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Report No: 32920-TJ

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT
IN THE AMOUNT OF SDR 10.6 MILLION
(US$15 MILLION EQUIVALENT)

TO

THE REPUBLIC OF TAJIKISTAN

FOR A

MUNICIPAL INFRASTRUCTURE DEVELOPMENT PROJECT

December 19, 2005

Infrastructure and Energy Sector Unit
Central Asia Country Unit
Europe and Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective: November 30, 2005)

Currency Unit	=	TJS (Tajik Somoni)
1.00 TJS	=	US$0.3132
US$1.4195	=	SDR 1

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

CAS	Country Assistance Strategy
CFAA	Country Financial Accountability Assessment
CPAR	Country Procurement Assessment Review
ECA	Europe and Central Asia Region
EMP	Environmental Management Plan
FMR	Financial Monitoring Report
FMS	Financial Management Specialist
FPIP	First Phase Investment Program
GDP	Gross Domestic Product
GNI	Gross National Income
ICB	International Competitive Bidding
IFRS	International Financial Reporting Standards
ISA	International Standards on Auditing
KMK	Khochagii Manziliu Kommunali (formerly known as Tajikkomunservis)
LSMS	Living Standards Measurement Survey
M&E	Monitoring and Evaluation
MIDP	Municipal Infrastructure Development Project
MIP	Management Improvement Program
MIS	Management Information System
MOF	Ministry of Finance
MTR	Mid-Term Review
NCB	National Competitive Bidding
OM	Operations Manual
PHRD	Policy and Human Resources Development Grant
PMC	Project Management Consultant
PMU	Project Management Unit
QCBS	Quality and Cost Based Selection
CQ	Consultant Quality Based Selection
SBD	Standard Bidding Documents
SFCC	State Financial Control Committee
SOE	Statement of Expenditure
SUE	State Unitary Enterprise
TISG	Technical and Institutional Support Group
TOR	Terms of Reference
UNDP	United Nations Development Program
USAID	United States Agency for International Development

Vice President:	Mr. Shigeo Katsu, ECAVP
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Task Team Leader:	Jonathan S. Kamkwalala

TAJIKISTAN
Tajikistan Municipal Infrastructure Development Project

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TAJIKISTAN

MUNICIPAL INFRASTRUCTURE DEVELOPMENT PROJECT

PROJECT APPRAISAL DOCUMENT

EUROPE AND CENTRAL ASIA

ECSIE

Date: December 19, 2005	Team Leader: Jonathan Kamkwalala
Country Director: Dennis N. de Tray	Sectors: Water supply (40%); General water, sanitation and flood protection sector (30%); Sanitation (10%); Solid waste management (20%)
Sector Director/Manager: Peter Thompson/ Sumter Lee Travers	Themes: Access to urban services for the poor (P); Other urban development (S)
Project ID: P079027	Environmental screening category: Partial Assessment
Lending Instrument: Specific Investment Loan	Safeguard screening category: Limited impact

Project Financing Data

[ ] Loan [ ] Credit [X] Grant [ ] Guarantee [ ] Other:

For Loans/Credits/Others:
Total Bank financing (US$m.): 15.00
Proposed terms: Standard IDA Terms

Financing Plan (US$m)

Source	Local	Foreign	Total
RECIPIENT	1.50	0.00	1.50
IDA GRANT FOR DEBT VULNERABLE COUNTRIES	9.50	5.50	15.00
Total:	11.00	5.50	16.50

Borrower:
Government of Tajikistan
Tajikistan
Responsible Agency:
State Unitary Enterprise "Khochagii Manziliu Kommunali" (KMK)
Project Management Unit (PMU)
56 Karabaeva Street
Dushanbe
Tajikistan
Contact. Mr. Abdulmalik Azimov, Director General
Mr. Jamshed Tabarov, Project Director

Estimated disbursements (Bank FY/US$m)									
FY	2006	2007	2008	2009	2010	2011			
Annual	1.00	3.00	4.00	4.00	2.00	1.00			
Cumulative	1.00	4.00	8.00	12.00	14.00	15.00			

Project implementation period: Start March 1, 2006 End: February 28, 2011
Expected effectiveness date: March 1, 2006
Expected closing date: August 31, 2011

Does the project depart from the CAS in content or other significant respects? [ ]Yes [X] No
Ref. PAD A.3

Does the project require any exceptions from Bank policies? [ ]Yes [X] No
Ref. PAD D.7
Have these been approved by Bank management? [ ]Yes [ ] No
Is approval for any policy exception sought from the Board? **[ ]Yes [X] No**

Does the project include any critical risks rated "substantial" or "high"? **[X]Yes [ ] No**
Ref. PAD C.5

Does the project meet the Regional criteria for readiness for implementation? **[X]Yes [ ] No**
Ref. PAD D.7

Project development objective ***Ref. PAD B.3, Technical Annex 3***
The development objective of MIDP is to improve the availability, quality and efficiency of delivery of basic municipal services to the population of the eight towns which participate in the project.

Project description *[one-sentence summary of each component]* ***Ref. PAD B.4, Technical Annex 4***
This objective will be achieved by: (a) financing the rehabilitation and repair of basic infrastructure and installations and/or the replacement of equipment of KMK local subsidiary utility enterprises, (b) assisting KMK and its local subsidiary utility enterprises in improving their management capacity for the delivery of basic municipal services; and (c) supporting the implementation of project activities.

Which safeguard policies are triggered, if any? ***Ref. PAD D.6, Technical Annex 10***
The project is not expected to have any significant or irreversible environmental impacts, and is classified as Environmental Category "B". International Waterways (World Bank OP 7.50): Since some of the activities supported by the project will take place on trans-boundary waterways as defined in OP 7.50, the project triggers this policy. However, the project qualifies for an exemption from the obligation to notify the governments of riparian countries, because the proposed activities will neither attempt to modify the course of waterways nor significantly increase the volume of water abstraction and therefore will not affect the water rights of other riparian populations. No subproject financed by the project will entail land acquisition or relocation of population, or result in restricting access to economic resources of any individual or community.

Significant, non-standard conditions, **if any**, for: ***Ref. PAD C.6***

Board presentation:
N/A.
Loan/Grant effectiveness:
Operations Manual (OM) adopted by KMK
Project Implementation Agreement executed between KMK and PMU
Subsidiary Grant Agreement executed on behalf of the Government and KMK

Covenants applicable to project implementation:

Opening by Government of Project Account for counterpart funding and deposit of an initial amount of US$70,000 equivalent by July 15, 2006

A. STRATEGIC CONTEXT AND RATIONALE

1. Country and sector issues

With a per capita Gross National Income (GNI) of about US$200 in 2003, Tajikistan is the poorest country in Central Asia and among the poorest in the world. Close to 65 % of the population of about 6.3 million people live below the poverty line. Most of the country's terrain is mountainous and only a small fraction of it is usable for agriculture. Despite this, the agricultural sector accounts for about 60% of employment and close to 25% of GDP. Industrial production is limited and concentrated in a few sectors and geographical areas. As a result, the urbanization rate is relatively low with only about 25% of the population living in urban centers (see Annex 1).

Tajikistan suffered widespread physical damage and heavy human losses from a civil war that broke out soon after independence in 1991 and lasted until 1997. The war compounded the effects of the break-up of the Soviet Union and the resulting losses in subsidies and trade. Since then, the infrastructure inherited from the Soviet times has continued to deteriorate rapidly as lack of fiscal resources has forced the Government to curtail investments and maintenance expenditure. Basic municipal services once taken for granted (supply of drinking water, solid waste collection, wastewater treatment, etc.) are often only intermittently available if at all. According to the UNDP's '2003 Tajikistan National Human Development Report', 43% of the population is now without access to safe drinking water, about one third of the water distribution networks are broken down, and even in some of the larger cities that still have functioning water distribution systems, water supply is considered unsafe as possibly not more than 10% of distributed water receives adequate treatment. Contamination with untreated sewage is thought to be widespread. Outbreaks of typhoid fever occur periodically and the incidence of other water-borne diseases is high. Conditions of delivery of other basic municipal services such as solid waste collection and disposal are similarly poor and a major concern for the population.

Tajikistan has a sub-national administration system that still reflects, to a large extent, the Soviet system in place before 1991 and operates on three levels: provinces (oblasts), towns and rayons (districts), and sub-districts (jamoats) (see Annex 1). The relationship between these units and levels is generally, but not universally, hierarchical. In recent years the Government has started working on creating the legal framework for decentralization and local government reform. However, at this point, Tajikistan still operates as a heavily centralized state. Local authorities play only a marginal role in delivery of basic municipal services. Delivery of such services is primarily a responsibility of a central government agency, the State Unitary Enterprise (SUE) Khochagii Manziliu Kommunali (or KMK, formerly known as Tajikkomunservis), and its local subsidiary utility enterprises.

2. Rationale for Bank involvement

The continuing deterioration in the delivery of basic municipal services creates serious public health risks and carries high economic costs for the population. Improving the quality of drinking water is essential for protecting people from diseases and will allow Tajikistan to move towards achieving, among the Millennium Development Goals, Target # 10, which is '*to halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation*'. Thus far, Bank involvement in supporting the rehabilitation of basic municipal

infrastructure has been relatively modest in comparison to the country's needs and limited to the on-going Dushanbe Water Supply Project, (Cr. 3664-TJ, SDR13.5 million, FY02) which seeks to improve water service provision in Dushanbe, the capital city. The proposed Municipal Infrastructure Development Project (MIDP) will therefore provide an opportunity to broaden Bank support to Tajikistan and extend it to much needed improvements in the delivery of basic municipal services in other, economically more challenged, towns of the country and contribute to improving the quality of life of their populations.

3. Higher level objectives to which the project contributes

Tajikistan's Country Assistance Strategy (CAS) was approved by the Bank Board on July 26, 2005. The main objective of the CAS is to support growth in the immediate future by improving domestic economic opportunities, laying the foundation for future growth by preserving and enhancing human capital, and exploiting the country's energy potential. Specifically, the CAS aims at improving business opportunities in rural and urban areas, and thereby reducing the cost of doing business. In addition, the CAS seeks to enhance and preserve the quality of human capital, by among other things, improving health and education services as well as increasing the supply of safe drinking water in selected areas.

MIDP is directly linked to the themes of this CAS which underlines that good and reliable urban infrastructure is essential for stimulating growth and increasing business opportunities in urban areas. In addition, MIDP also supports the CAS objectives through the rehabilitation of water supply infrastructure which, by increasing the supply of safe drinking water in the eight towns participating in the project, will contribute to protecting human capital. The project will also support efforts to build up capacity of KMK, the central government agency responsible for delivery of basic municipal services in Tajikistan's urban centers to improve, at the level of both its central and local units, the ability to more adequately address the service needs of the populations of the towns participating in the project.

MIDP is also in line with the country's first Poverty Reduction Strategy Paper (December 2002), which stresses the issue of deteriorating infrastructure and municipal services and recognizes the key link between growth and infrastructure. To measure and monitor progress in the fight against poverty, the Government has selected nine poverty indicators, including the Millennium Development Goal Target # 10. To that end, it aims at increasing the percentage of the total population with access to safe drinking water from 51.2% in 2001 to 58% in 2006.

B. PROJECT DESCRIPTION

1. Lending instrument

The lending instrument is an IDA Specific Investment Grant for Debt Vulnerable Countries.

2. [If Applicable] Program objective and Phases

Not applicable.

3. Project development objective and key indicators

The development objective of the Municipal Infrastructure Development Project (MIDP) is to improve the availability, quality and efficiency of the delivery of basic municipal services to the population of the eight towns which participate in the project. This objective will be achieved through (a) financing the rehabilitation and repair of infrastructure and installations and/or the replacement of equipment of KMK local subsidiary utility enterprises, and (b) assisting KMK and its local subsidiary utility enterprises and, where and when appropriate, local government authorities in their efforts to improve the management of the delivery of basic municipal services. Ensuring access of the population to basic municipal services will be an important factor in supporting local economic growth and poverty reduction.

Key indicators:

Due to the nature of the project, defining outcomes - and corresponding indicators - for MIDP as a whole would not be meaningful. Outcomes and indicators have therefore been defined individually for each of the eight participating towns to reflect their specific conditions and expected achievements under the project.

The expected project outcomes are:

- Availability and quality of delivery of basic municipal services improves in the eight participating towns during project implementation. This will be measured through quantifiable indicators such as:
  - increase in the availability of water supply in hours per day for the towns' population
  - increase in the frequency of solid waste collection pick ups per month
- Efficiency of basic municipal services improves in the eight participating towns during project implementation. This will be measured through quantifiable indicators such
  - reduction in energy use per m3 of water produced
- Satisfaction of the population with improvements in the delivery of basic municipal services in the eight participating towns increases during project implementation. This will be measured through periodic sociological surveys.

4. Project components

MIDP will consist of the following three components: (a) Municipal Infrastructure Rehabilitation; (b) Technical and Institutional Strengthening; and (c) Implementation Support.

The Table below provides a project cost estimate and indicative financing plan for the project components and subcomponents. The financing plan is based on the Country Financing Parameters adopted in April 2005, which allow for up to 100% financing of goods and works and local services, and contracts for foreign consultants, including taxes and duties.

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Table 1. Estimated Project Costs and Financing		
(in US dollars equivalent)		
	Total Cost	**IDA**
Component A: Municipal Infrastructure Rehabilitation	12,500,000	11,000,000
Component B: Technical and Institutional Strengthening	1,500,000	1,500,000
Component C: Implementation Support	2,500,000	2,500,000
Total Project Cost	**16, 500,000**	**15, 000,000**

* All costs are inclusive of physical and price contingencies

Component A: Municipal Infrastructure Rehabilitation: (Estimated component cost: US$12.5 million; indicative IDA financing: US$11.0 million).

The component will finance the rehabilitation and/or repair of infrastructure and installations, and the replacement of equipment that are needed for the delivery of basic municipal services by the KMK local subsidiary utility enterprises (water supply, solid waste collection, etc) in the eight towns (Dangara, Istaravshan, Kanibadam, Kulyab, Kurgan-Tyube, Rasht (Gharm), Vakhdat, and Vose) which were selected by the Government in May 2004 to participate in the project.

Investments to be financed under the component were selected on the basis of the following criteria:

(a) they represent top priorities for the local utilities, local administrations *(khukumats)*, and town populations;
(b) they are technically feasible least-cost solutions to the problems to be addressed;
(c) they comply with World Bank safeguards and other guidelines; and
(d) they do not compete and/or overlap with any investment or activity financed by another donor.

Component B: Technical and Institutional Strengthening**:** (Estimated component cost: US$1.5 million, indicative IDA financing: US$1.5 million). The component will consist of two sub-components: (B.1) Additional Engineering Studies; and (B.2) KMK Institutional Strengthening.

Sub-component B.1: Additional Engineering Studies (Estimated sub-component cost: US$0.4 million, indicative IDA financing: US$0.4 million).

The sub-component will finance a series of studies and activities that are necessary to better define the scope and features of some of the investments to be carried out under Component A in the second and subsequent years of project implementation. The studies and activities, which will be carried out by international and domestic consultants, will include the following: (a) updating of inventory and mapping of existing water supply distribution and sewerage networks; (b) leak detection campaigns for water supply systems; and (c) other technical and hydro-geological studies as needed.

Sub-component B.2: KMK Institutional Strengthening. (Estimated sub-component cost: US$1.2 million, indicative IDA financing: US$1.2 million).

The sub-component will finance technical assistance by international and domestic consultants in various areas to assist KMK and its local subsidiary utility enterprises in: (a) developing their capacity to more effectively address issues of operational and financial management; (b) training staff in matters of occupational safety, business and environmental management, and operational planning; (c) addressing legal issues arising from both current arrangements for delivery of basic municipal services, and the expected larger role of local authorities in the future delivery of such services; and (d) strengthening the financial and technical management of the KMK local subsidiary utility enterprises in the participating towns through the implementation of enterprise-specific Management Improvement Programs (MIPs) which focus on improving billing and collection, accounting, and customer relations as well as on updating operating procedures and establishing and implementing preventive maintenance programs for utility installations and equipment.

Component C: Implementation Support: (Estimated component cost: US$2.5 million, indicative IDA financing: US$2.5 million). The component will consist of four sub-components (C.1) PMU Operations Support; (C.2) Audits; (C.3) Monitoring and Evaluation; and (C.4) Project Management Support.

Sub-component C.1: PMU Operations Support (Estimated sub-component cost: US$0.8 million, indicative IDA financing: US$0.8 million).

The sub-component will finance the: operating costs of the PMU including staff salaries, in-country travel costs, mandatory employer social charges, office consumables, staff training, miscellaneous project supervision costs, communications, vehicle insurance and maintenance, as well as office equipment, furniture and vehicles.

Sub-component C.2: Audits: (Estimated sub-component cost: US$0.1 million, indicative IDA financing: US$0.1 million).

The sub-component will finance the annual audits of the project accounts and entity audits of the two largest KMK local utility subsidiary enterprises participating in the project (Kurgan Tyube and Kulyab VodoKanal, respectively).

Sub-component C.3: Monitoring and Evaluation (Estimated sub-component cost: US$0.1 million, indicative IDA financing: US$0.1 million).

The sub-component will finance the creation and maintenance of a system to continuously monitor and evaluate the performance and results of the project.

Sub-component C.4: Project Management Support: (Estimated sub-component cost: US$1.5 million, indicative IDA financing: US$1.5 million)

The sub-component will finance the project management support necessary to implement the project with the required technical and financial efficiency. To this end, the sub-component will finance the services of an international Project Management Consultant (PMC) who will team up with domestic consultants to assist the PMU in project management tasks such as procurement, preparation of final designs and tender documents and supervision of implementation of works by contractors and/or delivery of goods and services by suppliers and consultants.

5. Lessons learned and reflected in the project design

The project will be the second World Bank project in Tajikistan to address problems of basic municipal service infrastructure. The first project, the Dushanbe Water Supply Project is still under implementation. The experience of other municipal infrastructure projects in ECA and other Bank regions shows that the successful achievement of the objectives of this type of operation depends on a number of specific elements: (a) it requires a very strong government ownership and commitment to effective project implementation; (b) in an environment of pervasive lack of technical expertise, complexity of project design should be reduced as much as technically possible; (c) trying to address technical problems in combination with policy or governance issues should be avoided to the extent possible in an environment of weak institutional capacity; (d) even though making one-time investments in infrastructure improvements may be useful, a significant sustainable economic, social or institutional impact can only be achieved through continued support over a number of years; (e) investments in local infrastructure and/or utility services need to be complemented with support to institutional capacity building; and (f) project implementation arrangements must be well defined, and the roles of both central government agencies and local authorities must be clearly defined during project preparation to preempt possible conflicts of interest during implementation.

