

**“ROAD MAP”
PLANNED STEPS TOWARDS REALIZATION OF THE
INTEGRATED WATER RESOURCES MANAGEMENT
PRINCIPLES
and
RATIONALE OF THE ESSENTIAL ACTIVITIES
IN THE REPUBLIC OF UZBEKISTAN**



TASHKENT – 2006

INTRODUCTION

The presented “road map” and rationale of the essential activities are the output of work of the national expert of UCC Water project in the Republic of Uzbekistan and the National Group on Coordination and Support to the “IWRM – Fergana” project (NGCS IWRM), created at the end of 2005, within the framework of “IWRM-Fergana” project (SIC ICWC¹ – IWMI² under the SDC³ sponsorship). Experience and lessons learned by these specialists in introduction of the IWRM principles in the pilot objects of the “IWRM-Fergana” project have allowed them to work out the draft “road map” and rationale of the essential activities.

This “road map” describes process of the staged transition from vision to the IWRM plan. In the initial stage of the “road map” development the status of the national water resources management and the main provisions of the long-term program for water resources development in the Republic of Uzbekistan⁴ have been assessed from the IWRM principles viewpoint in the context of the current socio-economic situation and taking into account the national vision of IWRM.

42 representatives from the key ministries and institutions, representatives of UNDP, Japan International Cooperation Agency, and representatives of the projects being implemented in Uzbekistan with support from the international agencies participated in the Seminar #1 “Issues of intersectoral interaction in water use and transition to the integrated water resources management” (29.04.06, Tashkent). The following main issues were reflected in the reports and presentations made by the members of the National Group on Coordination and Support to the IWRM and in the discussions at the seminar:

- Further development of reformation that begun in the Republic in the area of water resources management and use and hydrographical management principle;
- Transition to the chargeable water use in the Republic’s irrigated agriculture;
- Coordination between priorities of hydropower and the IWRM system;
- Legal basis of establishment and state support to the WUAs;
- Aquatic ecosystems conservation;
- Provision of the IWRM system with the reliable hydro-meteorological and environmental information.

The participants of the seminar decided to entrust the national consultant to the UCC-Water jointly with the National Group on Coordination and Support to the Integrated Water Resources Management with preparation of the draft “road map” of activities aimed at transition to the IWRM for subsequent presentation of this draft at the regional seminar #1.

The draft national “road map” was discussed at the regional seminar on the subject “Speedup of IWRM – 2005 Objectives Implementation in Central Asia” (27-28.07.06, Bishkek). During discussions (which were continued at the joint UNEP and GWP seminar on methodology for managerial capacity building on 30-31.07.06) participants of the seminar made the constructive comments and proposals on the presented draft national “road maps” (need to stress the improvement of water use productivity, prepare rationale of the essential activities, social mobilization of stakeholders, etc.). The draft “road map” and rationale improved in accordance with these comments were discussed at the final national seminar #2 “Draft road map of the staged transition to IWRM in Uzbekistan and the necessary actions” (28.10.06, Tashkent) and submitted to the key ministries and institutions.

Approvals were obtained from:

- The Ministry of Agriculture and Water Resources of the Republic of Uzbekistan (#04/29-1520, 31.10.06);
- Uzbek Agency “UZKOMMUNHIZMAT” (#011-1/1233, 03.11.06);

¹ Scientific Information Center of the Interstate Commission on Water Coordination

² International Water Management Institute

³ The Swiss Agency for Development and Co-operation

⁴ National report of the Republic of Uzbekistan within the framework of UNEP on assistance and aid to the developing countries for achieving of implementation target of “Integrated Water Resources Management and Efficiency Plans by 2005”., GWP CACENA – UCC Water, Tashkent 2006, 26 pages.

- The Ministry of Higher and Secondary Education of the Republic of Uzbekistan (#84-02-1098, 06.11.06);
- The State Committee of the Republic of Uzbekistan for Nature Protection (#11-1539, 07.11.06);
- The Ministry of Economy of the Republic of Uzbekistan (#6-1/6-6-1404, 08.11.06);
- The Ministry of Justice of the Republic of Uzbekistan (#03-7952/6, 08.11.06);
- The Centre of Hydro-meteorological Service (Uzhydromet) under the Cabinet of Ministers of the Republic of Uzbekistan (#01-15/545, 09.11.06);
- The State Inspection “SANOATKONTEXNAZORAT” (#03-875, 09.11.06);
- The State Joint Stock Company “Uzenrgo” (#BA-01-21/2815, 10.11.06);
- The State Committee of the Republic of Uzbekistan on Geology and Mineral Resources (#04/1127, 10.11.06).

