

PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Justification

1. Project preparatory technical assistance (PPTA) is required to complete due diligence for the ensuing project.

B. Major Outputs and Activities

2. The objective of the PPTA is to design an investment project for increased farm incomes and incomes of non-farm households engaged to agriculture in arid areas in the KPP. The TA will include the key activities and outputs as summarized in Table A4.1:

Table A4.1: Summary of Major Activities and Outputs

Major Activities and Outputs	Expected Completion Date
Develop subproject selection criteria and identify at least three core subprojects	May 2014
Assess KPID's financial and procurement management capacities, identify these risks, and develop mitigation measures	June 2014
carry out water balance, irrigation system, arid area agriculture, climate change impact assessments in each selected core subproject	July 2014
develop an irrigated agriculture and water resources sector development plan for arid areas, and an institutional analysis, and carry out institutional capacity assessments	July 2014
Develop technically feasible physical and non-physical investment packages in each core subproject given (i) willingness of farmers' and communities' participations; (ii) efficient and sustainable O&M of water management systems; and (ii) implications of climate change impacts	September 2014
Estimate costs, project benefits, and assess economic and financial viabilities of developed investment packages in each core subproject	September 2014
Develop preliminary engineering designs and Planning Commission Performa No.1 in each core subproject	September 2014
Assess the distribution of project effects and the impact on poverty reduction and inclusive growth, and explore possibilities of development for a gender action plan in each core subproject	September 2014
Assess environmental, involuntary resettlement, and indigenous peoples' impacts, conduct actions for safeguard requirements, and develop relevant frameworks and plans in each core subproject	September 2014
Develop implementation arrangement, investment and financing plans, and advanced implementation actions	September 2014
Develop the Expression of Interest for potential implementation consultants	November 2014
Develop the request for proposal to recruit the project implementation consultants	January 2015

C. Cost Estimate and Proposed Financing Arrangement

3. PPTA is estimated to cost \$1,120,000 equivalent, of which \$1,000,000 equivalent will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-V). The Government will provide counterpart support in the form of counterpart staff, logistical support, and provisions of available feasibility studies, whose value are estimated at about 10% of the total PPTA cost. The detailed cost estimate to be financed by ADB's TASF-V is in Table A4.2.

Table A4.2: Cost Estimates and Financing Plan
(\$'000)

Item	Total Cost For Firm	Total Cost For Individual Consultant	Total Combined Cost
Asian Development Bank Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants (8 person-months for firm and 4 person-months for individual)	210	108	318
ii. National Consultants (76 person-months)	315	0	315
b. International and Local Travel ^b	83	6	89
c. Reports and Communications	25	5	30
2. Workshops, Seminars, Trainings, and Consultations ^c	51	0	51
3. Surveys, Studies and Design ^d	65	0	65
4. Equipment (Printer, etc.) ^e	5	0	5
5. Miscellaneous Administrative and Support Costs ^f	17	3	20
6. Office Accommodation	30	0	30
7. Contingencies	54	23	77
Total	855	145	1,000

^a Financed on grant basis from TASF-V.

^b Includes international and local travel and hired vehicles for travel within KPP and to Islamabad.

^c Includes training and consultation workshops as detailed below, and costs hiring NGOs to carry out community consultations on sites.

Purpose	Participants	Venue	Duration (days)	Cost (\$)
Inception workshop (consultation and dissemination)	60	Hotel	1	3,500
Midterm workshop (consultation and dissemination)	60	Hotel	1	3,500
Final workshop (consultation and dissemination)	70	Hotel	1	4,000

^d Includes topographic, geotechnical and condition surveys for preparation of feasibility studies, tender and technical designs, socio-economic surveys, environment studies.

^e The consultants may procure equipment through shopping according to ADB's Procurement Guidelines (2013, as amended from time to time). The equipment procured will be transferred to the EA upon completion of the PPTA.

^f Covers the costs of office manager, secretarial and related support facilities.

Source: Asian Development Bank estimates.

D. Consulting Services

4. The PPTA will provide 8 international person-months and 76 national person-months through a firm using the QCBS procedure at 80:20 ratio and full technical proposals and an individual Water Resources Specialist for 4 person-months, following ADB's *Guidelines on the Use of Consultants and its Borrowers* (2013, as amended from time to time) (Table A4.3).

Table A4.3: Summary of Consulting Services Requirement

International Name of Positions	Person-months	National Name of Positions	Person-months
Water Resources Specialist (individual Consultant)	4.0	Irrigation Water Management Specialist/Team Leader	11.0
Financial Management Specialist	2.0	Project Economist, Financial Management, and Costing Specialist	4.0
Economist and Financial Analyst	2.0	Environmental Specialist	4.0
Environmental Specialist	2.0	Resettlement Specialists (2)	4.0
Resettlement and Indigenous Peoples' Specialist	2.0		

	Procurement/Contracts Specialist	4.0
	Social and Gender Specialist	3.0
	Geotechnical Specialist	2.0
	Watershed Planning Specialist	3.0
	On-farm Irrigation Water Use Specialist/Deputy Team Leader	8.0
	Domestic Water Supply and Use Specialist	6.0
	Agriculture Development Specialist	5.0
	Institution and Operation and Maintenance Specialist	4.0
	Hydraulic Structures Engineer	5.0
	River Morphologist and Hydrologist	2.0
	Irrigation Engineer (Small/Medium dams) /Deputy Team Leader	8.0
	Legislation and Regulation specialist	3.0
Total	12.0 Total	76.0

