan, Turkmenistan, Uzbekistan and Kazakhstan.

The Amu Darya is in the south of the basin. The river is 2,500 km long, with a basin area of more than 300,000 km<sup>2</sup>, and has a mean annual flow of about 79,3 km<sup>3</sup>/year. Most of the Amu Darya flow (74%) is formed on the territory of Tajikistan, in Afghanistan and Iran is about 14.6% and more than 6.4 % in Uzbekistan, in Kyrgyzstan is 3.0%.

The Syr Darya runs in the north of the basin. It is the longest river in Central Asia and ranks second with regard to water flow. It is 2,790 km long, with a basin area of almost 300,000 km<sup>2</sup>. The mean annual flow of 37,2 km<sup>3</sup>/year. Most of the Syr Darya flow (74.2%) is formed within Kyrgyzstan, Uzbekistan contributing 16.6%, Kazakhstan 6.5%, and Tajikistan 2.7%.



# 1. INTRODUCTION

Both rivers flow into the Aral Sea. The delta of the Amu Darya River is located in the northwestern part of Uzbekistan, while the delta of the Syr Darya River is in the southwestern part of Kazakhstan.

Until 1960, the Aral Sea area was about 67,000 square km in size. This made the Aral Sea the world's fourth largest inland water body. Now, the Aral Sea is not a single water body any more. Its northern part is separated by a dam and is sustained by the Syr Darya River. The remaining part is a residual water body with saline water. It comprises a shallow central part and a deeper narrow part stretching along the meridian of the Ustyurt Plateau escarpment.

For Central Asia, water is the key for development. Land has been irrigated for many centuries, with the local people enjoying a centuries-old tradition of cultivating agricultural crops in the harsh dry climate. The Soviet Union doubled the area under irrigation, from around 4 million hectares to 8 million hectares, with irrigated land becoming a major water consumer. Diversion of water for irrigation purposes accounts for more than 90% of the total intake from all water sources.

According to SIC ICWC, in 1960 the total water diversion in the Aral Sea Basin was 60.6 cubic km, while by 1994 it had grown to 116.3 cubic km. From 1960 to 2008, the basin population more than doubled to an estimated figure of almost 60 million today. Increased population and increased irrigated land, as well as deteriorating water infrastructures, have led to what is known worldwide as 'the Aral Sea catastrophe'. This includes health problems, high rates of child mortality, desiccation of the Aral Sea, biodiversity degradation, salt-dust transport from the dry bed of the Sea, and a loss of pastures, fisheries and wetlands.

Under the current conditions the Aral Sea cannot be restored to its former level. However, there is no doubt that greater efficiency in the use and management of water could significantly improve the situation and the trend towards a complete dry-out of the Aral Sea could be reversed.

## 2. IFAS AND ASBP: Regional institutions and programs

### 2.1 History of IFAS

After the collapse of the Soviet Union the Central Asia states established a new framework for sharing and distributing water. On 18 February 1992, the Ministers of Water Resources of the newly independent states issued a Statement in which they declared that joint management of water resources would be carried out in accordance with the principles of equality and mutual benefit.

An Interstate Coordination Water Commission (ICWC) was established following the Interstate Agreement of 18 February 1992. The task of ICWC was to agree on water allocation and water reservoir operations in the basins of the Amu Darya and Syr Darya Rivers. Under this Agreement, the decisions of ICWC must be unanimous. Responsibility for the implementation of the decisions lies with Basin Water Organizations Amudarya and Syrdarya, located in Urgench and Tashkent.

The support of donors in 1992-1994 made it possible to establish the interstate organizations: International Fund for saving the Aral Sea (IFAS) with its headquarters in Almaty, and the Interstate Commission for the Aral Sea (ICAS) with the Executive Committee, headquarters in Tashkent. The role of IFAS was, primarily, to generate funds, while ICAS was in charge of the Aral Sea Basin Program (ASBP). A third body, the Interstate Commission for Sustainable Development (ICSD) with headquarters in Ashgabat, was established in 1993. its major objective was to protect the environment in the region.