Further steps envisage submission of the “road map” and rationale to the international agencies at the final regional seminar #2 “Speedup of IWRM – 2005 Objectives Implementation in Central Asia” (29-30.11.06, Tashkent). Based on the results of discussions at this seminar these documents together with the protocol of seminar and letters of approval from the key ministries and institutions will be submitted to the Government of the Republic of Uzbekistan to make decision on practical implementation of these activities.

**“ROAD MAP”
OF ACTIVITIES ON TRANSITION TO THE INTEGRATED WATER RESOURCES MANAGEMENT (IWRM)
IN THE REPUBLIC OF UZBEKISTAN**

No	Necessary Actions	Objectives	Planned Realization Time	Responsible Executors	Expected Source of Financing
1. MANAGERIAL CAPACITY BUILDING					
The Mid-term Period (2007-2012)					
1.1	Development and approval of the Provisions on Public Councils for assistance in implementation of the IWRM principles, program of seminars aimed at explanation of the IWRM principles, organization of such seminars for the members of Councils of the various water hierarchy levels	Ensuring of public participation at the “bottom-up” levels in solution of all the fundamental issues associated with introduction of the IWRM principles	2007-2010	<u>The Main Administration of Water Resources of the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan (MAWR MAWR RUz),</u> Basin Irrigation Systems Management (BISM), Basin Councils, The Ministry of Justice	The Republican Budget, and International Grants
1.2	Managerial capacity building for improvement of water resources manageability, and coordination of the intersectoral activities in use of water resources	Capacity building of the authorized water resources management body	2007-2012	<u>MAWR MAWR RUz,</u> the Ministry of Economy, the Ministry of Justice, the State Committee on Geology and Mineral Resources, the State Committee for Nature Protection	The Republican Budget
1.3	Establishment of the National water and ecological Information Center	Identification of needs for information and strengthening of the informational capacity. Development of database and system for exchange of information on water resources conditions accessible to all stakeholders interested in the efficient and	2009-2014	<u>MAWR MAWR RUz,</u> the State Committee on Geology and Mineral Resources, the State Committee for Nature Protection, The Centre of Hydro-meteorological Service	The Republican Budget, Funds of the Main Water Users, and International Grants

No	Necessary Actions	Objectives	Planned Realization Time	Responsible Executors	Expected Source of Financing
		nature protective water resources management		under the Cabinet of Ministries of the Republic of Uzbekistan (Uzhydromet)	
1.4	Development and improvement of water resources management at the local level	Joint search and identification of ways favorable to development of the IWRM principles and their introduction in practice	2007-2012	<u>MAWR MAWR RUz</u> , Basin Irrigation Systems Management (BISM), Basin Councils, Uzbek Agency “UZKOMMUNHIZMAT”, Oblast Khokimiyats	The Republican and Local Budgets
The Long-term Period (2007-2025)					
1.5	Realization of the National IWRM Plan, Introduction of the IWRM principles on the scale of Uzbekistan	Management system for ensuring sustainable development of society and environment needs	2009-2015	<u>MAWR MAWR RUz</u> , Basin Irrigation Systems Management (BISM), Basin Councils, the State Committee for Nature Protection, Uzbek Agency “UZKOMMUNHIZMAT”, Oblast Khokimiyats	The Republican Budget, Funds of the Main Water Users, and International Grants
1.6	Improvement of education and increase of awareness about nature protective use of water resources	Preparation of highly qualified managers for realization of the water saving policy and protection of water resources. Encouragement and forming sense of responsibility for conservation of the natural resources for future generations	2007-2025	<u>MAWR MAWR RUz</u> , Basin Councils, the Ministry of Higher and Secondary Education, the Ministry of Justice, the Ministry of Economy, the State Committee for Nature Protection, Oblast Khokimiyats	The Republican Budget, Funds of the Main Water Users, and International Grants
2. CREATION OF THE LEGISLATIVE AND POLITICAL ENVIRONMENT FOR THE IWRM					
The Essential Period (2007-2009)					
2.1	Development of concept of the National Integrated Water Resources	Identification of the current situation and main problems of the water resources management system in Uzbekistan and	2007	<u>MAWR MAWR RUz</u> , the State Committee on Geology and Mineral Resources, the State	The Republican Budget, and International Grants

