

ASIAN DEVELOPMENT BANK

TAR: UZB 38074

TECHNICAL ASSISTANCE
(Financed by the Japan Special Fund)

TO THE

REPUBLIC OF UZBEKISTAN

FOR PREPARING THE

KASHKADARYA AND NAVOI RURAL WATER SUPPLY PROJECT

August 2004

CURRENCY EQUIVALENTS

(as of 2 August 2004)

Currency Unit	–	sum (SUM)
SUM1.00	=	\$0.00097
\$1.00	=	SUM1,028

The exchange rate of the sum is determined under a floating system.

ABBREVIATIONS

ADB	–	Asian Development Bank
IA	–	implementing agency
IDB	–	Islamic Development Bank
NGO	–	nongovernment organization
O&M	–	operation and maintenance
TA	–	technical assistance
UCSA	–	Uzbekistan Communal Services Agency
WUA	–	water users association

TA CLASSIFICATION

Poverty Classification	–	Human development
Sector	–	Social infrastructure
Subsector	–	Water supply and sanitation
Theme	–	Inclusive social development

NOTES

- (i) The fiscal year (FY) of the Government ends on 31 December.
- (ii) In this report, "\$" refers to US dollars.

<p>This report was prepared by a team consisting of P. Wallum (team leader) and R. Mamatkulov, Social Sectors Division, East and Central Asia Department.</p>

KAZAKHSTAN

60°00'E

45°00'N

Aral Sea

KAZAKHSTAN

KARAKALPAKSTAN

Muynak

Kungrad

Khodzheyli

Nukus

Urgench

KhOREZM

Turtkul

NAVOI

Uchkuduk

Zarafshan

UZBEKISTAN KASHKADARYA AND NAVOI RURAL WATER SUPPLY PROJECT

39°00'N

- Project Area (Kashkadarya and Navoi)
 - National Capital
 - Provincial Capital
 - City/Town
 - Main Road
 - Railway
 - River
 - Provincial Boundary
 - International Boundary
- Boundaries are not necessarily authoritative.

TURKMENISTAN

60°00'E

AFGHANISTAN



TAJIKISTAN

KYRGYZ
REPUBLIC

TASHKENT

Chirchik

Angren

Gulistan

SYR DARYA

Fergana

Sukh

Jordan

Andijan

ANJUAN

Namangan

Kokand

Samarkand

Djizzak

SAMARKAND

Navoi

Bukhara

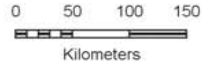
Gazh

Karshi

Oklya

Denau

Termez



39°00'N

69°00'E

04-1716 HR

I. INTRODUCTION

1. Following a request from the Government of Uzbekistan for Asian Development Bank (ADB) assistance for preparing a project to improve rural water supply services, technical assistance (TA) was included in ADB's operational program for 2004.¹ The TA Fact-Finding mission visited Uzbekistan from 22 March to 5 April 2004 for field visits and discussions with the government officials concerned. The Mission coordinated its work with the Islamic Development Bank (IDB), as the Government has requested cofinancing from IDB. The Mission reached an understanding with the Government on the TA's objectives, scope, cost estimates, financing plan, terms of reference, and implementation schedule and arrangements. A preliminary project framework is attached as Appendix 1.

II. ISSUES

2. Uzbekistan is suffering from poor water supply and sanitation services and a shortage of safe drinking water, especially in the rural areas. This has many undesirable consequences. Consumers incur significant time costs and inconvenience in coping with poor services; many collect water from rivers, irrigation channels, and wells. Unsafe water and sanitation services are responsible for deteriorating public health and increasing expenditure on health, with the poor being affected most. The inadequate water supply and sanitation systems result from deficient design, use of inferior construction materials and methods, damaged water supply equipment, the collapse of institutional arrangements due to the country's economic transition, and insufficient maintenance and rehabilitation. Given the lack of funds and the poor state of repair of sector facilities, the quality of water and sanitation services will continue to deteriorate. The current water supply coverage of 65% of the rural population is planned to be increased to 90% by 2010. There is an urgent need to upgrade and expand the rural water supply and sanitation services. The capacity of the water users associations (WUAs) and local governments to implement projects and undertake the operation and maintenance (O&M) of facilities also needs to be enhanced.

3. Since independence in 1991, Uzbekistan has been making a difficult transition to a market-based economy. However, the sharp decline in output since independence has contributed significantly to an increase in poverty. The economic transition has been accompanied by increasing inequity in income distribution. The situation is even more obvious when access to social infrastructure services such as safe and reliable water supply is taken into account. Health and demographic indicators confirm the presence of greater levels of human deprivation in rural areas. The social and economic costs of the current transition have been sharp and immediate. Closing of facilities, privatization of public enterprises, and falling budget for the social sectors have resulted in service disruption and major price increases for these services. Social spending, including social assistance and provision of social services including water supply and sanitation, has declined sharply.