In designing the project, these lessons were taken into account through the following: (a) the implementation of the project is entrusted to KMK, the central government agency responsible for delivery of basic municipal services in Tajikistan. Theoretically, implementing MIDP through local governments would have been the most desirable approach. However, in the current institutional context of Tajikistan where decentralization is still at an incipient stage, entrusting the responsibility for implementation to KMK is the only practical option; (b) the project complements the investment component with institutional support to KMK and its local subsidiary utility enterprises in order to improve the likely sustainability of project results and outcomes; and (c) the project design has been simplified to the extent feasible, focuses exclusively on the rehabilitation of existing infrastructure and installations and the replacement of equipment, and excludes any attempt to promote sector policy or institutional reforms.

6. Alternatives considered and reasons for rejection

A Specific Investment Loan (SIL) type operation is the most appropriate instrument and given the urgent need for investment in urban infrastructure rehabilitation, the proposed project design represents the most effective approach to addressing these problems in the towns of Tajikistan. Combining infrastructure rehabilitation with institutional capacity building at the level of KMK and its local subsidiary utility enterprises will allow beginning to address some of the most critical problems that for the time being still hamper local economic growth and reduction of poverty.

Another option that was considered but not selected consisted in a project that, by focusing on issues of decentralization, would have simultaneously addressed sector policy issues at the national level and delivery of basic municipal services at the local level. The option was not retained because the discussion about decentralization and local government reform is still at an incipient stage in Tajikistan and national policy issues are generally more efficiently addressed

through structural adjustment programs and other policy based lending operations than through investment projects.

The creation of a municipal fund-type operation was also considered but rejected because an on-lending type operation would have to be based on the repayment of the investment costs by KMK and/or its local subsidiary utility enterprises. In the prevailing economic and social context of Tajikistan and given, in particular, the lack of resources and widespread poverty at local level, such an arrangement was deemed largely premature and impractical.

C. IMPLEMENTATION

1. Partnership arrangements (if applicable)

Project preparation was supported by a US$420,500 Policy and Human Resource Development (PHRD) Grant from the Japanese Government to Tajikistan (TF 053752) which allowed hiring the international and domestic consultants needed to carry out the preparatory work. Preparation studies comprised technical feasibility studies for the investment program including final designs and tender documents for the first phase of project implementation as well as the preparation of Management Improvement Programs (MIPs) for each of the KMK local subsidiary utility enterprises involved in the project.

Project preparation also benefited from studies carried out by USAID/Urban Institute on both technical and institutional issues at local government and local utility level. During its implementation, MIDP will be closely and continuously coordinated with the USAID/Urban Institute Program to ensure full consistency and complementarity.

MIDP will not involve any co-financing. However, opportunities for possible parallel financing of some MIDP components or sub-components will be explored with other donors during project implementation.

2. Institutional and implementation arrangements

MIDP will be implemented over a period of five years commencing in March 2006, the expected time of effectiveness of the IDA Grant. As per Government Resolution # 357 of September 28, 2005 the project will be implemented under the responsibility of the SUE Khochagii Manziliu Kommunali (KMK) - formerly known as Tajikkomunservis. KMK was created by Government Resolution No 357 of July 31, 2001 as the Government agency responsible for the delivery of basic municipal services such as water supply, sewerage, district heating, and solid waste management in urban centers of Tajikistan. At this point, KMK manages a network of about 180 local subsidiary utility enterprises throughout the country.

To implement MIDP, a Project Management Unit (PMU) was established by Government Resolution # 408 of October 1, 2004, amended by Resolution # 357 of September 28, 2005 under the name "Municipal Infrastructure Development Project Management Center (Centr Upravlenya Proyektom Rasvitya Municipalnoy Infrastruktury v Respublike Tajikistan)". The PMU, which reports to KMK, is headed by a Project Director, and has staff responsible for procurement, disbursement and financial management, accounting, reporting, technical supervision of project implementation and monitoring and evaluation of project results.

The division of responsibilities between KMK and the PMU in MIDP implementation will be detailed in a specific Project Implementation Agreement to be entered into by KMK and the PMU as a Condition for Effectiveness. Specific internal working arrangements and procedures of the PMU are specified in an Operations Manual (OM) the adoption of which by KMK will be a condition for Effectiveness of the IDA Grant. Under delegation of responsibilities from KMK, the PMU will be responsible for managing day-to-day implementation of the project including (a) reporting on project progress to KMK, the Government and the Bank, (b) undertaking procurement of works, goods and services in a timely manner and in accordance with the procurement plan and in compliance with the relevant Bank guidelines, (c) managing project funds and accounts, (d) ensuring timely audit of project accounts, and (e) overseeing, and guaranteeing the quality of, project implementation by contractors, suppliers, and consultants. Training to be provided under the project will enable the PMU to efficiently manage project implementation.

3. Monitoring and evaluation of outcomes/results

Under delegation of responsibility from KMK, the PMU will be in charge of continuous Monitoring and Evaluation (M&E) of MIDP implementation. As part of the social assessment, baseline information and data were collected on the overall quality and availability of water supply, solid waste collection and other basic municipal services as well as the effects of access limitations or poor quality of services on the living conditions of the population, in particular the poor. These baseline data will be used to monitor the impact and benefits of the project by comparing service conditions before and after project implementation. M&E will ensure that the investments in the eight participating towns are implemented in accordance with Bank procedures, are consistent with the development objectives of MIDP, and enjoy the support of the local authorities and the beneficiary populations.

In addition, M&E will monitor progress in the development of institutional capacity within KMK and its local subsidiary utility enterprises, in particular through the annual review of the MIPs. These reviews will allow to alert KMK at an early point to actual and/or potential problems in MIDP implementation or the sustainability of project results and propose remedial action where and when necessary.

The results of M&E activities will be reflected in quarterly and annual progress reports. These progress reports will cover performance and impact indicators, progress in the implementation of works and/or delivery of goods and services, and the development of institutional activities, training and studies, as well as the use of project resources under the project. The report for the fourth quarter of each year will be prepared in the form of an annual report that will summarize the entirety of the results achieved during the year and provide a work plan and budget for the following year.

A Mid-Term Review (MTR) of the project will be conducted no later than spring of 2008, or two years after commencement of MIDP implementation. The MTR will review the actual implementation performance of each of the participating towns, identify the reasons for possible delays and poorer than anticipated results and, if advisable, agree with KMK and the Government on possibly required changes in the investment programs, reallocation of project and IDA Grant resources and/or explore the possible extension of MIDP activities to new towns.

It will also review the effectiveness of the decision-making process on MIDP investments including the involvement of local authorities and the beneficiary population.

4. Sustainability

In recent years, the Government of Tajikistan has begun to prepare legislative proposals for decentralization and local government reform with the assistance of UNDP and bi-lateral donors with the aim to give local governments more power in the management of local affairs. In spite of this work, today the delivery of basic municipal services still remains essentially the primary responsibility of the central government and is ensured through KMK and its local subsidiary utility enterprises. This arrangement reflects the fact that, at this point, local governments do not yet have the capacity to manage the provision of basic municipal services effectively and that in the absence of appropriate fiscal and other reforms, they will not be in a position to assume this responsibility in the foreseeable future.

Although MIDP enjoys support at the highest levels of the Tajik Government and the participating towns, such political support in itself is not enough to guarantee the sustainability of project results. Improving the infrastructure conditions and strengthening the technical and financial management capacity of KMK and its local subsidiary utility enterprises will contribute to restoring and maintaining an acceptable level of service delivery in the short- and medium-term. Longer-term sustainability, however, will depend on a combination of factors mostly beyond the reach of the project such as, for instance, improvement in the country's macro-economic performance, continuing political stability, and successful implementation of institutional reforms. Last, it must be recognized that both the scope of the project and the absorptive capacity of KMK and its local subsidiary utility enterprises are extremely limited and that the sustainability of results will therefore require that investments and technical support efforts be continued beyond the completion of the project for a number of years through other operations supported by either the Bank or other donors.

5. Critical risks and possible controversial aspects

Potential risks and mitigation

Risk	Mitigation Strategy
Division of implementation responsibilities between KMK and PMU as specified in the Project Implementation Agreement is not followed through and results in delaying and/or blocking MIDP implementation	Failure to comply with the provisions of the Project Implementation Agreement may result in remedial action taken by the Bank
Limited technical experience of KMK and the PMU will delay the implementation of project activities.	Provision of assistance through PMC to the PMU will reduce the risks of management inefficiencies.
The ability of KMK and its local subsidiary utility enterprises to ensure satisfactory maintenance of infrastructure and operation of service delivery is constrained by low tariffs for services and poor collection performance	Efforts by KMK and its local subsidiary utility enterprises to improve customer relations and develop outreach programs in connection with actual improvements in quality of service delivery can be expected to increase the

Risk	Mitigation Strategy
	willingness of customers to pay for services delivered.
The domestic construction industry may lack the technical and financial capacity and expertise to implement relatively large contracts and certain project sub-components involving the installation of more modern equipment.	Packaging contracts where feasible to elicit the interest of international firms/suppliers through ICB will be explored.

Possible Controversial Aspects:

There are no controversial aspects nor are any controversies expected to develop during project implementation.

6. Loan/credit conditions and covenants

1. Effectiveness Conditions
   - KMK formally adopts the Project Operations Manual (OM)
   - Project Implementation Agreement is executed between KMK and PMU
   - Subsidiary Grant Agreement is executed on behalf of the Government and KMK

2. Other
   - Project Account for counterpart funding is opened and initial deposit of US$70,000 is made by Government by July 15, 2006.

D. APPRAISAL SUMMARY

1. Economic and financial analyses

MIDP will support the Government's efforts to improve the delivery of basic municipal services in support of poverty reduction and economic growth. The proposed project investments will yield substantial direct and indirect benefits, including improved urban environment, reduction in public health risks through provision of cleaner water and better sanitation. Because of the lack of reliable quantitative and financial data on current conditions of service delivery the assessment of benefits and costs normally carried out for an economic analysis would be largely hypothetical. Most of the infrastructure in the eight towns participating in MIDP is in a state that creates severe risks of public health problems and is at the root of major inefficiencies in service provision. The data collection to be developed under MIDP will provide the necessary information for a more accurate assessment of the economic benefits of the project and necessary adjustments in the design of activities in the later years of project implementation.

The most significant quantifiable economic benefit is the reduction in energy consumption resulting from the improvement of the operational efficiency of the systems (i.e. reduction of water losses and wastage) and the replacement of highly inefficient pumping equipment.

Refurbishment and optimization of pumping systems are expected to decrease unit energy consumption by 25% between 2006 and 2008, when most of the new pumps will be installed.

Some of the key benefits that do not lend to quantitative analysis due to lack of information will result from the reduction of coping expenditures:

- A social assessment which was carried out during project preparation showed that both residential and non-residential users in each of the eight towns incur a variety of costs/expenditures to cope with the effects of poor service quality (insufficient pressure, intermittent availability, etc). Such costs/expenditures include fetching water from stand-posts and carrying it often over long distances, purchasing water from tanker trucks, or buying bottled water from shops or vendors. For the very poor the economic toll in terms of lost productive time and health impacts is probably substantial.
- Improving the quality of drinking water is of critical importance. In most of the eight participating towns, the lack of proper water treatment has contributed to a worsening of the chemical and bacteriological quality of drinking water. Coping mechanisms include water filtration at home, and boiling of drinking water. MIDP will improve water treatment and disinfection facilities and will therefore contribute to a significant reduction in the coping expenditures related to poor water quality.
- Virtually no data are available on the incidence of water-borne diseases, let alone on the resulting direct (e.g., medical treatment costs) and indirect costs (e.g. lost wages). Lack of sanitary protection of water production facilities, direct pumping of raw river water into the network, and failure to properly disinfect water supplied to households are believed to have contributed to periodic outbreaks of typhoid fever in Tajikistan. Through rehabilitating water treatment plants and/or increasing the supply of uncontaminated groundwater MIDP will help reduce the risk of water-borne diseases.

A financial assessment of the KMK local subsidiary utility enterprises in the eight participating towns was carried out as part of project preparation and provided the basis for identifying the institutional and financial capacity building activities included in MIDP.

The main financial challenge the KMK local subsidiary utility enterprises face is that most of them do not have adequate resources to meet operations and maintenance expenses. The main reasons behind this problem include: (a) low tariffs and very high tariff differentials between residential and industrial/commercial consumers, resulting in reduced revenue capacity; (b) lack of metering, extensive water leakage and wastage, and high operating costs; (c) continuously increasing accounts payable, causing deferral of payments to employees and suppliers, such as Barki Tajik, the national power company; and (d) inadequate or outdated information about customers.

The KMK institutional strengthening sub-component of MIDP will address some of these problems by helping KMK and its local subsidiary utility enterprises to:

- reduce system inefficiencies (water losses, energy inefficiency, low cash collection, and water wastage) in order to decrease operating costs and increase revenues;
- establish financial management, accounting, and customer management systems and procedures that will provide better information about costs, revenues, and customers and will allow KMK to make better policy and tariff recommendations

to the Government and improve the effectiveness of its commercial management. Selected utilities would be subject to audits conducted to international standards in the latter part of the project so as to provide them the time to strengthen their accounting systems; and

- collect better information on fixed assets and current operating conditions of the services operated by the KMK local subsidiary utility enterprises as a first step in the preparation of a more accurate assessment of operation and maintenance needs and resulting recommendations for tariff reviews and adjustments during project implementation.

2. Technical

The objective of MIDP is to improve the quality and efficiency in the delivery of basic municipal services in the eight participating towns. Achieving this objective entails the selection of investments that are technically sound and feasible, yet are at the same time cost effective, take into account the local conditions, and keep operation and maintenance costs as low as possible. In keeping with these criteria, care was taken during project preparation to ensure that the investments selected for the project represented genuine least cost alternatives. Moreover, given the critical state of infrastructure in all of the eight participating towns where investment needs exceed by far available financial resources, priority was given to those investments that would address the most urgent needs of the population and contribute to halt further deterioration of the conditions of service delivery.

Additionally, since the infrastructure and equipment for KMK local subsidiary utility enterprises must be certified by the relevant Tajikistan authorities before being put to use, attention was paid to ensure that all technical designs were developed in accordance with Tajik standards, yet reflected international best practices.

A detailed First Phase Investment Program (FPIP), covering the first eighteen months of MIDP implementation, was prepared and incorporated in the Procurement Plan. Detailed designs and tender documents have been prepared. While tentatively identified for MIDP as a whole, various of the investments contemplated for the subsequent phases of implementation will require additional technical studies (to be carried out during the first phase of implementation) to: (a) verify the accuracy of basic technical assumptions, (b) review and corroborate actual needs and technical requirements, and (c) if required, revise and adjust design parameters for final engineering designs and tender documents.

3. Fiduciary

A Procurement Capacity Assessment was conducted for the project in August/September 2005. Risks were identified and necessary mitigation measures will be implemented by KMK. In addition, a Financial Management Assessment of KMK and the PMU was carried out in May and September 2005 to determine if the existing financial management arrangements were acceptable to the Bank. These arrangements include systems of budgeting, accounting, financial reporting, auditing, and internal controls. Currently, a few PMU staff members are already familiar with the Bank's fiduciary requirements regarding procurement, financial management and disbursement and audit. Additional staff to be hired under the project will require some

training on Bank procedures for financial management and disbursement, with guidance from the existing staff. The PMU is in the process of designing a computerized accounting system, using the 1-C accounting software which is already being used for the PHRD Grant provided for project preparation. Annual audits for the project accounts will be carried out in accordance with the *Guidelines for Financial Reporting and Auditing of Projects Financed by the World Bank (June 2003).* The guidelines require a single audit opinion on the project financial statements as a whole, which will include the Special Account Statement and the Statement of Expenditures (SOEs) used as the basis for withdrawing funds from the IDA Grant Account.

4. Social

A Social Assessment was carried out in all of the eight participating towns. The assessment was based on focus group discussions and in-depth interviews in four of the towns and on a household survey of 1,000 respondents from all eight towns. All project towns have high levels of poverty. Living conditions of the poor are exacerbated by the unavailability and/or poor quality of basic municipal services such as water supply or solid waste collection. The Social Assessment confirmed that access to safe drinking water was a top priority for the population and strong support was found for MIDP investments for improvements in water supply, sanitation and solid waste management.

There will be no land acquisition under MIDP. Potential negative project impacts will be localized and only temporary, and result primarily from construction activities during the rehabilitation of water supply distribution networks and corresponding road works. If such construction activities affect the livelihood of the project population more severely, administrative and technical measures to mitigate such impact have been put in place. Iindicators to measure changes in the perception of quality of service delivery have been identified. The M&E system to be developed by the PMU will keep track of the project's overall social development impact. Concurrently, the PMU will also monitor possible issues related to Bank safeguards.

5. Environment

MIDP is not expected to have any significant or irreversible environmental impacts, and is therefore classified as Environmental Category "B". The short term impacts which inevitably will occur during construction will be minimized by proper planning and implementation of preventive measures, and mitigated by restorative actions after the civil works are completed. For each investment, the PMU will prepare an Environmental Management Plan (EMP) describing likely impacts and the ways of addressing/mitigating them. An EMP for MIDP was reviewed and approved by the Bank. Provisions for environmental screening have been included in the OM. At the same time, all investments will need to obtain the required clearances from Tajik authorities as per Tajikistan national regulations.

6. Safeguard policies

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP/GP 4.01)	[X]	[ ]
Natural Habitats (OP/BP 4.04)	[ ]	[X]
Pest Management (OP 4.09)	[ ]	[X]
Cultural Property (OPN 11.03, being revised as OP 4.11)	[ ]	[X]
Involuntary Resettlement (OP/BP 4.12)	[ ]	[X]
Indigenous Peoples (OD 4.20, being revised as OP 4.10)	[ ]	[X]
Forests (OP/BP 4.36)	[ ]	[X]
Safety of Dams (OP/BP 4.37)	[ ]	[X]
Projects in Disputed Areas (OP/BP/GP 7.60)*	[ ]	[X]
Projects on International Waterways (OP/BP/GP 7.50)	[X]	[ ]

International Waterways (World Bank OP 7.50): Since some of the project investments will take place on trans-boundary waterways as defined in OP 7.50, MIDP will trigger this policy. However, the project qualifies for an exemption from the obligation to notify the riparian Governments, because the proposed activities will neither attempt to modify the course of waterways, nor significantly increase the volume of water abstraction and therefore will not affect the water rights of other riparian populations. A Memorandum to the Regional Vice President seeking his agreement on the above findings was prepared and signed by the Regional Vice President on September 27, 2005. KMK and the PMU will approach the Bank for additional guidance on what actions as per OP 7.50 would be applicable to any particular investment that could raise this issue.

