

PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Justification

1. During the country programming mission held in Manila in November 2013, the Government of the People's Republic of China (government) requested the Asian Development Bank (ADB) to assist the Kelamayi Municipal Government (KMG) to prepare the proposed Xinjiang Kelamayi Ecological Forest Infrastructure Project (project), which is included in ADB's lending program for 2016. A project preparatory technical assistance (TA) is provided to undertake due diligence in technical, safeguards, economic and financial, and poverty and social areas. The TA will help ensure compliance with ADB's requirements and incorporation of international best practices in the project design.

B. Major Outputs and Activities

2. The TA will address the following aspects related to the project: (i) assess the technical feasibility of the project; (ii) conduct due diligence on the economic and financial feasibility of the project; (iii) review safeguard requirements; (iv) conduct social survey and consultations; (v) develop the capacity of the KMG for project management; and (vi) prepare project documents, including ADB's draft report and recommendation of the President (RRP) and key linked documents.

3. The major outputs and activities are summarized in Table A3.1.

Table A3.1: Summary of Major Outputs and Activities

Major Activities	Expected Completion Date	Major Outputs	Expected Completion Date
Consultant mobilization	April 2015		
Initial assessment and scheduling	May 2015	Inception report	May 2015
Sector assessment and stakeholder analysis	May 2015	Sector assessment report, problem tree, and draft project design and monitoring framework	May 2015
Project technical, economic, financial, environment and social appraisal	Interim results by August 2015	Interim report, including procurement risk assessment	August 2015
Procurement risk assessment	Draft final results by November 2015	Draft final report with all appendices including EIA reports, resettlement plans (if applicable), a social and poverty analysis report, a GAP, an IPP, an economic and financial analysis report, a FMA report, PPMS, and draft RRP including PAM	November 2015
Social economic survey, consultations, and poverty assessment	November 2015	GAP, participatory strategy, and social and poverty analysis report	November 2015
Social safeguards	November 2015	Resettlement plan (if applicable) and IPP	November 2015
Environmental assessment	November 2015	EIA report	November 2015
Institutional capacity and training needs	November 2015	Institutional capacity and training needs assessment report	November 2015
Procurement capacity assessment	November 2015	Procurement plan and procurement capacity assessment report	November 2015
Financial management assessment	November 2015	FMA report	November 2015

EIA = environmental impact assessment, FMA = financial management assessment, GAP = gender action plan, IPP = indigenous peoples plan, PAM = project administration manual, 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 TA is estimated to cost \$800,000 equivalent, of which \$600,000 equivalent will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF—other sources). The KMG will provide counterpart support in the form of staff remuneration and transportation, data collection, logistic support in arranging workshops and field visits, fully functional office space for consultants with water and utility supply, a telephone line and access to internet, and other in-kind contributions. The detailed cost estimate is presented in Table A3.2.

Table A3.2: Cost Estimates and Financing Plan

Item	Total Cost (\$'000)
Asian Development Bank Financing^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (14 person-months)	349.0
ii. National consultants (23 person-months)	156.2
b. International and local travel	40.0
c. Reports, translation, and communications	5.0
2. Equipment ^b	15.0
3. Workshops, training, seminars, and conferences ^c	10.0
4. Surveys	3.8
5. Miscellaneous administration and support costs ^d	5.0
6. Contract negotiations ^e	6.0
7. Contingencies	10.0
Total	600.0

^a Financed by the Asian Development Bank's Technical Assistance Special Fund (TASF—other sources).

^b Equipment (The equipment will be handed over to the KMG upon the completion of the TA).

Type	Quantity	Cost (\$)
Office computer with wireless broadband internet access	5	10,000
Printer	1	1,000
Photocopy machine	1	2,000
Digital camera	2	1,000
Other small peripherals	1	1,000

^c Workshops, training, seminars, and conferences will be administered by the consultants. These costs may include representation costs, such as food and beverages.

Purpose	Venue
Stakeholder and resettlement consultation workshops	Kelamayi, PRC
Social and environmental safeguards, procurement, and financial management	Kelamayi, PRC

^d Miscellaneous administration and support costs include general operating costs, office supplies, and translation costs.