4. The Government is conscious of the urgent need to improve rural water services through policy and institutional reforms and the repair and upgrading of existing infrastructure. The Government has prepared a national strategy for the water supply and sanitation sector, including specific targets, action plans, and a medium-term sector investment program. The sector strategy includes (i) improving the capabilities of WUAs and local governments in

¹ The TA first appeared in the *ADB Business Opportunities* (Internet edition) on 12 March 2004.

administration, financial management, and O&M; (ii) integrating water supply development with the improvement of sanitation facilities; and (iii) increasing access to safe and reliable water supply and sanitation services. In consultation with aid agencies, the Government has adopted a community management approach for the delivery of rural water and sanitation services to ensure their sustainability.

5. The project area will cover two oblasts: Kashkadarya and Navoi. These oblasts were selected because of an urgent need to improve the poor condition of their basic rural water supply and sanitation facilities. About 730 villages from a total of 1,700 villages in the two oblasts are without safe and reliable water supply and sanitation services. Of the 730 villages, about half need their water supply systems rehabilitated and the other half require new systems. The proposed Project is expected to cover about 500 of the most needy and poorest rural communities, each with a population of 200–6,000 people. In total, the Project will cover about 500,000 people.

6. ADB will assist the Government to improve water supply and sanitation services in the rural areas. This will include helping to formulate and implement the national sector strategy for water supply and sanitation, strengthen the institutional capacity for the sustainable management of sector facilities, improve the quality and efficiency of safe water and sanitation services, and rehabilitate and develop rural water supply and sanitation facilities. The Project will enhance rural water supply and sanitation coverage, and contribute to improving living and health conditions, as well as the institutional capabilities of WUAs and local governments. Improving the health conditions of the poorest, in addition to addressing poverty reduction directly, will also lessen the fiscal burden on local and central governments in the future, and thus contribute to a better allocation of resources in the economy. The TA is needed to prepare the Project and a program of capacity building for WUAs and local governments.

III. THE TECHNICAL ASSISTANCE

A. Purpose and Output

7. The main objectives of the TA are to (i) analyze and propose measures to strengthen rural water supply and sanitation development programs in the two oblasts; (ii) prepare a program for capacity building of local governments; (iii) prepare subprojects for upgrading water supply and sanitation facilities; and (iv) prepare a Project for possible external financing covering about 500 communities with populations ranging from 200 to 6,000 persons, and increase the service coverage in the two selected provinces to 90% by 2010. About half of the villages will be covered by groundwater supply systems serving 1–15 villages and the other half will be served by linking them to group water pipelines or interregional trunk mains.

8. The Project will fulfill the immediate demand for potable water supply and safe sanitation services in the project area. The Project will cover (i) rehabilitation and extension of piped water supply services; and (ii) sanitation, including public bathhouses, and private and school latrines. The stakeholders and beneficiaries will participate in designing the Project through consultations and socioeconomic surveys that will be undertaken for all subprojects. During project design, consultations with stakeholders and beneficiaries will include women's groups and poor communities in the project area. The Project will address poverty reduction, social aspects, and gender issues.

B. Methodology and Key Activities

9. The TA will consist of two parts: part A—review and strengthening of the two oblasts' water supply and sanitation sector investment programs, and part B—preparation of an investment project.

10. **Part A: Review of the Oblasts' Sector Investment Programs.** The two oblasts' water supply and sanitation sector programs will be reviewed. The review will include an assessment of physical, institutional, and human resources required for the Project and cover a description of the present facilities, planned future coverage, cost recovery, O&M arrangements, private sector involvement, and related policies. The review will pay particular attention to integrated water resources management and environmental concerns to ensure the protection of water resources at the regional and local levels.

11. **Part B: Preparation of the Investment Project.** The TA consultants will prepare the Project, including appropriate capacity-building measures. The feasibility study will cover (i) the technical, economic, and financial feasibility of subproject components; cost estimates; implementation schedule for components; and preliminary engineering design; (ii) poverty, social, and gender analysis; and community participation; and (iii) environmental considerations. The poverty analysis will include the collection of detailed information on the incidence of poverty in the two oblasts.

