



Technical Assistance Report

Project Number: 53110-002
Transaction Technical Assistance (TRTA)
July 2019

Republic of Uzbekistan: Preparing the Infrastructure for Rural Productivity Enhancement Sector Project

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 5 July 2019)

Currency unit	–	sum (SUM)
SUM1.00	=	\$0.000117
\$1.00	=	SUM8,574.74

ABBREVIATIONS

ADB	–	Asian Development Bank
IFS	–	investment feasibility study
NFS	–	national feasibility study
TA	–	technical assistance
TRTA	–	transaction technical assistance

NOTE

In this report, "\$" refers to US dollars unless otherwise stated.

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TRANSACTION TECHNICAL ASSISTANCE AT A GLANCE

1. Basic Data		Project Name	Preparing the Infrastructure for Rural Productivity Enhancement Sector Project	Department/Division	Project Number: 53110-002 CWRD/CWER
	Nature of Activity	Project Preparation		Executing Agency	Agency for Implementation of Projects in the Field of Agro-Industry and Food Security (UZAIFSA)
	Modality	Regular			
	Country	Uzbekistan			
2. Sector		Subsector(s)		ADB Financing (\$ million)	
✓	Agriculture, natural resources and rural development	Agro-industry, marketing, and trade			0.50
		Rural market infrastructure			0.50
				Total	1.00
3. Strategic Agenda		Subcomponents		Climate Change Information	
	Inclusive economic growth (IEG)	Pillar 2: Access to economic opportunities, including jobs, made more inclusive		Climate Change impact on the Project	Low
	Environmentally sustainable growth (ESG)	Disaster risk management			
	Regional integration (RCI)	Eco-efficiency			
		Natural resources conservation			
		Pillar 2: Trade and investment			
4. Drivers of Change		Components		Gender Equity and Mainstreaming	
	Governance and capacity development (GCD)	Public financial governance		No gender elements (NGE)	✓
	Knowledge solutions (KNS)	Application and use of new knowledge solutions in key operational areas			
	Partnerships (PAR)	Knowledge sharing activities			
	Private sector development (PSD)	Implementation			
		Private Sector			
		Promotion of private sector investment			
5. Poverty and SDG Targeting				Location Impact	
	Geographic Targeting	No		Rural	High
	Household Targeting	No		Urban	Low
	General Intervention on Poverty	Yes			
	SDG Targeting	Yes			
	SDG Goals	SDG1, SDG8, SDG9, SDG10			
6. Risk Categorization		Low			
7. Safeguard Categorization		Safeguard Policy Statement does not apply			
8. Financing					
Modality and Sources			Amount (\$ million)		
ADB			1.00		
Transaction technical assistance: Technical Assistance Special Fund			1.00		
Cofinancing			0.00		
None			0.00		
Counterpart			0.00		
None			0.00		
Total			1.00		
Currency of ADB Financing: USD					

I. THE ENSUING PROJECT

1. The proposed project will help finance new construction, rehabilitation, and modernization of specific items of medium-scale rural infrastructure which are either non-existent or have deteriorated over the past decades due to disasters triggered by natural hazards, and severe budgetary constraints that have contributed to this progressive deterioration. Infrastructure to be improved will include, but not limited to the following: (i) rural roads, (ii) irrigation drainage and flood control schemes, (iii) rural markets, (iv) solid waste disposal and collection, and (v) domestic water supply and sanitation schemes. As such, the project will help improve the livelihoods of the rural population by (i) increasing access to markets, agricultural inputs, and public services such as health and education; (ii) increasing employment opportunities; and (iii) reducing vulnerability to disasters due to natural hazards. The proposed project will have two outputs: (i) rural infrastructure in the project areas constructed and/or modernized; and (ii) capacity for devolved development and management of rural infrastructure strengthened. These outputs will result in the following outcome: rural productivity increased. The project will be aligned with the following impact: livelihoods and standards of living for rural population improved.

2. The project is estimated to cost \$140 million. ADB will finance \$100 million from its ordinary capital resources (concessional loans) and the government of the Republic of Uzbekistan (the government) will finance \$40 million through exemptions of taxes and duties. The sector modality is used for the proposed project since it will provide selective support for the Prosperous Village Program as the sector development plan, which highlights key investment requirements and policy development for comprehensive and inclusive rural development. The transaction technical assistance (TA) and the ensuing loan were included in ADB's country operations business plan, 2019–2021.¹

II. THE TECHNICAL ASSISTANCE

A. Justification

3. The TA will help the government prepare the project. Particularly, the TA will help with: (i) conducting the investment feasibility study (IFS), (ii) preparing the national feasibility study (NFS) in form and substance required by the prevailing regulations of the government, and (iii) assisting loan processing and implementation startup for the ensuing loan to the Republic of Uzbekistan for the Infrastructure for Rural Productivity Enhancement Sector Project (the project).

B. Outputs and Activities

4. The TA has three outputs: (i) Output 1: the IFS conducted; (ii) Output 2: the NFS prepared. The NFS shall be prepared as a requirement of the government in processing its approval of the project after ADB's approval; and (iii) Output 3: loan processing and implementation startup expedited.