Involuntary Resettlement (World Bank OP 4.12): MIDP will not trigger OP/BP 4.12 as the project will deal exclusively with the rehabilitation and/or repair of existing infrastructure and installations on existing premises or on routes within public rights of way, activities that will not entail any land acquisition, relocation of population, nor result in restricting the access of individuals or communities to economic resources.

7. Policy Exceptions and Readiness

The project will not entail any policy exceptions and will comply with all applicable Bank and Regional policies.

Preparation of final design studies and tender documents for the first phase of MIDP investments as well as of the documentation for the procurement of technical assistance is substantially completed. Likewise, draft MIPs have been prepared for the KMK local subsidiary utility enterprises involved in the project.

Annex 1: Country and Sector or Program Background

TAJIKISTAN: Municipal Infrastructure Development Project

Tajikistan became independent in 1991 as a result of the break-up of the Soviet Union. It experienced severe physical damage and heavy human losses from a civil war that broke out in 1992 and lasted, with varying decrees of intensity, until 1997. The economy recovered from 1998 onwards despite several droughts, periodic floods, and external economic constraints and GDP grew at an average of 9% per annum in recent years. Even so, Tajikistan remains the poorest country in Central Asia and counts among the poorest in the world, with a 2003 GNI per capita of about US$200 and close to 65% of the 2003 population of about 6.3 million living below the poverty line. \

1. The urban setting

1.1 Although most of the country's terrain is mountainous and only a fraction is usable for agriculture, the agricultural sector still accounts for about 60% of employment and about 20% of GDP. Industrial production and especially manufacturing and service activities are limited and concentrated in a few sectors and geographical areas. As a result, Tajikistan's urbanization rate is comparatively low with only about 1.7 million or 26.5 % of its population living in urban centers.

Tajikistan: Urban Centers

Dushanbe	562,000
Khudjant	149,000
Kulyab	80,200
Kurgan-Tyube	62,100
Istaravshan	52,500
Kanibadam	45,300
Vakhdat	44,000
Tursun-Zade	39,000
Isfara	37,000
Pendjikent	33,400
Khorog	27,800
Chkalovsk	21,300
Gissar	20,000
Yavan	22,600
Vose *	20,000
Nurek	19,900
Dangara	18,400
Gafurov	15,000
Rasht (Gharm) *	12,000
Taboshar	11,900
Sarband	11,300
Kairakum	11,700
Pyandj	8,200
Rogun	8,200
Shurab	4,100

* urban settlements

1.2. The urban sector consists of about 23 towns[1] that have officially the status of a township (gorod) and about 47 'urban settlements' (poshyolok). 562,000 people (2003 estimate) or about one third of the urban population is concentrated in Dushanbe, the capital city. Khudjant, the capital of Northern Tajikistan (Sughd Oblast) and one of Tajikistan's main industrial centers has a population of about 150,000. All other towns have populations of less than 100,000, (see Table).

1.3. With a few, notable exceptions[2] most of the country's towns are of recent origin and many were created or expanded in connection with the development of the industrial and mining sector during the times of the Soviet Union. The demise of the Soviet Union and the concurrent break-up of the Soviet industrial complex, followed by the 1992-97 civil war, led to a rapid decline of most industrial activities and brought in many centers, especially the smaller ones, economic activities to a virtual standstill. In some sectors, activities have begun to recover in recent years, but in others they continue to stagnate and remittances from Tajik workers abroad have become the primary driving force for domestic economic growth in many places.

[1] Towns in Tajikistan frequently change names: For instance: Khudjant was formerly known as Leninabad, Vakhdat as Khofarnikon, Istaravshan as Ura-Tyube, etc.

[2] The town of Kulyab is to celebrate 2700 years of existence in 2006; the town of Istaravshan was probably founded in the six century B.C. and known as Cyropolis in the antiquity; the city of Khudjant was founded around 327 B.C. by Alexander the Great under the name of Alexandria Eskhata during his expedition to India around 330 BC.

2. System of sub-national administration

2.1 In its structural features Tajikistan's system of sub-national administration has undergone only minor changes since the times of the Soviet Union. The sub-national administration is organized on the basis of a three-tiered system including from top to bottom:

- 4 *oblasts* and oblast-level entities[3]
- 62 *rayons*, and
- 403 *jamoat* (local self-government units).

Hierarchical relations between the tiers are less systematic than in other countries, however: GBAO has a larger autonomy than oblasts usually have and the region around Dushanbe does not have oblast status but is comprised of *rayons* of republican subordination.

2.2. In line with the three-tiered sub-national administration described above, Tajik urban settlements fall into three categories.

- cities of republican subordination (4 cities including Dushanbe)
- towns of oblast subordination (11 towns)
- towns of rayon subordination (6 towns and 45 urban settlements)

2.3. Each oblast, rayon and towns is governed by an executive body *(khukumat)* and a legislative council *(majilis)*. In accordance with the Law on Local Government (Law # 616/1998) all heads of *khukumats* – including mayors of towns - are appointed by the President, whereas members of *majilis* are elected. On the other hand *jamoat* heads and council members are elected locally.

3. Roles and responsibilities in the delivery of basic municipal services

3.1 Delivery of most local infrastructure services is carried out by the State and is the responsibility of an agency subordinated to the Central Government, the SUE 'Khochagii Manziliu Kommunali' (KMK). KMK was established in 2001 as a successor to 'Tajikkomunservis', the entity previously in charge of local infrastructure services created in 1995 (and whose name continues to be used by the general public to designate KMK). 'Tajikkomunservis' was the successor to the State Committee for Communal Services that was created in 1992 when the Government decided to re-concentrate responsibility for such services in the hands of the State after an attempt to decentralize it to local authorities had ended up in failure. At the present time, KMK operates local service delivery in all urban centers except in eight towns and urban settlements where they remain a responsibility of the local government.[4]

3.2 As defined by its Charter (Government Resolution # 357/2001), KMK's responsibilities are broad. It manages countrywide State housing assets including their repair and maintenance. It operates water supply, district heating, sewerage, solid waste collection, and other services. KMK has a total of about 8,000 employees and comprised, as of January 2005, of a total of 183 local branches or subsidiary utility enterprises. Of these, 32 are simple water supply and

[3] Gorno-Badakhshan Autonomous Oblast (GBAO), Khatlon Oblast, Sughd Oblast, and Dushanbe city

[4] Dushanbe, Khudjant, Chkalovsk, Rogun, Kayrokun, Sarband, Nurek, and Varzob

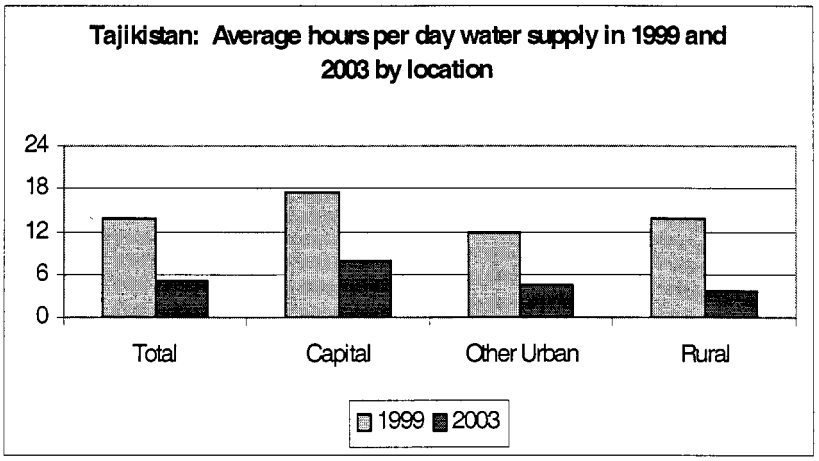
sewerage enterprises (Vodokanals) and 62 are communal multi-service utility enterprises operating solid waste collection, street cleaning, public bath houses, and other local services.

3.3. In accordance with the provisions of the Law on State Enterprises (Law # 253/2003) KMK - as well as its local subsidiary utility enterprises - operate on the principle of financial autonomy and are independent from the State budget. KMK's head office revenue is exclusively derived from an 8% share of the payments for services delivered by its local subsidiary utility enterprises. Despite some ambiguities in the legal framework, KMK is considered to the sole owner of all infrastructure assets pertaining to the services its local subsidiary utility enterprises deliver. KMK also has the authority to set tariffs (though approval of tariffs is subject to control by the State Anti-Monopoly Agency). In theory, the tariffs set by KMK should ensure the full financial autonomy of its local subsidiary utility enterprises allowing them to self-finance both operation and maintenance and a minimum of capital asset replacement. In practice, the revenue of these enterprises is, in most cases, largely insufficient to cover the actual costs of their operations. As a result, they usually resort to financing their deficits through reduction and/or elimination of maintenance and capital repairs, accumulation of payables and arrears in wage payments to employees.

3.4. Local governments still play only a marginal role in delivery of basic municipal services. According to the 1998 'Law on Local Government' local governments are, in principle, responsible for controlling the development of local infrastructure and the quality of services and agreeing on proposed tariffs. In practice, however, local governments have neither the resources nor the skills to actually exercise such an oversight function. In the absence of a formal institutional link or reporting obligation, cooperation between KMK local subsidiary utility enterprises and local governments follows a strictly informal pattern and therefore varies from town to town.

4. Quality of local service delivery

4.1 There has been a severe deterioration in the availability and quality of public infrastructure services both in rural and urban areas, resulting from the break-up of the Soviet Union, the 1992 -1997 civil war and the continuing lack of maintenance and investments in capital repair. According to the 1999 Living Standard Measurement Survey (LSMS), less than half of all households then had access to piped water supply, and nearly a quarter relied on untreated water from rivers, lakes or ponds. Since then, the quality of services has continued to deteriorate. According to the 2003 LSMS, average daily availability of water supply fell countrywide by more than 50% from 13 hours to 5 hours, a trend that, as shown by anecdotal evidence, is continuing to date.



4.2 According to the 2003 'UNDP Tajikistan National Human Development Report', at least 35% of water supply distribution networks countrywide are broken down while the remaining 65% are in an advanced state of dilapidation. Water losses through leakage are extremely high and in many places estimated to be in excess of 60% (though actual data are difficult to obtain due to lack of metering). Losses are compounded through wastages by consumers, a legacy of the system of norm-based invoicing inherited from the Soviet times. Water treatment capacity has declined dramatically since 1991 and according to the above UNDP Report was at only 50% of pre-independence levels. (Even in Dushanbe, the capital city, about 16% of water supply is supplied directly without any treatment from rivers to the distribution network). Chemical and bacteriological contamination is a critical issue. Analyses carried out by the Ministry of Health showed that in Khatlon Oblast, about 55% of water samples exceeded bacteriological contamination norms while in Sughd Oblast, 21% of the samples presented evidence of excessive chemical contamination.

4.3 Only about 50% of the total urban population is connected to sewerage systems. Sewer networks are in disrepair in most places and virtually none of the waste water treatment plants in the country are currently in operating conditions. Cross-contamination from sewage is believed to have the main cause of repeated large outbreaks of typhoid fever in the past few years. The incidence of other water-borne diseases such as diarrhea, dysentery, diphtheria and hepatitis is high and increasing.

5. Municipal service delivery conditions in the towns participating in MIDP

5.1 The eight towns participating in the project: Dangara, Istaravshan, Kanibadam, Kulyab, Kurgan-Tyube, Rasht (Gharm), Vakhdat, and Vose, were selected by the Government in May 2004. (Two of these, Rasht (Gharm) and Vose, are urban settlements and, despite their population size, do still not have the official town status). The selection of towns was made, primarily, to reflect the geographical diversity of Tajikistan and asserted the Government's aim to: (a) ensure a reasonably balanced regional distribution of project benefits, and (b) also channel project benefits to smaller, economically more challenged, towns (while concurrently excluding towns like Khudjant that already benefit from sizable municipal infrastructure investment operations funded from external sources). All eight towns have high and only insignificantly varying rates of poverty and represent close to 50% of the country's urban population excluding that of Dushanbe, the capital city.

5.2 Municipal service delivery conditions among the eight towns vary, but are generally poor. In all towns, the needs for infrastructure rehabilitation and repair are extensive, though in most cases difficult to assess and quantify in detail because of pervasive lack of reliable data and/or supporting technical documentation. For instance, data on actual water production or consumption are not available for any of the towns since there is no metering of either production or consumption and, as in other former Soviet Union countries, all officially provided data are based on hypothetical normative production and consumption estimates. Maps and network surveys are often incomplete and occasionally treated as State secrets requiring the approval of the highest authorities of the Government for their release.

5.3. The following provides a summary description of the service delivery conditions in each of the eight participating towns:

- Dangara: The town (population 18,400) is located in the Khatlon Oblast. Municipal services are provided by two KMK local subsidiary utility enterprises: Dangara Vodokanal (water supply and sewerage) and Dangara Housing and Communal Services Utility.

  Data on actual water supply service coverage are not available. Water is provided from two sources: an irrigation channel carrying water from the Nurek lake and a well field (currently not operating). All water is distributed without prior treatment. Losses in the network are believed to be substantial.

  An existing sewerage network for part of the town is broken and has ceased to operate, as has the waste water treatment plant linked to it.

- Istaravshan: The town (population 52,500) is located in the north-west sector of the Sughd Oblast on the border with Uzbekistan. Municipal services are provided by two KMK local subsidiary utility enterprises: Istaravshan Vodokanal (water supply and sewerage) and Istaravshan Housing and Communal Services Utility.

  Data on actual water supply service coverage are not available. Water supply is reportedly highly irregular due to frequent cuts in, and only intermittent availability of, power supply averaging six hours/day. Water is supplied from well fields (60%), springs (10%), and lakes (30%) and only partially treated prior to distribution. Over half of the well field pumps are broken down. Losses in the network are believed to be substantial.

  An existing sewerage network built in 1967 covers only part of the town. Most of the sewers are reportedly blocked by debris or broken. The town has two waste water treatment plants, of which one does not operate any longer and the other only partially.

- Kanibadam: The town (population 45,300) is located in the north-east sector of the Sughd oblast on the Ferghana Valley border with Uzbekistan. Municipal services are provided by two KMK local subsidiary utility enterprises: Kanibadam Vodokanal (water supply and sewerage) and Kanibadam Housing and Communal Services Utility.

  Water supply is highly irregular due to frequent cuts in, and only intermittent availability of, power supply averaging six hours/day. Only about half of the town population is reported connected to the supply network. Water is supplied from well fields developed in the 1970s, but due to high salinity water quality is generally poor and water is distributed without prior treatment. Losses in the network are estimated to amount to 60% of production.

  Only 30% of the population is connected to a sewerage network built in the early 1960s. A waste water treatment plant built in 1985 has fallen in disrepair and is not operating any longer.

- Kulyab: The town (population 80,200) is located in the south of the Khatlon oblast close to the border with Afghanistan. Municipal services are provided by two KMK subsidiaries: Kulyab Vodokanal (water and sewerage) and Kulyab Housing and Communal Services Utility.

  Data on water supply coverage are not available. Water supply is irregular with only about 30% of the population enjoying permanent supply, about 65% receiving water during 12 hours per day, and 5% more infrequently. Water is supplied from well fields

(about 90%) and springs (about 10%) and distributed without prior treatment. Losses in the network are estimated to be in excess of 60%.

Precise data on sewerage service coverage are not available. A small waste water treatment plant built in 1985 operates partially in the form of a stabilization pond. Only about 10% of solid waste is collected and disposed due to the breakdown of most collection vehicles.

- Kurgan-Tyube: The capital of the Khatlon oblast (population 62,100) is located about 100 km south of Dushanbe. Municipal services are provided by two KMK subsidiaries: Kurgan-Tyube Vodokanal (water and sewerage) and Kurgan-Tyube Housing and Communal Services Utility.

  Data on actual water supply service coverage are not available. Water supply is highly irregular due to frequent cuts in and only intermittent availability of power. Water was originally supplied from three well fields developed in the 1960s, all of which have fallen in disrepair. As a result, water is currently supplied from an irrigation channel and is pumped directly into the network with only limited prior treatment (sedimentation). Losses are extremely high and estimated to reach 70%.

  The existing sewerage system is said to cover close to 90% of the population. Number of sewers is blocked by debris and open air spills are reported to be a common occurrence. None of the two existing waste water treatment plants is operating.

- Rasht: Also known as Gharm, the urban settlement (population 12,000) is located in the Karategin Valley east of Dushanbe. Municipal services are provided by two KMK subsidiaries: Gharm Vodokanal (water and sewerage) and Gharm Housing and Communal Services Utility.

  About 70% of the population is reportedly connected to the water supply distribution network. Water is supplied exclusively from springs and distributed without prior treatment, and, especially in winter, often available in limited quantities only. Losses in the network are presumed to be substantial.

  There is no sewerage network

- Vakhdat: Formerly known as Khofarnikhon, the town (population 44,000) is located about 20 km east of Dushanbe. Municipal services are provided by two KMK subsidiary utility enterprises: Vakhdat Vodokanal (water supply and sewerage) and Vakhdat Housing and Communal Services Utility.

  Data on actual water supply service coverage are not available, but coverage is reportedly limited to only a fraction of the population. Water is supplied from three well fields developed in the 1960s. A large number of pumps are in disrepair or are worn out and operate at extreme low capacity. Water treatment by chlorination is inadequate. Losses in the network are estimated to be in excess of 60%.

  The existing sewerage system covers about 60% of the population. A large number of sewers are blocked or broken. A waste water treatment plant built in the 1960s is not operating any longer and a substantial part of the plant equipment has been vandalized.

- Vose: The urban settlement (population 20,000) is located in the Khatlon oblast about 20 km north of the town of Kulyab. Municipal services are provided by two KMK subsidiaries: Vose Vodokanal (water and sewerage) and Vose Housing and Communal Services Utility.

  Data on actual water supply service coverage are not available. Water is supplied from well fields and distributed without prior treatment. Losses in the network are believed to be substantial

  There is no sewerage system. Sewage from existing septic tanks is emptied into the solid waste dump site.

Annex 2: Major Related Projects Financed by the Bank and/or other Agencies

TAJIKISTAN: Municipal Infrastructure Development Project

THE WORLD BANK GROUP

Dushanbe Water Supply Project (P057883)

Credit amount:	*US$17.0 million (SDR 13.5 million)*
Effectiveness date:	*October 31, 2002*
Closing date:	*June 30, 2007*
Summary DO rating:	*S*
Summary IP rating:	*S*

The water supply project for Dushanbe has two fundamental objectives: (i) improve the safety, reliability, and efficiency of water supply services through the rehabilitation and efficiency improvements of existing facilities; and (ii) assist Dushanbe Vodokanal (DVK) in becoming a more efficient and financially self-sufficient municipal utility through the implementation of a management contract with a private Operator.

