A. Country and Sector Background

The Government of Uzbekistan (GOU) has assigned high priority to improving environmental and public health conditions associated with seriously deficient water supply services in the province of Syrdarya. The total population of the Syrdarya province is about 700,000 spread over a large area. Following the Government’s request, through letter No 2-8/8-111, for Bank financing a Syrdarja Water Supply Project was included in the 2009-2011 Country Assistance Strategy to help finance a wide range of water supply works. Specifically, the Government has requested Bank assistance of US$ 88 million to “improve the level of service in terms of safety, quality, reliability, efficiency, financial viability, and sustainability of the water supply services in the six rayons of Akaltyn, Bayaut, Kvasast, Mekhnatobad, Mirzaobad, and Sardoba in the Syrdarja oblast” with a total population of 340,000 in an area of about 4,000 km². The beneficiaries reside in about 50 towns... The towns were supplied originally with treated water through regional transmission schemes or from around 250 individual wells that have now reached a state of acute disrepair. The result has been a breakdown of supply in many towns. It is estimated that 25% of the project towns receive no piped water and have to rely on water tankers; another 55% receive less than 6 hours daily, 10% between 6 and 24 hours daily, and only about 10% 24-hour service. The consequences are dire. Service is unsafe and costly for consumers who have to invest time and money in alternative supplies (including drawing raw water from irrigation canals). Under the circumstances there is little hope of having efficient and sustainable services since consumers naturally refuse to pay financially sufficient tariffs for the absent or deficient services.

The Bank is in a good position to assist the Government’s request. Through the implementation of the Bukhara and Samarkand Water Supply Project the Bank has enjoyed increasingly good relations with the Uzbekistan sector authorities, Uzkomunhizmat, and the respective vodokanals. The Bank is now preparing a follow-up Bukhara and Samarkand Sewerage Project.
with Board presentation planned for July 2009. The Bank’s experience from financing large regional water supply schemes elsewhere could help guide the regional authorities and the central government Uzkkomunkhizmat in the preparation and implementation of the Syrdarya Water Supply Project. The proposed project would help prepare and finance a mix of rehabilitation of the existing infrastructure and replacement of such systems that are beyond rehabilitation. Equally important, the Bank project would focus on creating the infrastructure for maintaining the rehabilitated and newly built systems to ensure sustainability. The investment in building institutional capacity would comprise training of maintenance staff and the creation of an institutional infrastructure in each of the 50 project towns, supported by specialized maintenance capacity in the regional capital of Gulistan. It is expected that improvements in service coverage and quality from the Project would improve the chances that user charges could pay for the cash costs of operations and maintenance.

B. Objectives

The proposed project development objective (PDO) is to improve the availability, quality and sustainability of public water supply services in selected rayons of the Syrdarya Region. The objective would be achieved through rehabilitation and/or replacement of the existing water supply infrastructure that has now reached the end of its useful life. In order to reach sustainable operations the project would focus on creating the institutional capacity in the project towns and in the regional vodokanal Suvokova (SVK) to maintain the town systems and to charge user charges that would be sufficient to pay for the cash costs of operations and maintenance.

Achievement of project objectives would be measured by the following proposed performance indicators: (i) Increase in the number of people with access to improved (24 hour /day) water sources under the project; (ii) improved energy efficiency in the water supply system in Syrdarya region; (iii) number of piped households with water meters; (iv) improved financial working ratio; (v) reduced number of pipe breaks per year; and (vi) number of water utilities that the project is supporting.

C. Rationale for Bank Involvement

The financial needs of rehabilitation are so large and the financial situation of the vodokanals so weak that only the central government budget and external concessionary funding, such as IDA, can bring the needed resources and the technical know-how for sustainable operations and good maintenance.

The Bank is in a good position to assist the Government’s request. Through the implementation of the Bukhara and Samarkand Water Supply Project (scheduled to close on June 30, 2010) and the Bukhara and Samarkand Sewerage Project (approved on August 4, 2009) the Bank has enjoyed increasingly good relations with the Uzbekistan sector authorities, Uzkommunkhizmat, and the respective vodokanals. The Bank’s experience with financing large regional water supply schemes elsewhere could help guide the regional authorities and the central government Uzkkomunkhizmat in the preparation and implementation of the Syrdarya Water Supply Project. The proposed project would help prepare and finance a mix of rehabilitation and replacement of existing infrastructure systems that are beyond repair. Furthermore, the Bank project would focus on creating the institutional capacity for operating and maintaining the rehabilitated and newly built systems to ensure sustainability. It is expected that improvements in service coverage
and quality through the Project would improve the likelihood of user charges being used to pay for the cash costs of operations and maintenance.

