PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Justification

1. The Government of Mongolia (GOM) requested support through (i) consultations with ADB staff, (ii) a letter from the Ministry of Environment and Green Development (MEGD) on 11 March 2013, and (iii) a letter from Ministry of Economic Development on 25 April 2013 for the preparation of the Tuul River Improvement Project. To facilitate the preparation of the project, a project preparatory technical assistance (PPTA) of \$1 million will be provided by the Japan Fund for Poverty Reduction, administered by ADB.

B. Major Outputs and Activities

2. The major outputs of the PPTA will be: (i) a project design which responds to government's needs and fulfill ADB requirements, and (ii) detailed data collection and surveys. Specifically, the outputs include (i) sector assessment; (ii) financial management and procurement capacity assessments; (iii) stakeholder analysis, and problems and constraints identification; (iv) a project technical, environmental, economic, financial and social appraisal; (v) a participatory gender plan and a sustainable livelihood plan; (vi) a resettlement plan, if required; (vii) initial environmental examination and management plans; and (viii) an institutional and capacity development plan.

	Expected	ary or Major Outputs and Activities	Expected
	Completion		Completion
Major Activities	Date	Major Outputs	Date
Consultant mobilization	April 2014	· ·	
Initial assessment and scheduling	April 2014	An inception report	May 2014
Sector assessment and stakeholder analysis	May 2014	A sector assessment report, problem tree, and draft project DMF	May 2014
Project technical, economic, financial, and environment and social appraisal	Interim results by July 2014	An interim report, including draft FMA.	July 2014
	Draft final results by October 2014	A draft final report with all appendices including IEE reports, resettlement plans (if required), a social and poverty analysis report, a GAP, an economic and financial analysis report, a FMA report, PPMS, draft RRP, and PAM	September 2014
Social economic survey and consultations	October 2014	A GAP and participatory strategy	October 2014
Social safeguards and poverty assessment	October 2014	A resettlement plan, if required A social and poverty analysis report	October 2014
Environmental assessment	October 2014	An IEE report	October 2014
Institutional capacity and training needs	October 2014	An institutional capacity and training needs assessment report	October 2014
Procurement capacity assessment	October 2014	A procurement plan and PCA report	October 2014
Financial management assessment	October 2014	A FMA report	October 2014

Table A4.1: Summary of Major Outputs and Activities

DMF = design and monitoring framework, FMA = financial management assessment, GAP = gender action plan, IEE = initial environmental examination, PAM = project administration manual, PCA = procurement capacity assessment, PPMS = project performance management system, RRP = report and recommendation of the President Source: Asian Development Bank.

C. Cost Estimate and Proposed Financing Arrangement

4. The PPTA is estimated to cost \$1.2 million equivalent, of which \$1.0 million will be financed on a grant basis by the Japan Fund for Poverty Reduction, and administered by ADB. The government will provide counterpart support in the form of counterpart staff, data collection, office facilities, administrative support, and other in-kind contributions. The detailed cost estimate is presented in Table A4.2.

Item			Total Cost
Japan Func	d for Pov	verty Reduction ^a	
1.	Cons	sultant	
	a.	Remuneration and per diem	
		i. International consultants (21 person-months)	501.0
		ii. National consultants (54 person-months)	216.0
	b.	International and local travel	75.0
	C.	Reports and communications	10.0
2.	Eaui	pment ^b	24.0
3.		kshops, local training, seminars, and conferences ^c	35.0
4.	Surv		75.0
5.		ellaneous administration and support costs	6.0
6.		resentative for contract negotiations	8.0
7.		tingencies	50.0
	Tota		1,000.0
Administered	d by the A	sian Development Bank.	.,
		ment will be handed over to the Ministry of Environment and Gree	en Development upon t
completion o	of the proje	ect preparatory technical assistance).	
Туре		Quantity	Cost
Office com	puter and	printer 3	9,000
Photocopie	er	1	1,000
Groundwat	er monito	ring equipment tbd	14,000
Workshops,	local train	ing, seminars, and conferences will be administered by the consultant	S.
Purpose		Venue	
Inception		Tuul River Basin	
Midterm		Tuul River Basin	
Final TA		Tuul River Basin	
Fact-finding	0	Tuul River Basin	
Two trainin	g worksho	ops Tuul River Basin	

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

Source: Asian Development Bank estimates.

D. Consulting Services

Resource persons

5. It is expected that a consulting firm will be recruited. ADB will be responsible for recruiting consultants following ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). A consulting firm will be recruited using the quality- and cost-based selection (QCBS) at a quality–cost ratio of 80:20 using simplified technical proposal.