Rural Infrastructure Rehabilitation Project (P058898)

Credit amount:	*US$20.0 million (SDR 14.9 million)*
Effectiveness date:	December 14, 2000
Closing date:	March 31, 2006
Summary DO rating:	*S*
Summary IS rating:	*S*

The objectives of the project include raising the levels of agricultural output by improving the delivery of irrigation water to and removal of drainage water from selected demonstration farms, raising health levels and enhancing the quality of rural life in pilot areas by improving standards of village electricity and drinking water services, strengthening institutions and improving the sustainability of irrigation and utility services, and improving rural employment opportunities by encouraging community-based construction work.

Pamir Private Power Project (P075256)

Credit amount:	*US$10.0 million (SDR 7.9 million)*
IFC loan/equity subscription	*US$8.0 million*
Effectiveness date:	*March 31, 2003*
Closing Date:	*December 31, 2006*
Summary DO Rating:	*S*
Summary IP Rating:	*S*

The objective of the project is, through private sector involvement, to improve the reliability and enhance the quantity of supply of electricity in the Gorno Badakshan Autonomous Oblast (GBAO) region in a financially, environmentally and socially sustainable way.

Energy Loss Reduction Project (P089244)

Credit amount:	*US$15 million (SDR 12.0 million)*
Grant amount:	*US$3.0 million (SDR 2.0 million)*
Effectiveness date:	*July 12, 2005*
Closing date:	*June 12, 2012*

The objectives of the project are to support the reduction of commercial losses in the electricity and gas systems and lay the foundation to improve the financial viability of the electricity and gas utilities through adoption and implementation of an energy pricing policy, as well as measures to improve the metering, billing, and collection practices. The project also aims to put in place an effective social protection scheme to protect the vulnerable segments of the population from the expected price increases, initiate institutional reform of the sector, and enable private sector participation in the sector.

OTHER DONORS

Emergency Restoration of Yavan Water Conveyance System: (Asian Development Bank)

Amount:	*US$4.0 million*
Approval Date:	*October 30, 2001*
Completion Date:	*April 2003*

The project objective was to restore the Yavan water conveyance system damaged in May 2001 by an earthquake which disrupted water supplies to 56,000 people, 65,000 livestock, and 11,724 hectares (ha) of arable land in the Yavan, Khodzhamaston, and Gozimalik rayons of the Khatlon oblast. The Project restored water supply through permanent replacement works but also the rehabilitation of facilities which posed threat to failure, thus safeguarding against future failure risk. The project works included construction of bypass canals and rehabilitation of an existing canal and tunnel necessary for safe operation of the system.

Khudjant Water Supply Improvement Project (European Bank for Reconstruction and Development)

Amount:	*US$1.2 million*
Approval Date:	*June 8, 2004*

The project will rehabilitate the Khudjant Water production and distribution system and will consist of: (a) improvement of the Khodija Barkigan water wells; (b) construction of transmission and connection mains; (c) refurbishment of portion of the municipal distribution network and installation of meters; and (d) installation of reserve wastewater pumps and purchase of workshop equipment. The project will also include an institutional strengthening program consisting of the preparation and implementation of a Financial and Operational Performance Improvement Program for the Khudjant Water Company.

Local Government Initiative (USAID/Urban Institute)

The goal of the ongoing USAID Local Government Initiative is to support the development of accountable local government and other public institutions in Tajikistan. Among other activities, the program supports a Presidential Working Group formed to develop local government legislation.

Annex 3: Results Framework and Monitoring

TAJIKISTAN: Municipal Infrastructure Development Project

Results Framework

PDO	Outcome Indicators	Use of Outcome Information
To improve the availability , quality and efficiency of delivery of basic municipal services for the eight towns participating in the project.	Availability and quality of basic municipal services improves in eight participating towns during project implementation period. Efficiency of KMK local subsidiary utility enterprises delivering basic municipal services improves in participating towns during project implementation. Satisfaction of the population with delivery of basic services increases in participating towns during the project implementation.	To prepare a possible follow up operation.
Intermediate Results One per Component	**Results Indicators for Each Component**	**Use of Results Monitoring**
Component 1 KMK local subsidiary utility enterprises make technical improvements to local service infrastructure.	Rehabilitation investments are satisfactorily completed in the participating towns. Technical improvements are satisfactorily implemented in the participating towns.	To assess technical approach of subprojects and gauge compliance of KMK and its local subsidiary utility enterprises with MIDP implementation requirements.
Component 2 KMK clarifies roles and responsibilities for delivery of basic municipal services and its local subsidiary utility enterprises have improved their capacity to efficiently operate such services.	Reporting on improvements in service delivery is regular and satisfactory. Managerial and financial improvement measures are prepared and satisfactorily implemented.	To gauge compliance of participating utilities with project requirements. To assess TA activities and determine any changes for further advisory support, training and other technical assistance.
Component 3 Project is implemented efficiently	MIDP implementation progress and financial reporting is satisfactory and in line with agreed schedule. Auditors issue unqualified opinion on financial statements of project accounts.	To gauge compliance by KMK with its project responsibilities.

Arrangements for results monitoring

		Target Values					Data Collection and Reporting		
Outcome Indicators	**Baseline**	**YR1**	**YR2**	**YR3**	**YR4**	**YR5**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
Availability and quality of basic local infrastructure services improves in participating towns during project implementation period.							Annual Update of Baseline Survey	Surveys	KMK and Utility Enterprises in each of the eight towns
A.1. Increase in the availability of water supply as expressed in percentage of population having at least 16 hours of water in both summer and winter									
Indicators:									
Dangara	60%	62%	70%	74%	74%	74%			
Istravshan	24%	30%	35%	39%	42%	42%			
Kanibadam	2%	8%	12%	15%	17%	17%			
Kulyab	13%	20%	25%	30%	32%	32%			
Kurgun Tyube	58%	60%	65%	70%	70%	70%			
Rasht (Gharm)	68%	75%	78%	80%	80%	80%			
Vose	6%	10%	15%	20%	25%	25%			
Vakhdat	26%	30%	37%	43%	45%	45%			
A.2. Improved solid waste collection as measured by the percentage of the population covered by municipal waste collection and removal							Annual Update of Baseline Survey	Surveys	KMK and Utility Enterprises in each of the eight towns
Dangara	31%	37%	42%	47%	47%	47%			
Istravshan	90%	92%	95%	96%	96%	96%			
Kanibadam	86%	88%	92%	95%	95%	95%			
Kulyab	8%	15%	20%	23%	23%	23%			
Kurgun Tyube	27%	35%	37	42%	42%	42%			
Rasht (Gharm)	75%	80%	85%	88%	88%	88%			
Vakhdat	20%	27%	32%	38%	38%	38%			
Vose	15%	20%	25%	29%	29%	29%			

		Target Values					Data Collection and Reporting		
Outcome Indicators	**Baseline**	**YR1**	**YR2**	**YR3**	**YR4**	**YR5**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
A.3. Improved solid waste collection as measured by percentage of population with access to municipal waste collection at least once a week							Annual Update of Baseline Survey	Surveys	KMK and Utility Enterprises in each of the eight towns
Indicators									
Dangara	38%	45%	52%	55%	55%	55%			
Istravshan	73%	77%	82%	85%	85%	85%			
Kanibadam	58%	65%	82%	85%	75%	70%			
Kulyab	21%	27%	35%	40%	40%	40%			
Kurgun Tyube	38%	65%	52%	73%	73%	73%			
Rasht (Gharm)	18%	22%	27%	30%	30%	30%			
Vakhdat	31%	38%	27%	46%	30%	46%			
Vose	35%	40%	47%	50%	50%	50%			
Efficiency of utilities operating basic infrastructure services improves in participating towns during project implementation period.									
B.1. Improved efficiency of participating utilities as measured by reduction in unaccounted for water							Quarterly and Annual Progress Reports	Project Progress Reports	Project Management Unit, KMK
Indicators:									
Dangara	65%	65%	62%	60%	58%	56%			
Istravshan	62%	62%	60%	57%	55%	53%			
Kanibadam	58%	58%	55%	52	50%	48%			
Kulyab	67%	67%	65%	62%	60%	58%			
Kurgun Tyube	60%	60%	58%	56%	54%	52%			
Rasht (Gharm)	65%	65%	62%	60%	58%	55%			
Vakhdat	60%	60%	57%	55%	53%	50%			
Vose	60%	60%	58%	56%	54%	52%			

		Target Values					Data Collection and Reporting		
Outcome Indicators	**Baseline**	**YR1**	**YR2**	**YR3**	**YR4**	**YR5**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
B.2. Improved efficiency of participating utilities as measured by a reduction in energy consumption costs (as a percentage of total operating costs)							Quarterly and Annual Progress Reports	Project Progress Reports	Project Management Unit, KMK
Indicators:									
Dangara	9%	5%	3%	3%	3%	3%			
Istravshan	15%	12%	7%	6%	6%	6%			
Kanibadam	25%	20%	15%	15%	15%	15%			
Kulyab	16%	12%	7%	7%	7%	7%			
Kurgun Tyube	15%	12%	7%	5%	5%	5%			
Rasht (Gharm)	25%	20%	15%	15%	15%	15%			
Vaskhdat	17%	14%	10%	8%	8%	8%			
Vose	35%	30%	22%	20%	20%	20%			
Satisfaction of the population with basic infrastructure services increases in participating small towns during the project implementation period.									
C.1. Decrease in the number of households reporting poor water quality (as percentage of population							Annual Update of Baseline Survey	Surveys	KMK and Utility Enterprises in each of the eight towns
Indicators:									
Dangara	46%	40%	35%	32%	30%	28%			
Istravshan	56%	50%	45%	40%	38%	36%			
Kanibadam	83%	70%	63%	55%	53%	50%			
Kulyab	39%	32%	25%	22%	20%	18%			
Kurgun Tyube	28%	25%	20%	18%	16%	15%			
Rasht (Gharm)	6%	6%	5%	5%	5%	5%			
Vakhdat	16%	14%	10%	8%	8%	7%			
Vose	51%	46%	40%	38%	35%	33%			

		Target Values					Data Collection and Reporting		
Outcome Indicators	**Baseline**	**YR1**	**YR2**	**YR3**	**YR4**	**YR5**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
C.2. Improved customer rating of water supply as expressed in percentage of population rating service as satisfactory									
Indicators:									
Dangara	56%	60%	65%	67%	65%	70%			
Istravshan	13%	20%	27%	30%	32%	24%			
Kanibadam	8%	15%	20%	24%	26%	28%			
Kulyab	44%	50%	57%	60%	62%	64%			
Kurgun Tyube	45%	55%	60%	62%	65%	67%			
Rasht (Gharm)	13%	18%	23%	26%	28%	30%			
Vakhdat	36%	45%	52%	55%	57%	58%			
Vose	40%	45%	50%	55%	57%	60%			
Results Indicators for Each Component									
Component 1									
Project investments satisfactorily completed in participating small towns.	(US$ mil)								
• Estimated target disbursements.	0.0	2.0	2.0	3.0	3.0	2.5	Quarterly and Annual Progress Reports	Progress Reports	PMU and KMK
Technical measures in business plans are satisfactorily implemented in participating utilities									
• Number of participating utilities implementing subprojects	0	2	4	6	8	8			
Subproject pipeline is prepared and robust.									
• Number of subproject ready for implementation	0	4	8	12	15	15			

		Target Values					Data Collection and Reporting		
Outcome Indicators	**Baseline**	**YR1**	**YR2**	**YR3**	**YR4**	**YR5**	**Frequency and Reports**	**Data Collection Instruments**	**Responsibility for Data Collection**
Reporting on utility performance is regular and satisfactory.	Number of Progress Reports 0	4	4	4	4	4	Quarterly and Annual Progress Reports	Progress Reports	PMU and KMK
Managerial and financial improvement measures in business plans are prepared and satisfactorily implemented.	Number of Activities started 0	2	4	6	8	8			
Component 3									
Project implementation progress and financial reporting is satisfactory and in line with agreed schedule	# of Progress Reports 0	4	4	4	4	4	Quarterly and Annual Progress Reports	Progress Reports	PMU and KMK
Auditors issue unqualified opinion on financial statements of project accounts.	0	1	1	1	1	1			

Annex 4: Detailed Project Description
TAJIKISTAN: Municipal Infrastructure Development Project

MIDP consists of the following three main components:

- Municipal Infrastructure Rehabilitation
- Technical and Institutional Strengthening
- Implementation Support

1. Component A: Municipal Infrastructure Rehabilitation

Estimated total component cost: US$12.5 million (including physical and price contingencies)

The component will finance the rehabilitation, repair, and replacement of infrastructure and equipment for basic municipal services (water supply, solid waste collection, etc) in the eight participating towns (Dangara, Istaravshan, Kanibadam, Kulyab, Kurgan-Tyube, Rasht (Gharm), Vakhdat, and Vose) selected by the Government in May 2004.

To be eligible for financing under MIDP the proposed investments must demonstrate that they:

(a) represent top priorities for the KMK subsidiary enterprises responsible for service delivery, as well as the local governments (*khukumats)*, and the town populations;
(b) are technically sound and represent technically feasible least-cost solutions to the problems to be addressed;
(c) comply with World Bank safeguards and other guidelines as well as with applicable Tajikistan legislation and/or regulations; and
(d) do not compete and/or overlap with any investment or activity financed by another donor.

On a town-by-town basis, the following investment programs are being considered:

1.1.1 Dangara:

Water Supply: MIDP will finance the rehabilitation of the Korez well field by installing new submersible pumps, cleaning of existing drilling wells, and rehabilitation of the existing water reservoir and sanitary protection of the well field. The project will also rehabilitate the water distribution network by replacing about 22 km of secondary and tertiary pipe network and provide necessary repair and operating equipment to the KMK local subsidiary utility enterprise responsible for water supply.

Solid Waste Management: MIDP investments will include improvement of the access road to the waste disposal site, and provision of necessary vehicles and equipment to the KMK local subsidiary utility enterprise responsible for solid waste collection and disposal.

1.1.2 **Istaravshan:**

Water Supply: MIDP will finance the rehabilitation of the Dzhavkandak, Argu, and Dusty well-fields, including the cleaning of existing boreholes, the installation of new pumps, and rehabilitation of the disinfection and chlorination facilities at Dzavkandak and Argu well-fields. MIDP will also finance the partial rehabilitation of the secondary and tertiary water supply network, and provide necessary repair and operating equipment to the KMK local subsidiary utility enterprise responsible for water supply.

Solid Waste Management: MIDP investments will include the provision of necessary vehicles and equipment to the KMK local subsidiary utility enterprise responsible for solid waste collection and disposal.

1.1.3 **Kanibadam**:

Water Supply: MIDP will finance the reconstruction of the Maslozavodskaya pumping station including the rehabilitation of the pumping station building and installation of new pumps and disinfection facilities; the rehabilitation of two other pumping stations, including the cleaning of existing boreholes, and provision of necessary repair and operating equipment to the KMK local subsidiary utility enterprise responsible for water supply.

Solid Waste Management: MIDP investments will include the repair of the access road to, and construction of a protection fence around, the disposal site as well as the provision of necessary vehicles and equipment to the KMK local subsidiary utility enterprise responsible for solid waste collection and disposal.

1.1.4 **Kulyab**:

Water Supply: MIDP will finance the rehabilitation of the Dzhangall Boshi well field, including the supply of a new disinfection facility; the rehabilitation of a third stage pumping station and construction of a water reservoir; the rehabilitation of the Teblai Sai spring water intake, the replacement and rehabilitation of primary transmission mains, and portions of the distribution network, and provision of necessary repair and operating equipment to the KMK local subsidiary utility enterprise responsible for water supply.

Solid Waste Management: MIDP investments will include the provision of necessary vehicles and equipment to the KMK local subsidiary utility enterprise responsible for solid waste collection and disposal.

1.1.5 **Kurgan-Tyube**:

Water Supply: MIDP investments will include the rehabilitation of the Sadvinkoz Water Intake #2 by replacing hydro-mechanical installations, construction of filtration and coagulation station as well as cleaning of the sedimentation pond, replacement of pumps at various pumping stations, replacement of pumps at well fields #1 and #3, including the cleaning of boreholes; rehabilitation of about 10% of the transmission mains from well field #2 to the distribution network; replacement of pipes in the primary and secondary water distribution network; drilling of new wells at well field # 2, and

provision of necessary repair and operating equipment to the KMK local subsidiary utility enterprise responsible for water supply.

Solid Waste Management: MIDP will finance the repair of the access road to, and construction of a protection fence around, the disposal site as well as the provision of necessary vehicles and equipment to the KMK local subsidiary utility enterprise responsible for solid waste collection and disposal.

1.1.6 **Rasht (Gharm):**

Water Supply: MIDP will finance the rehabilitation of the Loyak and Mulla Hysen springs, including the construction of new reservoirs, the rehabilitation of transmission mains, and portions of the distribution network, including the replacement of valves in the distribution network, and provision of necessary repair and operating equipment to the KMK local subsidiary utility enterprise responsible for water supply.

Solid Waste Management: MIDP investments will include the provision of necessary vehicles and equipment to the KMK local subsidiary utility enterprise responsible for solid waste collection and disposal.

1.1.7 **Vakhdat**:

Water Supply: MIDP will finance the renovation of three well fields, including the drilling of new boreholes at well field #1, cleaning of existing boreholes, installation of new submersible pumps, and rehabilitation of the chlorination units at the three well fields, and provision of necessary repair and operating equipment to the KMK local subsidiary utility enterprise responsible for water supply.

Solid Waste: MIDP investments will include the construction of a protection fence around the disposal site as well as the provision of necessary vehicles and equipment to the KMK local subsidiary utility enterprise responsible for solid waste collection and disposal.

1.1.8 **Vose**:

Water Supply: MIDP will finance will the rehabilitation of the Centralnaya, Zhilimasiv and SPTU well fields, including the rehabilitation of chlorination units and other service facilities, replacement of pumps at the Uchkoz well field, replacement of valves and meters in the distribution network, and provision of necessary repair and operating equipment to the KMK local subsidiary utility enterprise responsible for water supply.

Sanitation System: MIDP investments will finance the rehabilitation of septic tanks at various public toilets.

Solid Waste Management: MIDP investments will include the construction of a protection fence around the waste disposal site and the provision of necessary vehicles and equipment to the KMK local subsidiary utility enterprise responsible for solid waste collection and disposal.

The investments programs for all eight towns will be implemented in successive phases. Detailed designs and tender documents have been prepared for the First Phase Investments (covering the first eighteen month of MIDP implementation). Investments for the subsequent phases will be defined in more detail as part of MIDP implementation and in several cases will require the prior completion of complementary technical studies and surveys (financed under Component B of MIDP) to determine appropriate design parameters and basic data.