Parallel to the preparation of the proposed project, the GOU and the World Bank are working together to create the basis for a dialogue on the optimal sector development path. The World Bank financed the preparation of a Water Supply and Sanitation Sector Note which has been finalized taking into account comments from the Government. The sector note is the basis for a strategy workshop scheduled for March 2010 to which all domestic and external stakeholders will be invited. The workshop results could include common agreement on optimal sector strategies and possibly additional financing commitments from other lenders, including the Asian Development Bank. The proposed project will also finance a feasibility study for a future Sewerage Project in Syrdarya, paving the way for potential donor financing.

**Strong government ownership.** The proposed project responds directly to the GOU’s Welfare Improvement Strategy (WIS), similar to the first Poverty Reduction Strategy Paper, which stated that reforming environmental management was a priority. The Bank can assist the Uzbek government in sharpening investment priorities, mainly by focusing on improved maintenance and selective rehabilitation, preceded by a careful mapping of the location and condition of existing infrastructure.

**D. Description**

The Government initiated the preparation of the proposed project, for which a PHRD grant in an amount of US$935,000 was provided under the management of the Uzkomkhizmat to finance a full feasibility study of the proposed Project. The following draft studies were completed and submitted to the World Bank during January-February 2009 for comments: i) Technical, and Economic Feasibility of the Project; ii) Financial and Commercial Feasibility; iii) Social Assessment; and iv) Environmental Impact Assessment of the proposed Project.

The Project will comprise the following components:

**Project Component A: Physical Investments (total estimated cost US$83.0 million of which IDA is US$83.0 million)** - This component will finance the rehabilitation and limited expansion of existing water supply systems in five rayons (Akaltyn, Bayaut, Miezaobad, Sardoba and Hkavast) in Syrdarya region and procurement of O&M equipment, spare parts and construction of site laboratories in project sites. The following sub-components will be financed (refer to Annex 4 details):

*Sub-Component A1: Physical Investments.* Physical investments will be divided into three Sub-regional Zones - Zone 1: Sardoba and Akaltyn sub-region; Zone 2: Bayaut/ Khavast sub-region and Zone 3: Mirzabad sub-region.

*Sub-Component A2: Operations and Maintenance Assistance.* The project will finance i) Installation of SCADA and basic MIS (software and hardware)- to assist with diagnosing the condition of the infrastructure this sub-component will finance the installation of a pilot SCADA system and a basic Mass Information System (MIS) that will assist vodokanal staff to collect, store and analyze required information and data to monitor the day-to-day operations, financial management and results indicators during project
implementation; ii) procurement of operational equipments and related spare parts for improved operations and maintenance of the newly rehabilitated water supply system; and iii) establishment and procurement of equipment for a central laboratory in Gulistan and smaller site laboratories in the following places: (i) Water intake Turttom, (ii) Water intake Beshbulok, (iii) Suvokova Mirzoabad (Water intake Balikchi), (iv) Suvokova Bayaut, (v) Suvokova Khavast, (vi) Suvokova Sardoba and (vii) Suvokova Akaltyn, will be financed.

**Component B: Institutional Strengthening and Capacity Building (total estimated cost US$2.0 million of which IDA is US$2.0 million)** - Suvokova and its district level vodokanal are desperately short of trained staff and information systems to operate and maintain the water supply system. Suvokova lacks adequate capacity to i) bill and collect, ii) install and read water meters, iii) manage customers, and iv) detect, maintain and repair system failures. Uzkomkommunkhizmat has suggested that outsourcing of selected tasks to local private entrepreneurs as a possibility to compensate for Suvokova’s inadequate capacity. The Project will finance the following sub-components:

*Sub-Component B1: Institutional Assessment.* The project will finance an institutional study which will carry out a thorough assessment of the formal and informal (investigate the role of mahallas and shirkats) institutional arrangements currently in place to manage the delivery of water supply services. The study will examine the capacity of the SVK and district vodokanals – Akaltyn, Bayaut, Mekhnaobad, Mirzaobad and Sardoba.