In February 1997, a meeting of the heads of the Central States made a fundamental decision to restructure and merge IFAS and ICAS. Decisions were also made concerning the chairmanship of the new Executive Committee, including rotations, location of the Executive Committee and the supply of fees to the Fund. Since IFAS was established in 1997, the Executive Committee has been located in Almaty (1993-1997), Tashkent (1997-1999), Ashgabat (1999-2002), and Dushanbe (2003-2009). Since 2009, it has been based in Almaty.

### 2.2 History of ASBP

#### ASBP 1

The first ASBP was initiated in 1993 and in January 1994, the Program was approved by the Heads of Central Asian States.

In June 1994, Paris hosted a meeting of donors to discuss the draft, which was called a “Program of Actions to improve environmental security in the Aral Sea basin for the next 3-5 years with regard to the socio-economic development of the region”. At this meeting, donors made commitments of more than USD\$400 million to finance this Program.

The main goals of the Program included:

- (i) stabilizing the environment in the Aral Sea basin
- (ii) restoring the disaster zone around the Sea
- (iii) improving management of transboundary waters in the basin
- (iv) developing the capacity of the regional organizations to plan and implement the Program

The Program was aimed at assisting the basin countries in implementing priority issues and strengthening socio-oriented activities giving particular importance to combating poverty and ensuring sustainable development of the region.

## 2. IFAS AND ASBP: Regional institutions and programs

### ASBP 2

ASBP-2 was developed in accordance with the Decision of the Heads of States in Dushanbe on October 6, 2002. This Program set up projects covering a wide range of environmental, socioeconomic and water management issues for the period of 2003-2010.

According to information provided to EC IFAS, from 2002 to 2010, the total contribution from the IFAS country members to the implementation of activities was over 2 billion US Dollars. The Program implementation was also financed by donors, including UNDP, World Bank, Asian Development Bank, USAID, as well as the governments of Switzerland, Japan, Finland, Norway and others.

### 2.3 Lessons Learnt from ASBPs

The main lesson learnt was that the international donor community has to be involved in the preparation and financing of the ASBPs.

Until now the main focus of ASBPs has been on technical issues, with little attention being paid to social, political and institutional issues. There has also been a lack of cooperation among all Central Asian country ministries involved, and local authorities and civil society have not always been part of the decision making process or project implementation. In addition, there were no successful public awareness programs, which should have accompanied the Programs.

Nevertheless, the Programs have made a substantial contribution to establishing relations between the countries of Central Asia and the international donor community. They have also strengthened the capacity of the countries to devise strategies and set priorities for the development of the economy, the social sector and the management of natural resources.

## 3. Aral Sea Basin Program-3

On April 28, 2009, the Heads of the Central Asia states made a joint statement, highlighting the important role of IFAS in coordinating and addressing the fundamental aspects of cooperation to overcome the Aral Sea Basin crisis and strengthen the collaboration with the UN system institutions and other international organizations.

The Heads of States also expressed their commitment to change the organizational structure and contractual and legal framework of IFAS to help improve its performance and to increase its ability to cooperate with financial institutions and donors to implement the Aral Sea related projects and programs.

The statement confirmed that the countries in Central Asia were interested in the development of mutually acceptable mechanisms for the multi-purpose use of water resources and protection of the environment in Central Asia taking into account the interests of all the states of the Region.

It was also decided that EC IFAS jointly with the Interstate Commission for Water Coordination, Interstate Commission for Sustainable Development of the IFAS with participation of national experts and donors to develop a Program of actions for the period 2011-2015 (ASBP-3).

### 3.1 Development of ASBP 3

The ultimate objective of ASBP-3 is to improve the environmental and socio-economic situation of the Aral Sea Basin. This can be achieved by improving the socio-economic and environmental situation by applying the principles of the integrated water resources management to develop a mutually acceptable mechanism for a multi-purpose use of water resources and to protect the environment in Central Asia taking into account the interests of all the states in the region.

The project preparation process involved extensive consultations among national and international experts to develop program priorities and project proposals. It was agreed for ASBP-3 to work in four directions:

Integrated Use of Water Resources.

Environmental protection.

Socio-economic development.

Improving the institutional and legal instruments.