1. Output 1—Conducting the Investment Feasibility Study

5. The study shall cover, but will not be limited to the following aspects: sector and institutional analysis; demand analysis; investment alternative analysis; proposed project scope and implementation arrangements; subproject implementation workflow (from identification to completion); feasibility study of three representative rural infrastructure subprojects; operation

¹ ADB. 2018. *Country Operations Business Plan: Uzbekistan, 2019–2021*. Manila.

and maintenance strategy and plan for the entire project; risk assessment; economic and financial analysis; financial management assessment; procurement capacity assessment and strategic procurement planning and packaging; social and gender analysis; safeguards assessment and planning (including preparing documents for environmental safeguards and land acquisition and resettlement); and a list of pre-screened potential candidate subprojects in the project areas for financing consideration by the project. It is required that close consultations, discussions, and surveys of potential users and/or stakeholders be conducted to ensure the project design has high likelihood of sustainability.

2. Output 2—Preparing the National Feasibility Study

6. A national consulting firm will be mobilized to prepare the NFS to serve the government's approval of the project. The firm will be engaged using the consultant's qualifications selection (CQS) method, with a lump-sum and performance-based contract. The firm shall prepare the NFS by making use of the relevant parts of the IFS report as per Output 1 and ensure consistency with ADB's Report and Recommendation of the President to the Board of Directors (RRP) and its linked documents. The firm will be mobilized after loan negotiations have been completed to ensure consistency in the loan/project approvals by ADB and government, both in form and substance.

3. Output 3—Assisting Loan Processing and Implementation Startup

7. Two project design and startup specialists (one international and one national) will be engaged on an intermittent basis prior to the loan fact-finding mission to undertake the following: (i) address critical technical gaps including sector and market assessment, financial, business and market risks, financial and economic evaluation, among other aspects of due diligence during the loan processing stage; (ii) assist with the NFS preparation as a technical back-up; and (iii) provide implementation startup support. These activities are to ensure that (i) proper ADB's Board documents are prepared and technical revisions are made during loan processing; (ii) the NFS is harmonized and technically consistent with the RRP and its linked documents; and (iii) disbursement is expedited.

C. Cost and Financing

8. The TA is estimated to cost \$1.0 million, which will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-6). The key expenditure items are listed in Appendix 1.

9. The government will provide counterpart support in the form of office space for TA consultants, counterpart staff, data and information access, and facilitation of liaisons with stakeholders during the feasibility study. The government was informed that approval of the TA does not commit ADB to finance any ensuing project.

D. Implementation Arrangements

10. The Agency for Implementation of Projects in the Field of Agro-industry and Food Security (AIFSA) will be the executing agency for the TA. ADB's Central and West Asia Department, Environment, Natural Resources, and Agriculture (CWER) will act as the focal point and coordinator of consulting inputs and activities. The proposed TA will be implemented over 36 months, from September 2019 to August 2022. The disbursements will be made in accordance with ADB's *Technical Assistance Disbursement Handbook* (May 2010, as amended from time to

time). The implementation arrangement schedule is in Table 1.

Table 1: Implementation Arrangements

Aspects	Arrangements		
Indicative implementation period	September 2019–August 2022		
Executing agency	The Agency for Implementation of Projects in the Field of Agro-industry and Food Security (AIFSA)		
Implementing agencies	Environment, Natural Resources, and Agriculture Division (CWER), of Central and West Asia Department (CWRD)		
Consultants	To be selected and engaged by ADB:		
	QCBS	50 person-months	\$600,000
	CQS	16 person-months	\$100,000
	ICS	6 person-months	\$ 80,000
Procurement	None		
Advance contracting and retroactive financing	None		
Disbursement	The TA resources will be disbursed following ADB's <i>Technical Assistance Disbursement Handbook</i> (2010, as amended from time to time).		
Asset turnover or disposal arrangement upon TA completion	None		

ADB = Asian Development Bank, CQS = consultants' qualifications selection; QCBS = quality- and cost-based selection; ICS = individual consultant selection, TA = technical assistance.

Source: Asian Development Bank.

11. **Consulting Services.** The TA will require three packages of consulting services (i) Package 1: A consulting team led by an international team leader to conduct the IFS (Output 1) to be selected using the QCBS method, with 90:10 quality-cost ratio and simplified technical proposals;² (ii) Package 2: A national consulting firm to prepare the NFS (Output 2) to be selected using the consultants' qualifications selection (CQS) method;³ and (iii) Package 3: Two individual consultants (one international and one national) to be recruited to assist loan processing and implementation startup (Output 3).⁴ Consultants will be engaged in accordance with ADB's Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.⁵ The indicative expertise and corresponding person-months are in Table 2. The outline terms of references are accessible from the list of linked documents in Appendix 2.

Table 2: Summary of Indicative Consulting Services Requirement

Positions	International (person-months)	National (person-months)	Key or Non-Key Position
Output 1—Conducting the Investment Feasibility Study			
Rural Development Specialist (Team Leader)	5		Key
Rural Infrastructure Specialist (Deputy Team Leader)		5	Key
Institutional Specialist		3	Key

² QCBS is essential to ensure quality of the consultant's deliverables for smooth project startup and successful implementation.