*Sub- Component B2: Training and Capacity Building, Installation of SCADA and Basic MIS system.* The project will finance i) Institutional Consultants - will help build the capacity and improve utility management in the vodokanals; ii) Communication Strategy and Public Awareness Campaigns- improved water supply will increase consumption of water in Syrdarya Region, a public awareness campaigns will be carried out and aimed to improve public hygiene practices and water conservation, and the need for regular tariff payments to support O&M operations; and iii) Staff Training - training will be provided to staff in the rayon Vodokanals, Mahallas and Shirikats so that they are equipped with the information needed to communicate to project beneficiaries and have the necessary skills to operate and maintain the water supply system.

*Sub-Component B3: Local PSP Pilot Program for Outsourcing select water supply operations and maintenance services.* The Uzkomkommunkhizmat is keen on promoting and piloting the concept of Local Private Sector Outsourcing to improve vodokanal operations in the Syrdarya Region based on experience in Tashkent, Bukhara and Samarkand vodokanals. The Project will finance the following i) Local PSP Study; ii) Pilot outsourcing of select O&M tasks. The pilot will finance performance based service contracts of select vodokanal tasks which will based on measurable outputs; and iii) Promote learning and knowledge exchange between Tashkent Vodokanal and Syrdarya vodokanal.- The Tashkent Vodokanal has expressed their willingness in sharing their experience with outsourcing with Suvokova and in training Suvokova staff in this area. Tashkent Vodokanal’s specific role in this respect will be further explored and confirmed during Project Appraisal.
Component C: Feasibility Studies for Future Sewerage Investments in Syrdarya Region (total estimated cost US$1.0 million of which IDA is US$1.0 million) - Under the management of the central government, this component will finance consultant studies for future sewerage investments in the Syrdarya Region. It is envisaged that the feasibility study will help financiers to consider financing the wastewater infrastructure sector in the Syrdarya region. The component will be executed by the Uzkommunhizmat with support from the PCU.

Component D: Project Management (total estimated cost US$2.0 million of which IDA is financing US$2.0 million) - This component will finance the Project Coordination Unit (PCU), including its branches in Syrdarya. The component will also finance monitoring and evaluating (M&E) of project activities: technical, environmental and social monitoring (for example, periodic beneficiary assessments to determine consumer satisfaction, connection rates, and the effectiveness of public awareness campaigns).

The total expected IDA financing for the proposed project is expected to be US$88 million. The equivalent cost of US$268 per capita of the beneficiary populations is relatively high and is explained by the dire state of the existing infrastructure and by the need to bring in water for those towns where nearby groundwater is so poor that it cannot be treated economically to meet drinking water standards.

E. Financing
Source: ($m.)
BORROWER/RECIPIENT 12
International Development Association (IDA) 88
Total 100

F. Implementation

Consultants hired under project will assist in building the capacity of the participating vodokanals to operate/maintain the water supply system through Technical Assistance (TA) and training and will include the following vodokanals – Bayaut, Okoltyn, Shirin, Mirzaobod, Yangier, Khovos and Sardova rayon vodokanals. Efforts to build institutional capacity will entail various policy reforms and training activities which will be financed under Component B, among other activities. These include:

- Reviewing current tariff and financial policies, including water supply connection policies, to enable each vodokanal to rapidly connect those households;
- Upgrading the capacity of each vodokanal to diagnose the state of its infrastructure and carry out preventive maintenance in an efficient and sustainable way; and
- Added training in different aspects of water supply and sewerage operations.
- Launching better communication and public awareness campaign.
- Piloting a local PSP operation in operation and maintenance.

Overall responsibility for project implementation within the Government is with the Uzkommunhizmat. The PCU established within Uzkommunhizmat will be in charge with day-to-day project management and coordination through its Syrdarya branch office in SVK (SPCU).
SVK is the implementing entity of the Project with full implementation responsibility. It will be assisted in the project implementation by the PCU in Tashkent and its Syrdarya branch - SPCU.

The PCU will be responsible for project financial management, including accounting, reporting, and disbursements, including the management of the designated account. The PCU will have overall responsibility for submission of withdrawal applications to the Bank, and for consolidation and submission of periodic financial reports as well as audit arrangements. The PCU will need to recruit, and retain throughout project implementation, suitably qualified and experienced financial staff with adequate knowledge of the World Bank financial management and disbursement procedures. The PCU financial specialist will consolidate all the reports for submission to the Bank, and would also help to train the accounting staff of its Syrdarya branch SPCU.

