

TERMS OF REFERENCE FOR CONSULTANTS

1. The Asian Development Bank (ADB) will engage the consultants following the ADB Procurement Policy (2017, as amended from time to time) and its associated project administration instructions and/or staff instructions.¹ The technical assistance (TA) will finance approximately 16 person-months of international consulting and 35 person-months of national consulting services through a consulting firm. ADB will select an international consulting firm based on the quality- and cost-based selection method using a 90:10 quality–cost ratio with simplified technical proposals. The TA will also finance 1 person-month of an international and 2 person-months of national individual consultants through individual consultants selection to refine the project scope at the initial stage before the consulting firm is engaged. Time-based contracts will be used for both firm and individual consultants to flexibly respond to possible changes in the project scope during the TA implementation. The consulting team will refine the project scope incorporating international best practices and conduct technical, safeguards, economic, financial, and other due diligence to meet government’s and ADB’s project processing requirements.

2. The \$400,000 grant financing by Urban Environmental Infrastructure Fund (UEIF) under the Urban Financing Partnership Facility (UFPF) will be used to finance a contract with the international consulting firm together with ADB’s Technical Assistance Special Fund. The UEIF financing will be disbursed front-loaded.

I. TERMS OF REFERENCE FOR AN INTERNATIONAL CONSULTING FIRM

A. Primary Expertise

3. A transaction TA is required to produce a mutually agreeable project suitable for ADB financing. The consultant team will have technical expertise in logistics and experience in preparing feasibility studies and projects for ADB. Specific technical expertise in multimodal logistics (especially road/rail, road/air) and cold chain logistics management will be required.

B. Terms of Reference Keywords

4. Logistics, cold supply chain management, rural logistics, logistics IT system, bulk commodity distribution, small- and medium-sized enterprises, and financial intermediary loan.

C. Objective and Purpose of the Assignment

5. The consulting firm will help the government and ADB in the preparation of the project. The consulting team will refine the project scope incorporating international best practices and conduct technical, safeguards, economic, financial, and other due diligence to meet government’s and ADB’s project processing requirements. The consulting firm is expected to hold two tripartite workshops to introduce the team’s findings, discuss issues, and set directions for way forward. The workshops should be attended by various stakeholders including relevant civil society organizations and private operators in addition to the executing agency, ADB mission, and the consulting team. As main players of logistics operations are in the private sector. Sufficient involvement of and consultation with private operators and shippers will be critically important to make the project design relevant to the local business context.

¹ Terms of Reference for Consultants (accessible from the list of linked documents in Appendix 3-2).

6. The consultants will complete the necessary due diligence to prepare the project for ADB's approval and will: (i) review the project component plans and designs, and suggest ways to enhance the quality of the project; (ii) help define the scope, design, and operating plan of the proposed road safety components to be included in the project; (iii) ensure that the executing agency (EA) and implementing agencies (IAs) have the capacity to successfully implement the project and conduct any training or capacity development required to ensure such capacity; (iv) validate the feasibility studies; (v) conduct the economic and financial analysis; (vi) in cooperation with the EA, determine areas where the TA will support the logistics sector in Shaanxi and enhance the benefits delivered by the proposed project components; and (vii) ensure that the EA adheres to ADB's Safeguard Policy Statement (2009) covering resettlement, the environment, and to ADB's social and gender policy during project planning and preparation.

D. Experts Needed

7. The following experts will be required:

Table 1: International Experts (Consulting Firm)

No.	Expertise or Position	Inputs in Person-Month	Primary Place of Assignment	Legal Expert	I.T. Expert	Required in Proposal
1	Multimodal Logistics Specialist/ Team Leader	3.0	Xi'an, PRC	No	No	Yes
2	Cold Chain Logistics Management Specialist	2.0	Xi'an, PRC	No	No	Yes
3	Logistics Information Systems Specialist	2.0	Xi'an, PRC	No	Yes	Yes
4	Logistics/Transport Economist	1.0	Xi'an, PRC	No	No	Yes
5	Financial Specialist	1.5	Xi'an, PRC	No	No	Yes
6	Facility Engineering Design and Procurement Specialist	1.5	Xi'an, PRC	No	No	Yes
7	Social Development and Safeguards Specialist	2.0	Xi'an, PRC	No	No	Yes
8	Environmental/Climate Impact and Climate Risk Assessment Specialist	2.0	Xi'an, PRC	No	No	Yes

PRC = People's Republic of China.