^e If applicable. Contract negotiations may be conducted through e-mail for smaller contract.

Sources: Asian Development Bank estimates.

D. Consulting Services

5. The TA will be carried out by a team of consultants. A total of 14 person-months (pm) of international and 23 pm of national consulting services will be required. The consulting firm will be selected by (i) inviting simplified technical proposals; and (ii) using the quality- and cost-based selection method, with a quality–cost ratio of 90:10 according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). Table A3.3 provides details of the consultant input requirements.

Table A3.3: Summary of Consulting Services Requirement

International Positions	pm	National Positions	pm
Dryland agriculture specialist and team leader	6.0	Water resources and deputy team leader	6.0
Environment specialist	2.0	Environment specialist	2.5
Water resource and soil salinity specialist	1.5	Agroforestry specialist	2.0
		Livestock farming specialist	2.5
Social development specialist	2.5	Social development specialist	4.5
Economist	2.0	Financial specialist	3.5
		Project management and procurement specialist	2.0
Total:	14.0		23.0

Source: Asian Development Bank estimates.

6. The outline terms of reference for the TA consultants are described in paras. 7 to 18.

7. **Dryland agriculture specialist and team leader** (international, 6 pm). The specialist will have a master's degree or relevant qualification in agriculture and demonstrated experience in the development and management of dryland agricultural systems, especially sustainable farming in water scarce and saline soils. The specialist will have overall responsibility for effective and timely implementation of the TA and quality of all TA outputs, and coordinating and consolidating inputs of government agencies and other specialists. Specifically, the specialist will: (i) prepare a sector assessment report; (ii) develop the project design and monitoring framework (DMF); (iii) establish a project performance monitoring system (PPMS); (iv) prepare the project implementation schedule and detailed implementation arrangements; (v) prepare inception, interim, draft final, and final reports, including a draft RRP and related linked documents in ADB format; (vi) organize workshops and implement training to develop capacity of the executing and implementing agencies; and (vii) provide inputs to project design to maximize agricultural efficiency using environmentally sustainable dryland technologies.

8. **Environment specialist** (international, 2 pm). The specialist will have a master's degree or relevant qualification in environmental studies and work experience in environmental assessment. The specialist will: (i) assess possible environmental impacts of each project activity; (ii) prepare an environmental impact assessment (EIA) which complies with ADB requirements, including description of habitats and biodiversity values, general characterization of the project area in relation to regional environmental resources and values, project boundary and zone of influence, potential environmental benefits and impacts, public consultations, an environmental management plan (EMP) comprising mitigation measures, monitoring program and cost estimates, institutional arrangements, implementation schedule, and grievance redress mechanism; (iii) assess the safety of wastewater reuse; (iv) develop a monitoring program for integration within the PPMS to be prepared by the team leader (see para. 7); (v) identify 'associated facilities' to the project and, if necessary, conduct due diligence on any relevant environmental issues as per ADB Safeguard Policy Statement (2009); (vi) incorporate the findings of other team members as relevant into the EIA; (vii) prepare an EIA, including an EMP, for the whole project; and (viii) provide necessary inputs to the draft RRP.

9. **Water resource and soil salinity specialist** (international, 1.5 pm). The specialist will have a master's degree or relevant qualification in hydrology, water resources, or hydraulic engineering, and demonstrated experience in managing soil salinization in dryland systems. Building on the existing ADB water analysis for Kelamayi Municipality, the specialist will take the lead in designing output 1 as well as detailed inputs to the other components on agriculture and