³ CQS is proposed as it is a small-value and short-term assignment.

⁴ ICS is proposed as experience and qualifications of the individuals are the paramount requirements.

⁵ The terms of reference for consultants by consulting service package are accessible from the list of linked documents in Appendix 2.

Positions	International (person- months)	National (person- months)	Key or Non- Key Position
Rural Infrastructure Engineers	3	5	Key
Financial Specialist and Economist	3		Key
Financial Analyst and Financial Management Specialist		5	Key
Procurement Specialists	2	4	Non-key
Environmental Specialists	1	4	Non-key
Social Development and Community Participation Specialists	1	3	Non-key
Resettlement Specialists	2	4	Non-key
Subtotal	17	33	
Output 2—Preparing the National Feasibility Study			
Reporting Coordinator/Agriculture Sector Policy Specialist		4	Key
Rural Infrastructure Management Specialist		3	Key
Graphic Designer		3	Key
Environmental Specialist		2	Non-key
Procurement Specialist		2	Non-key
Social Development Specialist		2	Non-key
Subtotal	0	16	
Output 3—Assisting Loan Processing and Implementation Startup			
Project Design and Startup Specialists	3	3	Not applicable
Subtotal	3	3	

Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN

(\$'000)

Item	Total Cost
Asian Development Bank^a	
1. Consultants ^b	
a. Remuneration and per diem	
i. International consultants	500.0
ii. National consultants	180.0
b. International and local travel	100.0
c. Reports and communications	20.0
2. Training, Seminars, and Conferences ^{b,c}	40.0
3. Miscellaneous administration and support costs ^d	80.0
4. Contingencies	80.0
Total	1,000.0

Note: The government will provide counterpart support in the form of office space for TA consultants, counterpart staff, data and information access, and facilitation of liaisons with stakeholders during project preparation.

^a Financed by ADB Technical Assistance Special Fund (TASF-6).

^b The sum of items 1 and 2 includes \$600,000 to engage an international consulting firm to prepare the IFS as outlined under Output 1. The remaining balance is for the consulting services under Outputs 2 and 3.

^c Including at least three consultation workshops.

^d Including translation and interpretation expenses.

Source: Asian Development Bank estimates.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/LinkedDocs/?id=53110-002-TARreport>

1. Terms of Reference for Consultants

TERMS OF REFERENCE FOR CONSULTING SERVICES

A. Output 1: Conducting the Investment Feasibility Study

1. **Scope of Work.** An international consulting firm will be engaged to conduct the investment feasibility study (IFS) using quality- and cost-based selection (QCBS) method with 90:10 quality-cost ratio and simplified technical proposals. The contract with the firm will be partial lump-sum and performance-based.

2. The firm is expected to deliver the following aspects, among others: (i) sector and institutional analysis; (ii) demand analysis; (iii) investment alternative analysis; (iv) proposed project scope and implementation arrangements; (v) subproject implementation workflow (from identification to completion); (vi) feasibility study of three representative rural infrastructure subprojects; (vii) operation and maintenance strategy and plan for the entire project; (viii) risk assessment; (ix) economic and financial analysis; (x) financial management assessment; (xi) procurement risk assessment and procurement packaging; (xii) social and gender analysis; (xiii) safeguards assessment and planning (including preparing documents for environmental safeguards and land acquisition and resettlement); and (xiv) a list of pre-screened potential candidate subprojects in the project areas for financing consideration by the project. It is required that close consultations, discussions, and surveys of potential users and/or stakeholders be conducted to ensure the project design has high likelihood of sustainability. A detailed IFS report structure will be provided to the selected firm by ADB upon signing of the contract for consultant services. The expected date of service commencement is January 2020.

3. **Deliverables.** The firm shall submit the following reports: (i) Inception Report; (ii) Draft Final IFS Report; (iii) Final IFS Report after incorporating all comments and/or recommendations from ADB and the government, and safeguard documents to meet ADB's requirements, including initial environmental examinations, environmental assessment and review framework, resettlement plans, and resettlement framework. All the reports are expected to be in English, except that the main text of the draft final IFS report and project administration manual must be translated into Russian.

4. **Consultant's Qualification.** The minimum requirements for the international firm are (i) extensive and proven experience in conducting investment feasibility studies for and implementing projects related to integrated rural infrastructure development, agricultural value chain development, value chain infrastructure in various countries for international financial institutions such as ADB and the World Bank; and (ii) at least 15 years of experience for the team leader and 10 years of experience for other key staff in similar rural infrastructure development and agriculture value chain development projects. It is preferred that the international firm associates with a national firm(s) which has (have) (i) recent experience in preparing ADB-financed project feasibility studies related to agriculture, water resource development, rural infrastructure, and agriculture value chain infrastructure in Uzbekistan; and (ii) is (are) familiar with Uzbekistan's prevailing regulations in investment project appraisal and approval.

