# PROJECT INFORMATION DOCUMENT (PID)
# CONCEPT STAGE

Report No.: PIDC879

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| **Project Name** | NATIONAL WATER RESOURCES MANAGEMENT PROJECT (P144336) |
| **Region** | EUROPE AND CENTRAL ASIA |
| **Country** | Kyrgyz Republic |
| **Sector(s)** | Irrigation and drainage (50%), General water, sanitation and flood protection sector (50%) |
| **Theme(s)** | Water resource management (80%), Rural policies and institutions (20%) |
| **Lending Instrument** | Technical Assistance Loan |
| **Project ID** | P144336 |
| **Borrower(s)** | KYRGYZ REPUBLIC |
| **Implementing Agency** | Department of Water Resources |
| **Environmental Category** | B-Partial Assessment |
| **Date PID Prepared/ Updated** | 15-May-2013 |
| **Date PID Approved/ Disclosed** | 13-Jun-2013 |
| **Estimated Date of Appraisal Completion** | 30-Jul-2013 |
| **Estimated Date of Board Approval** | 10-Sep-2013 |
| **Concept Review Decision** | Track II - The review did authorize the preparation to continue |

## I. Introduction and Context

### Country Context

With an estimated per capita GDP of US$886 in 2010, the Kyrgyz Republic is one of the poorest economies in the Europe and Central Asia region. In 2011, 37 percent of the population lived below the poverty line, while 4.5 percent lived in extreme poverty. Incidence of poverty in rural areas (40 percent, with 62 percent of the population) was far higher than in urban areas (31 percent). The Kyrgyz Republic is geographically and culturally divided into the north and south. The three southern oblasts of the Fergana Valley have a distinct regional identity vis-à-vis the north. The region is also affected by lower per capita incomes, higher unemployment, lower human development indices and more limited access to services than all other regions of the country. Over the last 3 years the country has seen some dramatic developments. In April 2010, the government was overthrown, followed by an outbreak of ethnically motivated violence in June 2010 in the south

of the country. Following parliamentary elections in October 2010 and presidential elections in fall 2011, the government is working towards providing a stable policy and governance environment.

**Sectoral and Institutional Context**

The Kyrgyz Republic is well endowed with water resources, with over 3,500 rivers and streams with a total annual runoff estimated at 47 km3, of which the Kyrgyz Republic can abstract a maximum of 12 km3 under international agreements with neighboring countries. Snowfall constitutes a major part of the total precipitation, with snow melt contributing to river flows during the growing season from April to September. Of the 12 km3 allocation to the Kyrgyz Republic, up to 90 percent is used for irrigated agriculture, 7 percent for industry and 3 percent for other needs, including potable water. Though not a consumptive user, hydropower generation, such as that from the Toktogul Reservoir on the Naryn river in the headwaters of the Syr Darya, plays an important role in regulating the river flow pattern, with significant impacts on water supply to irrigation systems downstream. Competition and conflict over water at the on-farm level has been markedly reduced since the 1990s through the formation of functioning and effective Water Users' Associations (WUAs), however, significantly more remains to be done to reduce the level of competition and conflict at higher system levels.

In January 2005 a new and comprehensive modern Water Code was signed into legislation. The Code is based on principles of integrated water resources management, stewardship of water resources, organization of water resources management by river basins, recognition of the economic value of water, participation of users in decision-making, polluter-pays and environmental management and regulation. By means of modern legislation in the form of the Water Code (2005) and the Law on WUAs (2002), the foundations have been set for comprehensive management of water resources from the river basin to the field, enabling better control and management of these resources, both within the country and to neighboring riparian states. A core element of the Water Code is the establishment of a State Water Agency (SWA) responsible for national water resource management, and Basin Water Agencies (BWAs) responsible for basin water management, and the implementation of a water usage permitting system. Policy oversight and direction is to be provided by the National Water Council (NWC) an inter-ministerial body convened by the office of the Prime Minister.