12. The Project will be based on consultations with stakeholders and beneficiaries, the estimated demand for water supply and sanitation services in the project area, and the service delivery capacity of the participating WUAs and local governments. Project formulation, with attention to financing aspects (local and central), will include analysis of cost recovery; community ownership; private sector participation; financing options; fiscal impact; and sustainability (technical, financial, and institutional) for all subprojects. Analysis of the Project's impact on poverty reduction will also be undertaken. The consultants will undertake project framework analysis, including problem and solution analysis, to assist in the design of the Project and the selection of indicators for monitoring during implementation. The TA consultants will coordinate their work with two ongoing ADB-financed loan projects—Urban Water Supply Project,² and Western Uzbekistan Rural Water Supply Project,³ and the ongoing TA on Capacity Building for Urban Water Supply.⁴

13. The TA will formulate the Project at an indicative total estimated cost of about \$70.0 million, partly for external financing. The Government has asked ADB to consider a loan for about \$40.0 million for the construction of new water supply systems and rehabilitation of existing systems in the two oblasts. The Government has also requested cofinancing from IDB for a loan of about \$15.0 million for the construction of a gravity flow pipeline from Damkhodjent trunk water main for Navoi oblast.

² ADB. 2001. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Uzbekistan for the Urban Water Supply Project*. Manila.

³ ADB. 2002. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to Uzbekistan for the Western Uzbekistan Rural Water Supply Project*. Manila.

⁴ ADB. 2001. *Technical Assistance for Uzbekistan for Capacity Building for Urban Water Supply Project*. Manila.

C. Cost and Financing

14. The TA is estimated to cost \$825,000 equivalent, comprising \$380,000 in foreign exchange costs, and \$445,000 equivalent in local currency cost. The TA will be financed on a grant basis by the Japan Special Fund, funded by the Government of Japan. The Government requested ADB to provide \$575,000 equivalent to finance the entire foreign exchange cost and \$195,000 equivalent of the local currency cost. The Government has agreed to provide the balance of local currency cost, equivalent to \$250,000, in cash and kind for counterpart staff, office space, furniture, administrative support services, and logistics. Details of the cost estimates and financing plan are in Appendix 2. The Government has been informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

15. The Uzbekistan Communal Services Agency (UCSA) will be the Executing Agency of the TA. UCSA will chair the TA steering committee, which will include representatives from the Ministry of Finance, Ministry of Economy, Ministry of Environment, Ministry of Agriculture and Water Resources, Kashkadarya and Navoi Oblast governments, and other agencies as appropriate, to ensure that their views are adequately considered and necessary support provided. The TA office will be headed by UCSA and will include staff from all the other agencies involved to maintain coordination and ensure consultants' access to relevant project information and data, and to liaise with ADB on matters relating to TA implementation. To optimize logistical and economic efficiency, the existing project management unit for the Urban Water Supply Project (footnote 2), with additional staffing, will be used as the TA office and the project management unit (PMU) for the proposed Project. The Government will provide the consultants with a suitably furnished office with utilities, telecommunication access, materials, maps, data, and all required documents.

16. The TA will be implemented during 7 months, from October 2004 to April 2005. The total consultant input is estimated at 72 person-months: 12 international and 60 domestic. An international consulting firm in association with domestic consultants will be engaged in accordance with *ADB's Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for the engagement of domestic consultants. ADB will select and engage consultants following the quality- and cost-based selection (QCBS) method, using simplified technical proposal procedures. The consultants will have expertise in water supply development, sanitation, tariff analysis, financial and economic analysis, institutional development, social analysis and poverty impact assessment, and environmental matters. The international consulting services (with equivalent person-months in parentheses) will provide expertise in water supply and/or institutional development (6), economic/financial analysis (4), and community development (2). The domestic consulting services will provide expertise in water supply engineering (7, 2 positions), economic and financial analysis (6), engineering cost estimation (4), environmental engineering (2), community participation (3), institutional development (3), civil engineering (5, 2 positions), electrical engineering (5), hydro-geological engineering (5), and design engineering (4, 2 positions). The consultants' outline terms of reference are in Appendix 3. TA equipment will be procured by the consultants in accordance with *ADB's Guidelines for Procurement*. The initial poverty and social analysis is in Appendix 4.

17. The consultants will submit to ADB inception, interim, draft final, and final reports; and summary initial environmental examination reports. The final report must be prepared as a final feasibility study, which should conform with both domestic and international standards. The final report should be approved in parallel by ADB and the Government, including the approval of the Project's implementation arrangements, O&M, and budget requirements. The consultant team will be responsible to have the final report approved by all project stakeholders and government agencies concerned.