Table A4.3: Summary of Consulting Services Requirement

International Positions	pm	National Positions	pm
A. Consulting firm			
Water resources management specialist and team leader	9.0	Water resources specialist and deputy team leader	10.0
Groundwater resources monitoring specialist	3.0	Institutional water expert (PMO)	2.0
Hydraulic engineer	2.0	Hydraulic Engineer	8.0

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Total	21.0		54.0
	-	Procurement and project management specialist	6.0
specialist Environmental economist	2.0	Financial specialist	6.0
Environment and ecological specialist Sediment pollution specialist Social development and resettlement	2.0 1.0 2.0	Water information management specialist Environment specialist Social development specialist	6.0 8.0 8.0

Source: Asian Development Bank.

6. The outline terms of reference for the PPTA consultants are described in paras. 7 to 21.

A. **PPTA Consulting Firm**

7. Water resources management specialist and team leader [international, 9 personmonths (pm)]. The specialist will have a master's degree or equivalent qualification in water resources management, and at least 5 years of experience in formulating donor funding investment projects. The specialist will have overall responsibility for effective and timely implementation of the PPTA and quality of all outputs, and coordinating and consolidating inputs of government agencies and other specialists.

8. **Groundwater resources monitoring specialist** (international, 3 pm). The specialist will preferably have a master's degree in groundwater resources management or equivalent qualifications, and at least 8 year work experience with artificial groundwater recharge. The specialist will (i) conduct a brief assessment of experiences on successful groundwater recharge and ecological restoration approaches in Mongolia; (ii) summarize groundwater recharge opportunities in the Tuul River Basin, including ecological restoration programs (wetland and floodplains) that to promote groundwater recharge; and (iii) design the groundwater recharge investments to be included in the project.

9. **Hydraulic engineer** (international, 2 pm). The specialist will have bachelor's degree in hydraulic engineering and over 10 years of experience in designing hydraulic engineering projects. The specialist, in close cooperation with the national hydraulic engineer, will be responsible for the design and quality control of the hydraulic structures proposed for the investment project.

10. **Environment and ecological specialist** (international, 2 pm). The specialist will have a master's degree or equivalent qualification in environmental studies and at least 8 years of experience in environmental assessment and ecological sciences. The specialist, in close cooperation with the national environment specialist, will (i) assess possible environmental impacts of each project activity, including livelihood impacts through environmental media; (ii) coordinate and supervise the development of the national environmental reporting requirements; (iii) prepare an initial environmental examination which complies with ADB's Safeguard Policy Statement (2009) requirements; and (iv) prepare a communications strategy.

11. **Sediment pollution specialist** (international, 1 pm). The specialist will have a master's degree or equivalent qualification in environmental studies and at least 8 years of experience in soil or sediment pollution control. The specialist will (i) assess the pollution status of selected stretches of the Tuul River, (ii) identify opportunities for clean-up and disposal of the sediments, and (iii) contribute to the project design.

12. **Social development and resettlement specialist** (international, 2 pm). The specialist will have a master's degree or equivalent qualification in social development studies and at least 8 years of experience in social development studies and IFI social safeguard policies. The specialist will be responsible for (i) conducting a poverty and social analysis; (ii) formulating action for social

inclusion and gender equity; (iii) preparing a participation strategy; (iv) confirm social safeguards categorizations; and (v) prepare, if necessary, social safeguard documents, including a resettlement plan or an ethnic minority development plan.

13. **Environmental economist** (international, 2 pm). The economist will have a bachelor's degree in economics, and at least 8 years of work experience in economic analyses of ADB- or other projects financed by multilateral development banks related to environment and natural resources management. The economist will (i) prepare the economic analysis of the project in accordance with ADB's Guidelines for the Economic Analysis of Project ADB guidelines, (ii) design the development and implementing of economic instruments for pollution control, and (iii) provide support to the national financial specialist. The economic analysis will include at least cost analysis, cost-benefit analysis, sensitivity and risk analysis, distribution analysis, and financial and institutional sustainability analysis.

14. **Water resources specialist and deputy team leader** (national, 10 pm). The specialist and deputy team leader will have a bachelor's degree or equivalent qualification in water resources management or other related fields and at least 5 years of work experience in formulating foreign funded projects. The specialist will support the international team leader to ensure the effective and timely implementation of the PPTA and be responsible for the coordination and reviewing of the design and quality control for output 1, which focuses on groundwater management.