1.1.9 First Phase Investment Program (FPIP)

FPIP investments (estimated cost US$1.6 million, including physical and price contingencies) will consist of the following:

Dangara: (estimated cost US$23,000). FPIP will finance the rehabilitation of (a) a water reservoir and corresponding chlorination unit; and (b) the acquisition of solid waste collection equipment.

Istaravshan: (estimated cost US$93,000). FPIP will finance (a) the partial rehabilitation of the Dzavkandak and Argu well fields, and (b) the acquisition of solid waste collection equipment.

Kanibadam: (estimated cost US$200,000). FPIP will finance (a) the partial rehabilitation of first and second stage pumping stations, and chlorination units, and (b) the acquisition of solid waste collection equipment;

Kulyab: (estimated cost US$177,000). FPIP will finance (a) the rehabilitation of the Dzhangall Boshi well field, and partial rehabilitation of pumping stations and chlorination units; and (b) acquisition of solid waste collection equipment.

Kurgan-Tyube: (estimated cost US$121,000). FPIP will finance (a) the rehabilitation of the Sadivinkoz well field and well fields # 1 and # 2, rehabilitation of a transmission main, and (b) the acquisition of solid waste collection equipment.

Rasht (Gharm): (estimated cost US$120,000). FPIP will finance the (a) rehabilitation of at Mulla Hysen and Loyak spring intakes; and (b) the acquisition of solid waste collection equipment.

Vakhdat: (estimated cost US$70,000). FPIP will finance the (a) partial rehabilitation of well fields #1 and 2, including chlorination units; and (b) acquisition of solid waste collection equipment.

Vose: (estimated cost US$100,000) FPIP will finance the (a) rehabilitation of the Centralnaya and Zhillmasiv well fields, and (c) acquisition of solid waste collection equipment.

2. Component B: Technical and Institutional Strengthening:

Estimated component cost US$1.5 million (including price contingencies)

2.1 Sub-component B.1: Additional engineering studies

Estimated sub-component cost US$0.4 million

The sub-component will finance studies/surveys that are necessary to determine the scope and features of some of the investments to be implemented in the second and subsequent phases of MIDP implementation.

(a) Updating of inventory and mapping of existing water distribution and sewer networks The purpose of the studies is to update and complete existing documentation on location and features of the water supply distribution and sewer networks in order to provide the basis for the implementation of systematic leak detection programs and the preparation of repair and maintenance programs.

(b) Water distribution system leak detection campaigns: The purpose of the leak detection campaigns will be to determine the location of major leaks and areas of losses in the distribution network and identify programs of priority repair (or pipe replacement) to be carried in the second and subsequent phases of MIDP implementation.

2.2 Sub-component B.2: Institutional Strengthening of KMK and its local subsidiary utility enterprises

Estimated sub-component cost US$1.1 million

The sub-component will finance technical assistance in various areas to assist KMK and its local subsidiary utility enterprises, in:

(a) setting up a Technical and Institutional Support Group (TISG) within KMK;

TISG will be established within KMK's Department for Economics, Financial Policy and Utility Sector Reform. TISG will be formed by current employees of the Department and will be supported by international and local consultants with expertise in legal and technical areas. To improve the working conditions of TISG the project will finance office equipment and information technology. MIDP will also provide funding for training, including study tours, to TISG and other KMK staff.

TISG will help KMK and the KMK local subsidiary utility enterprises to:

(i) strengthen general operational and financial management capacity, improve KMK-internal information systems, and address issues of tariff policies and reforms;

(ii) organize staff training on issues of occupational safety, environmental protection, and operations planning;

(iii) provide advise on legal issues related to the current roles and responsibilities of KMK and its local subsidiary utility enterprises in the delivery of basic municipal

services, as well as on issues that could arise from the expected larger future involvement of local authorities in the delivery of such services;

(iv) conduct technical audits of KMK local subsidiary utility enterprises; and

(v) support KMK local subsidiary enterprises in preparing and implementing consumer outreach programs including the development of consumer relations offices, and consumer education and awareness programs, as well as the establishment a venue for periodic public discussions between utilities, consumers, and local authorities on issues of delivery of public utility services. Such outreach programs will be implemented on a pilot basis for one or two towns before being rolled out to all eight participating towns.

(b) implementing Management Improvement Programs (MIPs). The purpose of MIPs is to help improve the technical and financial management of KMK and the local subsidiary utility enterprises in the eight towns participating in MIDP. MIP activities will include:

(i) implementation of programs to improve the billing, collection and accounting systems. Development of these programs will be tailored to the absorptive capacity and skill level of local utility staff, include the provision of a minimum of necessary equipment, and be supported by staff training in operational and financial matters; and

(ii) preparation of operations manuals and preventive maintenance programs. The purpose of these programs will be to revise existing and outdated sets of operational rules and technical management procedures including the preparation of preventive maintenance programs for specific types of infrastructure and equipment.

Results of MIPs will be subject to an annual review jointly conducted by KMK and the Bank to assess achievements made, identify possible shortcomings and readjust the operational performance targets accordingly.

3. Component C: Implementation Support

Estimated component cost US$2.5 million (including price contingencies)

3.1 Sub-component C.1: PMU Operating Costs

Estimated sub-component cost US$0.8 million

The sub-component will finance the operating costs of the PMU, operating costs of the PMU including staff salaries, in-country travel costs, mandatory employer social charges, office consumables, staff training, miscellaneous project supervision costs, communications, and vehicle insurance and maintenance.

The sub-component will also finance the purchase of computers, printers, communication and other office equipment as well as office furniture and up to three vehicles to allow the PMU to operate in a satisfactory and efficient manner.

3.2 Sub-component C.2: Annual Audits

Estimated sub-component cost US$0.1 million

The subcomponent will finance the annual audits of project accounts and financial statements by independent auditors in accordance with Bank guidelines.

3.3 Sub-component C.3: Monitoring and Evaluation

Estimated sub-component cost US$0.1 million

The sub-component will finance consulting services, and the purchase and installation of database software for monitoring and evaluation of MIDP outcomes. Consulting services will be required for (a) designing a performance monitoring system to assess the performance of KMK local subsidiary utility enterprises in the delivery of services and improvement of management quality including customer relations, and (b) conducting periodic surveys of beneficiary satisfaction in the eight participating towns.

3.4 Sub-component C.4: Project Management Support

Estimated sub-component cost: US$1.5 million

The sub-component will finance the project management support that is required to implement MIDP with the required technical and financial efficiency. The sub-component will provide funding for the services of a Project Management Consultant (PMC) - composed of a team of both international and domestic consultants – who will assist the PMU in key project management tasks such as procurement, preparation of final designs and tender documents and supervision of work implementation by contractors and that are critical for the success of the project.

Annex 5: Project Costs
TAJIKISTAN: Tajikistan Municipal Infrastructure Development Project

Project Cost By Component and/or Activity	Local US $million	Foreign US $million	Total US $million	Total in %	% IDA financed
A. Municipal Infrastructure Rehabilitation	**7.0**	**3.4**	**10.4**	**73**	88
B. Technical and Institutional Strengthening	**0.4**	**1.0**	**1.4**	**11**	
B.1 Leak Detection/Network Updating	0.3	0.0	0.3	2	100
B.2 KMK Institutional Strengthening	0.1	1.0	1.1	8	100
C. Implementation Support	**1.2**	**1.2**	**2.4**	**16**	
C.1 PMU Operating Costs	0.7	0.1	0.8	6	
C.2 Audits	0.0	0.1	0.1	1	100
C.3 Monitoring and Evaluation	0.1	0.0	0.1	1	100
C.4 Project Management Support	0.4	0.9	1.3	11	100
Total Baseline Cost	**8.6**	**5.7**	**14.2**	**100**	
Physical Contingencies	0.8	0.5	1.3		
Price Contingencies	0.6	0.3	0.9		
Total Project Costs	**10.0**	**6.5**	**16.5**		
Interest during construction	0.0	0.0	0.0		
Front-end Fee	0.0	0.0	0.0		
Total Financing Required	**10.0**	**6.5**	**16.5**		

* Figures may not add up due to rounding

The Table provides cost estimates for project components and sub-components. Based on the 2005 financing parameters for Tajikistan, the project will cover up to 100% of eligible costs. The Government will provide counterpart funding of US$1.5 million for investments in infrastructure and equipment. Physical contingencies have been applied to physical investment costs only. Price contingencies are based on an assumed average inflation rate of 2% annually.

Annex 6: Implementation Arrangements
TAJIKISTAN: Municipal Infrastructure Development Project

1. Implementation Period

1.1 MIDP will be implemented over a period of five years (sixty months) commencing in March 2006. A Mid-Term Review (MTR) will be conducted at the end of the second year of project implementation.

2. Key Institutions

2.1 The institution responsible for MIDP implementation is the SUE Khochagii Manziliu Kommunali (KMK). KMK was established by a Government Resolution No. 357 on 31 July 2001 as the legal successor to the State Entity Tajikkomunservis previously in charge of delivery of basic municipal services. KMK is subordinated in its activities to the Government of the Republic of Tajikistan and subject to the standard accounting and statistical reporting legally required in Tajikistan.

2.2 According to its Charter, KMK's responsibilities, rights, and activities include regulatory, control and oversight as an "authorized agency" of the government, for control over use and preservation of the housing stock, the development of legislative and regulatory documents related to municipal services and housing; development of technical standards for operation and maintenance of municipal service and housing and regulatory norms; and formulating and approval of tariffs and service fees for water provision, heating, garbage removal, housing maintenance, and other municipal services. In addition, KMK also has business mandates for direct service provision, and can establish subsidiary companies, allocate assets to, and among, them, and is entitled to receive a part of their profits.

3. Implementation arrangements

3.1 KMK will be responsible for implementation of MIDP in accordance with Government Resolution # 357 0f September 28, 2005. KMK will have overall responsibility for procurement, disbursement and financial management of IDA Grant proceeds. A PMU which was created by Government Resolution No. 408 of October 1, 2004, amended by Government Resolution # 357 0f September 28, 2005 under the name "Municipal Infrastructure Development Project Management Center (Centr Upravlenya Proyektom Rasvitya Municipalnoy Infrastruktury v Respublike Tajikistan)" will be responsible for the day-to-day implementation coordination and management of MIDP. Details of the division of responsibilities between KMK and the PMU are detailed below and specified in a Project Implementation Agreement established by the Government and entered into by KMK and the PMU prior to Grant Effectiveness.

3.2 PMU working arrangements and procedures are detailed in an Operations Manual (OM) which will be adopted by KMK prior to Grant Effectiveness. The review of PMU financial management arrangements is shown in Annex 7. A Project Environmental Management Plan (EMP) was prepared and published in the local media on October 15, 2005. Safeguard policy issues are addressed in Annex 10. Procurement arrangements and PMU capacity issues are addressed in Annex 8. An implementation progress review will be carried out at the end of the first year of implementation to identify possible shortcomings and, if advisable, make necessary adjustments to the implementation arrangements.

3.3 The following arrangements will cover the specific aspects of project implementation:

3.3.1 Municipal Infrastructure Rehabilitation:

MIDP will finance investments in the eight project towns that were selected to participate in the project. MIDP will finance through grants, the repair, rehabilitation, and/or replacement of infrastructure and equipment for basic municipal services (water supply, solid waste collection, etc.) whose operation is the responsibility of KMK's local subsidiary utility enterprises. Detailed designs and bidding documents for a First Phase Program covering the first eighteen months of MIDP implementation were prepared by Project Preparation Consultants. Detailed designs and bidding documents for subsequent years will be developed by the PMC under the supervision of the PMU. The PMU, assisted by the PMC, will be responsible for: (a) carrying out procurement, evaluating and selecting contractor proposals for the execution of works and supply of goods for the subproject in accordance with project procurement guidelines (see Annex 8 for Procurement Arrangements); (b) supervising and coordinating overall work execution by contractors for sub-project implementation, including control of technical quality and compliance with agreed implementation schedules; (c) making necessary arrangements for obtaining permits and final approval/acceptance of completed works; and (d) making payments to contractors in accordance with disbursement arrangements. Payments will be made upon certification of accomplished works by the PMC and the PMU. (See Annex 7 for disbursement and financial management procedures)

3.3.2 Technical and Institutional Strengthening: MIDP will finance various activities aimed at assisting KMK and its local subsidiary utility enterprises in improving their technical and institutional capacity. A specific sub-component will support, inter alia, the development and implementation of Management Improvement Programs (MIPs) for KMK local subsidiary utility enterprises with a view to identify the institutional and operational measures required to improve service delivery and overcome technical and management deficiencies. KMK, with the assistance of the PMU, will be responsible for the implementation of the component, including procurement, selection of consultants, management and payment of consulting and other vendor services required for this component. A detailed description of this component is provided in Annex 4.

4. Monitoring & Evaluation, Reporting

4.1 Under delegation of responsibilities from KMK, the PMU will be responsible for monitoring overall project performance and achievement of project objectives and evaluating the quality of project results.

4.2 For each participating town the PMU will define specific project implementation targets and monitoring and performance indicators.

4.3 With the support of the PMU, KMK will prepare quarterly progress reports on project implementation and project financial management for the Government and the World Bank. The quarterly report for the forth quarter will consolidate the annual results and will be issued as an Annual Report.

4.4. Results of MIPs will be subject to an annual review jointly conducted by KMK and the Bank to assess achievements made, identify possible shortcomings and readjust the operational performance targets accordingly.

4.5 A MTR will be conducted no later than spring of 2008, that is, at the end of the second year of project implementation. The MTR will review the actual implementation performance of each of the participating towns to date, identify the reasons for delays and poorer than anticipated results and, if advisable, agree with KMK and the Government on possible changes in the investment programs, reallocation of project resources and/or the extension of MIDP activities to new towns. It will also review the effectiveness of the decision-making process on MIDP investments including the involvement of local authorities and the beneficiary population.

Table 1: Division of responsibilities in MIDP implementation between KMK and PMU

Actors	General Responsibility	Specific responsibilities in MIDP
KMK	Formulates overall policies, strategies, and guidelines for the implementation of MIDP. Ensures adequate operation and maintenance of facilities, installations, and equipment of local subsidiary utility enterprises as well as timely repair and upgrading of infrastructure and equipment.	Is responsible for overall coordination and oversight of MIDP implementation by the PMU; Makes necessary decisions related to coordination of MIDP works and makes corresponding recommendations to Government and Bank; Formulates MIDP implementation policies and strategies; Serves as interlocutor of the Bank and the Government in discussions on general MIDP policy issues; Ensures that MIDP is implemented in conformity with the Bank guidelines and safeguard policies; Secures availability of KMK facilities, services or other resources required for MIDP implementation; Reviews and approves annual procurement and project implementation plans prepared by the PMU; Chairs tender committees for award of contracts above the thresholds agreed with the Bank and signs off on award decisions; Signs withdrawal applications for replenishment of the Special Account and direct payments; Reviews and forwards quarterly and annual Financial Monitoring Reports (FMRs) and Project Implementation Progress Reports to the Government and the Bank; Informs the Government and the Bank without delay in writing of any problems that could impede the compliance with its obligations under the IDA Grant Agreement; Collaborates with other external agencies and donors

Actors	General Responsibility	Specific responsibilities in MIDP
PMU	Day-to-day management of MIDP implementation under the oversight of KMK. Quality and timely implementation of the Project.	Under delegation of responsibilities from, and oversight by, KMK manages all day-to-day MIDP implementation activities, including, but not limited to, the following: Is the interlocutor of the Government, KMK, and the Bank in discussions on MIDP operational issues; Prepares, in consultation with the Project Management Consultant (PMC) annual project implementation programs and Procurement Plans for review by KMK and the Bank. Identifies potential problems and proposes appropriate actions to be taken to KMK and the Bank Obtains all necessary decisions, permits and approvals required for MIDP implementation; Manages bidding procedures, signs contracts and supervises contract implementation. Supervises the work of the PMC and other consultants Approves and pays invoices from the Special Account Manages the Special and Project Accounts; Ensures that financial audits of MIDP accounts are carried out annually; Prepares the documentation required for replenishing the Special and Project Accounts Ensures the preparation of all reports required to be submitted by KMK to the Government and the Bank; Assists KMK in discussions with other donors; Maintains all technical and financial documentation and records on MIDP activities Prepares Environmental Management Plans (EMPs) acceptable to the Bank and implements them in consultation with the Bank. Manages the Monitoring and Evaluation of MIDP results on the basis of agreed monitoring and performance indicators

Annex 7: Financial Management and Disbursement Arrangements

TAJIKISTAN: Municipal Infrastructure Development Project

1. Summary and Conclusions:

1.1 An assessment of the financial management arrangements proposed by KMK and implemented by the PMU was undertaken in May and September 2005, to determine if the arrangements were acceptable to the Bank. These financial management arrangements include systems of budgeting, accounting, financial reporting, auditing, and internal controls. The PMU is in the process of designing a computerized accounting system, using the 1-C accounting software which is already being used for the PHRD Grant provided as a project preparation facility. This software is widely used in the Central Asia region for project accounting and reporting and has been used, and will support financial requirements of the Bank and Government. An OM which includes financial management procedures has been prepared. The PMU is not expected to hire financial management staff to participate in the development of system before signing of the IDA Grant Agreement. However, transitional arrangements will be agreed for the existing PMU to coordinate the development of the accounting system and ensure the transfer of necessary skills to staff who will be hired to manage the system during MIDP implementation. TORs for the accounting and disbursement staff will be developed by the PMU and agreed with the Bank before launching the recruitment process.

1.2 Further actions are needed for the financial management arrangements to fully meet the requirements of the Bank. The OM which documents the financial procedures is being finalized, taking into account Bank comments. A Financial Management Action Plan has been developed, and will be agreed with KMK. There will be no Board or Effectiveness conditions related to financial management as substantial work has already been accomplished, and some of the remaining significant actions, such as hiring of staff, can be implemented only upon signing of the IDA Grant Agreement when KMK will be able to spend funds allocated in the project budget.

1.3 Taking into consideration the assessment of the financial management systems and processes and the assessment of risks and mitigating measures, the financial management arrangements for the proposed MIDP, when fully implemented, will be capable of satisfactorily recording all transactions and balances, supporting the preparation of regular and reliable financial statements, safeguarding the KMK assets, and will also be subject to auditing arrangements acceptable to the Bank.

1.4 A detailed financial management assessment questionnaire is included in the project files. A summary of the ratings is as follows:

Table 1: Summary Table: Financial Management Assessment and Conclusions.