forestry. Specifically, the specialist will: (i) describe and assess existing water resources, supply and demand, and management, for the project area; (ii) the consultant could review the water balance analysis for Xinjiang Integrated Urban Development Project; (iii) conduct a water balance analysis to assess the sustainability of existing and future project demand, including cumulative and downstream impacts with adjacent planned development and potential impacts of climate change on water quality and availability; (iv) review the water allocation arrangements between the two reservoirs and its status; (v) assess whether the proposed project drainage system is feasible to reduce soil salinity and, if necessary, design alternative solutions; (vi) identify existing water-intensive and water-efficient farming and forestry practices in the project area (including any traditional methods); (vii) identify and quantify key sources of water and soil pollution, including agricultural chemicals; (viii) develop cost-effective measures to conserve water, reduce soil salinity, and protect topsoil, including measures for farming, forestry, and operation of on-site infrastructure (e.g., water meters, dual-flush toilets, and restricted-flow taps), (ix) assess local capacity for water management for agricultural use and conduct two training workshops in best-practice measures of water conservation in dryland regions, tailored to the project area; (x) develop a long-term water and soil monitoring program for the project area; and (xi) prepare a technical report of the findings and necessary inputs to the draft RRP.

10. **Social development specialist** (international, 2.5 pm). The specialist will have a master's degree or relevant qualification in social safeguards, social development for agricultural sector, and demonstrated experience in working with communities and developers to strengthen community livelihood programs, technical skills and integrate community values, skills, and culture with project development. The specialist will: (i) lead design of output 3 in conjunction with other relevant specialists, including social aspects related to examining opportunities to access the broader regional markets for agricultural products; (ii) document the existing farmer populations within and adjacent to the project sites, including ethnic minorities, permanent and seasonal workers, types of positions held, and work conditions; (iii) document data on land use and whether the project will cause any resettlement and/or economic displacement, including any impacts to ethnic minorities; (iv) assist the executing agency in preparing a resettlement plan, if required; (v) conduct a poverty, social, and gender analysis; (vi) prepare a consultation and participation plan and a gender action plan (GAP); (vii) conduct a labor analysis; (viii) identify project opportunities to strengthen project benefits for local stakeholders, including ethnic minorities and/or vulnerable and marginalized communities; (ix) prepare an ethnic minority development plan (EMDP) or a social action development action plan, as per ADB's requirement; and (x) provide necessary inputs to the draft RRP, including gender, participation, social safeguards, and other social risks.

11. **Economist** (international, 2 pm). The specialist will have a master's degree in agricultural economics, economics, finance, or a relevant discipline, and work experience in economic and financial analysis of at least one ADB project, or one of other international development banks. The specialist, in cooperation with national financial specialist, will conduct economic analyses of the project and each subproject following ADB's Guidelines for the Economic Analysis of Projects (1997), Key Areas of Economic Analysis of Projects: An Overview (2003), ADB's Financial Management and Analysis of Projects (2005). The specialist will: (i) assess the macroeconomic and the sector contexts; (ii) assess demand and supply of goods produced with support of the project, including examining opportunities to access the broader regional markets for agricultural products; (iii) identify and establish economic rationale of the public sector involvement; (iv) analyze least-cost investment options to achieve the project objective; (v) undertake economic cost-benefit analysis of the project and each subproject; (vi) assess financial and institutional sustainability; (vii) undertake a distribution analysis to quantify which project main beneficiary and stakeholder groups will gain benefits and

bear costs and what extent; (viii) undertake sensitivity analysis on key risks affecting the economic viability of the project and the subproject, and propose for measures of risks; (ix) prepare an economic analysis report; (x) assist the national financial specialist in carrying out all the tasks required for the financial analysis and financial management assessments to ensure high quality of those documentation; and (xi) provide other necessary inputs relevant to cost estimates and financing plan, economic and financial analyses, and financial management assessments.

12. **Water resources specialist and deputy team leader** (national, 6 pm). The specialist and deputy team leader will have a master's degree or relevant qualification in water resources management or other related fields, assessing potential climate change impacts and adaptation measures, and demonstrated experience in formulating projects. The specialist will support (i) the international team leader, to ensure the effective and timely implementation of the TA and quality of all TA outputs, and to coordinate and consolidate inputs of government agencies and other specialists, and (ii) the international water resource and soil salinity specialist to address the water resources issues of the project. Specific work tasks will include an assessment of climate change impacts (based on a literature review) and identification of potential adaptation measures and support for: (i) output 1; (ii) project sector assessment report; (iii) establishment of a PPMS; (iv) preparation of the project implementation schedule and detailed implementation arrangements; (v) preparation of the inception, interim, draft final, and final reports, including a draft RRP and related linked documents in ADB format; and (vi) the organization of workshops and implementation of training to develop capacity of the executing and implementing agencies.