No	Necessary Actions	Objectives	Planned Realization Time	Responsible Executors	Expected Source of Financing
	Management Plan (IWRM) of the Republic of Uzbekistan	possible ways for solution of these problems in the context of socio-economic reformations		Committee for Nature Protection, the State Committee for Supervision over Safety in Industry and Mining, the State Joint Stock Company "Uzbekenergo", Uzbek Agency "UZKOMMUNHIZMAT"	
2.2	Development, approval and adoption of the Law "On Water User Associations"	To provide the appropriate legislative basis for the efficient operation of the WUAs. To undertake the necessary legislative procedures for approval of the Law on Water User Associations.	2007	MAWR MAWR RUz, Basin Irrigation Systems Management (BISM), Basin Councils, the State Committee on Geology and Mineral Resources, the State Committee for Nature Protection, the Ministry of Justice, the Ministry of Economy	The Republican Budget, and International Grants
2.3	Development, approval and adoption of the "Water Code of the Republic of Uzbekistan"	Establishment of the unified normative/legislative basis for regulation of water relationships in the area of use and protection of water resources for the guaranteed and sufficient supply of the proper quality water for Uzbekistan's population and sectors of economy. Establishment of balance between protection of water resources and ever-increasing economic activities of the physical and legal entities.	2007-2008	MAWR MAWR RUz, Basin Irrigation Systems Management (BISM), Basin Councils, the State Committee on Geology and Mineral Resources, the State Committee for Nature Protection, the State Joint Stock Company "Uzbekenergo", the Ministry of Justice, the Ministry of Economy	The Republican Budget, and International Grants
2.4	Development, coordination and approval of the National IWRM plan of the Republic of Uzbekistan	Development of complex of measures aimed at implementation of IWRM principles in Uzbekistan in pursuance of the Paragraph 26 of the Plan for	2007-2009	MAWR MAWR RUz, Basin Irrigation Systems Management (BISM), Basin Councils,	The Republican Budget, and International Grants

No	Necessary Actions	Objectives	Planned Realization Time	Responsible Executors	Expected Source of Financing
		implementation of proposals of the World summit on sustainable development in Johannesburg (September 2002) (WSSD).		the State Committee on Geology and Mineral Resources, the State Committee for Nature Protection, the Ministry of Justice, the Ministry of Economy, the State Committee for Nature Protection, "UZKOMMUNHIZMAT"	
The Mid-term Period (2007-2012)					
2.5	Development and broad introduction of the "water user pays" principle	Improvement of the efficiency, productivity, and discipline of water resources use. Improvement of the tariff policy	2007-2010	MAWR MAWR RUz, Basin Irrigation Systems Management (BISM), Basin Councils, the Ministry of Economy, the Ministry of Justice, Uzbek Agency "UZKOMMUNHIZMAT", Oblast Khokimiyats	The Republican and Local Budgets
2.6	Development and broad introduction of the "polluter pays" principle.	Decrease of water bodies and ecosystems pollution. Improvement of the tariff policy.	2007-2012	The State Committee for Nature Protection, Basin Irrigation Systems Management (BISM), Basin Councils, the Ministry of Justice, the Ministry of Economy, Uzbek Agency "UZKOMMUNHIZMAT", Oblast Khokimiyats	The Republican and Local Budgets
The Long-term Period (2007-2025)					
2.7	Improvement of the normative and legislative basis of integrated water resources management	Code of normative and legislative documents (bylaws) aimed at stability and efficiency of water management complex operation	2007-2015	MAWR MAWR RUz, Basin Irrigation Systems Management (BISM), Basin Councils, the State Committee on Geology and Mineral Resources,	The Republican and Local Budgets