Financial Management Assessment	*Rating*	*Comments/Risk Mitigation measures.*
1. Implementing Entity	S	KMK has no experience with Bank project management and implementation; the PMU will recruit additional staff to manage the IDA Grant after effectiveness.
2. Funds Flow	S	There will be satisfactory arrangements to ensure flow of funds from IDA to the project and beneficiaries.
3. Staffing	S	The financial manager in the PMU managing the PHRD Grant and additional staff will be hired on effectiveness of IDA Grant. Significant support from the Bank's FMS, and training, will be required during initial phase of implementation
4. Accounting Policies and Procedures	S	Operating Manual under preparation and documents accounting policies and procedures, reporting and audit arrangements.
5. Internal Audit	NA	There is no internal audit function, and none is planned.
6. External Audit	M	Project financial statements will be audited annually by an auditor acceptable to the Bank. Draft TORS for project audit will be prepared, and will be agreed during negotiations.
7. Reporting and Monitoring	S	Accounting system to prepare reliable financial reports is being developed. PMU does not, however, have experience with Financial Monitoring Reports (FMRs). Some additional training will be required for new staff to be hired.
8. Information Systems	S	PMU is in the process of installing suitable software, capable of producing FMRs. Some training will be required as well as support from the Bank's FMS.
Overall Financial Management Rating	**S**	Action Plan for implementation of the remaining actions required to ensure establishment of financial management system acceptable to the Bank has been prepared and will be discussed and agreed during negotiations

Legend:
H – High S – Substantial M – Moderate L - Low N/A – Not applicable.

2. Country Issues and linkage to the current project

2.1 A Country Financial Accountability Assessment (CFAA) for Tajikistan was completed in 2004. The conclusion of the CFAA is that there is a high risk to public funds due to extremely weak public sector financial management including budgeting accounting and auditing. The CFAA notes that systems of public accountability function poorly and that there is a lack of transparency at all levels of government. While legislative reforms have been introduced in the Treasury, budget processes and control agencies, these are undermined through human and technological capacity constraints. Some of the main risks include fragmented budgets, poor cash management and execution control, lack of transparency in the operations of State Enterprises and inadequate checks and balances in the Executive and Legislature. These risks affect the overall quality and credibility of governance in Tajikistan.

2.2 Overall, the status of accounting profession in the country is low; and there is a critical lack of professionally qualified accountants. Most PMUs for Bank-financed projects use the cash basis of accounting, which is not in accordance with International Financial Reporting Standards (IFRS), but is in many cases sufficient for proper accounting. There is no public sector internal audit unit functioning in accordance with international norms. External audit is practiced by individuals and a small number of audit firms. However the standards are low and insufficient to

be relied on in Bank projects. Most audits required by international organizations, including the Bank, traditionally have been performed by private sector auditors from outside Tajikistan using firms eligible to audit Bank projects elsewhere in Central Asia.

2.3 As well as a basic lack of experience in international accounting and auditing there is shortage of computers and training courses available for KMK finance staff both in Dushanbe and the KMK local subsidiary utility enterprises. Technical assistance for developing the accounting and finance function needs to take into account these basic weaknesses and design simple and realistic local level interventions which can support improvements in billing, collection and accounting systems. To mitigate the risks associated with weak governance and low capacity, MIDP will be implemented through ring-fenced structures, with parallel systems of accounting, reporting and audit in the implementing agency

3. Implementation and Staffing Arrangements

3.1 MIDP will be implemented under the responsibility of KMK through a PMU consisting of dedicated, full time staff under the leadership of the Project Director. Other staff will include specialists in procurement, financial management and disbursement, as well as administrative staff. The PMU will be based in the offices of KMK in Dushanbe.

3.2 The PMU will be responsible for ensuring that project activities are implemented according to the legal documents, procurement plan and operations manual, reporting on project progress to the Bank, ensuring that procurement of goods and services is done in a timely manner and in accordance with Bank guidelines, managing project funds, maintaining accounts, getting the accounts audited, ensuring adequate budget provisions for the project in the national budgets, facilitating the work of consultants, and reviewing consultant outputs.

3.3 During project preparation the accounting and disbursement functions have been handled by a financial manager recruited in the PMU. Once the IDA Grant becomes effective, the PMU will hire an adequate complement of project financial management staff, including specialists in financial management, disbursement and procurement, as well as a cashier/administrator. The financial manager will be responsible for all aspects of the financial management and accounting, including managing the special account. He will be assisted by a suitably qualified accountant/disbursement specialist who will be responsible for disbursement functions, as well as project accounting - maintaining books of accounts, reporting day-to-day transactions and preparing accounting reports and financial statements, as well as monitoring financial flows to the project. The financial manager will be involved in the budget preparation for the project and have primary responsibility for the quarterly Financial Monitoring Reports (FMRs), and prepare annual financial statements for audit. He will also manage an effective system of internal control, ensuring adherence to established financial procedures, and safeguarding the resources and assets of the project. It is envisaged that staff will need training on project financial management and disbursement procedures, to equip them with skills for effective project financial management.

4. Strengths and Weaknesses

4.1 A PMU has been implementing the preparation of the project with funding from a PHRD Grant, and staff has gained some experience with the Bank's procedures for disbursement and procurement. However, further skills will be required to manage the IDA Grant and PMU staff will require considerable training and guidance during the initial phase of project

implementation. The full-time financial management and disbursement staff will not be hired until project inception, but it's expected that the PMU currently contracted for project preparation will provide essential support in the interim including the development of project software and installation. Successful implementation of the financial management action plan will ensure establishment of financial management arrangements that satisfy Bank requirements.

5. Accounting policies and procedures.

5.1 KMK, with the support of the PMU, has prepared an OM which includes the financial procedures, key internal control mechanisms to be followed by the PMU in the application and use of funds. The OM reflects the structure as well as the flow of funds to support project activities. Accounts and records for the project will be maintained by the PMU which will operate and maintain a financial management system capable of generating FMRs in accordance with formats to be agreed with the Bank. Books of accounts for the project will be maintained by the PMU based on generally accepted accounting principles. The financial manager will be responsible for overall project financial management, maintenance of books and accounts for the project, preparation and dissemination of financial statements and FMRs, and timely audits of the project. The PMU will generate and maintain accounting vouchers and supporting documentation for expenditures on all activities of the project, and will document the accounting transaction information flow. Funds will be transferred from the Special Account to pay for eligible expenditures in accordance with instructions contained in the Disbursement letter to be issued upon IDA Grant approval. The PMU will also maintain appropriate financial records and reports in accordance with existing government financial regulations and project specific procedures established in the OM. These accounts which follow generally accepted accounting practices will reflect the progress of the project and identify its resources, operations and expenditures. The project accounts will reflect all financial transactions during the project period for the IDA Grant and government counterpart financing by project component and by expenditure categories.

6. Auditing Arrangements.

6.1 Internal audit. There is no internal audit department within KMK and none is proposed in the near future. However, the KMK activities are subject to periodic audits by the State Financial Control Committee (SFCC). For the purposes of the IDA Grant, no reliance will be placed upon the audits performed by the SFCC.

6.2 External audit. Annual audits for the project accounts will be carried out in accordance with the *Guidelines for Financial Reporting and Auditing of Projects Financed by the World Bank (June 2003).* The guidelines require a single audit opinion on the project financial statements as a whole, which will include the Special Account Statement and the Statement of Expenditures (SOEs) used as the basis for withdrawing funds from the IDA Grant Account. The project will adopt these guidelines and submit a single audit opinion on the annual project financial statements within six (6) months following the end of the projects fiscal year end. TORs for the audit as well as a shortlist of audit firms to be invited to tender for the audit contract will be cleared with the Bank prior to the end of the fiscal year to be audited.

6.3 As noted above, the Bank does not intend to place reliance on the government external auditing activities conducted by the SFCC. The external audit will be carried out by independent auditors in accordance with International Standards on Auditing (ISA) and terms of reference

acceptable to the Bank. The TORs will stipulate both the audit of financial transactions and an assessment of the operation of the financial management system, including a review of the internal control mechanisms.

7. Reporting and Monitoring.

7.1 FMRs will be used for project monitoring and supervision. The project will prepare and submit the FMRs in a form and frequency agreed with the Bank (sample forms will be included in the OM). These FMRs will be customized to reflect the specific characteristics of the project, while meeting the Bank's minimum information requirements for the financial monitoring of the Project. The FMRs will include, but not be limited to: (a) Sources and Uses of Funds, (b) Uses of Funds by Project Activity, (c) Output Monitoring Reports, (including written summary of project progress, and explanations for significant budget variances); and (d) Procurement Reports. The PMU will submit quarterly FMRs to the Bank starting with the first quarter ended in which disbursements will commence and quarterly thereafter, no later than 45 days after the end of the relevant quarter. The project accounting software will generate FMRs, incorporating all components, categories and performance indicators which are acceptable to the Bank. Review of actual results against budgets will be a key managerial tool for monitoring performance of the project.

8. Information systems.

8.1 The PMU has signed a contract to develop the existing computerized accounting system based on the existing 1-C accounting software used under the PHRD Grant. The 1-C system, a Russian software system that is commonly used among Bank-funded projects in Central Asia, will have capacity to generate FMRs, annual financial statements and other reports required by the Government. The system will be fully operational by effectiveness of the IDA Grant.

9. Impact of procurement arrangements.

9.1 The PMU hire will procurement personnel who are experienced with Bank guidelines or who will be trained to gain familiarity with Bank procurement guidelines. The PMU will prepare annual budgets in line with the Procurement Plans, and these budgets will form the basis for expenditures and requesting funds for counterpart contributions. Budgets, prepared in accordance with the FMR format (disbursement categories, components and activities, financial sources, account codes, and by quarter), will establish physical targets to ensure linkage between expenditures and physical progress, and proper comparison between actual and budgeted performance. A detailed budget for the first full year of project implementation, broken down by quarter, will be prepared before the IDA Grant becomes effective.

10. Disbursements arrangements.

10.1 The proceeds of the IDA Grant will be disbursed over a period of five years, or for such longer period as will be agreed with the Bank. Grant funds will initially flow to the project via disbursements to the Special Account opened by the KMK. Disbursements will follow the transaction-based method, i.e. reimbursements with full documentation, Statements of Expenditure (SOEs), direct payments and special commitments). Withdrawals from the IDA Grant Account will be requested in accordance with the guidance provided in the Disbursement Letter. Withdrawal applications may be signed by an authorized representative of the Recipient,

and KMK. The Financial Manager will ensure completeness and accuracy of all withdrawal applications and will append her/his signature as part of the internal control procedures. SOEs would be used for contracts for goods of less than US$100,000 each; contracts for works of less than US$200,000 each; contracts for services of consulting firms of less than US$100,000 each, and of individual consultants of less than US$50,000 each, PMU operating costs, and training expenses.

10.2 Special Account: To facilitate project implementation, the KMK will open a Special Account in a commercial bank acceptable to the Bank, and on terms and conditions acceptable to the Bank. IDA will make an initial deposit to the Special Account upon the request by the Ministry of Finance (MOF) after IDA Grant effectiveness. The total Authorized Allocation of the IDA Grant will be specified in the legal documents. Replenishment of the Special Account from the IDA Grant account will be made against withdrawal applications, supported by appropriate documentation or SOEs prepared by the PMU, signed by the authorized officials of KMK and submitted to the Bank for approval.

11. Financial Management in utilities

11.1 The financial assessment of the KMK local subsidiary utility enterprises revealed significant weaknesses in the quality of financial data. In particular it was noted that some of the required financial data either did not exist or were in conflict with anecdotal evidence of what the true financial performance of each utility should be. Most of the KMK local subsidiary utility enterprises do not have adequate resources to meet operations and maintenance expenses – the major reasons being low tariffs, poor collection rates and increasing accounts payables, high water losses and inadequate information about customers. Low collections results in delays in paying wages and salaries, suppliers, or partial payments or off-sets to power utilities and other government institutions. In financial terms, most of these utilities would fail the test of "going concern".

11.2 Currently KMK and the KMK local subsidiary utility enterprises conduct all billing, collection and accounting processes manually using Soviet era standards and financial reporting forms. The current system is vulnerable to arithmetic errors and does not allow for periodic review and reporting of utility's financial situation or key financial performance indicators. In addition incomplete registers and cash accounting for the residential sector and lack of bad debt provisions inhibit utilities ability to appreciate their financial situation (for example, collection rates for the population can only be estimated). There has been minimal investment in human or technical capital over the last ten years. In addition the development of a culture in which financial information is seen as a useful tool for all levels of management in making decisions will take time to establish. While the Government supports the introduction of accounting standards that conform to IFRS the severe capacity constraints will inevitably make compliance a challenging and long term process.

11.3 While investment in information technology and financial management training are overdue the challenge presented by (a) the present extremely low level of capacity, and (b) the number of enterprises in the KMK group need to be taken into account in developing and sequencing appropriate interventions. Lessons from previous donor technical assistance suggest that small scale interventions at a local level working in partnership with a willing management team present the best opportunity for success. The project will finance the development of

management information systems which can be piloted and scaled up through training and dissemination of new practices and procedures.

11.4 Given that KMK has more than 180 subsidiary utility enterprises of which no more than about a dozen are expected to participate in MIDP, auditing of KMK in its entirety would not be practical. Instead, at a first stage, the largest two KMK local subsidiary utility enterprises participating in the project (Kurgan Tyube and Kulyab VodoKanal, respectively, or any other utility agreed on with the Bank) will be required to have their entity financial statements audited by an auditor acceptable to the Bank. All other KMK utility enterprises participating in the project will be required to submit financial statements audited by local auditors for the duration of the project, and the Bank would reserve the right to require international audits of the financial statements of these utility enterprises for the duration of the project.

12. Financial Management Action Plan to be agreed with KMK

Given that the financial management arrangements are currently not fully satisfactory to the Bank, a draft time-bound action plan has been developed and discussed with the PMU and will be agreed with the Recipient during negotiations. Successful implementation of the Action Plan will ensure the establishment of a financial management system that meets requirements of the Bank.

FINANCIAL MANAGEMENT SYSTEM ACTION PLAN

	Action	Responsibility	Due Date/ Remarks
1.	**Financial Management Procedures described in Operating Manual (OM):** • Fully documenting the following procedures: budgeting, accounting and internal control, including description of the accounting system and books of accounts, disbursement and flow of funds (including chart), financial reporting, including FMR, annual reports and audit. • Present the final draft OM to the Bank for review. • Finalize the OM incorporating Bank comments.	KMK/PMU	Revised OM should be ready by Negotiations.
2.	**Establish Project Accounting and Financial Reporting System** • Develop project accounting system, including design of Chart of Accounts, capable of generating FMRs. • Provide appropriate training to the PMU financial manager, accountant/disbursement specialist and procurement specialist on application and maintenance of the installed system. Test the accounting and financial reporting system. • Produce Draft FMRs, for submission to the Bank for review and comments.	KMK/PMU	Contract signed under project preparation grant and consultants to start work on developing software in October 2005. The system is expected to be up and running by project inception.

13. Supervision Plan

13.1 The reports of the progress of the project implementation will be monitored in detail during supervision missions. The FMRs will be reviewed on a regular basis by the field-based Bank Financial Management Specialist and the results or issues followed up during supervision missions. Annual audited project financial statements and management letters will be reviewed and issues identified will be followed up with KMK.

13.2 Supervision missions will include a review of the project's financial management and disbursement arrangements (and may include a review of a sample of SOEs and movements on the Special Accounts for each funding source) to ensure compliance with the Bank's minimum requirements. It is envisaged that the Financial Management supervision missions will carried out every six months initially, but, subject to satisfactory performance by the PMU, the frequency may subsequently be reduced.

Annex 8: Procurement Arrangements

TAJIKISTAN: Municipal Infrastructure Development Project

1. General

1.1 Procurement for MIDP would be carried out in accordance with the Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated May 2004; and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated May 2004, and the corresponding provisions in the Grant and Project Agreements. For each contract to be financed by MIDP, the different procurement or consultant selection methods, the need for prequalification, estimated costs, prior review requirements, and time frame have been agreed between KMK, the PMU and the Bank and are defined in the Procurement Plan. The Procurement Plan will be updated at least once a year or more often as required to address the actual needs of MIDP implementation.

2. Procurement:

2.1 Procurement of Goods: Goods procured under MIDP will include: parts and equipment for the rehabilitation and/or repair of water supply systems; vehicles and other equipment for solid waste collection management; and computers, software, vehicles for project implementation support, and consumables for office supplies. For ICB the procurement will be done using Bank's Standard Bidding Documents (SBDs). For NCB procurement will use appropriate standard bidding documents, which will include draft contract and conditions of contract acceptable to the Bank.

2.2 Procurement of Works: Works procured under MIDP will include rehabilitation and/or repair of infrastructure for basic municipal services. The procurement will be done using the Bank SBDs for all ICB and appropriate standard bidding documents for NCB.

2.3 Selection of Consultants: MIDP will finance domestic and international consultants, both individual and companies. Short lists of consultants for services estimated to cost less than US$100,000 equivalent per contract may include exclusively domestic consultants in accordance with the provisions of paragraph 2.7 of the Bank Consultant Guidelines. MIDP will also provide funds for local and international training.

2.4 Operational Costs: MIDP will finance the operational cost of the PMU, including staff salaries, a limited amount of equipment and vehicles, in-country travel, mandatory employer contributions, and training associated with implementation of the proposed Project. The PMU will prepare an annual budget to be agreed with the Bank

3. Assessment of the agency's capacity to implement procurement

3.1 Procurement for MIDP will be carried out by the PMU under the oversight of KMK.

3.2 An assessment of the capacity of the PMU to carry out procurement for MIDP was carried out in May 2005. The assessment reviewed the organizational structures set up for the implementation of MIDP as well as the relationship between the PMU and the staff of KMK responsible for overseeing the overall execution of the project. The assessment found the capacity of the PMU satisfactory. It identified, however, substantial risks that need to be mitigated and which are discussed below together with the mitigation measures recommended.

4. General Procurement Environment

4.1 The Bank completed a Country Procurement Assessment Review (CPAR) for the Republic of Tajikistan in May 2003. As a result of the CPAR, Tajikistan was ranked as a high risk country from the public procurement point of view. Recently, a new Public Procurement Law has been prepared and substantial improvements have been made to the previous law adopted in 1997. However, this new law is yet to be enacted. At the time of the procurement assessment for MIDP the new law has not yet had any impact on the country risk category. Given the current lack of transparency in public procurement and the lack of experience of the PMU, MIDP is therefore rated 'high risk' from the point of view of procurement.

4.2 Legal aspects: As per Government Resolution # 357 of September 28, 2005, MIDP will be implemented by under the overall responsibility of KMK. Day-to-day management of implementation will be the responsibility of the PMU, which was established by Government Resolution # 408 of Oct 1, 2004, amended by Resolution # 357 of September 28, 2005.

4.3 Support and Control Aspects: The Code for Civil Service adopted recently provides the basis for the establishment of professional ethics and behavior. There is a Law on Corruption dated 1999. Independent external auditors will conduct annual audits of the project. KMK and the PMU are subject to audits conducted by the State Financial Control Committee (SFCC).