13. **Environment specialist** (national, 2.5 pm). The specialist will have a master's degree or relevant qualification in environmental studies and demonstrated experience in environmental assessment. The specialist will support the international environment specialist to: (i) describe and assess the existing conditions and environmental values in the project area and relevant policies and regulations; (ii) assess potential environmental impacts of project construction and operation and develop mitigation measures for the project components; (iii) prepare an EIA which complies with ADB requirements (see para. 8); (iv) obtain and translate as necessary relevant national documents to support the work of the team members; (v) incorporate the findings of other team members as relevant into the EIA; (vi) prepare an EIA report, including an EMP for the project; and (vii) provide inputs as necessary to the draft RRP.

14. **Agroforestry specialist** (national, 2 pm). The specialist will have a master's degree or relevant qualification in agriculture and/or forestry and demonstrated experience in agroforestry in dryland systems. The specialist will: (i) describe and assess the existing agroforestry⁹ practices in the project area; (ii) assess the proposed project plans for agroforestry; (iii) identify strengths and weaknesses of existing practices; (iv) design improved and/or new agroforestry practices tailored for the specific conditions of the project area, including local soils, climate, existing capacity, and economic plans, taking into account potential climate change impacts. This may include (but not limited to) selection of appropriate crop and tree species (especially native species), pest control and watering systems, field rotation, and especially, measures which help protect topsoil and reduce soil salinity; (v) provide inputs to the long-term water and soil monitoring program for the project area (including key measurable indicators to assess the success of the agroforestry measures which will be implemented); (vi) design a training program in best-practice techniques in dryland agroforestry, tailored to the project area, for project

⁹ Agroforestry is the integration of agriculture, forestry, and animal husbandry. The aim of agroforestry with respect to agriculture is to increase crop yields; with respect to silviculture (forestry), to give emphasis to the forest; and with respect to pasture land, to manage grazing.

stakeholders and local communities adjacent to the project area; and (vii) prepare a technical report of the findings and necessary inputs to the draft RRP.

15. **Livestock farming specialist** (national, 2.5 pm). The specialist will have a master's degree in domestic animal husbandry or relevant qualification and demonstrated experience in dryland livestock farming. The specialist will: (i) describe and assess the existing livestock husbandry practices in the project area (as well as any adjacent local practices); (ii) based on project designs for livestock targets, estimate: (a) the increased volumes of feed that will be required, (b) increased volumes of waste that will be produced, including methane emissions, (c) extent of lands required for construction of raising and processing facilities, and (d) whether new lands outside the project area will be needed to produce feed; (iii) assess current management capacity and the capacity to manage the planned livestock expansion and potential new practices; (iv) design improved and/or new livestock farming practices tailored for the specific conditions (soil, climate, etc.) of the project area and potential future climate change impact—these may include (but not be limited to) selection of appropriate animal varieties, integrated practices with agriculture, animal welfare for raising and culling, and improved management of disease; (v) design a training program in best-practice techniques in dryland animal husbandry, tailored to the project area, for project stakeholders and local communities adjacent to the project area; and (vi) prepare a technical report of the findings and necessary inputs to the draft RRP.

16. **Social development specialist** (national, 4.5 pm). The specialist will have a master's degree or relevant qualification in social sciences and/or agricultural development studies and work experience in social development studies and social safeguards. The specialist will support the international social development specialist (see para. 10) to: (i) design output 3; (ii) conduct a poverty and social analysis; (iii) collect data on land use in the project area and assess whether the project will cause any resettlement impacts and/or economic displacement, including any impacts to ethnic minorities; (iv) identify project opportunities to strengthen project benefits for local stakeholders, including ethnic minorities and/or vulnerable and marginalized communities; (v) prepare a consultation and participation plan, GAP, and EMDP or a social development action plan, as per ADB's requirement; (vi) conduct a labor analysis; (vii) prepare a resettlement plan if necessary; and (viii) provide necessary inputs to the draft RRP.