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In August 2006 the Water Management Improvement Project (WMIP, P088671, starting in 2006 and closing November 30, 2013) began implementation with one of the objectives of supporting the government in operationalizing the Water Code, through strengthening the water resources management capability within the Department of Water Resources (DWR), in anticipation of the DWR being transformed to the SWA. The WMIP is part of a broader World Bank-financed portfolio in the water resources sector, with investments both in infrastructure. The Second On-Farm Irrigation Project and its Additional Financing (OIP-2 AF, closing December 2015) followed on from the On-Farm Irrigation Project (OIP-1, 2003-2008) to support the formation and institutionalization of WUAs and (later) Federations of WUAs (FWUAs) and to rehabilitate on-farm irrigation and drainage systems of well-performing WUAs. To date some 481 WUAs covering 737,400 ha (73 percent of the total irrigated area) and 35 Federations of WUAs covering approximately 210,000 ha have been formed, of which around 120 WUAs have been rehabilitated. Further rehabilitation of around 18 WUAs on 27,000 ha will be carried out under the Agriculture Productivity and Nutrition Improvement Project (APNI, P132746), which is financed through the Global Agriculture and Food Security Program (GAFSP) and is scheduled to be implemented from October 2013 to September 2017.

Under the WMIP, all relevant documentation, procedures, implementation plans and training programs have been developed for implementation of the Code, but actual implementation under the WMIP was too dependent on convening the NWC and a decision by the NWC to delegate the role of the SWA to the DWR. Since the NWC only met in February 2013, insufficient progress was made over the life of the WMIP, with establishing the SWA and improving the capacity for integrated water resources management, and a further sustained effort is required to bring about the institutional changes required to modernize and improve water resources and irrigation management within the country.

The meeting of the NWC in 2013 outlined the medium –term (5-year) and long-term (10+ year) vision for development of the water sector. The long-term vision is to have: (i) a separate organization for water resources planning and management (WRMP) and organizations for bulk water delivery; (ii) dedicated organizations for river basin management in each basin; (iii) a water permitting systems for water abstraction and wastewater discharge; (iv) adequate funding from government and water permit holders to support an autonomous water resource management organization; (v) management, operation and maintenance systems in place for each of the major irrigation schemes in the country; (vi) fully-functional distributed water information system operating in each basin in the country; and (vii) environmental protection mechanisms for water and water-related environments. Interim 5-year targets have been set for achieving this long-term vision.

### Relationship to CAS

The new Country Partnership Strategy (under preparation) for the period 2013-2017 recognizes the important role of water resources management and irrigation for the country as a whole and agricultural productivity in particular. The proposed project will be financed through a trust fund provided by the Swiss Agency for Development and Cooperation (SDC) and will invest in the technical assistance required for improving the sustainability of the management, operation and maintenance (MOM) of investments in infrastructure rehabilitation done under the OIP-2 AF, the WMIP and the planned APNI. It also supports critical elements of the Central Asia Energy and Water Development Framework (P123804) and the Central Asia Hydromet Modernization Project (P120788) in building the knowledge base for water resources management at the national and regional level. SDC is committed to finance technical assistance to the water sector until 2019, with a long-term vision of support to and development of the capacity for integrated water resources management as outlined in the roadmap and vision adopted by the NWC. The proposed project would cover the first phase of these investments and work towards the interim 5-year targets set by the NWC, with a focus on management of water resources in the irrigation and drainage sub-sector, which accounts for 90 percent of water use in the Kyrgyz Republic. The second phase of investments will be considered during the last year of this project.

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## II. Proposed Development Objective(s)

### Proposed Development Objective(s) (From PCN)

The proposed Project Development Objective is to enhance water resources management and irrigation service delivery for the benefit of water users and the nation as a whole.