No	Necessary Actions	Objectives	Planned Realization Time	Responsible Executors	Expected Source of Financing
				the State Committee for Nature Protection, the Ministry of Justice, the Ministry of Economy, Uzbek Agency "UZKOMMUNHIZMAT",	
3. THE TECHNICAL AND TECHNOLOGICAL MEASURES					
The Essential Period (2007-2008)					
3.1	Inventory of the technical conditions and certification of the water management systems and structures, including objects of the interstate importance	Identification of complex of priority measures aimed at improvement of operational reliability of the irrigation and drainage systems and structures, and mitigation of threats associated with water	2007-2008	MAWR MAWR RUz, Basin Irrigation Systems Management (BISM), Basin Councils, the Ministry of Emergency Situations, Agency for supervision over safety of water structures, the State Joint Stock Company "Uzbekenergo", Uzbek Agency "UZKOMMUNHIZMAT",	The Republican Budget, and Funds of the Main Water Users
The Mid-term Period (2007-2012)					
3.2	Development of the Basin Master Plans for use and protection of water resources. Development of the Master Plans for use and protection of water resources of the Republic of Uzbekistan	Selection of priorities in the context of socio-economic reforms in Uzbekistan, rationale of ways and methods for improvement of efficiency of water resources use taking into account the environment needs. Selection of priorities for achievement by Uzbekistan the Millennium Development Goals, rationale of ways and methods for improvement of efficiency of water resources use taking into account the environment needs and limitations for use of transboundary waters	2008-2012	MAWR MAWR RUz, Basin Irrigation Systems Management (BISM), Basin Councils, the State Committee on Geology and Mineral Resources, the State Committee for Nature Protection, the State Joint Stock Company "Uzbekenergo", Uzbek Agency "UZKOMMUNHIZMAT", the Ministry of Economy	The Republican and Local Budgets

No	Necessary Actions	Objectives	Planned Realization Time	Responsible Executors	Expected Source of Financing
3.3	Improvement and development of network for monitoring of surface and underground waters and ecosystems	Improvement of measurements quality and reliability of forecasts of water resources availability and quality	2008-2012	<u>MAWR MAWR RUz</u> , Basin Irrigation Systems Management (BISM), the State Committee on Geology and Mineral Resources, the State Committee for Nature Protection, Uzhydromet of RUz	The Republican and Local Budgets, Funds of the Main Water Users, and International Grants
The Long-term Period (2007-2025)					
3.4	Broad introduction of the improved irrigation application methods, and technologies for wastewaters treatment, including collector and drainage waters	Improvement of efficiency and productivity of irrigation, reduction of environment pollution.	2011-2025	<u>MAWR MAWR RUz</u> , Basin Irrigation Systems Management (BISM), Basin Councils, Uzbek Agency “UZKOMMUNHIZMAT”, Oblast Khokimiyats, the State Committee for Nature Protection	Funds of Water Users

THE REPUBLIC OF UZBEKISTAN

RATIONALE OF THE ESSENTIAL ACTIVITIES (2007-2008) ON TRANSITION TO THE INTEGRATED WATER RESOURCES MANAGEMENT (IWRM)

Subject 2: CREATION OF THE LEGISLATIVE AND POLITICAL ENVIRONMENT FOR THE INTEGRATED WATER RESOURCES MANAGEMENT (IWRM)
Activity 2.1 Development of concept of the National IWRM Plan for the Republic of Uzbekistan
Objectives: <ul style="list-style-type: none">• Identification of the current situation and main problems of the water resources management system in Uzbekistan and possible ways for solution of these problems on the basis of the IWRM principles in the context of socio-economic reformations
Rationale: <p>In many countries transition to the Integrated water resources management is a response to the growing problems associated with the guaranteed and stable water supply to society and environment. In the conditions of growing population and reduction of river runoff these problems are aggravated year by year for Uzbekistan as well. The main ones are:</p> <ul style="list-style-type: none">• Growing demand for foodstuff due to population growth;• Increased competition between agriculture and the other sectors of economy;• Inadequate access to the safe drinking water supply and sewerage systems, especially in the lower river reaches and tail parts of irrigation systems;• Inadequate or deteriorated infrastructure;• Low productivity of water and land;• Deteriorating quality of water and environment (soil degradation, waterlogging and salinization). <p>Pendency of these problems at the present stage of the Uzbekistan's socio-economic development hinders the stable supply of water users and environment with water resources, as well as sustainability and reliability of execution of the following functions:</p> <ul style="list-style-type: none">• Water supply to development of economy and social needs on the basis of equal rights to access to the reliable systems of water delivery and disposal;• Ensuring conservation of the nature objects (rivers, lakes, reservoirs/ponds, and deltas) as the elements of landscape and the natural habitat;• Prevention of catastrophic or emergency situations associated with water (flooding, mudflows, droughts, etc.). <p>Due to these problems and taking into account dependence of further economic growth and development on efficiency of water resources management, the purposeful reformation of the Uzbekistan's water sector on the basis of the IWRM principles is essential.</p> <p>The first steps towards reformation of the Uzbekistan's water sector were made during the last five years, but they mainly affected management structures. They were not sufficiently supported by the appropriate legislative basis and managerial capacity and mainly affected irrigated agriculture.</p> <p>The technocratic approach prevailed in the integrated water master plans that were developed in the past. They did not envisage participation of water users in the process of water resources management. The demands of ecosystems were definitely not taken into account to the sufficient extent.</p> <p>All these drawbacks should be taken into consideration in development of concept of the National IWRM plan for the Republic of Uzbekistan in order to ensure its correspondence to the generally recognized definition of the <i>integrate water resources management</i>¹as:</p> <p><i>The coordinated guidance, provision and financing of water services based on the broad</i></p>