The ASBP-3 was developed by EC IFAS jointly with the Interstate Commission for Water Coordination (ICWC), Interstate Commission for Sustainable Development (ICSD), national experts of CA States and in close cooperation with donor community including World Bank, European Union, USAIDS, GTZ, and SDC to make ASBP-3 a joint effort of the member countries, the donors and the civil society.



## 3. Aral Sea Basin Program-3

The Framework document reflecting the list of criteria for project proposals, ToRs and a general form of the ASBP-3 projects were elaborated by EC IFAS:

- National projects to be implemented within one state and primarily financed from the national budget.
- Regional projects to be implemented in the territory of two or more states.
- Meeting the ASBP goals and objectives.
- Meeting one of the directions of ASBP.
- Linking with the corresponding national and regional policy goals and programs.

EC IFAS asked member countries to prepare project proposals in accordance with the Framework document. In response, EC IFAS received a total of 335 project proposals including 149 proposals for Direction 1; 100 for Direction 2; 71 for Direction 3; and 15 for Direction 4. The proposals were clustered and 47 projects were identified.

### 3.2 Project Proposals

#### 3.2.1 Direction 1 - Integrated Use of Water Resources

The first direction – Integrated Use of Water Resources – includes projects aimed at addressing the problems associated with transboundary water resources management, establishing monitoring systems, modeling and establishing databases, developing basin plans, and ensuring the safety of water facilities.

Integrated Use of Water Resources, taking into account the interests of all states in the region suggests:

- Developing proposals to optimize the management and use of water resources in Central Asia, taking into account environmental factors, effects of climate change to meet the national interests of the Aral Sea basin.
- Improving and strengthening the management of transboundary water resources.
- Modernization, automation and improving technical conditions of water facilities.
- Assisting the countries of Central Asia to address the problem of maintaining a steady condition of the environment in the face of climate change.
- Increased efficiency of water use and amelioration of irrigated lands, reducing the burden on state budgets by reducing the amounts of the cost of maintenance and repair of irrigation infrastructure.
- Improving the quality of hydrometeorological services for weather-dependent sectors of the economy of Central Asia.
- Improving the monitoring system, including collection, transfer, processing, storage and dissemination of hydrological and meteorological information.
- Creating a database and computer models for the management of transboundary water resources.
- Assisting in the harmonization of monitoring parameters of water resources and irrigated lands.
- Assisting the countries in reducing the risk of natural disasters, including through the strengthening of regional cooperation, improve disaster preparedness and response.

## 3. Aral Sea Basin Program-3

Increased efficiency of decision making, prevention of causes of conflict situations and emerging environmental challenges are among the important outcomes of projects implementation.

Upon resolution of the above issues, efficiency of water use will be improved by reducing unproductive losses, efficiency of irrigation systems and the technical level of operation of irrigation systems will be increased.

Through the above activities, crop yields will be increased. Systems of monitoring and early warning will be modernized, thus improving the safe operation of hydraulic structures for the long term.

### 3.2.2 DIRECTION 2 - Environmental Protection

The second group of projects addresses the problems associated with the environmental protection and improvement of the environment, including biodiversity conservation, and natural disasters risks reduction.

Expected outputs are:

- The environment in the deltas of the Syr Darya and Amu Darya improved.
- Mountain environments improved.
- The environment and productivity of pastures improved.
- A regional information system on the environment established.

### 3.2.3 DIRECTION 3 - Socio-economic Development

The third group of projects addresses socioeconomic issues, including a focus on improving living conditions, ensuring sustainable development, increasing employment, and improving water and power supply systems, education and public health.

Expected outputs are:

- An improved access to safe drinking water.
- For the rural population: establishment and/or development of private small enterprises, creation of new jobs, and increased labor efficiency.
- An improvement in the quality of medical services.
- An improvement in the effectiveness and quality of education in schools and pre-school facilities in rural areas.



## 3. Aral Sea Basin Program-3

### 3.2.4 DIRECTION 4 - Improving the institutional and legal mechanisms

This direction includes projects aimed at addressing the issues associated with institutional development, improving regulatory frameworks and institutional structures, strengthening the capacity of regional IFAS bodies, developing the policy and strategy for sustainable development, training and capacity building, and increasing public awareness.