15. **Institutional water expert** (national, 2 pm). The expert will preferably have a master degree in water resources management or relevant field, and at least 7 years of work experience in water management policies. The specialist will (i) support executing and implementing agencies with reviewing technical and institutional aspects of the proposed project; and (ii) provide training on technical and institutional issues, as needed.

16. **Hydraulic engineer** (national, 8 pm). The specialist will have a bachelor's degree in hydraulic engineering and over 5 years of experience in designing hydraulic engineering projects. The specialist will specifically be responsible for the design and quality control of all investments that involves hydraulic engineering.

17. **Water information management specialist** (national, 6 pm). The specialist will preferably have a master's degree in water resources management, computer application, or relevant fields, and at least 7 years of work experience in developing water information and monitoring systems. The specialist will be responsible for the design and preparation of the proposed investments for the water monitoring network.

18. **Environment specialist** (national, 8 pm). The specialist will have a bachelor's degree or equivalent qualification in environmental studies and at least 5 years of experience in conducting environmental assessment. The specialist will support the international environment and ecological specialist to (i) assess possible environmental impacts, and (ii) prepare an initial environmental examination which complies with ADB requirements.

19. **Social development specialist** (national, 8 pm). The specialist will have a bachelor's degree or relevant qualification in social sciences and/or development studies and at least 5 years of work experience in social development studies. The specialist will support the international social development and resettlement specialist to (i) conduct a poverty and social analysis; (ii) formulating action for social inclusion and gender equity; (iii) preparing a participation strategy; (iv) confirm social safeguards categorizations; and (v) prepare, if necessary, social safeguards documents, including a resettlement plan or an ethnic minority development plan.

20. **Financial specialist** (national, 6 pm). The specialist will have (i) a bachelor's degree in accounting, finance, or financial management; (ii) a recognized professional accountancy

qualification (e.g., CPA); and (iii) at least 5 years of experience in project financial management assessment. The specialist will (i) prepare project costs in cooperation with team leader and deputy team leader, (ii) conduct a financial management assessment (FMA) of the executing and implementing agencies, and (iii) conduct financial sustainability analysis required for non-revenue generating projects. The FMA should consider (i) the design of the funds flow and disbursement mechanisms for the ensuing project, based on the FMA of executing and implementing agencies; and (ii) identify any further capacity development (financial management and ADB's disbursement procedures) that will be necessary for the project.

21. **Procurement and project management specialist** (national, 6 pm). The specialist will have a bachelor's degree in engineering and at least 5 years of experience in project management, procurement, and consulting services. The specialist will (i) conduct procurement capacity assessment for the executing and implementing agencies to undertake procurement and consultant recruitments envisaged under the project, (ii) conduct a market analysis, (iii) prepare a procurement plan, (iv) provide training for the executing and implementing agencies on ADB's procurement procedures, (v) support the executing and implementing agencies with project management tasks, (vi) provide training on the management and implementation of ADB funding projects, and (vii) support the executing and implementing agencies in project design.

E. Implementation Arrangements

22. The MEGD will be the executing agency for the PPTA and serve as focal point for coordinating the preparation and implementation of the PPTA implementation and the ensuing proposed project. The TRBA will be the implementing agency. A PMO, chaired by the MEGD, will be established in the TRBA and will comprise staff from the MEGD and TRBA. The PMO will provide oversight and ensure coordination across sectors and provide guidance to the project preparation and implementation. A PPTA steering committee, comprising of representatives of the relevant key government agencies, will be established to provide oversight and coordination. The proceeds of the TA will be disbursed in accordance with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). Procurement for the TA will be conducted in accordance with ADB's Procurement Guidelines (2013, as amended from time to time). The equipment will be handed over to MEGD upon the completion of the PPTA.

23. The PPTA will be implemented over a period of 15 months tentatively from 1 January 2014 until 31 March 2015. The proposed PPTA processing and implementation schedule is listed in Table A4.4.

Major Milestones	Expected Completion Date
Approval of funding	November 2013
Concept paper approval	December 2013
Recruitment of consultants	January 2014
Consultants mobilization	April 2014
Inception mission	May 2014
Mid-term review mission	August 2014
Submission of PPTA draft final report	October 2014
Final PPTA review/Loan fact-finding mission	November 2014
Submission of PPTA final report	December 2014

Table A4.4: Technical Assistance Processing and Implementation Schedule

PPTA = project preparatory technical assistance. Source: Asian Development Bank estimates.