Table 2: National Experts (Consulting Firm)

No.	Expertise or Position	Inputs in Person-Month	Primary Place of Assignment	Legal Expert	I.T. Expert	Required in Proposal
1	Multimodal Logistics Specialist/ Deputy Team Leader	6.0	Xi'an, PRC	No	No	Yes
2	Cold Chain Logistics Management Specialist	4.0	Xi'an, PRC	No	No	Yes
3	Logistics Information Systems Specialist	4.0	Xi'an, PRC	No	Yes	Yes
4	Logistics/Transport Economist	2.0	Xi'an, PRC	No	No	Yes
5	Financial Specialist	2.0	Xi'an, PRC	No	No	Yes
6	Financial Intermediary Due Diligence Specialist	4.0	Xi'an, PRC	No	No	Yes
7	Facility Engineering Design and Procurement Specialist	3.0	Xi'an, PRC	No	No	Yes
8	Involuntary Resettlement Specialist	2.0	Xi'an, PRC	No	No	Yes

No.	Expertise or Position	Inputs in Person-Month	Primary Place of Assignment	Legal Expert	I.T. Expert	Required in Proposal
9	Social, Poverty, and Gender Specialist	2.0	Xi'an, PRC	No	No	Yes
10	Environmental/Climate Impact and Climate Risk Assessment Specialist	4.0	Xi'an, PRC	No	No	Yes

PRC = People's Republic of China.

E. Draft Terms of Reference

8. **Multimodal Logistics Specialist** (international, 3.0 person-months (team leader); national, 6.0 person-months (deputy team leader)) should have minimum qualification requirements of: (i) 20 years of general and 15 years of specific (similar to the assignment) experiences with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 15 years of general and 10 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialist.

9. The consultants will: (i) identify the main bottlenecks which restrict efficient intermodal transfers and traffic flows to and from the proposed project sites; (ii) review and optimize the government's feasibility study report in terms of design, engineering, and cost, (iii) work with the EA, ADB, and relevant team members to identify and develop intermodal components to address key sector problems and opportunities; (iv) conduct workshop to introduce international best practices on relevant logistics practices which are potentially applicable to this project; (v) contribute and provide feedback to ADB's Report and Recommendations to the President and linked documents (e.g., Project Administration Manual); (vi) develop the implementation arrangements and the organizational set-up for project management; (vii) prepare an implementation schedule and a schedule for disbursement of ADB loan funds and counterpart funds; (viii) prepare a logical framework that outlines the goals, purposes, outputs, inputs, and activities under the project; and (ix) assist in the preparation of a procurement plan including a list of contract packages (with justification and estimated contract amount) for ADB financing; and (x) consolidate required TRTA reports.

10. **Cold Chain Logistics Management Specialist** (international, 2.0 person-months; national, 4.0 person-months) should have minimum qualification requirements of 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field. The consultant will: (i) identify the main bottlenecks which restrict efficient cold chain transfers; (ii) assist the EA/IA in site-selection for the cold chain demonstration base; (iii) identify innovative features to be incorporated in the design; (iv) assist the government in preparation of feasibility study report in terms of design, engineering and cost; and (v) provide inputs for reports.

11. **Logistics Information Systems Specialist** (international, 2.0 person-months; national, 4.0 person-months) should have minimum qualification requirements of 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field. The consultant will: (i) identify the main bottlenecks of the existing systems and demand for new or integrated systems; (ii) propose appropriate IT system integration options with their cost estimates and benefits, (iii) assist the government in preparation of feasibility study report in terms of design; and (iv) provide inputs for reports.