5. The terms of reference for the key PPTA consultants are outlined in paragraphs 6 to 11.

6. **Irrigation Water Management Specialist/Team Leader (national; 11 person-months).** He/she will provide overall direction and manage PPTA relationships with the KPID including the DGSD, the KPAD, the P&DD, ADB and other stakeholders, manage all experts' inputs, activities and outputs, and ensure feasibility studies, engineering designs, and reports. He/she will lead the development of subproject selection criteria and the identification of at least three subprojects, the comprehensive review and assessment of the irrigation systems, water balance, arid area agriculture, climate change impact in each subproject, and the identification of development constraints and priorities in each subproject. He/she will also have a direct responsibility for preparing project output 1 (but not related to small/medium dam irrigation systems) as well as overall responsibility for developing: (i) an irrigated agriculture and water resources sector development plan for arid area; and (ii) institutional capacity assessments to identify institutional shortcomings in the KPID, the DGSD, the KPAD and their causes for effective implementation of the plan, and propose a component to remedy the constraints and enhance their capacities and performances under the project.

7. **Economist and Financial Analyst (international; 2 person-months)/Project Economist, Financial Management and Costing Specialist (national; 4 person-months).** They will: (i) develop a criteria to identify and select subprojects from economic and financial aspects with the team leader; (ii) review economic and financial viability to develop an institutional structure, and propose revisions on the institutional structure, if necessary; (iii) develop cost estimation in coordination with other relevant experts for each subproject; (iv) prepare a project financing plan; (v) identify project benefits in each core-subproject and each project output; (vi) develop financial sustainability reports; (vii) develop relevant assumptions and criteria and analyze relevant investment scenarios for each subproject; (viii) develop farm budgets financial analyses for typical farms in each subproject; and (x) develop the economic internal rate of return by conducting detailed sensitivity analysis for each subproject. The economic analysis will be carried out in line with the ADB's Handbook on Economic Analysis (1997).

8. **Irrigation Engineer (Small/Medium dams)/Deputy Team Leader (national; 8 person-months).** He/she is responsible for preparing project output 1 associated with small/medium dam irrigation systems, and will (i) develop subproject selection criteria, and identify and select subprojects; (ii) assess core-subproject systems and their water balances; and (iii) develop

feasibility studies of core-subprojects for project output 1 with technical inputs from Geotechnical Specialist, Watershed Planning Specialist, Hydraulic Structures Engineer, River Morphologist and Hydrologist. He/she will also have a direct responsibility for the preparation of preliminary engineering designs, Planning Commission Performa No.1, bid designs and documents for the first contract from selected subprojects for project output 1 associated with small/medium dam irrigation system.

9. **Resettlement and Indigenous Peoples' Specialists (international; 2 person-months, national; 4 person-months for two positions).** They will: (i) prepare involuntary land acquisition and resettlement plan, if necessary for subprojects; (ii) prepare involuntary land acquisition and resettlement framework; (iii) impact assessment of indigenous people; and (iv) prepare Indigenous peoples planning framework and indigenous people plan, if necessary, all of which are in accordance ADB's Safeguard Policy Statement (SPS, 2009).

10. **Environmental Safeguard Specialist (international; 2 person-months, national; 4 person-months).** They will: (i) prepare a Rapid Environmental Assessment checklist, an Environmental Assessment and review framework for the proposed sector loan, initial environmental examination studies for the selected sample subprojects following ADB's and the government's requirements; (ii) prepare summary of the IEE and undertake public consultations following ADB's and Government's guidelines; and (iii) review the environmental management capability of the KPID including the DGSD, and the KPAD and recommend institutional strengthening measures required especially in the area of environmental assessment capability.

E. Implementation Arrangements

11. The KPID will be the PPTA executing agency. The representative appointed by the KPID will serve as Project Director, provide overall guidance to TA implementation, communicate with ADB, and prepare the project output 1 (but not related to small/medium dam irrigation systems). Two representatives appointed by the DGSD and the KPAD (one representative from each) will serve as deputy Project Directors, and prepare the project output 1 (related to small/medium dam irrigation systems), and the project output 2, respectively. The project output 3 will be prepared jointly by them. They will guide other officials for efficient and effective PPTA consultant's tasks. The KPID will provide: (i) logistical and security supports during the field visits, access to project sites; (ii) available data and feasibility studies as required; and (iii) facilitation of workshops. A TA Steering Committee chaired by a representative from the PD&D will be established to review TA progress and render project-specific decisions as necessary. All disbursements under the PPTA will be made in accordance with the Technical Assistance Disbursement Handbook (2010, as amended from time to time).

12. The proposed PPTA processing and implementation schedule is listed in Table A4.4.

Table A4.4: Technical Assistance Processing and Implementation Schedule

Major Milestones	Expected Completion Date
Contract Negotiations	March 2014
Commencement of TA	April 2014
Submission of Draft Final Report	September 2014
Approval of Final Report (physical completion)	March 2015
TA Completion (financial closure)	May 2015