IV. THE PRESIDENT'S DECISION

18. The President, acting under the authority delegated by the Board, has approved the provision of technical assistance not exceeding the equivalent of \$575,000 on a grant basis to the Government of Uzbekistan for preparing the Kashkadarya and Navoi Rural Water Supply Project, and hereby reports this action to the Board.

PRELIMINARY PROJECT FRAMEWORK

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Goal</p> <ul style="list-style-type: none"> • Improve living conditions and health in rural areas in two provinces through improved access to basic water supply and sanitation services. 	<ul style="list-style-type: none"> • Population coverage of rural water supply and sanitation increased from 65% to 90% by 2010 in the project villages on a self-sustainable basis. A total of about 0.5 million rural residents will be covered by the Project. 	<ul style="list-style-type: none"> • Oblast (province) statistics • Social surveys 	<ul style="list-style-type: none"> • Institutional capabilities • Willingness of communities to pay
<p>Purpose</p> <ul style="list-style-type: none"> • Improve water supply and sanitation services and strengthen the delivery and management capabilities of local governments and water users associations (WUAs). 	<ul style="list-style-type: none"> • Provide safe water supply to about 500 rural communities. Introduce proper sanitation facilities in the villages, including family and school latrines and rehabilitation of public bathhouses. 	<ul style="list-style-type: none"> • Oblast statistics • Social surveys 	<ul style="list-style-type: none"> • All inputs available and accessible in adequate quantities and on a timely basis • Public sector agencies provide an effective support role • Develop local governments' and WUAs' capabilities
<p>Activities</p>		To be developed during TA implementation	To be developed during TA implementation
<p>Inputs</p>		To be developed during TA implementation	To be developed during TA implementation
<p>Outputs (to be clarified and confirmed during the TA implementation):</p> <ul style="list-style-type: none"> • Provide safe drinking water • Improve bulk water supply • Improve local water distribution network system • Upgrade operational and maintenance facilities of the water supply agencies • Introduce water conservation measures • Provide sanitation facilities • Establish water conservation and health education programs 	<ul style="list-style-type: none"> • Reinforcement of sustainable water supplies • Extension of transmission mains into areas not currently served • Rehabilitation and construction of water supply systems in at least 500 of the most needed and poorest rural communities • Provision of essential operational and maintenance equipment to the water supply agencies in Kashkadarya and Navoi provinces 	<ul style="list-style-type: none"> • Project progress reports and ADB review missions • Project performance management system (PPMS) 	<ul style="list-style-type: none"> • Funding from the central Government budget is adequate; • Funding from the local budgets is adequate; • Design institutions provide adequate and reliable inputs; • Infrastructure facilities are effectively operated and maintained; • Community participation is active and effective; • Cooperation among stakeholders and agencies is effective; • Implementation and management arrangements are effective.

Continued on next page.

PRELIMINARY PROJECT FRAMEWORK—Continued

Design Summary	Performance Indicators/Targets	Monitoring Mechanisms	Assumptions and Risks
<ul style="list-style-type: none"> • Establish training programs on project management, institutional development, financial management and community participation • Establish effective water supply management system 	<ul style="list-style-type: none"> • Replacement of fragile and defective pipes to reduce water leakage • Provision of bulk water meters • Education and community awareness programs implemented in at least 500 communities • Training programs implemented for about 800 community leaders, local governments, members and staff of water supply agencies 		

COST ESTIMATES AND FINANCING PLAN
(\$'000)

Item	Foreign Exchange	Local Currency	Total Cost
A. Asian Development Bank Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International (12 person-months)	271.0	0.0	271.0
ii. Domestic (60 person-months)	0.0	120.0	120.0
b. International Travel	25.0	0.0	25.0
c. Local Travel	0.0	7.0	7.0
d. Reports, Communications and Translations	5.0	6.0	11.0
2. Surveys and Data Collection	0.0	30.0	30.0
3. Seminars and Workshops	0.0	7.0	7.0
4. Representatives at Contract Negotiations	10.0	0.0	10.0
5. Equipment ^b	14.0	0.0	14.0
6. Contingencies	55.0	25.0	80.0
Subtotal (A)	380.0	195.0	575.0
B. Government Financing^c			
1. Remuneration, Travel, and Per Diem of Counterpart Staff	0.0	81.0	81.0
2. Office Accommodation and Utilities	0.0	75.0	75.0
3. Studies, Data and Reports	0.0	41.0	41.0
4. Transportation and Drivers	0.0	12.0	12.0
5. Contingencies	0.0	41.0	41.0
Subtotal (B)	0.0	250.0	250.0
Total	380.0	445.0	825.0

^a Financed by the Japan Special Fund, funded by the Government of Japan.