5. **Detailed Terms of Reference.** A team of consultants will be engaged through a firm consisting of international and national experts. The consulting team will be led by the international rural development specialist (team leader), who will supervise all the transaction technical assistance (TA) consultants and be responsible for the delivery of their outputs together with the national rural infrastructure specialist (deputy team leader). The indicative consulting service inputs is in Table 1. The terms of reference for each specialist are outlined hereunder.

Table 1: Indicative Consulting Service Inputs for Conducting the IFS

Positions	International (person- months)	National (person- months)	Key or Non- Key Position
Output 1—Conducting the Investment Feasibility Study			
Rural Development Specialist (Team Leader)	5		Key
Rural Infrastructure Specialist (Deputy Team Leader)		5	Key
Institutional Specialist		3	Key
Rural Infrastructure Engineers	3	5	Key
Financial Specialist and Economist	3		Key
Financial Analyst and Financial Management Specialist		5	Key
Procurement Specialists	2	4	Non-key
Environmental Specialists	1	4	Non-key
Social Development and Community Participation Specialists	1	3	Non-key
Resettlement Specialists	2	4	Non-key
Subtotal	17	33	

IFS = investment feasibility study.
Source: Asian Development Bank.

6. **Rural Development Specialist (Team Leader)** (international: 5 person-months) and **Rural Infrastructure Specialist (Deputy Team Leader)** (national: 5 person-months). The Team Leader must have at least a bachelor's degree, preferably post graduate degree, in agriculture economics, rural development, development management, project management, or a related field, with at least fifteen years of aggregated experience in designing and implementing agriculture value chain development and/or rural development projects, particularly related to physical rural productive infrastructure such as irrigation, water supply, sanitation, and solid waste in several countries. Experience in the last five years in leading and/or designing ADB-financed sector modality projects is required. Knowledge of and experience in agriculture (horticulture and livestock) value chain development and decentralized management and development of rural infrastructure are highly preferred.

7. The Deputy Team Leader must have at least a bachelor's degree in civil engineering with at least ten years of experience in designing and implementing rural infrastructure and agriculture value chain development projects in Uzbekistan. Past and/or ongoing experience in preparing and/or designing ADB-financed projects in the role of national (deputy) team leader is a must.

8. The specialists will be responsible for the following:
- (i) Analyze (a) the government's rural development and poverty reduction strategies and plans at the national and regional levels, (b) performances of past sector investments, (c) supporting policy and regulatory environment, (d) sector expenditures, and (e) institutional capacity; and assess how those factors influence the commitment and capacity of relevant government agencies to finance and implement rural infrastructure development projects and/or programs;
 - (ii) Review lessons learned from the ongoing and past interventions for irrigation, rural roads, market infrastructure, rural water supply and sanitation (RWSS)

- development, solid waste disposal; and prepare a report on key relevant lessons learned and best practices in the country by the inception workshop;
- (iii) Lead the consultant team in analyzing the demography, development opportunities, poverty, ethnic minority and gender issues, technical feasibility, financial and administrative management capacity, and institutional framework of project regions;
 - (iv) Review planned investments (if available) in relevant rural infrastructure and rural development interventions in project regions over the next 10 years, identify their potential linkages with the ensuing project (the project), and formulate proposals on how to create synergy among those projects utilizing geographic information system mapping;
 - (v) Formulate (a) midterm regional rural infrastructure development plans that recommend potential subprojects, and (b) criteria for subproject selection based on the recommendations of team experts and findings of representative subprojects analysis;
 - (vi) Prepare a simple but efficient monitoring and evaluation system to capture the progress of rural infrastructure subproject implementation at various levels, and conduct baseline assessment together with other consultants;
 - (vii) Prepare project reports in the IFS Report outline (to be provided by ADB), including the feasibility study for loan project and three feasibility studies for representative subprojects, and ensure the consistency with both the government's and ADB's document requirements; and
 - (viii) Undertake and oversee the pre-screening of potential candidate subprojects in the project areas for financing consideration by the project.

9. **Institutional Specialist** (national: 3 person-months). The specialist must have at least a bachelor's degree in development economics, public administration, law, procurement, project management, or a related field, with at least ten years of aggregated experience in designing and implementing agriculture and rural development projects. Knowledge of and experience in preparing implementation and financing arrangements for decentralized management and development of rural infrastructure are highly preferred.

10. The specialist will be responsible for the following:
- (i) Assess the institutional framework relevant to road, irrigation, rural market, solid waste, and RWSS development, including the flow of fund and information, governance system, technical and administrative capacity, incentives and performance of various agencies, and the levels of community participation and ownership;
 - (ii) Review the administrative and tendering procedures of relevant past and ongoing projects and/or programs, and other government policies and regulations, and propose procedures to simplify the project administration;
 - (iii) Assess human and financial resources available in the relevant local government agencies, identify the gap between the existing functions and proposed responsibilities, and prepare an institutional and human resources development plan, including training needs assessment, to fill in the identified gap;
 - (iv) Review various existing planning and beneficiary participation models in planning and implementing rural infrastructure, and propose suitable identification, appraisal, and implementation models. Design short training courses on the use of participatory methods together with social development specialists; and

- (v) Propose implementation arrangements for the project including an overall framework for private sector participation and institutional arrangements that enhance beneficiaries' participation and prepare regular cost norms.