### Key Results (From PCN)

It is expected that water management, and thus water use efficiency and productivity, will be improved throughout the water supply chain, from river basin to field level. There will be

improvements in the management of water resources for all river basins in thecountry and improvements in service delivery, water management and system maintenance at the off- and on-farm levels within irrigation and drainage systems. Key results will be: (i) DWR assuming responsibilities of SWA, and establishing separate divisions for water resources management (WRM) and irrigation and drainage management (IDM); (ii) water resources measured, quantified and recorded in a digital data management system; (ii) river basin plans prepared for all river basins; (iv) service delivery by the IDM division improved and increasingly meeting water users needs; (v) WUAs and Federations of WUAs strengthened and providing improved levels of service to surveyed water users (including gender disaggregation where possible); (vi) Maintenance expenditures for on- and off-farm systems increasing towards more sustainable levels; and (vii) water use efficiency and productivity increased.

## III. Preliminary Description

### Concept Description

The project will have four components: (i) strengthening national water management capacity and implementation of the Water Code; (ii) improving irrigation service delivery; (iii) supporting water users' organizations; and (iv) project management. The project will be implemented nationwide, covering all river basins, government-run off-farm irrigation systems and WUAs, with localized initiatives to test and develop specific processes and procedures. The project will be financed by SDC through a Recipient-Executed Trust Fund (RETF) managed by the World Bank. The RETF will finance goods (mostly IT-hardware), training, consulting services and operating costs.

The components and design of the NWRMP take into account lessons-learned from implementation of the WMIP. Since the WMIP was overly reliant for implementation progress on convening the NCW in order to advance the institutional structure and capacity building, the project reduces the need for additional guidance from the NWC during implementation of the project, and the February 2013 meeting of the NWC already provides the resolution for the institutional framework as supported under the project. Secondly, implementation of the WMIP was constrained by the poor performance and unauthorized demobilization of the international consultancy firm recruited under the project. Under the proposed NWRMP this will be addressed by recruiting mostly individual consultants at key technical assistance positions, in order to have more control over the quality of the consultants' and provide more flexibility on the nature and the timing of using the consultants' inputs.

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Component 1: Strengthening national water management capacity and implementation of the Water Code (estimated cost US$ 2.2 million). This component will strengthen the capacity of the DWR's WRM division for water resources planning and management and for implementing key elements of the Water Code, including: (i) preparation of basin water plans; (ii) development of a National Water Strategy on water resources; (iii) developing and implementing procedures for water and wastewater permits; (iv) strengthen the secretariat for the NWC, the main government body to provide policy oversight; (v) strengthen the secretariat for the National Policy Dialogue (NPD) as the main platform of Government and development partners for coordinating externally-financed water sector projects; and (vi) communication campaign for stakeholders in the water sector and the broader public on key elements of the Water Code, sector reform and organization change management. The key building block for improved water resource management is to assist the WRM division with establishing a digital Water Information System (WIS), including digitized mapping of the water resource network and identification and location of all abstraction and

wastewater discharge points, together with time series of river flows and abstraction discharges. This exercise will require the DWR as a whole to move from analog data recording and management to digital data management, and to put in the required information technology hardware, software and training of staff. It also requires the acquisition and compilation of data from different organizations, like the Agency on Hydrometeorology under the Ministry of Emergency Situations and the State Committee on Hydrogeology. In parallel to this, the project will finance assistance to establish a Water Resources Analysis and Planning (WRAP) unit within the WRM division, which will be responsible for the preparation of river basin water plans and develop systems for water resources planning and management, including water permitting (abstraction and wastewater) and water resource fee charging. A key element of this component will be capacity building and training of a cadre of water resources planning and management specialists. The WRAP will also receive assistance in developing background dossiers on key transboundary water issues, and will be trained to engage more effectively in international fora on regional water issues and regional data sharing.