12. **Logistics/Transport Economist** (international, 1.0 person-month; national 2.0 person-months) should have minimum qualification requirements of: (i) 15 years of general and 10 years

of specific (similar to the assignment) experiences with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialists. The consultants will: (i) review the project rationale based on a problem diagnosis, estimate demand/supply, conduct competitive analysis, and provide a basis for ADB involvement; (ii) identify the project's economic costs and benefits comparing with-project and without-project situations, and estimate the economic internal rate of return of the separate project components as well as of integrated analyses; (iii) undertake sensitivity analysis and recommend issues to minimize potential risks; and (iv) provide inputs for TRTA reports. The economic specialists will cooperate with the financial specialist as regards the identification and quantification of revenue generating elements of the project. The consultants should follow provisions of ADB's Operations Manual Section G1, Guidelines for the Economic Analysis of Projects (2017), and other relevant documents.

13. **Financial Specialist** (international, 1.5 person-months; national 2.0 person-months) should have minimum qualification requirements of: (i) 15 years of general and 10 years of specific (similar to the assignment) experiences including financial due diligence (FDD) with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 10 years of general and 5 years of specific (similar to the assignment) experiences including FDD with a degree in a relevant field for the national specialist. The consultants will be responsible for financial aspects of the project preparation, and the international specialist will also supervise the national Financial Intermediary Due Diligence Specialist for the financial intermediary loan component.

14. The consultant will (i) carry out financial management assessment (FMA) of the executing and implementing agencies, including (a) assessing whether previous financial management assessments have been conducted by ADB or other agencies and, if so, reviewing the results and ascertaining whether these can be used as input, (b) assessing capacity for planning and budgeting, management and financial accounting, reporting, auditing, internal controls, and information systems (c) reviewing proposed disbursement and funds-flow arrangements, and (d) concluding on the financial management risk rating and identifying and confirming measures for addressing identified deficiencies; (ii) support the preparation and agreement of cost estimates and a financing plan, which are based on verifiable data and are sufficient to support project implementation; (iii) assess and prepare financial projections for the project components in accordance with ADB guidelines and carry out financial evaluations (financial cost-benefit analyses) including sensitivity analyses for the project over the construction and operation period by calculating the financial internal rate of return and comparing it with a weighted average cost of capital; (iv) conduct financial analyses of the executing and implementing agencies, and incremental recurrent costs, to determine financial sustainability, and reviewing proposed cost-recovery and tariff policies, including affordability; (v) develop the design of the funds flow, disbursement mechanisms, accounting, auditing, and financial reporting arrangements for the ensuing project, based on the FMA of executing/implementing agencies; (vi) identify significant risks to project financial sustainability or viability; (vii) propose any further capacity building activities and/or covenants (financial management and ADB's disbursement procedures) that will be necessary to mitigate the identified risks; (viii) assess market demand and analyze/propose proper amount for SME lending (FIL) component together with the Financial Intermediary Due Diligence Specialist (especially the international specialist); and (ix) provide relevant inputs for TRTA reports.

15. The international specialist will also oversee and work with the national financial intermediary due diligence specialist on his/her tasks below. The consultants should follow

provisions of ADB's Operations Manual Sections G2 and D6, and the following guidance material as updated from time to time: (i) Technical guidance note (TGN) for FMA (2015), (ii) TGN for project financial reporting (2015), (iii) TGN for preparation of cost estimates (2014), and (iv) Financial Management Analysis of Projects (2005) only for other financial due diligence items not covered by the specific TGNs listed above.

16. **Financial Specialist** (also responsible for the tasks above) and **Financial Intermediary Due Diligence Specialist** (national, 4.0 person-months) should have sufficient knowledge and at least 10 years of general experience and 7 years of practical experiences in the banking sector or accounting and auditing, especially with financial reporting, compliances, and banking sector rules and regulations in the PRC. The specialist is expected to conduct financial due diligence (FDD) and integrity due diligence (IDD) of participating financial intermediary banks and project implementation entities (PIEs) in Shaanxi Province, PRC, to select financial intermediaries (FIs) for the proposed financial intermediary loan (FIL). The expected outcome will be a shortlist of potential local banks and PIEs in Shaanxi which will be suitable partners for the proposed investment program.