11. **Rural Infrastructure Engineers** (international: 3 person-months; national: 5 person-months). The international engineer shall have at least a bachelor's degree, preferably post graduate degree in civil and/or structural engineering, spatial planning, or a related engineering field, with fifteen years working experience in designing rural infrastructure projects in several countries. The national specialist shall have at least a bachelor's degree in civil engineering, spatial planning, architecture, or a related engineering field, with ten years working experience with detailed design of infrastructure projects in Uzbekistan. Both specialists must be capable of handling and/or processing technical drawings with common graphic design software.

12. The international engineer will perform the following tasks:

- (i) Prepare the detailed work plans of the national rural infrastructure engineer and supervise the national engineer to ensure the adequate quality of his/her outputs;
- (ii) Examine the type, size, technical specifications and/or parameters, cost efficiency, and the degree of community participation of the subprojects implemented under past and ongoing similar infrastructure projects, and recommend specifications of subprojects to be considered under the project;
- (iii) Assess the technical procedures and existing technical guidelines currently used in Uzbekistan and the project regions for the identification, planning, designing, construction, and maintenance of various types of rural infrastructure to be considered under the project;
- (iv) Assist the local consulting firm(s) in preparing the national feasibility study in compliance with the requirements of the government and ADB;
- (v) Review and assess the general technical capacity and the resources of the concerned line agencies at the regional and district levels and of the beneficiary communities for the implementation of the types of subproject to be considered under the project over and above those planned under ongoing and proposed projects. Determine the degree of support likely to be needed at regional, district, and beneficiary levels for carrying out the entire subproject cycle;
- (vi) Together with other specialists, review beneficiaries' contribution arrangements under past and ongoing rural infrastructure development projects, and propose appropriate mechanisms and procedures commensurate with the actual capacity and affordability to assess asset transfer and operations and maintenance (O&M) arrangements for the various types of rural infrastructure envisaged under the project, review the institutional setting and technical and financial capacity of the project stakeholders responsible for O&M of the transferred assets, and recommend measures to ensure the sustainable use of rural infrastructure;
- (vii) Based on the above reviews, develop detailed and rigorous technical parameters/specifications and criteria for screening, prioritization, and appraisal of each of the types of rural infrastructure subproject to be financed under the proposed project; and
- (viii) Take primary responsibility for the technical/engineering aspects in the preparation of the IFS.

13. The national engineer will perform the following tasks:

- (i) Under the guidance of an international rural infrastructure engineer, assist in collecting and reviewing the required primary and secondary technical data,

- designing the engineering and civil works of the project, and preparing the feasibility studies of the representative subprojects;
- (ii) Develop geographic information system maps indicating the current and planned transport network, irrigation schemes, RWSS schemes, solid waste disposal, and rural markets for each project region;
 - (iii) Review technical norms, design and construction standards, procedures, and quality standards and control procedures followed in the project regions for the various types of rural infrastructure to be considered under the project, and recommend suitable technical specifications for the project and measures to achieve better quality together with transparency of financial and technical management;
 - (iv) Review costs currently incurred in the implementation of relevant rural infrastructure to determine the detailed financing requirements of the civil works of the project, and provide advice and inputs into the economic and financial analysis of the project;
 - (v) Develop cost estimates and cost recovery level for the O&M of the different types of rural infrastructure to be considered under the project, and recommend acceptable arrangements for the assets transfer and O&M;
 - (vi) Assist in selecting the priority target areas and representative subprojects;
 - (vii) Develop detailed implementation arrangements and procedures for the subproject cycle (identification, preparation, proposal, appraisal, implementation, O&M);
 - (viii) Assess the impact of the rural infrastructure subprojects envisaged under the project on the targeted beneficiary communities, and recommend the appropriate physical indicators that need to be incorporated in the project performance and monitoring system; and
 - (ix) Under the guidance and monitoring of the international Rural Infrastructure Engineer, take primary responsibility for supervising and monitoring the technical feasibility studies and preparing feasibility studies for three representative subprojects.

14. **Financial Specialist and Economist** (international: 3 person-months). The specialist shall have at least a bachelor's degree, preferably post graduate degree in agricultural/rural development economics, and/or finance, with fifteen years working experience in preparing economic and financial analyses, conducting financial due diligence, and/or designing of agriculture value chain and/or rural infrastructure development projects in several countries. Familiarity with common cost estimation software programs is preferred.