Component 2: Improving service delivery (estimated cost US$ 2.1 million). This component focuses on improving the MOM of government-run main (off-farm) irrigation and drainage systems, through modernizing and updating the procedures for identification, costing and implementation of system maintenance, and modernization of MOM procedures. Six main systems covering a total of approximately 60,000 ha will be selected on a pilot basis in order to implement advanced MOM planning and procedures centered around performance-based management of the IDM division of the DWR, working in partnership with WUAs and other water users' organizations. Once tested, procedures will be gradually applied to other irrigation and drainage systems throughout the country. In parallel to this activity, the project will finance a nation-wide mapping and inventory of irrigation and drainage systems and the information applications and training to build capacity at the provincial and district level to use upgraded MOM procedures in irrigation and drainage management. These measures will seek to (i) improve the service delivery to water users through more collaborative, transparent and accountable processes; (ii) increase the level of service fee collected from water users (to match the improved service delivery); and (iii) increase the expenditure on system maintenance. The project will build on a series of studies done under WMIP to ascertain the expenditure required for each type of irrigation and drainage system for adequate maintenance and assessment of the economic and financial costs (to farmers) of failing to adequately maintain systems and will demonstrate to key stakeholders the required levels of MOM and irrigation service fees for adequate irrigation service delivery.

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Component 3: Support to Water Users Associations (estimated cost US$ 2.2 million). This component focuses on further strengthening of WUAs, FWUAs and other water users' organizations, including Water Councils and the National Union of WUAs. These WUAs were initially established under the OIP-1, and further supported under the OIP-2 and its AF, whilst the establishment of FWUAs is supported under the WMIP. WUAs and FWUAs are established organizations, functioning reasonably well, levying fees from their members and carrying out MOM of on-farm (WUAs) and off-farm (FWUAs) systems. Some 481 WUAs have been established to date, covering 737,400 ha or 73% of the total irrigated area in the country. There is growing confidence and capability amongst WUAs as they gain experience with managing their own systems. The challenge over the coming years is to enhance the level and effectiveness of the MOM done by WUAs and to assist them to increase irrigation services fees to ensure more sustainable MOM. Therefore, as a first step the project would finance a comprehensive assessment of the current status, capabilities and training needs of WUAs and FWUAs, followed by training

program design to further strengthen their capabilities, particularly in relation to water management, system maintenance and service fee recovery. The program will train the WUA Support Units within the DWR to deliver a training program to all WUAs and FWUAs nation-wide, with training tailored to the specific needs of each WUA. In addition, the project will finance measures, like studies and specific training, to enhance the role of WUAs in user engagement and participation, social accountability, the mitigation of water-related conflicts, and the role of women in water management. For this NWRMP will draw on existing training modules used under the OIP-2, and trainings modules on gender and conflict management which are currently being developed and piloted under the OIP-2.

Component 4: Project management (estimated cost US$ 0.5 million). This component will provide the technical assistance, capacity building and day-to-day management, including administration, coordination of the project, procurement, financial management and monitoring and evaluation in line with the procedures of the World Bank. The DWR will be the implementing agency of the project, and the PIU currently managing the OIP-2 and its AF will be expanded to manage the OIP-2, the APNI and the proposed project.

## IV. Safeguard Policies that might apply

| Safeguard Policies Triggered by the Project | Yes | No | TBD |
|---|---|---|---|
| Environmental Assessment OP/BP 4.01 | | | × |
| Natural Habitats OP/BP 4.04 | | × | |
| Forests OP/BP 4.36 | | × | |
| Pest Management OP 4.09 | | × | |
| Physical Cultural Resources OP/BP 4.11 | | × | |
| Indigenous Peoples OP/BP 4.10 | | × | |
| Involuntary Resettlement OP/BP 4.12 | | × | |
| Safety of Dams OP/BP 4.37 | | × | |
| Projects on International Waterways OP/BP 7.50 | | × | |
| Projects in Disputed Areas OP/BP 7.60 | | × | |

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## V. Financing (in USD Million)

| | | | |
|---|---|---|---|
| Total Project Cost: | 7.25 | Total Bank Financing: | 0.00 |
| Total Cofinancing: | | Financing Gap: | 0.00 |

| Financing Source | Amount |
|---|---|
| Borrower | 0.25 |
| Free-standing TFs for ECA CU8 Country Unit | 7.00 |
| Total | 7.25 |

## VI. Contact point

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