^b Equipment includes two desktop computers, software, one printer, one scanner, accessories, one facsimile, and one photocopier for use by consultants. The equipment will be turned over to the executing and implementing agencies upon completion of the technical assistance.

^c The Government will provide counterpart staff time to include water supply civil engineers, an environmental specialist, a social specialist, a financial economist, and support staff to work with the consultants.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The consulting services required are described in para. 16 of the main text.

A. Review of Oblasts Investment Programs

2. **The Investment Program.** The consultants will review the investment plans in Kashkadarya and Navoi and establish whether the proposed Project is needed. They will conduct poverty analysis in terms of the Project. They will assess the physical, institutional, and human resources required for the Project. The consultants will analyze constraints and assess how the Project will address these. They will examine the environmental aspects of physical resources and their use and development.

3. **Sector Policies.** The consultants will review water supply and sanitation sector policies and propose improvements. They will analyze recent sector policies and issues related to the establishment of water users associations (WUAs) and make recommendations as appropriate. The consultants will strengthen the two oblasts' sector investment programs. The analysis will pay attention to integrated water resources management and environmental concerns to ensure protection of water resources at the regional and local levels.

4. **External Assistance to the Sector.** The consultants will review external assistance to the sector, and identify broad patterns of assistance and sector policy thrusts of major aid agencies.

5. **Coordination and Lessons Learnt.** The consultants' team leader will provide coordination among all the international and domestic consultants, the Executing Agency—the Uzbekistan Communal Services Agency (UCSA), and other sector agencies concerned. In undertaking this work, the consultants will review lessons learned under projects funded by the Asian Development Bank (ADB) in the country.

B. Preparation of the Investment Project

6. **The Project.** The consultants will prepare the Project, including required policy dialogue and assessment of institutional capacity. The central and local government agencies concerned must be closely involved in all stages of project preparation and implementation. The capacity of UCSA to implement the Project has to be carefully assessed, and lessons learned from previous projects be incorporated.

7. **Rationale and Project Framework.** The consultants will describe the subprojects and their locations and determine if the choice of project area is justified on grounds such as poverty reduction (including country and province-specific poverty profiles), demand trends, supply constraints, and growth potential. The consultants, in consultation with the government agencies and the project stakeholders, will develop a logical project framework that outlines the goals, purposes, outputs, and inputs or activities with clear links to the set of indicators for monitoring project development impact and overall performance. The consultants will undertake a structured problem analysis, prepare a problem tree, and derive the project framework. The framework will be prepared in line with the ADB Staff Instruction, "*Use of the Logical Framework for ADB-assisted Loan and Technical Assistance (TA)*."

8. **Objectives.** The consultants will describe overall objectives of the proposed Project in precise terms with due consideration for the poverty reduction aspect of the Project. They will

identify and quantify targets including poverty reduction, human development, women in development, and environmental consideration.

9. **Scope.** The consultants will prepare overall details of the subprojects and selection criteria in accordance with the project rationale. They will conduct feasibility studies for subprojects in Kashkadarya and Navoi oblasts for upgrading rural water supply and sanitation, including possibly public bathhouses, and private and school latrines. They will prepare the Project to increase the coverage in the two selected provinces to 90% by 2010. The TA will formulate the Project with an indicative total estimated cost of about \$70.0 million, for a loan of about \$40.0 million from ADB and \$15.0 million loan cofinanced from the Islamic Development Bank.

10. **Community Participation and Cost Sharing.** Both the stakeholders and beneficiaries will participate in the project design through consultations and socioeconomic surveys that will be undertaken for all subprojects. During project formulation, careful attention will be paid to the financing capacity of the central and local governments, including an analysis of cost recovery, community ownership/participation, financing options, and fiscal impact and sustainability (technical, financial, and institutional) for all subprojects.

11. **Technical Aspects.** The consultants will describe the relative merits of different technical options and prepare a detailed feasibility study. They will describe and review the subprojects in the following way: (i) review and prepare selection criteria; (ii) assess the adequacy of existing and potential water supply sources in subprojects for meeting water demand for the next 10–15 years; (iii) review existing sanitation in the subprojects and recommend improvements; (iv) review and prepare design criteria, including per capita water consumption for house connections and public standpipes; (v) describe technical feasibility of the subprojects; (vi) review surveys on water use and water quality monitoring; (vii) review surveys of unaccounted for water and recommend improvements; and (viii) assess measures to ensure that the project benefits are targeted to reach poor consumers. Other aspects to be covered will include the following: design criteria and standards; outline designs; staging of construction; instrumentation and control system; estimated quantities of major civil works items and schedules of major items of plant and equipment; unit rates for civil works items; manufacturers' budget quotations for major items; staffing requirements for operation and maintenance (O&M); implementation schedule; consulting services inputs needed for project implementation, engineering design, and construction supervision over the implementation period; detailed cost estimates; detailed financing plans and disbursement schedule; procurement packages and suitability of the contract packages to be financed by ADB; and commissioning procedures and O&M manuals. The consultants will review and reconfirm the technical options proposed; identify and assess the water supply needs and demand for the proposed services; evaluate the technical viability of each component, and confirm that the components are based on the least-cost option both in financial and economic terms; and evaluate the proposed water treatment processes and adequacy of the schemes to meet estimated demands, the treatment plants, pumping stations, and distribution systems.