¹ As definition the IWRM is the generally recognized philosophy of the World Water Commission, Global Water Partnership, the 1-st and 2-nd World Water Forums, UNDP, FAO, World Bank, Asian Development Bank, OECD, European Union, IWMI, et al.

participation of stakeholders within the framework of the approved strategies, laws, organizations and technologies, which will optimize the social and economic value of water, efficiency of its use and equal distribution of benefits, ensuring at the same time sustainability of the significant ecosystems.

Approach:

Working group comprising the qualified representatives of stakeholders will carry out:

- Inventory of water resources problems in Uzbekistan and associated management problems;
- Development of proposals for approaches to management, use, development, conservation, protection and control over the national water resources, managerial measures and strengthening of public participation in water resources management;
- Preparation of draft Concept.

In order to take into account interests of water users and the government in the Concept, consultations and discussions will be carried out with participation of representatives of the governmental bodies, public, international agencies and water users.

The developed and approved by the stakeholders Concept will be submitted to the Cabinet of Ministries for approval.

Realization Time:

Nine months from the beginning of the first year.

Responsible Executors:

The Main Administration of Water Resources of the Ministry of Agriculture and Water Resources of the Republic of Uzbekistan (MAWR MAWR RUz),

Basin Irrigation Systems Management (BISM),

Basin Councils,

The State Committee on Geology and Mineral Resources,

The State Committee for Nature Protection,

The Uzbek Agency “UZKOMMUNHIZMAT”,

The Ministry of Justice,

The Ministry of Economy

Results:

Adoption of Concept of the National IWRM Plan for the Republic of Uzbekistan

Necessary Resources:

Estimated number of man-months: 90 man-months.

Planned contribution from the Republic’s budget: 15 million sum/USD 12 thousand

Planned contribution from potential sponsors: USD 40 thousand

Subject 2: CREATION OF THE LEGISLATIVE AND POLITICAL ENVIRONMENT FOR THE INTEGRATED WATER RESOURCES MANAGEMENT (IWRM)

Activity 2.2 Development, approval and adoption of the Law “On Water User Associations”

Objectives:

To provide the appropriate legislative basis for the efficient operation of the WUAs.

To undertake the necessary legislative procedures for approval of the Law on Water User Associations.

Rationale:

The main water user in the Republic is agriculture, share of which is more than 80% from the total water intake. The intensive process of the agricultural enterprises restructuring is ongoing in Uzbekistan. The private farms are formed on the basis of unprofitable and unpromising collective farms.

Sharp increase of water users’ number has caused a necessity for establishment of appropriate structures which would carry out the on-farm water management and control over water distribution. The optimal solution of this problem is establishment of water user associations (WUAs) with involvement of public in the management processes and creation of the necessary conditions for the equitable and equal water delivery to water users at the lower level of water hierarchy, and efficient and productive use of water resources with minimization of the adverse impacts on environment.

Currently more than 142 thousand private farms are united in 1388 Water User Associations, which deliver water and provide other services to farmers on the basis of agreements. However, status of the WUAs, their management structure, operational principles, etc. is not identified to full extent so far. Efficient operation of the WUAs is hampered due to lack of the appropriate legislative and legal basis. This determines a necessity