5. Risk Assessment

5.1 MIDP may face the following potential risks during implementation:

(a) Government officials who would be involved in project procurement through Tender Committees may not be familiar with Bank procurement procedures;

(b) The existing system of Government bureaucracy may create opportunities for informal interference in the procurement process by senior officials; and

(c) Suppliers and contractors for goods and works required for the project may not be available, especially in the more remote regions of the country. As a result, there may be insufficient competition resulting in higher than expected prices for goods, works and services.

6. Recommendations

6.1 Action Plan to Build the PMU Capacity: Based on the assessment made, the following actions are recommended:

- The PMU Procurement Specialist should receive regular training on international procurement and the Bank's procedures;
- The Bank should organize a project launch workshop for KMK and the PMU as well as representatives of the KMK local subsidiary utility enterprises and local authorities from the eight towns where MIDP will be implemented;
- Special care should be given to the preparation of the Procurement section of the OM. The OM should specify the procurement methods to be used under MIDP together with a step by step explanation of their implementation as well as the corresponding standard or sample documents to be used;

- The PMU should prepare an inventory of possible suppliers of goods, construction contractors and consultants (firms and individuals);
- The Bank staff will review the efficiency of procurement under MIDP upon completion of the first year of MIDP implementation.
- The PMU will maintain up-to-date project and procurement records. It will open a file for each contract including all correspondence and other relevant documents such as draft and final bidding documents, minutes of bid opening, evaluation reports, minutes of contract negotiations, draft and final contracts, etc.

6.2 Thresholds for Procurement Methods. It is recommended that the following thresholds be applied under this project:

Procurement Method	Threshold
ICB: Goods	>US$200,000
NCB: Goods	>US$100,000
Shopping: Goods	<US$100,000
ICB: Works	>US$200.000
NCB: Works	<US$200,000
Shopping :Works	<US$50,000
Quality and Cost Based Selection (QCBS) for Consultant Services	>US$100,000 (International shortlist) <US$100,000 (National shortlist)
Selection Based on Consultants' Qualifications (CQ)	<US$100,000 per contract
Selection of individual Consultants	<US$50,000

7. Suggested Thresholds for Prior Review

7.1 Taking into account the rating 'high risk' of the project the following procurement items will be subject to prior review by the Bank:

- All contracts for goods and works awarded through ICB (estimated to cost more than US$200,000);
- The first NCB contract for works and the first NCB contract for goods (estimated to cost less than US$200,000);
- All TORs for consulting services, irrespective of the contract value;
- Contracts with consulting firms estimated to cost US$100,000 or more and contracts with individual consultants estimated to cost US$10,000 or more; and
- Single source or direct contracting, including appropriate justification.

7.2 The above thresholds may be subject to revision as the MIDP implementation progresses and the PMU acquires improved procurement capacity and expertise.

8. Ex-Post Review

8.1 All other contracts will be subject to ex-post review by the Bank. The Bank supervision missions will conduct a procurement review at least once a year and/or whenever needed at critical points of project implementation.

9. Details of the Procurement Arrangements (First Phase Procurement Plan)

9.1 Goods and Non-Consulting Services

Bid No.	Bid Reference	Procurement Method	Estimated Cost (USD)	Bank Prior Review	Procurement Advertisement	Bid Opening	Contract Signature
Works and Goods							
	Works						
1	Water system rehabilitation : Dangara + Vose	NCB	123,000	Y	02/01/06	03/01/06	04/01/06
2	Water system rehabilitation : Istaravshan	NCB	93,000	N	03/15/06	04/15/06	05/15/06
3	Water system rehabilitation : Kanibadam	NCB	199,000	N	04/01/06	05/01/06	06/01/06
4	Water system rehabilitation : Kulyab	NCB	177,000	N	04/15/06	05/15/06	06/15/06
5	Water system rehabilitation: Kurgan Tyube	NCB	121,000	N	05/01/06	06/01/06	07/01/06
6	Water system rehabilitation: Rasht	NCB	120,000	N	05/15/06	06/15/06	07/15/06
7	Water system rehabilitation: Vakhdat	NCB	70,000	N	06/01/06	07/01/06	08/01/06
8	KMK Training Centre Repair	S	32,000	N	01/15/06	02/15/06	03/01/06
	Goods						
1	Vehicles for PMU	S	85,000	N	01/15/06	02/15/06	03/01/06
2	PMU Office Furniture	S	30,000	N	01/15/06	02/15/06	03/01/06
3	PMU Office Equipment	S	40,000	N	01/15/06	02/15/06	03/01/06
4	Solid Waste Trucks	ICB	420,000	Y	04/01/06	05/15/06	07/01/06
5	Solid Waste Containers	S	32,000	N	04/15/06	05/15/06	06/15/06
6	Leak Detection Equipment	S	50,000	N	06/01/06	07/01/06	08/01/06
7	Equipment for KMK Training Center	S	85,000	N	06/01/06	07/01/06	08/01/06
	TOTAL		**1,677,000**				

9.2 Consulting Services.

Bid No.	Bid Reference	Selection Method	Estimated .Cost (USD)	Prior Review	Submission Date	Comments
	Project Management Consultant (PMC)	QCBS	1,500,000	Y	02/01/06	
	PMU Staff contracts	CQ	305,000	N	03/01/06	
	Leak Detection Program	QCBS	110,000	Y	06/01/06	
	Network Map Updating	CQ	100,000	N	03/01/06	
	Technical/Institutional Support Group	CQ	240,000	N		Multiple Contracts
	Management Improvement Programs (MIPs)	CQ	280,000	N		Multiple Contracts
	Training Activities	CQ	10,000	N		Multiple Contracts
	Training (PMU)		50,000	N		Multiple Contracts
	Audit	CQ	30,000	N	12/01/06	
	TOTAL		**2,625,000**			

	TOTAL		**4,302,000**			

Annex 9: Economic and Financial Analysis

TAJIKISTAN: Municipal Infrastructure Development Project

Introduction

1.1 This Annex reviews the economic analysis of the project, and the financial aspects of the local subsidiary utility enterprises participating in the project. It is important to note that much of the operational, technical and financial data required for any economic and financial analysis of this project is very limited or sometimes contradictory when different sources of information are compared.

2. Economic Analysis

Benefits and Costs:

2.1 The lack of reliable data on system condition, expected quantifiable improvements, etc. makes the economic analysis speculative to some degree. Therefore, benefits are assessed largely from a qualitative standpoint. The data collection to be developed by the PMU under the project will provide the necessary information to allow for more accurately evaluate the economic benefits of the project and improve the design of activities in the later years of project implementation.

2.2 In the simplest version of a cost benefit analysis, the only benefits that could be measured in monetary terms are the savings from reduction in energy consumption and increases in operational efficiency resulting from reduction of water losses and wastage and replacement of inefficient pumping equipment. Replacement and optimization of pumping systems are expected to decrease unit energy consumption by about 25% in between 2006 to 2008, when most of the new pumps will be installed. The table below shows some of the expected benefits resulting from the project.

Table 1: Summary of Economic Benefits

Project Activities	Expected Economic Benefits
Installing energy efficient pumping systems	Energy savings , and possible avoided damages to the system
Reducing technical water losses through the rehabilitation of deteriorated networks	Input savings (energy, chemicals and other variable costs). In the long run, the avoided costs of expanding or rehabilitating redundant water production and conveyance facilities Avoided damages to private and public property (damages to road and other infrastructure as result of leaks and water-logging)
Improving water service reliability (continuity of service)	Avoided mitigating/coping expenditures (fetching water, purchasing tanks or booster pumps, etc) Increased willingness to pay for water
Rehabilitating well fields and water intake sources	Switch to less treatment intensive and therefore less expensive water supply sources, e.g., ground water vs. surface water

Project Activities	Expected Economic Benefits
Improving water quality through rehabilitation key elements of water treatment installations	Reduction of risk of water related diseases
Rehabilitating solid waste collection facilities and equipment	Reduction of vector –related diseases

2.3 Other project benefits can only be analyzed qualitatively, although they are as important as those analyzed above. Some of the key benefits that do not lend to quantitative analysis due to lack of information include:

- Coping expenditures due poor water service (insufficient pressure, intermittent availability, etc);
- Coping expenditures due to poor water quality; and
- Health impacts.

2.4 Coping expenditures due poor water service (insufficient pressure, intermittent availability): The Social Analysis carried out during project preparation showed that both residential and non-residential users in all eight towns incur a variety of expenditures to cope with poor service. Virtually all inhabitants suffer from the lack of continuity of water services and insufficient pressure. In some towns, several neighborhoods, though connected to the network, hardly ever receive any water. Furthermore, most of the persons interviewed mentioned that water pressure was insufficient with 50% indicating that there was no pressure at all. Permanent water availability was also not assured. No one responded that one could reliably count on water being available during any given period of time. Households have to fetch water from stand-posts and carry it often over long distances, or purchase water from tanker trucks or buy bottled water from shops or vendors. Such coping expenditures are regressive and affect disproportionately the poor. They are also expensive in absolute terms regardless of income. For the very poor the economic toll in terms of lost productive time and health impacts is substantial.

2.5 No data are available on the time and money spent by households to fetch and/or store water, or on the cost of coping strategies undertaken by non-residential users, but they are likely to be significant, and would increase without the project. Service improvements resulting from the project will benefit all users in terms of avoided coping expenditures. In addition, the utilities will benefit financially if commercial consumers continue to purchase from the utility and do not exit the system and resort to self-supply arrangements.

2.6 Coping expenditures due to poor water quality: Ensuring acceptable water quality standards is of critical importance to both households and the KMK local subsidiary utility enterprises. In most of the eight towns, the lack of proper water treatment has contributed to a worsening of the chemical and bacteriological quality of drinking water. Water was reported by most people interviewed in the Social Analysis to be turbid – particularly during the spring time. As a result, there is an overall mistrust of the quality of water that translates into a number of coping strategies, and a lower willingness-to-pay. Such coping mechanisms include water filtration at home, and boiling of drinking water. According to the survey, over 75% of households regularly boil water used for drinking purposes. In the long run, if water quality does

not improve and at the same time incomes rise, households may divert a significant share of their disposable income (and away from the water utility) towards the purchase of bottled water. Indeed, worldwide experience shows that the failure of water utilities to ensure a consistent supply of high quality water (and perceived as such) has led to the emergence of a thriving bottled water business in a growing number of cities and countries. The project will improve water filtration and disinfection facilities and therefore is expected to reduce the need to undertake both short- and long-term coping strategies.

2.7 Health impacts: Little data is available on the incidence of water-borne diseases, let alone on the resulting direct (e.g., treatment costs) and indirect costs (e.g. lost wages). Lack of sanitary protection of water production facilities, direct pumping of raw river water into the network, and failure to disinfect properly water supplied to households are believed to have contributed in the past to major outbreaks of typhoid fever in Tajikistan. The project will fund rehabilitation of water treatment plants to ensure sustainable provision of safe water, therefore reducing the risk of water-related diseases.

3. Financial Assessment

3.1 A financial assessment of the KMK local subsidiary utility enterprises in the eight towns participating in the project was carried out as part of project preparation. The financial assessment served as basis for identifying the institutional and financial capacity building activities included in the project. It is important to note that the financial assessment was sometimes speculative in that some of the required financial data either did not exist, or were in conflict with the anecdotal evidence of what the true financial performance of each utility should be, especially when different sources of data were compared. In addition, KMK's transition from the Soviet accounting standards is not yet complete. The financial and accounting procedures of KMK and its local subsidiary utility enterprises will require major improvements during the project, through efforts such as the installation of new financial management and accounting systems and procedures. The present financial assessment is based on the limited information available as provided by KMK.

3.2 The main financial challenge facing KMK local subsidiary utility enterprises is that most of them do not have adequate resources to meet operations and maintenance expenses. The main reasons behind this crisis are:

- Low tariffs and very high tariff differentials between domestic and commercial consumers: The very low tariffs and the distorted tariff structure result in minimum revenue capacity of KMK local subsidiary utility enterprises and an untargeted subsidy to domestic consumers regardless of income levels. Although current legislation allows tariffs to be determined taking into consideration the actual costs and expenditures related to the production the tariff approval process is subject to political approval and tariffs are usually approved after long delays.
- Low metering, very high water leakage and wastage, and high operating costs: Reliable metering and billing based on metered consumption is non-existent in the eight towns. Domestic consumption is billed using standard consumption norms, and lack of metering and payment enforcement results in very high consumption and wastage (field measurements indicate up to 1400 liters/person/day in apartment blocks) and therefore water production has to be increased, driving up operating costs and safety risks.

- Continuously increasing accounts payable: Most of the utilities strategy for survival is to defer taxes and payments to employees and suppliers, most notably Barki Tajik, the national power company. Two or three month delays in payment of salaries are not uncommon.
- Inadequate information about customers: None of the KMK local subsidiary utility enterprises has up to date information on their customers. Records are generally incomplete and service contracts are based on outdated information based on old census and housing information.

3.3 In such a financial situation, it is impossible to expect significant improvements in financial performance, which would lead to full cost recovery as a result of this project, a revenue increase leading to an immediate full cost recovery and full collection of revenues. The institutional and financial capacity building program of MIDP has therefore been prepared with the objective of achieving at the end of the project a basic level of financial sustainability where each utility can collect enough revenues to meet operating costs, and basic maintenance of the water supply system, and in particular, the assets created under the project.

3.4 The institutional and financial strengthening program which will form part of the MIPs will focus on:

- reduce system inefficiencies (water losses, energy inefficiency, low cash collection, and water wastage) in order to decrease operating costs and increase revenues;
- establish financial management, accounting, and customer management systems and procedures that will provide better information about costs, revenues, and customers and will allow KMK to make better policy and tariff recommendations to the Government and improve the effectiveness of its commercial management. Selected utilities would be subject to audits conducted to international standards in the latter part of the project so as to provide them the time to strengthen their accounting systems; and
- collect better information on fixed assets and current operating conditions of the services operated by the KMK local subsidiary utility enterprises as a first step in the preparation of a more accurate assessment of operation and maintenance needs and resulting recommendations for tariff reviews and adjustments during project implementation.

3.5 Close supervision of the project during the first year, and adapting the progress to changing conditions will be critically important to ensure that sustainability of the project is maintained.

Annex 10: Safeguard Policy Issues

TAJIKISTAN: Municipal Infrastructure Development Project

1. MIDP triggers two safeguard policies, OP 4.01 'Environmental Assessment' and OP 7.50 'International Waterways'.

2. MIDP has been assigned the environmental screening category "B", as none of the activities supported by it are expected to cause any long term, irreversible or negative cumulative impact on the environment. To the contrary, overall it will have a long term positive impact on the environment due to more efficient use of water resources, increased energy efficiency and improved solid waste management.

3. An Environmental Management Plan (EMP) has been prepared by KMK. It contains a list of potentially adverse environmental impacts the project activities may have – mainly at the stage of civil works implementation, and identifies the preventive and mitigation measures to address them. For the investments included in the First Phase Program environmental management measures have already been incorporated into the final design. For the second and subsequent phases of MIDP implementation, the EMP will serve as a basis for determining what kind of additional environmental/safeguard measures, if any, would be needed, since for every new investment a specific EMP will be prepared.

4. The potential short term negative impacts are: (a) increased dust levels in the air and stimulation of soil erosion due to digging of trenches for replacement of pipes (if no appropriate counter measures are taken in sensitive areas); (b) pollution of soil and water bodies with oil products in case of negligent operation and maintenance of construction equipment by contractors; (c) littering of construction sites with solid waste by contractors, (d) threat to the habitats of endangered species, if no proper site investigations are done prior the selecting the routes for new pipes. The latter however, is highly unlikely, since virtually all of the civil works under MIDP will be carried within urbanized areas.

5. MIDP will finance only the rehabilitation of drinking water supply systems in the eight participating towns and will not finance any irrigation systems. As a result of the repair of water supply distribution networks water losses will be reduced. MIDP therefore qualifies for an exemption from the obligation to notify the Governments of other riparian countries, since the .project activities will neither attempt to modify the course of waterways, nor significantly increase the volume of water abstraction, and therefore will not affect the water rights of other riparian populations A Memorandum to the Regional Vice President seeking his agreement on the above findings was prepared and signed by the Regional Vice President on September 27, 2005. KMK will approach the Bank for additional guidance on what actions as per OP 7.50 would be applicable to any particular investment that could raise this issue.

6. Institutional capacity in Tajikistan to deal with safeguards issues is low. To address this shortcoming, the OM contains a detailed description of the steps required to address the potential environmental issues within MIDP as well as a checklist for determining the environmental screening category of investments to be included into the second and subsequent phases of project implementation. It is also planned to have PMU staff receive training on environmental management issues.

Involuntary Resettlement (World Bank OP 4.12): The project will not trigger OP/BP 4.12 as the project will deal exclusively with the rehabilitation and/or repair of existing infrastructure and installations on existing premises or on routes within public rights of way, activities that will not entail any land acquisition, relocation of population, nor result in restricting the access of individuals or communities to economic resources.