12. **Cost Estimates.** The consultants will prepare cost estimates, including foreign exchange and local cost components. They will (i) review cost estimates for each subproject and estimate per capita investment costs for water supply and sanitation; (ii) prepare cost estimates for water supply and sanitation under the categories of land, civil works, incremental O&M, incremental administration, and consulting services, including possible involvement of nongovernment organizations. Cost estimates for consulting services will include estimated costs for detailed design and tender documents and construction supervision, and other costs associated with capacity building and training. The cost estimates will include physical and price

contingencies; the local currency cost will include estimated duties and taxes; and interest during construction should be calculated separately.

13. **Indicative Contract Packages and Procurement Procedures.** The consultants will conduct the project cost estimates using the COSTAB software program to (i) estimate project costs, (ii) summarize project cost estimates in the expenditure categories, (ii) compile and present indicative contract packages and procurement procedures to be financed by the proposed ADB loan in line with the *Guidelines for Procurement under ADB Loans*, (iii) prepare detailed financing and disbursement plans, and (iv) assess training requirements and consulting services inputs needed for project implementation.

14. **Financing Plan.** The financing plan will specify the amount of the foreign exchange and local currency costs to be financed by ADB, Islamic Development Bank, the central Government, local governments, WUAs, and other agencies, if any. The plan will describe the maturity, grace periods, and relending arrangements, including possible subsidies, if any. In preparing the financing plan, the financial capacity of UCSA and the implementing agencies (IAs) will be assessed to ensure provision of adequate counterpart funding. The consultants will also design financial management and control procedures in consultation with the Government agencies.

15. **Implementation Arrangements.** The consultants will (i) describe the organizational arrangements envisaged to implement the components of the proposed project; (ii) describe UCSA and the IAs, as well as a project steering committee, a project monitoring unit, and project implementing units; (iii) prepare an implementation schedule; and (iv) describe the following features related to project implementation: (a) procurement; (b) consulting services (outline scope, terms of reference, person-months, and costs); (c) disbursement schedule; (d) reports, accounts, and audit (including project completion report); (e) possible retroactive financing, including its justification; (f) monitoring and evaluation; and (g) relending policies, if any.

16. **Executing Agency and Implementing Agencies.** The consultants will review the records of UCSA and the IAs in project implementation and their institutional capability to implement the proposed Project. Detailed financial evaluation of local governments should also be prepared.

17. **Environmental Analysis.** The consultants will (i) review environmental assessment procedures in the country; (ii) prepare initial environmental examinations and a summary initial environment examination; (iii) recommend measures to mitigate any adverse effects (sludge management for the proposed Project should be part of the water treatment system plan and the consultants will follow ADB's *Environmental Policy of ADB (2002)* and ADB's *Environmental Assessment Guidelines (2003)*); and (iv) conduct environmental impact assessment studies, if required, and assist UCSA in securing environmental clearance certificates for each subproject as required by the Government.

18. **Poverty and Social Analysis.** The consultants will collect detailed information on the incidence of poverty in the two selected oblasts at the early stage of project preparation. The consultants will assess the socioeconomic benefits of the subprojects and socioeconomic profiles of the beneficiary groups. The consultants will prepare a summary poverty reduction and social strategy and adhere to ADB's *Guidelines for Incorporation of Social Dimensions in Bank's Operations, Handbook for Incorporation of Social Dimensions in Projects*, and *Gender Checklists for Water Supply and Sanitation Projects*. Particular attention should be paid to mitigating any adverse impacts of the proposed Project. The consultants will develop and

recommend a mechanism and procedures for public consultation and participation in the planning process, particularly for the development and implementation of water and other tariffs, and the need for development control regulations, land acquisition, and compliance with environmental standards for wastewater disposal.

