

TECHNICAL ASSISTANCE FOR PROJECT PREPARATION

A. Justification

1. A technical assistance (TA) is required to produce a project design which responds to the needs of the clients and fulfills requirements and safeguards policies of the Asian Development Bank (ADB). The consulting team will undertake a detailed due diligence in technical feasibility, economic and financial viability, and safeguards. Capacity assessment and strengthening will also be conducted, as needed. ADB will provide TA support for agricultural products e-commerce applications, agricultural logistics information and communication technology (ICT) solutions, and socialized agricultural services applications to strengthen the project design in demonstrating ICT application in agricultural value chains.

B. Major Outputs and Activities

2. 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
Sector assessment	15 July 2017	An inception report	31 July 2017
E-commerce technical feasibility analysis	01 August 2017	Consultant study report	15 August 2017
Logistics ICT technical feasibility analysis	01 August 2017	Consultant study report	15 August 2017
Social due diligence and planning documents.	01 September 2017	An interim report	15 September 2017
Assessment of technical feasibility, financial and economic, social safeguard and dimension analysis, environment safeguard, climate change due diligence	01 December 2017	A draft final report, including finalized FSRs, IEE reports; land lease due diligence report and, if needed, resettlement plan; a social and poverty analysis report; a gender action plan; climate smart implementation plan; an economic and financial analysis report; a financial management assessment report; a procurement capacity assessment report, and draft RRP and linked documents, including PAM	15 January 2018
Capacity building on financial management, procurement, disbursement, and safeguards	31 January 2018	A final report	15 March 2018

Source: Asian Development Bank estimates.

C. Cost Estimate and Proposed Financing Arrangement

3. The TA is estimated to cost \$550,000 equivalent, of which \$500,000 will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources). The government will finance the remaining \$50,000 equivalent in kind (counterpart staff, office accommodation, and administrative support). The detailed cost estimate is presented in Table A3.2. Additional support will be provided for an international and national specialist position to support the development of ICT application systems for agriculture production and marketing systems.¹

¹ Arrangements are made for funding under technical assistance projects: (i) Information and Communication Technology for Development Initiative Facility in Asia and the Pacific; and (ii) Building Sustainable Food and

Table A3.2: Cost Estimates and Financing Plan
(\$'000)

Item	Total Cost
A. Asian Development Bank^a	
1. Consultants	
a. Remuneration and per diem	
i. International consultants (7.5 person-months)	155.0
ii. National consultants (27 person-months)	239.0
b. International and local travel	45.0
c. Reports and communications	10.0
2. Equipment (computer, printer, etc.) ^b	5.0
3. Workshops, training, seminars, and conferences ^c	13.0
5. Surveys	13.0
8. Contingencies	20.0
Subtotal (A)	500.0

^a Financing by ADB's Technical Assistance Special Fund (TASF-other sources).

^b Equipment (to be handed over to the implementing agency upon completion of the technical assistance).

Type	Quantity	Cost
Computer	3	\$4,000
Printer	1	\$1,000

^c Workshops, training, seminars, and conferences. Includes translation and interpretation costs.

Purpose	Venue
Inception, interim, and final workshops	Lanzhou, Gansu
Training on safeguards, procurement, financial management, and design and monitoring framework	Lanzhou, Gansu

Source: Asian Development Bank estimates.

D. Consulting Services

4. It is expected that 7.5 person-months of international and 27 person-months of national consultants are required. To ensure the consistency in due diligence and capacity strengthening, one consulting firm will be recruited to carry out the due diligence in technical feasibility, economic and financial viability, poverty, social and gender analyses, safeguards and capacity strengthening. The consultants will be recruited in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time) using quality- and cost-based selection method (with a quality-cost ratio of 90:10) following the simplified technical proposal. ICT related consultants will be recruited through individual consultant selection to ensure sourcing of high quality specialists in this new technology market. Table A3.3 provides details of the required expertise. The outline terms of reference for the TA consultants are described in the succeeding paragraphs.

Table A3.3: Summary of Consulting Services Requirement

International Positions	Person-months	National Positions	Person-months
Agricultural economist/team leader	4.0	Financial specialist/deputy team leader	4.0
		Agribusiness e-commerce specialist ^a	3.5
		Smart system architect ^a	3.5
		Agricultural logistics specialist ^a	3.0
Environment impact assessment specialist	2.0	Socialized agricultural services specialist ^a	4.0
Social development specialist	1.5	Social development specialist	2.5
		Social safeguards/resettlement specialist	1.5
		Environmental impact assessment specialist	3.0
		Procurement specialist	2.0
Total:	7.5		27.0

Nutrition Security in Asia and the Pacific. The Sustainable Development and Climate Change Department will be responsible for the recruitment of consultants under these funds.

^a Position to be recruited through individual consultant selection method.
Source: Asian Development Bank estimates.

5. **Agricultural economist/team leader** (international, 4.0 person-months [pm]). The economist will have at least a master's degree in agricultural economics or a relevant discipline, and working experience with economic analysis of at least five donor-funded projects as economist and at least two projects as team leader. In accordance with ADB's Economic Analysis for Investment Project Guidelines and the 10 key areas of the economic analysis listed in the operations manual Section G1, the economist will (i) assess the macroeconomic and sector contexts, (ii) assess demand for project outputs, (iii) establish economic rationale of public sector involvement, (iv) assess least-cost investment options, (v) conduct project economic cost-benefit analysis, (vi) assess financial and institutional sustainability, (vii) conduct a distribution analysis, and (viii) conduct sensitivity and risk analyses.