Annex 11: Project Preparation and Supervision

TAJIKISTAN: Municipal Infrastructure Development Project

	Planned	Actual
PCN review		April 4, 2004
Initial PID to PIC		April 6, 2004
Initial ISDS to PIC		April 6, 2004
Appraisal	September 2005	September 19-28, 2005
Negotiations	December 2005	December 14, 2005
Board/RVP approval	January 2006	
Planned date of effectiveness	March 31, 2006	
Planned date of mid-term review	March 2008	
Planned closing date	August 31, 2011	

Key institutions responsible for preparation of the project: Khochagii Manziliu Kommunali (KMK)
Bank staff and consultants who worked on the project included:

Name	Title	Unit
Jonathan Kamkwalala	Lead Financial Analyst/Task Team Leader	ECSIE
Felix Jakob	Infrastructure Consultant	ECSIE
Mirlan Aldayarov	Operations Officer	ECSIE
Inesis Kiskis	Senior Environmental Specialist	ECSSD
Shahridan Faiez	Social Development Specialist	ECSSD
Irina Novikova	Consultant Social Specialist	ECSIE
Naushad Khan	Lead Procurement Specialist	ECSPS
Fasliddin Rakhimov	Procurement Specialist	ECSPS
John Ogallo	Senior Financial Management Specialist	ECSPS
Nikolai Soubbotin	Senior Counsel	LEGEC
Agate Waclawik-Wejman	Junior Counsel	LEGEC
Hannah Koilpillai	Finance Officer	LOA
Andrina Ambrose-Gardiner	Senior Finance Officer	LOA
Andrew Mackie	Financial Management Consultant	ECSPS
Toshiaki Keicho	Senior Urban Environmental Specialist	SASEI
Stephen Karam	Senior Urban Economist	MNSIF
Milane Reyes	Program Assistant	ECSIE
Maria Teresa Lim	Program Assistant	ECSIE
Dilshod Karimova	Program Assistant	ECCTJ
Takhmina Mukhamedova	Program Assistant	ECCTJ

Bank funds expended to date on project preparation:

1.	Bank resources:	US$435,994
2.	Trust funds:	-
3.	Total:	US$435,994

Estimated Approval and Supervision costs:

1.	Remaining costs to approval:	US$20,000
2.	Estimated annual supervision cost:	US$100,000

Annex 12: Documents in the Project File

TAJIKISTAN: Municipal Infrastructure Development Project

1. Report on the Development of Municipal Infrastructure in Small Towns of Tajikistan, B. Asanakunov and A. Kolesnikov, July 2004

2. Feasibility Study for the preparation of the Tajikistan Municipal Infrastructure Development Project, Seyas Consulting Firm and Urban Institute, September 2005

3. Assessment of Intergovernmental Relations and Local Governance in the Republic of Tajikistan , Urban Institute, prepared for USAID, March 2003

4. Social Assessment for the Tajikistan Municipal Infrastructure Development Project, A. Khakhulov and I. Novikova, September 2005

5. Tajikistan Municipal Infrastructure Development Project Financial Management Capacity Assessment, September 2005

6. Tajikistan Municipal Infrastructure Development Project Final Procurement Capacity Assessment, September 2005

7. Tajikistan Municipal Infrastructure Development Project: Environmental Management Plan, October 2005

Annex 13: Statement of Loans and Credits

TAJIKISTAN: Municipal Infrastructure Development Project

Project ID	FY	Purpose	Original Amount in US$ Millions				Cancel.	Undisb.	Difference between expected and actual disbursements	
			IBRD	IDA	SF	GEF			Orig.	Frm. Rev'd
P077454	2004	COMMTY AGRIC & WATERSHED MGMT	0.00	5.00	0.00	0.00	0.00	11.20	0.00	0.00
P081159	2004	COMMTY AGRIC & WATERSHED MGMT (GEF)	0.00	0.00	0.00	4.50	0.00	4.50	0.00	0.00
P069055	2003	EDUC MOD	0.00	13.00	0.00	0.00	0.00	21.38	1.59	0.00
P075256	2002	PAMIR PRIV POWER	0.00	10.00	0.00	0.00	0.00	7.14	-4.46	0.00
P008860	2002	POV ALLV 2	0.00	13.80	0.00	0.00	0.00	11.90	1.68	0.00
P057883	2002	DUSHANBE WS	0.00	17.00	0.00	0.00	0.00	17.60	6.56	0.00
P049894	2000	PRIM HEALTH CARE	0.00	5.40	0.00	0.00	0.00	0.77	0.70	-0.09
P067610	2000	LAKE SAREZ RISK MITIGATION	0.00	0.47	0.00	0.00	0.00	0.37	0.27	0.12
P058898	2000	RURAL INFRA REHAB	0.00	20.00	0.00	0.00	0.00	11.80	5.01	-2.45
P059755	1999	IBTA 2	0.00	6.70	0.00	0.00	0.00	0.52	0.28	-0.34
P049718	1999	FARM PRIV SUPPORT	0.00	20.00	0.00	0.00	0.00	2.86	-0.84	0.23
		Total:	0.00	111.37	0.00	4.50	0.00	90.04	10.79	- 2.53

TAJIKISTAN
STATEMENT OF IFC's
Held and Disbursed Portfolio
In Millions of US Dollars

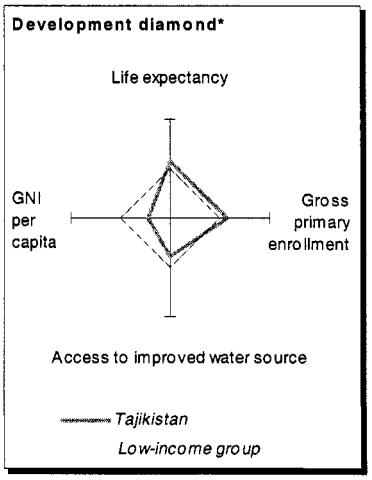
FY Approval	Company	Committed IFC				Disbursed IFC			
		Loan	Equity	Quasi	Partic.	Loan	Equity	Quasi	Partic.
2003	Giavoni	0.00	3.00	0.00	0.00	0.00	3.00	0.00	0.00
2002	Pamir Energy	4.50	3.50	0.00	0.00	0.00	3.50	0.00	0.00
2002/04	SEF FOM	0.50	0.00	0.00	0.00	0.25	0.00	0.00	0.00
2000	SEF Holland	0.08	0.00	0.00	0.00	0.08	0.00	0.00	0.00
2002	SEF Telecom Tech	0.25	0.00	0.00	0.00	0.25	0.00	0.00	0.00
	Total portfolio:	5.33	6.50	0.00	0.00	0.58	6.50	0.00	0.00

FY Approval	Company	Approvals Pending Commitment			
		Loan	Equity	Quasi	Partic.
2005	FMBT	0.00	0.00	0.00	0.00
	Total pending commitment:	0.00	0.00	0.00	0.00

Annex 14: Country at a Glance

TAJIKISTAN: Tajikistan Municipal Infrastructure Development Project

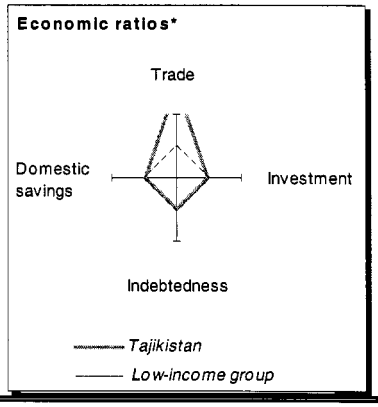
POVERTY and SOCIAL	Tajikistan	Europe & Central Asia	Low-income
2003			
Population, mid-year *(millions)*	6.3	473	2,310
GNI per capita *(Atlas method, US$)*	200	2,570	450
GNI *(Atlas method, US$ billions)*	1.3	1,217	1,038
Average annual growth, 1997-03			
Population *(%)*	0.8	0.0	1.9
Labor force *(%)*	2.1	0.2	2.3
Most recent estimate (latest year available, 1997-03)			
Poverty *(% of population below national poverty line)*	..	..	..
Urban population *(% of total population)*	25	63	30
Life expectancy at birth *(years)*	67	69	58
Infant mortality *(per 1,000 live births)*	90	31	82
Child malnutrition *(% of children under 5)*	..	..	44
Access to an improved water source *(% of population)*	60	91	75
Illiteracy *(% of population age 15+)*	1	3	39
Gross primary enrollment *(% of school-age population)*	107	103	92
Male	109	104	99
Female	104	102	85



KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1983	1993	2002	2003
GDP *(US$ billions)*	..	1.6	1.2	1.4
Gross domestic investment/GDP	..	39.2	20.0	21.1
Exports of goods and services/GDP	..	..	58.4	60.8
Gross domestic savings/GDP	..	15.1	6.8	17.9
Gross national savings/GDP	..	16.4	17.2	29.2
Current account balance/GDP	..	-12.7	-2.8	-4.2
Interest payments/GDP	..	0.0	1.2	..
Total debt/GDP	..	23.4	95.9	89.3
Total debt service/exports	..	0.2	10.3	9.3
Present value of debt/GDP	..	..	74.1	..
Present value of debt/exports	..	..	116.2	..

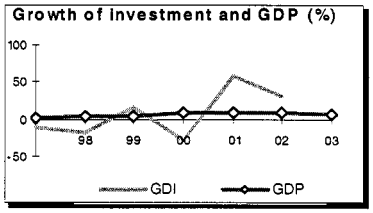
	1983-93	1993-03	2002	2003	2003-07
(average annual growth)					
GDP	-5.3	0.3	9.1	6.0	4.0
GDP per capita	-7.8	-0.8	7.5	6.2	-0.4

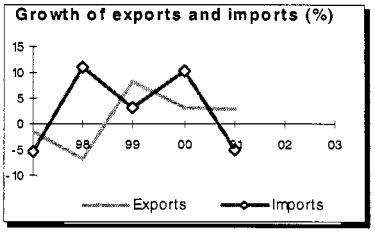


STRUCTURE of the ECONOMY

	1983	1993	2002	2003
(% of GDP)				
Agriculture	..	23.3	24.3	23.4
Industry	..	46.4	24.0	20.2
Manufacturing	..	36.4	21.1	..
Services	..	30.4	51.7	56.4
Private consumption	..	63.0	84.5	73.9
General government consumption	..	21.9	8.7	8.3
Imports of goods and services	..	..	71.6	64.1

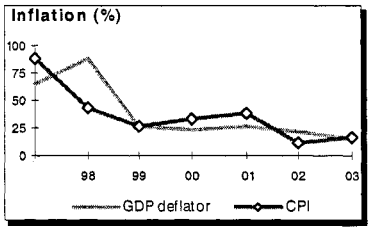
	1983-93	1993-03	2002	2003
(average annual growth)				
Agriculture	-7.2	-0.1	..	..
Industry	-1.1	-6.9	3.6	..
Manufacturing	-1.3	-5.3	..	..
Services	-3.2	6.3	6.7	..
Private consumption	..	5.1	6.4	..
General government consumption	8.2	-12.4	7.8	..
Gross domestic investment	-6.8	-10.7	31.6	..
Imports of goods and services	..	-2.8	..	..





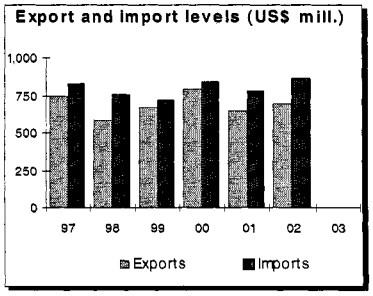
PRICES and GOVERNMENT FINANCE

	1983	1993	2002	2003
Domestic prices				
(% change)				
Consumer prices	..	7,343.7	12.2	16.4
Implicit GDP deflator	..	1,211.5	21.2	14.2
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	33.3	16.7	15.7
Current budget balance	..	-16.2	3.0	2.7
Overall surplus/deficit	..	-20.9	-2.4	-0.4



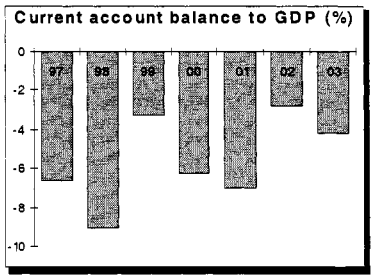
TRADE

	1983	1993	2002	2003
(US$ millions)				
Total exports (fob)	..	456	696	..
Aluminum	..	230	399	432
Cotton fiber	..	117	128	131
Manufactures	..	..	..	..
Total imports (cif)	..	660	868	..
Food	..	95	..	..
Fuel and energy	..	127	174	..
Capital goods	..	..	..	..
Export price index *(1995=100)*	..	86	..	..
Import price index *(1995=100)*	..	63	..	..
Terms of trade *(1995=100)*	..	137	..	..



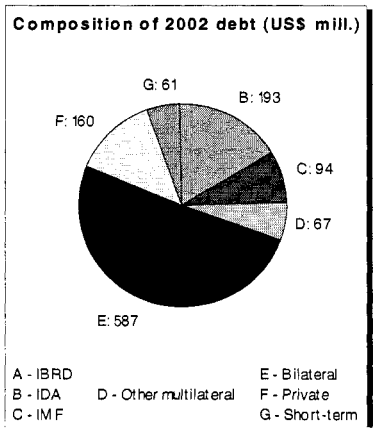
BALANCE of PAYMENTS

	1983	1993	2002	2003
(US$ millions)				
Exports of goods and services	..	456	708	827
Imports of goods and services	..	686	868	1,040
Resource balance	..	-230	-160	-213
Net income	..	-4	-58	-33
Net current transfers	..	25	184	189
Current account balance	..	-209	-34	-57
Financing items (net)	..	211	35	89
Changes in net reserves	..	-2	-1	-32
Memo:				
Reserves including gold *(US$ millions)*	..	2	96	144
Conversion rate *(DEC, local/US$)*	..	4.29E-3	2.8	3.0

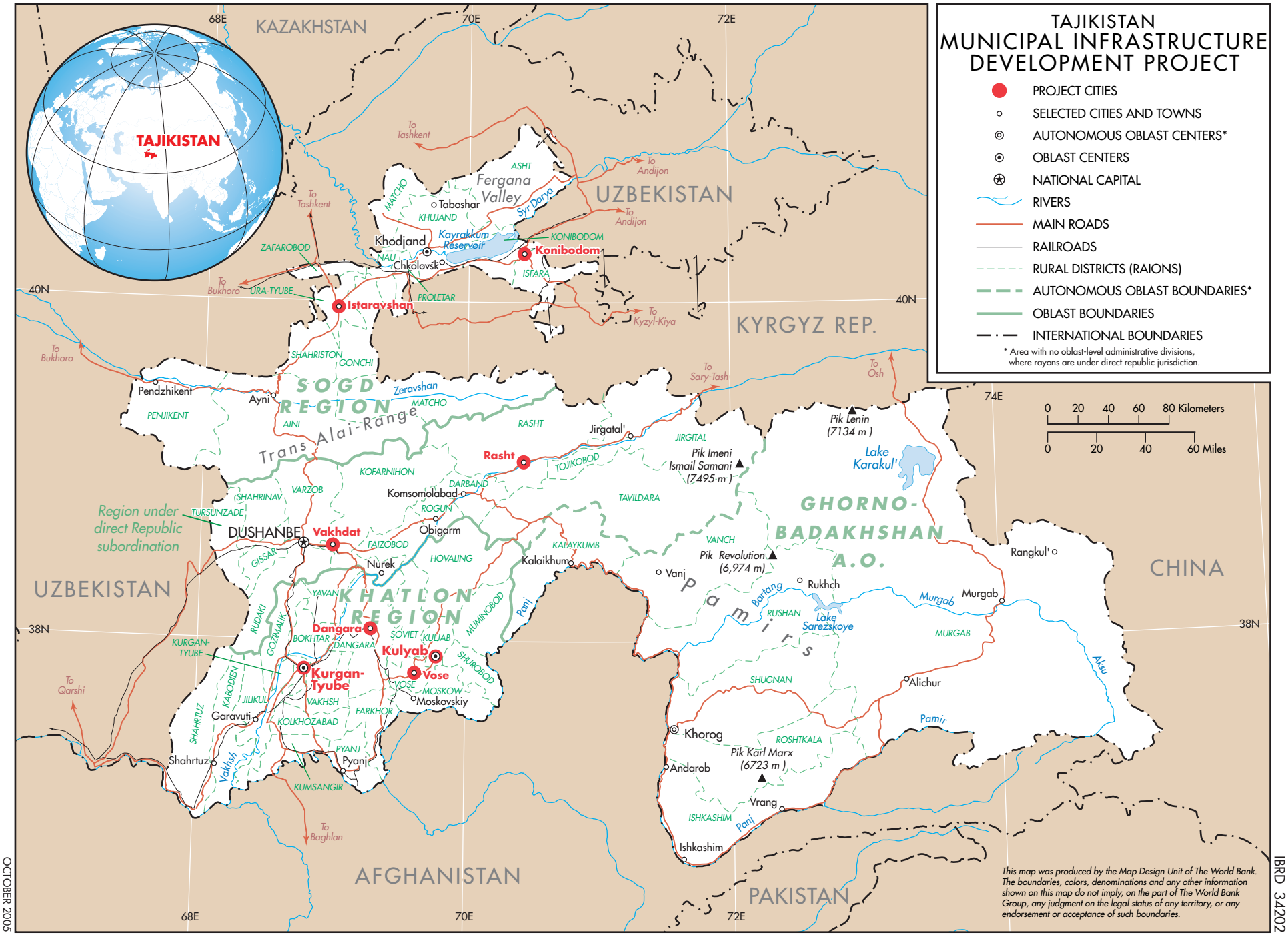


EXTERNAL DEBT and RESOURCE FLOWS

	1983	1993	2002	2003
(US$ millions)				
Total debt outstanding and disbursed	..	386	1,162	1,225
IBRD	..	0	0	0
IDA	..	0	193	206
Total debt service	..	1	80	98
IBRD	..	0	0	0
IDA	..	0	1	2
Composition of net resource flows				
Official grants	..	11	..	..
Official creditors	..	10	12	26
Private creditors	..	68	-20	-34
Foreign direct investment	..	9	36	..
Portfolio equity	..	0	0	..
World Bank program				
Commitments	..	0	53	20
Disbursements	..	0	10	13
Principal repayments	..	0	0	0



MAP SECTION


TAJIKISTAN
MUNICIPAL INFRASTRUCTURE DEVELOPMENT PROJECT
PROJECT CITIES
SELECTED CITIES AND TOWNS
AUTONOMOUS OBLAST CENTERS*
OBLAST CENTERS
NATIONAL CAPITAL
RIVERS
MAIN ROADS
RAILROADS
RURAL DISTRICTS (RAIONS)
AUTONOMOUS OBLAST BOUNDARIES*
OBLAST BOUNDARIES
INTERNATIONAL BOUNDARIES
* Area with no oblast-level administrative divisions, where rayons are under direct republic jurisdiction.
TAJIKISTAN
KAZAKHSTAN
UZBEKISTAN
KYRGYZ REP.
CHINA
AFGHANISTAN
PAKISTAN
SOGD REGION
KHATLON REGION
GHORNO-BADAKHSHAN A.O.
Region under direct Republic subordination
DUSHANBE
Vakhdat
Rasht
Istaravshan
Konibodom
Khodjand
Taboshar
Chkolovsk
Kayrakkum Reservoir
Fergana Valley
Syr Darya
Pendzhikent
Ayni
Zeravshan
Trans Alai-Range
Jirgatal'
Komsomolabad
Obigarm
Nurek
Kalaikhum
Vani
Rukhch
Murgab
Rangkul'
Lake Karakul'
Pik Lenin (7134 m)
Pik Imeni Ismail Samani (7495 m)
Pik Revolution (6,974 m)
Lake Sarezskoye
Pamirs
Dangara
Kulyab
Vose
Kurgan-Tyube
Moskovskiy
Garavuti
Shahrtuz
Pyanj
Alichur
Khorog
Andarob
Vrang
Ishkashim
Pik Karl Marx (6723 m)
Pik Revolution (6,974 m)
To Tashkent
To Andijon
To Bukhoro
To Kyzyl-Kiya
To Sary-Tash
To Osh
To Qarshi
To Baghlan
0 20 40 60 80 Kilometers
0 20 40 60 Miles
68E
70E
72E
74E
40N
38N
OCTOBER 2005
IBRD 34202
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