for speedup of development and adoption of the Law of the Republic of Uzbekistan “On Water User Associations”.
<p>Approach: Preparation and adoption of the law on WUAs will follow the usual legislative process (in accordance with the Law of the Republic of Uzbekistan “On the normative and legislative acts”, dated 14.12.2000), including development of the necessary ancillary documents for the government (rationale for adoption of law, implementation strategy, etc.). After approval by the ministries and agencies concerned the draft law will be submitted to the Ministry of Justice for consideration and correction and finally it will be considered by the Cabinet of Ministries and the Oliy Majlis. After signature the law will be officially published and put in force.</p>
<p>Realization Time: From the beginning to the end of the first year (12 months).</p>
<p>Responsible Executors: <u>MAWR MAWR RUz</u>, BISM, Basin Councils, The State Committee on Geology and Mineral Resources, The State Committee for Nature Protection The Ministry of Justice, The Ministry of Economy</p>
<p>Results: Adoption of the Law of the Republic of Uzbekistan “On Water User Associations”</p>
<p>Necessary Resources: Estimated number of man-months: 72 man-months. Planned contribution from the Republic’s budget: 10 million sum / USD 8 thousand Planned contribution from potential sponsors: USD 35 thousand</p>

<p>Subject 2: CREATION OF THE LEGISLATIVE AND POLITICAL ENVIRONMENT FOR THE INTEGRATED WATER RESOURCES MANAGEMENT (IWRM)</p>
<p>Activity 2.3 Development, approval and adoption of the “Water Code of the Republic of Uzbekistan”</p>
<p>Objectives: Establishment of the unified normative/legislative basis for regulation of water relationships in the area of use and protection of water resources for the guaranteed and sufficient supply of the proper quality water for Uzbekistan’s population and sectors of economy. Establishment of balance between protection of water resources and ever-increasing economic activities of the physical and legal entities.</p>
<p>Rationale: The current Law of the Republic of Uzbekistan “On water and water use” is the concentrated form of expression of the republic’s water management policy (published on 06.05.1993). This Law does not directly mention the development/support to the IWRM Action Plan/Strategy, but the main sense of IWRM process in terms of “integrated, rational, efficient use of water resources” is included in the legal structure. Subsequently some elements in the direction to transition towards IWRM in Uzbekistan were included in the listed below Orders of the President and Decrees of the Cabinet of Ministries. These documents are bylaws that directly or indirectly regulate the various aspects of water relationships. The Orders of the President of the Republic of Uzbekistan:</p> <ul style="list-style-type: none"> • “On important directions for deepening reforms in agriculture”, dated 24.03.2003; • “On improvement of economy management bodies”, dated 22.12.2003. <p>The Decrees of the Cabinet of Ministries of the Republic of Uzbekistan:</p> <ul style="list-style-type: none"> • “On improvement of management system in water sector”, No 320, dated 21.07.2003; • “On improvement of activities of the Ministry of agriculture and water resources of the Republic of

Uzbekistan”, No 290, dated 28.06.2003.

However, the above mentioned Orders and Decrees mainly envisage only structural reorganizations of water management bodies within the Ministry of agriculture and water resources of the Republic of Uzbekistan, because the main water user is agriculture.

It should be stated that the Law of 1993, “On water and water use” was elaborated in the beginning of formation of the government management structures and development of the market mechanisms in economy. Although it played the certain positive role in the development of water relationships, this law does not meet the modern requirements in many aspects at the present stage of the socio-economic development of Uzbekistan.

Based on requirements to ensure conditions for sustainable development of Uzbekistan and taking into account the high dependence of the republic’s economy on the properly regulated water relationships at all levels of water hierarchy, it is necessary to develop and adopt the “Water Code” as the legislative basis for implementation of the purposeful activities on staged solution of the following key tasks:

1. Practical ensuring of jurisdiction of the water management organizations within the hydrographical boundaries that corresponds to the IWRM principles and will allow making timely decisions on water management and provide water services without interference of the administrative and territorial bodies;
2. Integrated water resources management taking into account all types of water use within the hydrographical boundaries on the basis of the hydro-meteorological data analysis in the real time mode that takes into account water supply dynamics and use of water in various sectors of economy. Provision of this information in the user-friendly format for all water users;
3. Strategic planning of water use and consumption taking into account needs of the agricultural production, municipal and rural water supply, industry and environment, as well as the other water consuming sectors;
4. Practical decentralization of solutions on water management with transfer of management functions to the possibly lowest level (WUAs and their federations, Canal Councils), based on the country’s legislation and with assistance from the Government to establishment and formation of the WUAs and their federations;
5. Gradual transition from the direct state management of water delivery towards its regulation by water sector, as well as its relationships with the other sectors of economy;
6. Gradual transition to management of the WUAs activities and then water sector organizations by the elective Councils with authorization to carry out water policy, establishment of rules and procedures on their respective water systems within the Uzbekistan’s legislative basis;
7. Ensuring the necessary conditions that will allow farmers to pay full costs of operation and maintenance, as well as minor repair and improvement of all irrigation and drainage system within the WUA boundaries through adoption of measures on improvement of land and water productivity;
8. Ensuring of actual participation of Canal Councils, WUAs and their federations in formation of water policy and establishment of rules for water resources management.