Expected outputs are:

- Conditions for a transparent and mutually beneficial regional dialogue and cooperation, including setting up a sectorial dialogue between governments established.
- Conditions for a free exchange of opinions on vital issues, including on strengthening ties between stakeholders, ministries and agencies, academic and cultural communities, and the public at large, established.
- Institutional mechanisms and contractual and legal frameworks of regional cooperation in water resource management improved.
- A greater understanding of the most important issues of regional cooperation, including the situation assessment, causes of the problem of regional cooperation, and mutually acceptable ways to resolve these problems identified.
- Proposals to improve national legislative acts and to draft legislative and regulatory documents in order to improve the efficiency of activities aimed at adapting to and mitigating the consequences of climate change in the context of the UN Framework Conventions on Climate Change developed.
- A National regulatory framework for the safety of water facilities in the countries of Central Asia improved.
- The capacity of EC IFAS strengthened.
- A Prototype of the single information and analysis system for the water sector established.
- A Communication Strategy for stakeholders and the public established.
- Training systems for the water sector and the hydrometeorological services in Central Asia improved.

It should be noted that the above Directions complement each other in such a way that the whole is greater than the sum of the parts, and that by implementing proposed projects across these different directions, an overall synergy is achieved.

## 4. List of Projects Proposed

### Aral Sea Basin Program for the period of 2011-2015 (ASBP-3)

#### Projects Proposed

Directions	Themes	Reference Number	Project Proposals	Countries, participating in the project
1. Integrated use of water resources	1.1. Information system improvement, including hydromet modernization, database development, development of united methodology for water demand forecast	1.1.1	Water and Economic Development: Demand Management	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		1.1.2	Improvement of database and simulation models for transboundary water resources management	Kazakhstan Kyrgyzstan Turkmenistan Uzbekistan
		1.1.2*	Improvement of database and simulation models for water resources management	Tajikistan
		1.1.3	Capacity building for improved management of transboundary water resources	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		1.1.4	Improvement of irrigation infrastructure monitoring system	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		1.1.5	Hydromets modernization	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		1.1.6	Improvement of Monitoring System for Irrigated Lands	Kazakhstan Tajikistan Turkmenistan Uzbekistan
		1.1.6*	Improvement of monitoring system levels and groundwater pressures	Kyrgyzstan

\* - alternative projects, proposed by the interested countries

1. Integrated use of water resources	1.2. Application of integrated water resources management (IWRM) principles, including development of national and regional visions of water use, basin plans, water quality conservation and protection, manuals and strategies for efficient water use, improvement of water resource management at all levels.	1.2.1	Development of National and Regional Concept of the use of Water Resources	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		1.2.2	Integrated management of water resources to meet the needs of water users	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		1.2.3	Strengthening capacity of water users associations	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		1.2.4	Irrigation Rehabilitation	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		1.2.5	Rehabilitation of water facilities	Kazakhstan Uzbekistan Tajikistan	
		1.2.6	Development of feasibility study for construction reservoirs for seasonal and long-term regulation in the Aral Sea Basin	Tajikistan	
	1.3. Dam safety	1.3.1	Dam safety	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
	1.4 Natural disaster risk management	1.4.1	Strengthening regional capacity for disaster risk reduction in Central Asia	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
	2. Environmental protection	2.1. Environmental protection, including assistance in implementation of Kyoto Protocol and climate change adaptation measures	2.1.1	Reforestation in the Aral Sea Basin	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
			2.1.2	Sustainable development and management of wetlands to reduce desertification and restore biodiversity	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
2.1.3			Regional Program for biological resources protection in mountain areas of Central Asia	Kazakhstan Kyrgyzstan Turkmenistan Uzbekistan	