17. The specialist will be responsible for undertaking a CAMELS (C: capital adequacy, A: asset quality, M: management quality, E: earnings, L: liquidity, and S: sensitivity to market) review and integrity due diligence on candidate banks and PIEs in Shaanxi. The data and information generated by the review will be used to identify suitable partners to support ADB intervention in supporting small- and medium-sized enterprise (SME) financing especially in logistics business activities. The work would be accomplished through combination of desk research, market knowledge, interviews, consultant intellectual capital and corporate investigation. Site visits will also be made. Specifically, the responsibilities of the specialist will include followings:

- (i) undertake a through due diligence of the candidate FIs in terms of (a) financial strength, (b) experience in micro and rural financing, (c) financial management procedures and prior experience in acting as a finance intermediary;
- (ii) conduct qualitative review of the banks covering views from the market, knowledge of accounting irregularities, violation of CBRC regulations;
- (iii) review of financials with an emphasis on profit figures, size and strength measures, performance measurements;
- (iv) conduct operating/structural review covering information such as formation/background, ownership, management quality, corporate governance framework, risk management framework, anti-money laundering (AML) framework;
- (v) review the business strategy and operations, especially in the area of SME lending; and
- (vi) conduct integrity due diligence (including gender mainstreaming aspects as indicated in the TOR for Social, Poverty, and Gender Specialist below) based on ADB guideline and produce a summary report to be included in TRTA reports.

18. The assessment has to be prepared in compliance with the Technical Guidance Note on Financial Due Diligence (2014), the Technical Guidance Note on Financial Management Assessment (2015), and Staff Instructions for Integrity Due Diligence and other relevant guidance provided by ADB for financial due diligence (Financial Management page: <http://www.adb.org/projects/operations/financial-management-resources>).

19. **Facility Engineering Design and Procurement Specialist** (international, 1.5 person-months; national, 3.0 person-months) should have minimum qualification requirements of: (i) 15

years of general and 10 years of specific (similar to the assignment) experiences with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialist. The consultants should also be certified engineers or with equivalent qualification also familiar with ADB's procurement guidelines and procedures. The consultants will: (i) review and optimize the government's feasibility study report in terms of design, engineering, and cost, (ii) assess the EA/IA's capacity in carrying out procurement as per ADB's procurement guidelines, incorporating elements of PPP as required; (iii) assess applicability and benefits of the alternative procurement arrangement (APA); (iv) assist the EA/IA in advance procurement, which includes the preparation of procurement plan, procurement packaging, procurement documents, technical schedules, etc., to attain a high level of readiness to bid; (v) deliver training workshops on procurement to the EA and IA; and (vi) provide inputs for TRTA reports.

20. **Social Development and Safeguards Specialist** (international, 2.0 person-months); **Involuntary Resettlement Specialist** (national, 2.0 person-months); and **Social, Poverty, and Gender Specialist** (national, 2.0 person-months) should have minimum qualification requirements of: (i) 15 years of general and 10 years of specific (similar to the assignment) experiences with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialists.

21. The consultants will (i) prepare socioeconomic and poverty profiles for the areas; (ii) based on the initial poverty and social assessment, conduct poverty, gender, and social analysis in accordance with ADB guidelines; (iii) assess other social issues including AIDS prevention, gender, and labor impacts; (iv) prepare a social development action plan. On involuntary resettlement safeguards, assess social impacts for involuntary resettlement and assist the EA in the preparation and disclosure of the resettlement plan in accordance with ADB's Safeguard Policy Statement (2009). For land that were already acquired or in the process of being acquired, carry out due diligence by assessing compliance with safeguards requirements of the Government and ADB, determine differences/gaps between Government laws and regulations and ADB Safeguard Policy Statement (SPS), and prepare a due diligence report to present findings and assessment including corrective actions, if any, to address any outstanding issues or gaps found in order to meet compliance with Government laws and requirements and ADB SPS.