The PCU will also report to the Interagency Council for Cooperation (ICC) with International Financial Institutions, Foreign Government Agencies, and Donor Countries, established to coordinate “Implementation of Large-scale and Strategically Important Investment Projects” under the Cabinet of Ministers of the Republic of Uzbekistan. The ICC will have representatives from key national agencies of the central government (Cabinet of Ministers, MOF, MOFERT, Central Bank, State Property Committee, State Committee of Architecture and Construction, MOE, etc.) via the Coordination Group for Cooperation (CGC) established under the Ministry of Economy and set up for coordination with the World Bank Group. The ICC will be led by the First Deputy Prime Minister and via Coordination Group provide guidance on project-related issues and activities, where coordination of senior Uzbekistan management is required to ensure smooth implementation.

G. Sustainability

The project is designed to assist the Government of Uzbekistan to improve water supply service delivery by rehabilitating deteriorated water supply networks. The project will strengthen institutional capacity of the vodokanal in Syrdarya through provision of technical assistance for training of staff in O&M, accountability, financial management, communications, consumer orientation to handle complaints and corporate governance. Financial sustainability will be improved through increased revenue and reduced operational costs of the vodokanal through rehabilitation of the water supply system.

The sustainability of the project will be measured in the following manner:

(a) Institutional sustainability will be measured by the vodokanal’s ability to operate and maintain the water supply assets.

(b) Financial sustainability will be monitored with the cash working ratio (cash operating expenses/collected revenues).

(c) Operational sustainability will be measured by the reduction in water losses in the system.

H. Lessons Learned from Past Operations in the Country/Sector
Projects must be designed to match the implementation capacity. The BSWSP, financed under Loan Number 4216-UZ and Credit 3620-UZ, was approved on March 19, 2002 and is scheduled to close on June 30, 2010. Implementation of BSWSP was slower than envisaged reflecting limited capacity of the implementing agency. The meter installation component was in slow progress in the BSWSP due to mainly a relatively expensive cost that the customers have to pay. The proposed Bukhara and Samarkand Sewerage Project has been designed to match the demonstrated implementation capacity and include the meter installation component to be financed by the project.

Careful attention will be given to procurement of goods and services. Authorities have a policy of promoting national manufacturers and contractors. Preparation of procurement packages will strike a proper balance between the Government’s objectives and the requirements under the Bank’s policies that aim to procure goods, civil works and services at the lowest evaluated cost.

Local Private Sector Participation in the form of Outsourcing Vodokanal services/tasks has shown signs of success and is gaining popularity. The negative experience from management contracts in the water supply and sewerage utilities (as was tried under the BSWS project) prompts a re-examination of the choice of models of Private Sector Participation (PSP). On the other hand, the Tashkent vodokanal has proven positive experience from selective outsourcing to local private firms. At the same time, the capacity of the Syrdarya vodokanal to operate and maintain water supply systems is inadequate to operate, maintain and manage in a financially sustainable way the new systems that will be built under the Project. As a consequence, the Project proposes to proceed along parallel tracks to ensure efficient and sustainable operations: (i) An effort will be made to build up capacity within the Syrdarya vodokanal to operate and maintain the water systems; and (ii) A plan will be drafted and implemented to outsource the operations and maintenance of individual systems to domestic, private firms. The dual creation of capacity will allow greater flexibility since the Syrdarya vodokanal will not be under a single management or lease contractor, and since it will be in a position to benchmark the performance of individual outsourced operations, including comparing it to its own performance.

I. Safeguard Policies (including public consultation)

<table>
<thead>
<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Environmental Assessment (OP/BP/GP 4.01)</td>
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<tr>
<td>Natural Habitats (OP/BP 4.04)</td>
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<td>Pest Management (OP 4.09)</td>
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<tr>
<td>Physical Cultural Resources (OP 4.11)</td>
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<tr>
<td>Involuntary Resettlement (OP/BP 4.12)</td>
<td>[x]</td>
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<tr>
<td>Indigenous Peoples (OD 4.20, being revised as OP 4.10)</td>
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<td>[x]</td>
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<tr>
<td>Forests (OP/BP 4.36)</td>
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<td>[x]</td>
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<tr>
<td>Safety of Dams (OP/BP 4.37)</td>
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<tr>
<td>Projects in Disputed Areas (OP/BP/GP 7.60)*</td>
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<td>[x]</td>
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<tr>
<td>Projects on International Waterways (OP/BP/GP 7.50)</td>
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* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties’ claims on the disputed areas
The proposed rehabilitation water supply infrastructure investments will trigger the following Bank policies: OP/BP 4.01 on Environmental Assessment; OP/BP 4.12 on Involuntary Resettlement; and OP 17.50 on Disclosure Policy. The proposed project is categorized as #B,# based on the fact that the project involves mainly rehabilitation of existing water supply distribution systems (transmission main, water distribution pipelines, water intakes wells and related pumps, pumping stations with integrated chlorinators, water towers, replacement of valves, water meters installation) and new installation of 26 km transmission main of 700 mm diameter from Turttom water intake to Khavast and Bayaut rayon. Selected new construction of distribution systems that can be supplied more economically and sustainably from local groundwater wells is also planned under the project.