Approach:

Preparation and adoption of the Water Code will follow the usual legislative process (in accordance with the Law of the Republic of Uzbekistan “On the normative and legislative acts” dated 14.12.2000), including development of the necessary ancillary documents for the government (rationale for adoption of Water Code, implementation strategy, etc.). After approval of the draft Water Code by the ministries and agencies concerned it will be submitted to the Ministry of Justice for consideration and correction and finally it will be considered by the Cabinet of Ministries and the Oliy Majlis. After signature the Water Code will be officially published and put in force.

Realization Time:

From the beginning of the first year to the end of the second one (24 months)

Responsible Executors:

MAWR MAWR RUz.

BISM,

Basin Councils,

The State Committee on Geology and Mineral Resources,

The State Committee for Nature Protection The Ministry of Justice, The Ministry of Economy
Results: Adoption of the Water Code of the Republic of Uzbekistan
Necessary Resources: Estimated number of man-months: 240 man-months. Planned contribution from the Republic's budget: 20 million sum / USD 16 thousand Planned contribution from potential sponsors: USD 80 thousand

Subject 2: CREATION OF THE LEGISLATIVE AND POLITICAL ENVIRONMENT FOR THE INTEGRATED WATER RESOURCES MANAGEMENT (IWRM)

Activity 2.4. Development, coordination and approval of the National IWRM plan of the Republic of Uzbekistan

Objectives:
Development of complex of measures aimed at implementation of IWRM principles in Uzbekistan in pursuance of the Paragraph 26 of the Plan for implementation of proposals of the World summit on sustainable development in Johannesburg (September 2002) (WSSD)

Rationale:
One of the reasons for development of the National IWRM plan for the Republic of Uzbekistan is the Declaration of the World Summit on sustainable development in Johannesburg (September 2002) that called on all the countries to “..... achieving of implementation target of “Integrated Water Resources Management and Efficiency Plans by 2005”. Being the member of the UN the Republic of Uzbekistan thereby assumes commitments to develop such a plan and implement the IWRM principles in the Republic.

The National plan was not developed by 2005, but the IWRM principles were and being elaborated in the pilot irrigation system of the Southern Fergana Main Canal (SFMC) within the framework of the :IWRM-Fergana” project under the Swiss Development Cooperation Agency (SDC) sponsorship.

All vertical “stakeholders – high level decision makers” and various water using and consuming sectors of economy at the horizontal levels participate in testing and introducing the IWRM principles in the pilot objects of the SFMC. The significant contribution in the social and economic improvement of the rural population living conditions, increase of water resources management efficiency through the broad involvement of stakeholders, management restructuring and use of the operative management tools were demonstrated in these pilot objects. Although this project is of the local nature, there are no doubts that experience gained from its implementation, and analysis of its strengths and weaknesses will be useful for development of the national IWRM plan.

Approach:
Development of the IWRM plan will be based on the preliminarily developed Concept analyzing the current water resources problems in Uzbekistan and associated management problems. The ways for solution of these problems, roughly outlined in the Concept, will be developed in details in the plan as the measures facilitating implementation of the IWRM principles on the scale of the republic. Complex of the planned measures will envisage establishment of balance between supply and demand for water resources taking into account efficiency and productivity of water use, economic efficiency, equity, stability and ecological requirements.

The working group comprising the qualified specialists will carry out:

- Development on the basis of the approved Concept the complex of measures facilitating implementation of the IWRM principles on the scale of the republic;
- Preparation of the first version of the National IWRM plan for the Republic of Uzbekistan;
- Submission of the first version of the National IWRM plan to stakeholders for consideration and comments and its revision in accordance with comments if necessary;
- Final approval of the National IWRM plan by the key ministries and agencies.

The National IWRM plan, approved by the key ministries and agencies, will be submitted to the Cabinet of Ministries for final approval.