19. **Economic Analysis.** The consultants will conduct economic analyses of the subprojects and the Project in accordance with ADB's *Report on Economic Analysis in 2002: A Retrospective* and ADB's *Guidelines for the Economic Analysis of Projects* and the *Guidelines for the Economic Analysis of Water Supply Projects*. The consultants will (i) describe the macroeconomic and sector context; (ii) review and update the studies and projections of demand for water in the project area by user groups, including domestic, industrial, agricultural, commercial, and other users;¹ (iii) assess the project alternatives and confirm the least-cost solution for meeting water supply and wastewater treatment requirements in the project area; (iv) review tariff levels and structure for each subproject and assess the need to increase tariffs and charges in the short and medium term, taking into account ADB's position on user charges; (v) help estimate the detailed economic project cost estimates for the selected alternatives; (vi) identify all quantifiable and nonquantifiable economic benefits of the Project; (vii) quantify incremental and nonincremental economic benefits; (viii) determine the competing uses for water in the project area; (ix) estimate the economic internal rate of return of the Project and each subproject in constant prices, and perform sensitivity and risk analysis including calculation of switching values; (x) demonstrate the financial and fiscal sustainability of the Project, including an analysis of existing tariffs and taxes, cost recovery options, affordability and willingness to pay of project beneficiaries, an assessment and justification for any proposed subsidies, and an assessment of the fiscal impact of the Project; and (xi) demonstrate the development impact of the Project, and perform a distribution analysis.

20. **Financial Analysis.** The consultants will conduct the financial analysis of each subproject and an analysis of the financial performance of the relevant water supply entities participating in the proposed project in accordance with ADB's *Guidelines for the Financial Governance and Management of Investment Projects*. In particular, the consultants will (i) review water tariff level and structure, and determine its adequacy, comparing it with the average incremental financial cost of the Project; (ii) recommend any needed improvement, cross subsidy, affordability, water conservancy aspects, future operating capacity replacement and expansion (capital investment) and debt repayment; (iii) recommend a plan for tariff increase in line with the national water and wastewater tariff guidelines considering affordability; (iv) assess the financial viability of the project; estimate the financial internal rate of return for the Project, and perform sensitivity and risk analysis including switching values and calculation of the real weighted average cost of capital for the Project; (v) document and present the original financial statements of the relevant water supply entities in the project area for the past five years; (vi) prepare a summary of significant accounting policies; (vii) identify areas for improvement and training; (viii) review the past 5 years financial performance and evaluate their financial capacity; (ix) review current internal and external or governmental audit arrangements; and (x) prepare income statements, balance sheets, and cash flow statements for relevant water and wastewater entities in nominal terms and forecast the results for 5 years after the beginning of full project operation.

21. **Cost Recovery.** Under the reform policy, the Government seeks to establish self-financing principles for the provision of urban and rural infrastructure services. The Government

¹ The demand projections should address the expected changes in patterns of water consumption in the with and without project scenarios.

considers that the pricing of basic infrastructure services should balance four main objectives: (i) cost recovery to ensure financial viability and sustainability; (ii) affordability, particularly for lower income customers; (iii) demand management through metered charging; and (iv) economic efficiency. After analyzing the economic situation in the proposed project area, the Government has agreed to (i) target full O&M cost recovery in the long term; (ii) continue subsidies in the short term if affordability criteria cannot be met; (iii) use stepped tariffs for water, with a lifeline tariff for the lowest income group as a way forward; and (iv) review tariffs annually and adjust them accordingly taking into account collection efficiency rates, expenditure, and future investment plans. The Government also confirms that it will continue the policy of subsidizing rural water supply to ensure sustainable service provision to the rural population.

22. **Project Performance Monitoring System.** The consultants will prepare an effective project performance monitoring system, including monitoring of the proposed project's impact on poverty reduction.

23. **Private Sector Participation.** The consultants will identify opportunities and potential for private sector participation and public-private partnerships in the provision, operation, and management of water supply and sanitation services.

24. **Capacity Building and Anti-Corruption Measures.** This will include the following: (i) review the existing institutional capacity of UCSA, IAs, local governments, WUAs, and other sector agencies; (ii) develop a mechanism to encourage the participation of women and poor people in WUAs; and (iii) review and develop the capacity building program, that will include training of the staff UCSA, IAs, local governments, and WUAs to strengthen their capacity to efficiently implement, operate, and maintain the constructed facilities.