6. **Financial specialist and deputy team leader** (national, 4.0 pm). The specialist will have (i) at least a graduate degree in finance, accounting, or a relevant discipline, (ii) a professional accountancy qualification, and (iii) work experience in at least five donor-funded projects as financial specialist. The specialist will conduct financial evaluation of the project, financial analysis of executing and implementing entities, and financial management assessment of executing and implementing entities according to Financial Due Diligence-A Methodology Note and Financial Management Analysis of Projects.

7. **Procurement specialist** (national, 2.0 pm). The specialist will have (i) at least an undergraduate degree in civil engineering, or a relevant discipline, and (ii) work experience with procurement and consultant recruitment for at least three donor-funded projects. The specialist will (i) conduct the Procurement Risk Assessment in accordance with the Guide on Assessing Procurement Risks and Determining Project Procurement Classification, (ii) prepare a procurement plan and assist the executing agency to prepare master bidding documents for ICT goods and services including maintenance, and (iii) provide training on procurement.

8. **Environment impact assessment specialists** (international, 2.0 pm; national, 3.0 pm). Each specialist will have a master's degree in environmental studies or a relevant discipline, and work experience with environmental assessment for at least three donor-funded projects. The specialists will cooperate with each other to (i) assess possible environmental impacts, (ii) prepare an initial environmental examination including an environmental management plan, and (iii) provide training on environmental safeguards.

9. **Social development specialists** (international 1.5 pm; national, 2.5 pm). Each specialist will have a master's degree in social sciences, development studies, or a relevant discipline, and work experience with social and gender development for at least three donor-funded projects. The specialists will cooperate with each other to (i) conduct poverty, gender and social analyses, (ii) prepare a consultation and participation plan, a social action plan, and a gender action plan, (iii) assess impacts on ethnic minorities and prepare ethnic minority development plan, if needed, and (iv) provide training on social safeguards, gender and other social dimensions.

10. **Social safeguards/resettlement specialist** (national 1.5 pm). The specialist will have a master's degree in social sciences, development studies, or a relevant discipline, and work experience with social safeguards for at least three donor-funded projects. The specialist will (i) collect relevant data, (ii) prepare a due diligence report on land use rights transfer framework, and (iii) screen activities for potential resettlement impacts of the project and work with the project team to avoid such impacts.

11. **Agribusiness e-commerce specialist** (national, 3.5 pm). The specialist will have a master's degree in marketing, information technology or related field, and at least 5 years of experience in developing technical designs for agricultural e-commerce. The specialist will (i) identify agricultural inputs and outputs e-commerce solutions with detailed specifications, (ii) identify procurement methods for technical components, (iii) assess technology possession methods and associated costs, and (iv) identify integration requirements with existing e-commerce platforms.

12. **Smart system architect** (national, 3.5 pm). The architect will have a master's degree in science, information technology or a relevant discipline, at least 3-year work experience in implementing smart solutions using mobile applications and internet of things. The specialist will (i) design the application of smart solutions in agriculture value chain, (ii) identify implementation and maintenance requirements, and (iii) identify fail-safe and backup procedures.

13. **Agricultural logistics specialist** (national, 3.0 pm). The specialist will have (i) a postgraduate degree in agriculture, or other relevant fields, and (ii) over 5 years of experience in agricultural value chains development in the PRC. The specialist will (i) assess logistics requirements for featured agricultural products; (ii) develop an integrated agricultural (cold) chain logistics system design; (iii) develop an implementation plan for ICT enhanced logistics.

14. **Socialized agricultural services specialist** (national, 4.0 pm). The specialist will have (i) a postgraduate degree in information technology, agriculture, agronomy, or other relevant fields, and (ii) over 3 years of experience in agricultural value chains development in the PRC. The specialist will (i) assess the demand for socialized agricultural services, (ii) develop solutions for ICT enhanced agricultural services together with a conceptual design for implementation, and (iii) prepare training curricula and training material.

E. Implementation Arrangements

15. The Gansu Provincial Government will be the executing agency for the TA, and the Supply and Marketing Cooperative in Gansu Province (SMCGP) will be the implementing agency for the TA. The multiagency leading group at the provincial level will serve as steering committee that will provide overall guidance on the TA's implementation. The steering committee representatives will meet and provide directions through the inception, interim, and final TA workshops. A project management office will be established at the SMCGP, who will be responsible for day-to-day communications and operational matters involving ADB, consultants, and related government agencies. Equipment will be procured following ADB's Procurement Guidelines (2015, as amended from time to time), and handed over to SMCGP upon TA completion. Disbursement under the TA will be in line with ADB's *Technical Assistance Disbursement Handbook* (2010, as amended from time to time).

16. The proposed TA processing and implementation schedule is listed in Table A3.4.

Table A3.4: Technical Assistance Processing and Implementation Schedule

Major Milestones	Expected Completion Date
Concept paper approval	April 2017
TA consultant mobilization	June 2017
TA inception mission	July 2017
TA interim review	October 2017
Loan fact-finding mission	February 2018
Submission of TA final report	March 2018

TA = technical assistance.

Source: Asian Development Bank estimates.