17. **Financial specialist** (national, 3.5 pm). The specialist will have a recognized professional accountancy qualification; and work experience in financial analysis of at least one ADB, or one of other international development banks. The specialist will closely work with the international economist to ensure high quality financial analyses and financial management assessment. The specialist will: (i) conduct a financial management assessment of the executing and implementing agencies, including their capacity to manage ADB's imprest fund and statement of expenditure procedures; (ii) assess their policies and capacity for financial and disbursement management and identify any further need for capacity development; (iii) review existing procedures for disbursement, funds flow, and approvals; and recommend streamlined funds flow and procedures for contracting and disbursement under the project, and internal control and audits; (iv) review on-lending arrangements; (v) conduct the financial projections and financial analysis; and (vi) assess and reach an agreement on financial reporting, auditing, and disclosure arrangements.

18. **Project management and procurement specialist** (national, 2 pm). The specialist will have a degree in engineering and at least seven years work experience in project management, procurement, and consulting services. The specialist will: (i) conduct a procurement risk assessment and a procurement capacity assessment of the executing and implementing agencies to undertake procurement and consultant recruitments envisaged under the project;

(ii) prepare a procurement plan, including: (a) contract packages indicating the procurement method for each contract and the source of financing; and (b) indicative procurement schedule and implementation schedule indicating the tasks on the critical path; (iii) assess the capacity of the executing and implementing agencies for project implementation, and prepare training proposals to be included under the project; (iv) provide necessary trainings on project management, procurement, and consulting services; and (v) assist in developing the DMF and performance targets.

E. Implementation Arrangements

19. The KMG will be the executing agency for the TA. The Kelamayi Agricultural Comprehensive Development Zone (KACDZ) Committee, a bureau under the KMG, will be the implementing agency for the TA. The project leading group, chaired by the KMG vice mayor will provide overall guidance for the preparation and implementation of the TA.¹⁰ A comprehensive project management office (PMO), reporting directly to the KMG vice mayor, has been established comprising staff from the Kelamayi Finance Bureau, Kelamayi Development and Reform Commission, Kelamayi Water Resources Bureau, Kelamayi Environment Protection Bureau, Kelamayi Land Bureau, and Kelamayi Forest Bureau. The PMO will be the main contact point for ADB, and provide oversight to the project implementation office (PIO). The PIO has been established within the KACDZ Committee.

20. The PMO, on behalf of the executing agency, will be the main contact point for ADB and will be responsible for coordinating TA implementation activities among municipal and provincial, as needed, government agencies such as the finance bureau, development and reform commission, water resources bureau, environmental protection bureau, agricultural bureau, forestry bureau, and others. The PMO will also be responsible for supervision of the overall design of the project and ensure that the project complies with all national and local regulations. The PIO would be responsible for preparing the detailed designs of the project.

21. The TA will be implemented over 10 months tentatively from 1 April 2015 until 31 January 2016. The proposed TA processing and implementation schedule is listed in Table A3.4. Proceeds of the TA will be disbursed in line with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). Procurement of equipment will be done in accordance with ADB's Procurement Guidelines (2013, as amended from time to time) and will be turned over to the executing agency upon completion of the TA activities.

Table A3.4: Technical Assistance Processing and Implementation Schedule

Major Milestones	Expected Completion Date
Concept paper approval	November 2014
Recruitment of consultants	November 2014 to March 2015
TA consultants mobilization	April 2015
Major Milestones	Expected Completion Date
TA inception mission	May 2015
TA midterm review mission	August 2015
Submission of TA draft final report	November 2015
Final TA Review/Loan fact-finding mission	December 2015
Submission of TA final report	January 2016

TA = technical assistance.

Source: Asian Development Bank estimates.

¹⁰ Members of the project leading group include Kelamayi Finance Bureau, Kelamayi Development and Reform Commission, civil affairs bureau, human resource and social security bureau, land resource administration, environment protection bureau, construction bureau, urban planning bureau, communication bureau, water resource bureau, agro and husbandry bureau, auditing bureau, administration of agriculture development zone, Xinjiang Oil Field O&M Company, and Xinjiang Oil Field Water-supply Company.