<p>Realization Time: From the fourth quarter of the first year to the end of the first half of the third year (21 months)</p>
<p>Responsible Executors: <u>MAWR MAWR RUZ</u>, BISM, Basin Councils, The State Committee on Geology and Mineral Resources, The State Committee for Nature Protection, The Uzbek Agency “UZKOMMUNHIZMAT”, The Ministry of Justice, The Ministry of Economy</p>
<p>Results: Adoption by the Cabinet of Ministries of the National plan for transition towards the IWRM and the strategy for transition towards the new principles of water resources management in the Republic of Uzbekistan.</p>
<p>Necessary Resources: Estimated number of man-months: 600 man-months. Planned contribution from the Republic’s budget: 50 million sum / USD 40 thousand Planned contribution from potential sponsors: USD 320 thousand</p>

<p>SUBJECT 3. THE TECHNICAL AND TECHNOLOGICAL MEASURES</p>
<p>Activity 3.1. Inventory of the technical conditions and certification of the water management systems and structures, including objects of the interstate importance</p>
<p>Objectives:</p> <ul style="list-style-type: none"> • Improvement of operational reliability of the irrigation and drainage systems and structures, and mitigation of threats associated with water
<p>Rationale: Since 1991, due to complicated economic situation experienced by Uzbekistan during the transitional period, share of investment in water sector was reduced almost by 5 times. Allocation of funds from the state budget for proper operation and maintenance of irrigation and drainage infrastructure was sharply reduced. Volume of works for reconstruction of canals and water structures was also significantly reduced.</p> <p>The significant part of the irrigation and drainage infrastructure, comprising 27.4 thousand km of the main and 167.8 thousand km of the on-farm canals and structures, is outdated and worn out. Former on-farm irrigation and drainage infrastructure, that as a result of the state and collective farms subdivision into private ones became the inter-farm infrastructure, is transferred to the WUAs. This infrastructure is now in a poor technical conditions due to organizational and material/technical problems experienced by the majority of WUAs.</p> <p>Almost half of the Republic’s irrigated land area is supplied with irrigation water by pumping stations. The majority of these pumping stations are required modernization due to deterioration of equipment. Currently such a huge water structures as the Amu-Bukhara, Karshi, and Amuzang pumping station cascades with the main canals, and many large hydropower stations require replacement of pumping, hydro-mechanical, and electrical equipment that is practically worn-out. This situation severely affects the level of steerability of the water management complex and its efficiency.</p> <p>Therefore, the detailed evaluation of water management infrastructure conditions is required in order to identify on this basis the priorities for undertaking a complex of measures on improvement of the operational reliability of infrastructure and mitigation of threats associated with water.</p>
<p>Approach: Inventory of the technical conditions and certification of the water management systems and structures will be based on the unified methodology differentiating specificity and interrelationship of objects at all levels of water hierarchy. Database and the State cadastre of water management systems of the Republic of Uzbekistan will be developed on the basis of this inventory.</p>

<p>The working group comprising the qualified specialists will carry out:</p> <ul style="list-style-type: none"> • Development of methodology for certification of the water management systems and structures; • Development of database on the basis of the GIS technologies; • Inventory of the technical conditions and certification of water management systems and structures of the Republic of Uzbekistan; • Preparation of the State cadastre of the water management systems and structures of the Republic of Uzbekistan; • Assessment and analysis of information and identification of the priority measures aimed at improvement of the operational reliability of the irrigation and drainage systems and structures, and mitigation of threats associated with water. <p>The State cadastre of the water management systems and structures of the Republic of Uzbekistan approved by the key ministries and agencies and the package of the priority measures aimed at improvement of the operational reliability of water management systems and structures and mitigation of threats associated with water will be submitted to the Cabinet of Ministries for consideration.</p>
<p>Realization Time: From the second half of the first year to the end of the first half of the second year (12 months)</p>
<p>Responsible Executors: <u>MAWR MAWR RUZ</u>, BISM, Basin Councils, The Ministry of emergency situations, The Agency for supervision over safety of water structures, the State Joint Stock Company “Uzbekenergo”, The Uzbek Agency “UZKOMMUNHIZMAT”</p>
<p>Results:</p> <ul style="list-style-type: none"> • The State cadastre of water management systems of the Republic of Uzbekistan; • Package of the priority measures aimed at improvement of the reliability of water management systems and structures and reduction of threats associated with water
<p>Necessary Resources: Estimated number of man-months: 300 man-months. Planned contribution from the Republic’s budget: 80 million sum / USD 65 thousand Planned contribution from potential sponsors: USD 100 thousand</p>

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