22. The tasks related to the FI component will be to: (i) assess the FIs' social policies and their impacts, including poverty, gender, employment and labor, and procedures in terms of screening; review procedures; organizational structure, and staffing, and training; consultation, participation, and disclosure; grievance redress, and monitoring and reporting; (ii) assess the track record of FIs in terms of environmental and social management (e.g. types of loans being provided, clients' selection criteria (gender, vulnerability etc.), for outstanding / legacy issues (land disputes, labor disputes, legal cases, etc.), ISO management; (iii) on prohibited investments, determine if the FIs have exclusion lists for projects that they finance, and describe how FIs screen exclusion list. Identify the difference between the FI exclusion list and ADB's Prohibited Investment Activities List and propose amendments to the FI's list; (iv) work closely with and provide inputs to the environment specialist during due diligence and report preparation; (v) seek endorsement from the FI/s on the environmental and social management system (ESMS) arrangement; and (vi) submit (a) due diligence findings and recommendations report and (b) ESMS arrangements.

23. The gender analysis should include detailed information in the areas and potentials to enhance economic opportunity through:

- (i) skilled jobs in the logistics industry and supply chain management. Please obtain information on the composition of the labor market (women's participation in various areas of logistics and supply chain), interest by women to access this industry, barriers to access if any; provide recommendations for a diversity agenda that could be proposed as part of the project to enhance women participation/interest in the sector;
- (ii) targeted support to women-owned/led SMEs in the logistic sector. The project proposes an FI component. Please as part of the FI assessment obtain information and assess the rate of female-owned/led SME in this sector; assess if they face particular limitations in access to finance, human resources, information, technology, other; provide recommendations as needed for targeted financial products (to be jointly assessed with the Financial Intermediary Due Diligence Specialist); and
- (iii) increased benefit from improved logistics. Assess if there are potential gender-based limitation to the access and use of proposed facilities under output 3 (bulk agricultural commodity distribution) and provide recommendation to address as part of the project as needed.

24. **Environmental/Climate Impact and Climate Risk Assessment Specialist** (international, 2.0 person-months; national, 4.0 person-months) should have minimum qualification requirements of: (i) 15 years of general and 10 years of specific (similar to the assignment) experiences with a degree in environmental science, environmental engineering, environmental management or a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 10 years of general and 5 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialist. The consultants will help the EA to carry out further investigations and analysis, as required, to prepare an Initial Environmental Examination (IEE), Environmental Management Plan (EMP), and ESMS in accordance with the guidance in ADB's Safeguard Policy Statement (2009). The consultants will coordinate with the social and resettlement specialists and other members of the TA team, as needed, to inform the IEE, EMP, and ESMS and to support the development of an environmental management system proposal. The consultants will also conduct analysis and quantify benefits on climate change mitigation. More specifically, the consultants will undertake the following activities:

- (i) Visit the project site to assess the status of project preparation and readiness and draw the estimated period for approval by relevant government authorities.
- (ii) Visit the project site and review the domestic environmental impact assessment (EIA) reports prepared by local EIA institutes and feasibility study reports.
- (iii) Identify information gap, and collect sufficient information through primary and secondary data collection.
- (iv) Evaluate environmental impacts of the project, and identify environmental risks.
- (v) Propose a set of environmental mitigation measures throughout the project implementation, and recommend environmentally-friendly technologies particularly for the design and construction, which emphasizes on (a) biodiversity conservation, (b) public health and safety, (c) physical cultural resources, (d) pollution prevention and abatement including both technologies and materials used in the project (e.g. substances used in cold chain logistics), and (e) climate change mitigation measures.
- (vi) Establish environmental baseline indicators and performance targets.