The rehabilitation related impacts are likely to be localized and efficiently prevented by applying international construction practice and planning. Such potential impacts may be related to: (i) dust, noise, vibration, temporary access restriction and temporary closure of traffic during works, (ii) improper disposal of construction related waste; (iii) temporary pollution of soil, groundwater and surface waters as a result of leaching of chemicals used sometimes as pipe coating or lining, and by accidental spillage of oil and other products used as lubricants and fuel during works; (iv) lowering of the water table level may potentially occur in the close surrounding areas when the excavation of ditches and trenches goes deeper than the former; this effect, combined with the decompression of the soil, may lead to increased terrain instability with potential risks to nearby infrastructures and buildings; (v) impacts and risks associated with leaks and spills of chlorine and other chemicals or safety hazards including worker safety specially related to dismantle of asbestos pipes; and (vi) chance finds of physical cultural resources. However, these impacts will need to be properly managed during the construction phase by the contractor and closely supervised by Syrdarya PCU (SPCU), respective vodokanals, and designated supervisor engineer.

Construction of the new or replacement water supply pipes may require some displacement of commercial or agricultural activities, although the social impact, if any, is expected to be minor. The Project’s intention is not to displace people but will find alternative locations should land be required. Because the exact locations will only be known during implementation, the Borrower has prepared a Resettlement Policy Framework that will describe the process to be followed in the event any enterprises need to relocate to allow land to be available for the construction and operation of the water supply network, as needed.

No major impacts on Physical Cultural Resources (PCR) are expected during the project implementation, yet attention will be paid to the possibility of built PCR being affected by dust and vibration during works.

Projects on International Waterway. The project will rely on groundwater to supply the population with safe and sufficient water. The OP/BP 7.50 is not triggered because the groundwater to be accessed is not connected hydrologically with the Syr Darya river or any other international waterway. The EA evaluation concluded that the additional water amount extracted as a follow-up to the new project investments will remain in the limits of the operational reserves and utilization of fresh saline underground waters deposits (thousand cubic meters/day) approved by the national legislation. Consequently, the team assessment based on consultation with LEGEN is that the project interventions do not trigger the OP/BP 7.50.
Involuntary Resettlement (OP/BP 4.12). A screening during project preparation established that the proposed project is not expected to involve land acquisition as the focus of the project will be rehabilitation and/or replacement of the existing water supply infrastructure. Should land be needed for these investments, the project plans to use state-owned land which is located on existing rights of way designated for municipal infrastructure, and not occupied by residents (legal or illegal) or enterprises.

Although the need for and locations of new pipelines have not been established, a reconnaissance of the potential sites where new construction may occur suggests that the project may necessitate the (temporary) relocation of households, private and other enterprises, or that it may lead to a loss of access to assets or a loss of income sources for certain people living in the project area. The screening confirmed that there are a lot of illegally taken plots and unauthorized buildings/structures, including additions to houses, cattle-pens, warehouses, garages, toilets, sheds, vegetable gardens, etc., as well as electrical, gas and phone networks in the project area. Some of these structures are located near Suvokova facilities and networks, near non-functioning or functioning artesian wells, water towers, over WSNs and SNs, near gas and electrical networks, as well as too close to residential buildings.

To avert any negative social or economic impacts on persons losing access to land, assets and income as a result of the project a Resettlement Policy Framework (RFP) was prepared by the Borrower. The purpose of the RPF is to clarify the policies and principles and organizational arrangements for the delivery of compensation and other entitlements in the event that land acquisition and/or displacement occurs; the process by which these will be determined and delivered; and arrangements for possible grievance redress mechanisms as well as independent monitoring of the implementation of a specific resettlement plan (RP) or abbreviated resettlement plan (if impacts are minor or fewer than 200 people are displaced) that may become necessary as a result of the Project. For any project component requiring land acquisition, specific RPs consistent with the principles in this RPF will be submitted to the Bank for approval when detailed investment planning information and the scope of the civil works becomes available, and the extent of the land acquisition needed for the investment is known.

J. List of Factual Technical Documents
- Final Revised EIA
- Final RFP

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