15. The specialist will perform the following tasks:
- (i) Review the relevant sector policies, regulations and performance;
 - (ii) Evaluate the current status of fiscal management, counterpart fund availability and mechanisms to finance O&M costs of infrastructure for relevant regional and district governments;
 - (iii) Prepare a detailed financial and economic analysis including sector analysis, identifying rationale for public involvement, demand analysis, alternative/least cost analysis, cost-benefit analysis, sustainability and risk analysis for the overall project;
 - (iv) Prepare a detailed financial and economic analysis, including risk analysis, for each representative subproject and the project as a whole in accordance with

relevant ADB's Guidelines, particularly incorporating the 10 key areas of economic analyses for ADB investment projects;¹

- (v) Prepare project cost estimates and financing plan;
- (vi) Evaluate the financial affordability and sustainability of proposed project activities;
- (vii) In consultation with rural infrastructure engineers, estimate O&M costs over the product life for each type and scale of rural infrastructure, and propose financing plan to cover the required expenditures for relevant entities (including adequate level of user fee);
- (viii) Review the existing financing mechanisms for rural infrastructure, and propose a finance mechanism to be used for the project; and
- (ix) Assess training needs for conducting financial and economic analysis for subprojects.

16. **Financial Analyst and Financial Management Specialist** (national: 5 person-months). The specialist shall have at least a bachelor's degree in accounting, auditing, finance or economics with at least ten years' experience in financial management and governance regimes and possess a professional accountancy and/or finance qualification such as a Chartered Accountant, Certified Public Accountant, or equivalent.

17. The specialist will perform the following tasks:

- (i) Conduct financial management assessments of the executing agency and other agencies related to the project financing in terms of financial management, governance, and integrity and other ADB's required due diligence;
- (ii) Analyze the financial state of relevant maintenance companies (i.e., water supply and sanitation companies, irrigation maintenance companies, rural water supply and sanitation centers, etc.) and the levels of subsidy transfer from the regional and district government;
- (iii) Analyze risks and recommend mitigation measures to safeguard risk exposures of the executing agency and other agencies related to the project financing;
- (iv) Assess the financial management capacity of institutions that are relevant to project implementation; and
- (v) Assist in the preparation of project cost estimates and financing plan and other tasks under the guidance of the international financial specialist and economist.

18. **Procurement Specialists** (international: 2 person-months; national: 4 person-months). The international specialist shall have at least a bachelor's degree, preferably post graduate degree in engineering, economics, finance, project procurement or a relevant field, with fifteen years working experience in project management and project procurement in developing countries. The national specialist shall have at least a bachelor's degree in economics, finance, project procurement or a relevant field, with ten years working experience in project management and procurement in Uzbekistan. Both specialists are required to be familiar with procurement guidelines and related procedures of ADB and the government.

19. The specialists will perform the following tasks:

- (i) Prepare procurement workflow from the detailed design stage to the commissioning stage for each type of subprojects;
- (ii) Conduct strategic procurement planning and risk assessment in accordance with ADB Guidelines;

¹ ADB. 2017, *Guidelines for the Economic Analysis of Projects*. Manila.

- (iii) Prepare an overview of supply market for the type of goods, works, and services required by the project;
- (iv) Prepare the project procurement plan in collaboration with the other relevant team members including the Economist and Financial Specialist;
- (v) Assist the executing agency in undertaking advance actions in procurement, namely, (a) preparing the draft request for proposal including the terms of references for the detailed design and supervision consultant, and (b) assisting the executing agency in shortlisting interested firms; and
- (vi) Undertake the pre-screening of potential candidate subprojects in the project areas for financing consideration by the project.

20. **Environmental Specialists** (international: 1 person-month, national: 4 person-months). The international specialist shall have at least a bachelor's degree, preferably post graduate degree in environmental management or environmental engineering, with fifteen years working experience in environmental safeguards in developing countries. Experience in water, sanitation and solid waste is required. Extensive experience in Uzbekistan is an advantage. The national specialist shall have at least a bachelor's degree in environmental management or environmental engineering, with ten years working experience as an environmental specialist, preferably in donor-financed projects. Both specialists are required to be familiar with ADB's environmental safeguard policies and procedures.

21. The specialists will perform the following tasks:

- (i) Review and clarify domestic environmental initial assessment (EIA) rules and requirements for potential subprojects by subsector and scale, particularly for the three representative subprojects;
- (ii) Assess the potential environmental impacts of representative subprojects, conduct public consultation for their initial environmental examinations (IEEs), based on which to develop environmental management plans (EMPs) to manage impacts;
- (iii) In parallel of and through task (ii), prepare an environmental assessment and review framework (EARF) to guide future subproject environ selection, assessment and management; and
- (iv) Assess the human resource and institutional capacity of the executing agency and regional government agencies to carry out an initial environmental examination and monitor environmental impacts and identify capacity building needs.

22. **Social Development and Community Participation Specialists** (international: 1 person-month, national: 3 person-months). The specialist shall have at least a bachelor's degree in social sciences, sociology, anthropology, or other relevant disciplines for the assignment. (S)he shall have at least ten years of experience in social development and/or gender development. Familiarity with ADB policies on social safeguards, gender development, and core labor standards is required. Working experience in agriculture and natural resource sector in Uzbekistan is highly preferred.