C. Reporting

25. The implementation of the TA is expected to start by October 2004 and be carried out over a period of 7 months ending by April 2005. The consultants will submit an inception report within 1 month to present the issues and the direction of the study, analysis of sector policies, a national water supply and sanitation sector profile, and a medium-term sector investment program. Within 3 months after commencement, the consultants will prepare an interim report containing a description of the proposed Project, its subprojects, and the capacity-building program. A draft final report will be prepared by the consultants after 5 months, containing the complete details of the Project and other findings and recommendations. Tripartite meetings will be held to discuss the interim and draft final reports, in particular, to discuss the feasibility studies and to reach an agreement regarding cost recovery and acceptable water tariffs. The final report, incorporating the comments from the Government and ADB, will be completed about 2 weeks after the last tripartite meeting. All the reports will be in both English and Russian. The final report must be prepared as a final feasibility study, which should conform both with domestic and international standards. The report and the study should be approved in parallel by ADB and the Government, including the approval of the Project's implementation arrangements and O&M and budget requirements. The consultants' team will be responsible to have the report and study approved by all project shareholders and government agencies. The consultants should prepare requests for proposal and detailed terms of reference for the team project management consulting services.

26. The consultants will also prepare the draft report and recommendation to the President for the Project, with all the appendixes.

INITIAL POVERTY AND SOCIAL ANALYSIS

A. Linkages to the Country Poverty Analysis

Is the sector identified as a national priority in country poverty analysis?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Is the sector identified as a national priority in country poverty partnership agreement?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Contribution of the sector or subsector to reduce poverty in UZB:			
The Project will help to reduce poverty by (i) rehabilitating the existing and developing new potable water supply systems in the poor rural areas, (ii) improving health and sanitation, and (iii) promoting economic development.			

B. Poverty Analysis

Proposed Poverty Classification: Human Development

What type of poverty analysis is needed?
The following analysis will be needed:
<ul style="list-style-type: none"> (i) Identify how the project relates to national priorities as identified in the country poverty analysis and in the poverty partnership agreement. (ii) Identify project beneficiaries and other groups (particularly poor and vulnerable groups) that might be directly affected, either beneficially or adversely, by the project and prepare their socioeconomic profile. (iii) Assess the effects of the ensuing Project on its beneficiaries. Develop mitigation measures against adverse project impacts. (iv) Estimate the poverty incidence and baseline for project evaluation. The poverty analysis will include issues relevant to the transition period, and specific poverty targeting. (v) Assess the socioeconomic benefits of the subprojects, particularly the impact on income levels. (vi) The social assessment will include gender analysis.

C. Participation Process

Is there a stakeholder analysis?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Main stakeholders include national, provincial (oblast), and district government officials; the state water supply and management company (Uzkommunhismat); project beneficiaries (rural residents and water users); and project-affected communities. Further stakeholder analysis will be developed during the technical assistance (TA) implementation. During the TA, stakeholders will be consulted to help formulate the appropriate project design and implementation plan. The TA consultants will meet with the stakeholders regularly during the preparation of the feasibility study and during project implementation in order to present details of project components, discuss potential concerns, and formulate recommendations that may lead to modifications in project scope, design, implementation plan, and schedules.		
Is there a participation strategy?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
The strategy will incorporate consultation with the stakeholder group through workshops, surveys, and public consultation.		

D. Gender Development

Strategy to maximize impacts on women:		
Women are the one of the main beneficiaries of the ensuing project. The TA will carry out a gender analysis of the project impacts by gender.		
Has an output been prepared?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
The output will be prepared in the process of the TA implementation		

E. Social Safeguards and other Social Risks

Item	Significant/ Not Significant/ None	Strategy to Address Issues	Plan Required
Resettlement	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> None	In view of the sector approach of the Project, specific land requirements have not been fully identified. Based on the prepared subprojects, the Project will require small areas of land for the location of small groundwater pumping stations and, in some cases, small storage tanks. The Government and the project implementation team will screen each subproject before the award of the civil works contracts to ensure that the site selection does not cause any involuntary resettlement effects.	<input type="checkbox"/> Full <input type="checkbox"/> Short <input checked="" type="checkbox"/> None
Affordability	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	Not deemed to be a major concern, but it will be assessed further during the TA.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Labor	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	No labor retrenchments are envisaged as a result of the project, but will be assessed further during the TA.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Indigenous Peoples	<input type="checkbox"/> Significant <input type="checkbox"/> Not significant <input checked="" type="checkbox"/> None	In a few proposed project areas, ethnic minorities may be involved. But, the minorities are not maintaining separate social or cultural identities, nor distinguished with linguistically; they have been assimilated into the local lifestyle. The Project is not expected to have any adverse impacts on ethnic minorities.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Other Risks and/or Vulnerabilities	<input type="checkbox"/> Significant <input checked="" type="checkbox"/> Not significant <input type="checkbox"/> None	No other social risks are anticipated as a result of the ensuing project.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No