## Projects Proposed

2. Environmental protection	2.1. Environmental protection, including assistance in implementation of Kyoto Protocol and climate change adaptation measures	2.1.3*	Regional Program for protection of mountain ecosystems and biological resources in the runoff formation zone	Tajikistan	
		2.1.4	Integrated management of Syrdarya and Amudarya deltas for biodiversity conservation	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		2.1.5	Development of regional environmental indicators and environmental information system	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		2.1.6	Reduction of greenhouse gases emissions and increase of carbon dioxide absorption in the ASB	Kazakhstan Kyrgyzstan Turkmenistan Uzbekistan	
		2.1.6*	Reduction of greenhouse gas emission in the ASB	Tajikistan	
		2.1.7	Evaluation of snowpack, distribution of the solar radiation and radiation balance in the mountain area of the Central Asia	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		2.1.8	Natural disaster risks reduction in mountain areas	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		2.1.9	Man-made disaster risks reduction in mountain areas	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		2.2. Biodiversity management	2.2.1	Establishment of Regional biological diversity monitoring system	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
	2.2.2.		Conservation of flora endangered species and publication the Red Book of Wild Flora of the Aral Sea basin	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
	2.2.3		Preservation of fauna endangered species and publication the Red Book of Wild Fauna of the Aral Sea basin	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
	3. Socio-economic development	3.1. Sustainable socio-economic development	3.1.1	Increasing employment in rural areas	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan

3. Socio-economic development	3.1. Sustainable socio-economic development	3.1.2	Improvement of grazing lands in the Aral Sea Basin	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		3.1.3	Use of renewable energy in rural areas	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		3.1.4	Use of renewable energy in runoff formation zone	Tajikistan	
	3.2. Water supply, sanitation, and health	3.2.1	Improving access to drinking water for rural population	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
		3.2.2	Improving quality of medical healthcare of rural population	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
	3.3. Assistance in the improvement of education system	3.3.1	Improvement of education in rural areas	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
	4. Improvement of institutional and legal mechanisms	4.1. Institutional development and legal base support for regional cooperation	4.1.1	Improving the organizational structure and the legal framework of IFAS	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan
			4.1.1*	Strengthening the capacity of IFAS regional bodies in order to improve water resources management in the region	Uzbekistan
			4.1.2	National and regional dialogues on Water Conventions	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
4.1.3			Assistance to strengthening cooperation in Central Asia in the field of safety of hydraulic facilities. Preparation of the Agreement on Safety of Hydraulic facilities	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan	
4.1.4			Support the projects aimed at establishing Basin Water Councils for Amudarya and Syrdarya	Kazakhstan Kyrgyzstan Turkmenistan	
4.1.4*			Strengthening cooperation among Central Asian states through the transition to integrated water resources management and establishment of Basin Water Councils for Amudarya and Syrdarya	Tajikistan	

## Projects Proposed

4. Improvement of institutional and legal mechanisms	4.2. The development of mutually acceptable mechanism on integrated use of water resources and environmental protection in Central Asia taking into account the interests of all states in the region	4.2.1	Economic evaluation of integrated use of water resources in Central Asia	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan
		4.2.2	Adaptation of water resources use infrastructure in Central Asia to climate change	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan
	4.3. Capacity building on cooperation and public awareness	4.3.1	Legal and institutional support for establishment of Information System (network) and databases for Aral Sea basin and monitoring of ASBP-3	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		4.3.2	Improvement of Regional Training System for water sector staff	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		4.3.3	Improvement of Regional Training System for staff responsible for Hydrometeorological Services in Central Asia	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		4.3.4	Support to training staff responsible for safety of hydraulic facilities in Central Asia	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		4.3.5	Strengthening capacity of IFAS executive bodies	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan
		4.3.6	Institutional support on periodicals of IFAS bodies	Kazakhstan Kyrgyzstan Turkmenistan Uzbekistan
		4.3.7	Creation of educational and methodical complex to instil respect for the water	Kazakhstan Kyrgyzstan Turkmenistan Uzbekistan
		4.3.7*	Education towards respect for the water	Tajikistan
4.3.8	Public awareness	Kazakhstan Kyrgyzstan Tajikistan Turkmenistan Uzbekistan		

The full version of the Program of actions on providing assistance to the countries of the Aral Sea Basin for the period of 2011-2015 (ASBP-3) is published in the book of 224 pages.

The book consists of 3 chapters, including:

- Regional projects with the terms of reference (TORs), developed by EC IFAS, ICWC and ICSD jointly with donor community and supported in the donor coordination conference, conducted on 3 December 2010.
- Donors' on-going projects implemented in countries.
- Programs, financed from national budgets by the Central Asian countries.