23. The specialists will perform the following tasks:

- (i) Undertake social analysis and identify the beneficiaries and subgroups in each region that will gain from the project, based on available data and through the mapping exercise of the population (identify areas where the poor and low-income groups live);
- (ii) Undertake sample surveys (participatory rural appraisals) required of representative beneficiaries/subgroups identified for the project. Given different income levels, gender, ethnicity, remoteness, assess their attitudes toward

- different types of rural infrastructure, contribution to their construction, and affordability and willingness to pay with regard to fee payment/contribution for the services and O&M costs;
- (iii) Identify priority needs for rural infrastructure, and propose realistic options to balance the differing needs given variations in socioeconomic status, gender, and ethnicity;
 - (iv) Assess and evaluate the potential of the project to significantly and adversely affect local community members, including women, ethnic minorities, and other vulnerable groups, and propose their mitigation measures. Consider issues related to land titling, in-migration, rights of communities, and other factors;
 - (v) Together with the institutional specialist, review the existing experience in applying community participation approaches to different scales and types of rural infrastructure projects, and propose practical and feasible options for integrating participatory methods for different types of rural infrastructure to ensure ownership; include any special consideration required to ensure the participation of women;
 - (vi) Identify capacity building and/or training needs to facilitate participation of and effective communication with local communities;
 - (vii) Conduct a social development and gender assessment, highlighting men and women's roles and tasks; their access to resources, technologies and services, gender-based inequalities; assessment on core labor standards, particularly on child labor and equal pay for equal work; constraints faced by men and women, and recommendations to address these issues through the project's outputs or interventions; and
 - (viii) Prepare the gender action plan and the summary poverty reduction and social strategy based on ADB's template and provide inputs into other IFS documents in compliance with ADB's social safeguards and gender mainstreaming policies.

24. **Resettlement Specialists** (international: 2 person-months; national: 4 person-months). The international specialist shall have at least a bachelor's degree, preferably post graduate degree in social sciences, sociology, anthropology, or other relevant disciplines for the assignment, with fifteen years working experience in human settlement and safeguards in developing countries and has extensive experience in Uzbekistan. The national specialist shall have at least a bachelor's degree in social sciences, sociology, anthropology, or other relevant disciplines for the assignment, with ten years working experience in the field of land management and human resettlement in Uzbekistan. Both specialists must be familiar with ADB's safeguards policies and procedures.

25. Following the ADB's Safeguard Policy Statement (SPS, 2009), the specialists will perform the following tasks:

- (i) In close coordination with social development and community participation specialists, assess land issues, titles, and the potential impact of in-migration upon the land use rights of the communities along the roads, and identify means of protecting the land-use rights of the communities along or within the subproject areas;
- (ii) Prepare profiles of the project-affected communities in the project areas in terms of household sizes, demographic trends, income sources and levels, occupations, socioeconomic conditions, social service infrastructure, and social organizations, including gender profiles;
- (iii) Prepare indigenous peoples impact categorization and involuntary resettlement impact categorization for the whole project and representative subprojects;

- (iv) Prepare a resettlement framework for the entire project and resettlement plans for representative subprojects by involving full stakeholder participation and indicating specific actions for indigenous people (if any) affected by involuntary resettlement in accordance with ADB's SPS (2009) and the requirements of the government; and
- (v) Prepare due diligence report on land acquisition and resettlement in case there are no resettlement impacts.

B. Output 2: Preparing the National Feasibility Study Report

26. **Scope of Work.** A national consulting firm will be mobilized to prepare the national feasibility study (NFS) to serve the government's approval of the project. The firm will be engaged using the consultant's qualifications selection (CQS) method, with a lump-sum and performance-based contract. The firm shall prepare the NFS by making use of relevant parts of the IFS report as per Output 1 and ensure consistency with ADB's Report and Recommendation of the President to the Board of Directors (RRP) and its linked documents.

27. **Deliverables.** The firm shall submit the following reports in English and Russian: (i) Inception Report; (ii) Draft final NFS including all necessary aspects covering technical, institutional, economic, social and environmental assessments, procurement and financial management, etc., required for the project approval by authorized ministries and agencies; and (iii) Final NFS after approval of the NFS by the President of Uzbekistan.

28. **Maximum Budget and Payment Schedule.** The maximum budget for the NFS assignment is \$120,000. The payment schedule is as follows: (i) 10% after signing the contract; (ii) 15% after submission of the inception report; (iii) 40% following the submission of the draft final NFS to ADB and the government; (iv) 25% after incorporating comments of relevant government ministries and agencies and endorsement of the draft final NFS by relevant ministries and agencies; and (v) 10% after approval of the NFS by the President of Uzbekistan.

29. **Consultant's Qualification.** The minimum requirements for the firm are (i) extensive and proven experience in conducting feasibility studies for agriculture infrastructure projects funded by international development organizations; (ii) at least 10 years of experience for the team leader and seven years of experience for other key staff in similar agriculture and rural infrastructure development projects; (iii) having appropriate technical/professional licenses for preparing national feasibility study, and familiarity with requirements of the government with respect to format and content of the national feasibility study; and (iv) experience with previous ADB financed projects.

30. **Detailed Terms of Reference.** The schedule of indicative consulting service inputs is in Table 2. The terms of reference for each specialist are outlined hereunder.