- (vii) Assist the executing and implementing agencies in the stakeholders' participation and consultation during preparation of an initial environmental examination (IEE) and disclosure of relevant information.
- (viii) Assess and quantify environment benefits, such as pollution reduction, greenhouse gases emission reduction, and other associated environmental benefits.
- (ix) Assist the executing and implementing agencies to prepare a sound environmental management plan and a grievance redress mechanism to address environmental concerns and problems raised by the project-affected people.
- (x) Carry out cost review of the proposed environmental mitigation measures and implementation of the environmental management plan, and prepare a list of activities and budget requirements for environment monitoring during project implementation.
- (xi) Assess the capacity of executing and implementing agencies on environmental assessment, management, and monitoring; identify areas for improvement and training needs with respect to the environmental safeguard under the project; recommend required measures for capacity building; and prepare materials and conduct the training workshop to the staff of executing and implementing agencies, and other stakeholders on environmental management and safeguard.
- (xii) Prepare an IEE in English ensuring to meet all the requirements of ADB Safeguard Policy Statement (2009) and submit it to ADB.
- (xiii) Incorporate comments and feedbacks from ADB with regards to the IEE.
- (xiv) Conduct a climate risks and vulnerability assessment (CRVA) and prepare a report for the project, for instance using data from the Coupled Model Inter-comparison Project Phase 5 (CMIP5) climate models, the General Circulation Model (GCM); developing climate scenarios with different level of GHG emissions; assessing climate impacts based on appropriate climate change assumption, and recommending climate adaptation measures for the project. To the extent possible, assess costs associated with climate adaptation measures for the project.
- (xv) Incorporate comments and feedback from ADB in regard to the CRVA.

F. Deliverables

25. The following deliverables both in English and Chinese languages are expected.

Table 3: Expected Deliverables from the International Consulting Firm

Deliverables	Type	Estimated Submission Date
Inception Report	Report	February 2019
Workshop presentation/report	Presentation, report	April 2019
Interim Report	Report	June 2019
Draft Final Report	Report	August 2019
Final Report	Final Report	October 2019

II. TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANTS

A. Primary Expertise

26. The consultants will have technical expertise in logistics and experience in preparing feasibility studies for ADB funded projects in the PRC. Specific technical expertise in multimodal logistics (especially road/rail, road/air) and cold chain logistics management will be required.

B. Terms of Reference Keywords

27. Logistics, cold supply chain management, rural logistics, logistics IT system, bulk commodity distribution, small- and medium-sized enterprises, and financial intermediary loan.

C. Objective and Purpose of the Assignment

28. The consultants will refine the project scope incorporating international best practices. The consultants will assist the government with (i) preparing the project component plans and designs, and suggest ways to enhance the quality of the project; (ii) defining the scope, design, and operating plan of the proposed logistics facilities and IT system components to be included in the project; (iii) validate/contribute to the feasibility studies; and (iv) determine areas where the TA will support the logistics sector in Shaanxi and enhance the benefits delivered by the proposed project components. The final report will include a logical framework on reasonable, demonstrative, and implementable project components.

D. Experts Needed

29. The following experts will be required.

Table 4: Individual Consultants

No.	Expertise or Position	Inputs in Person-Month	Primary Place of Assignment	Legal Expert	I.T. Expert
1	(International) Logistics Project Design Specialist	1.0	Xi'an, PRC	No	No
2	(National) Logistics Project Design Specialist	2.0	Xi'an, PRC	No	No

E. Terms of Reference

30. **Logistics Project Design Specialist** (international, 1.0 person-month; national, 2.0 person-month) should have minimum qualification requirements of: (i) 20 years of general and 15 years of specific (similar to the assignment) experiences with a degree in a relevant field (a post-graduate degree preferred) for the international specialist and (ii) 15 years of general and 10 years of specific (similar to the assignment) experiences with a degree in a relevant field for the national specialist.

31. The consultants will: (i) carry out a situation analysis by assessing the existing logistics operations (magnitude, nature of operations, type of operations) in the city and identify logistics market demand that is not met by service providers; (ii) review the traffic flows to and from the proposed project sites and identify the key modal interchange points; (iii) identify the main bottlenecks which restrict efficient intermodal transfers; (iv) assist the government in preparation

of draft feasibility study report in terms of design, engineering, and cost; (v) work with the EA, ADB, and the consulting firm team members to identify and develop intermodal components to address key sector problems and opportunities; and (vii) prepare a logical framework on reasonable, demonstrative, and implementable project components.

F. Deliverables

32. The following deliverables both in English and Chinese languages are expected.

Table 5: Expected Deliverables

Deliverables	Type	Estimated Submission Date
Inception Report	Report	December 2018
Draft Final Report	Report	June 2019
Final Report	Final Report	July 2019