Table 2: Indicative Consulting Service Inputs for Preparing the NFS

Positions	International (person-months)	National (person-months)	Key or Non-Key Position
Output 2—Preparing the National Feasibility Study			
Reporting Coordinator/Agriculture Sector Policy Specialist		4	Key
Rural Infrastructure Management Specialist		3	Key

Positions	International (person-months)	National (person-months)	Key or Non-Key Position
Graphic Designer		3	Key
Environmental Specialist		2	Non-key
Procurement Specialist		2	Non-key
Social Development Specialist		2	Non-key
Subtotal	0	16	

NFS = national feasibility study.
 Source: Asian Development Bank.

31. **Reporting Coordinator/Rural Development Policy Specialist** (national: 4 person-months). The specialist shall have at least a bachelor’s degree, preferably post graduate degree in agricultural economics, with ten years working experience in rural development, agriculture finance, agriculture value chains, and up-to-date knowledge on sector transformation and reforms in Uzbekistan. The specialist will be responsible for the following (i) supervise overall preparation of the NFS; (ii) liaise with government ministries, agencies, and other relevant stakeholders to ensure the report reflects diverse but practical views; (iii) ensure that the NFS is consistent with ADB’s RRP and its linked documents; and (iv) submitting a NFS which addresses various due diligence aspects including technical, institutional, economic, social and environmental assessments, procurement and financial management, etc., in form and substance required by the government’s prevailing regulations.

32. **Rural Infrastructure Management Specialist** (national: 3 person-months). The specialist shall have at least a bachelor’s degree in civil engineering with specialization on rural infrastructure, with seven years working experience in the agriculture and rural development. The specialist will be responsible for the following (i) conduct analysis on past and current rural and agriculture sector development, and sector potential and development prospects with particular focus on rural infrastructure constraints; (ii) prepare the projections for the development impact of the proposed rural productive infrastructure; and (iii) ensure that the relevant NFS sections are consistent with ADB’s RRP and its linked documents and present them in form and substance required by the government’s prevailing regulations.

33. **Graphic Designer** (national: 3 person-months). The specialist shall have at least a bachelor’s degree in civil engineering, spatial planning, planning and real estate management, interior/exterior design, architecture, or a related engineering field, with ten years working experience with detailed design of infrastructure projects in Uzbekistan. The specialist is responsible for, but not limited to, the following: (i) incorporate conceptual drawings of representative subproject into the NFS; (ii) interpret the conceptual drawings and provide relevant inputs to the NFS; and (iii) ensure that the relevant NFS sections are consistent with ADB’s RRP and its linked documents and present them in form and substance required by the Government’s prevailing regulations.

34. **Environmental Specialist** (national: 2 person-months). The specialist shall have at least a bachelor’s degree in environmental management, environmental engineering, or cleaner production, with seven years working experience in environmental safeguards in agriculture sector, or establishment of an environmental management system. Experience in water, sanitation and solid waste is required. The specialist will be responsible for the following (i) examine initial environmental assessments and transfer the appropriate content into the formats required by the government; (ii) ensure that the NFS reflects the prevailing national environmental

requirements for the operations of the proposed project; and (iii) ensure that the relevant NFS sections are consistent with ADB's RRP and its linked documents and present them in form and substance required by the government's prevailing regulations.

35. **Procurement Specialist** (national: 2 person-months). The specialist shall have at least a bachelor's degree in agricultural engineering, or civil engineering with seven years working experience in local procurement, and trade and custom practices. The specialist will be responsible for utilizing the material prepared under the IFS and adapting it to the format/content required for the NFS and ensure consistency with the RRP and its linked documents and present them in form and substance required by the government's prevailing regulations.

36. **Social Development Specialist** (national: 2 person-months). The specialist shall have at least a bachelor's degree in social sciences, sociology, anthropology, or other relevant disciplines, with seven years working experience in social development and/or gender development. Familiarity with ADB policies on gender and core labor standards is required. Working experience in agriculture and natural resources sector in Uzbekistan is preferred. The specialist will be responsible for transferring the contents of relevant sections of ADB's RRP including, but not limited to, gender action plan, social safeguards, and social development etc., into the format required by the government's prevailing regulations.

C. Output 3: Assisting Loan Processing and Implementation Startup

37. **Project Design and Startup Specialists** (international: 3 person-months; national: 3 person-months). The specialists shall have at least a bachelor's degree, preferably post graduate degree in agricultural economics, or project finance, with fifteen years working experience in designing and implementing ADB-financed project in the agriculture and natural resources sector. Familiarity with ADB's requirements in reporting, due diligence, procurement, and disbursement guidelines and practices is a must. The specialist will be engaged on an intermittent basis prior to the loan fact-finding mission to undertake the following: (i) address critical technical gaps including sector and market assessment, financial, business and market risks, financial and economic evaluation, among other aspects of due diligence during the loan processing stage; (ii) assist with the NFS preparation as a technical back-up; and (iii) provide implementation startup support. These activities are to ensure that (i) proper ADB's Board documents are prepared and technical revisions are made during the loan processing; (ii) the NFS is harmonized and technically consistent with the RRP and its linked documents; and (iii) disbursement is expedited.