

PROJECT PREPARATORY TECHNICAL ASSISTANCE

A. Justification

1. The Government of the People's Republic of China (PRC) requested the Asian Development Bank (ADB) to assist the Shanxi Provincial Government (SPG) in preparing the Shanxi Inclusive Agricultural Value Chain Development Project, which is included in ADB's lending program for 2018. Although the SPG has experience with ADB's project preparation, it is necessary to provide a project preparatory technical assistance (PPTA) to help the SPG prepare the project in compliance with ADB's requirements and with international practices in the design.

2. To strengthen the project design and cater for the SPG's request, in addition to the PPTA, ADB will provide technical assistance support for inclusive business (IB) approach¹ (para. 3) to select the project agribusiness companies (PACs) and cooperatives; and for value chain analysis (para. 4) to design project investment to strengthen the PACs and cooperatives chains, and their supply chains; and promote mutually beneficial cooperation between the PACs and farmers.² This will be the first ADB project for the PRC to adopt value chain analysis to design a project and the first sovereign project to adopt the IB approach in the PRC.

3. **Selecting project agribusiness companies with the inclusive business criteria.**³ Prior to the PPTA, the project will help the Shanxi Poverty Alleviation and Development Office (SPADO) (i) define the IB criteria, which is a composite rating tool to assess potential PACs regarding their financial viability, social impact, and innovative features; and (ii) apply the IB criteria to select and engage the PACs that are financially viable and has the potential to make social impact through job creation, particularly for the poor and low-income population.⁴ The social impact assessment tool will include women empowerment criteria; and as part of the PPTA, the IB arrangements (i.e., cooperation mechanisms between the IB-qualifying PACs and their farmer suppliers such as contract farming, share-holding, or other modes of benefit-sharing) will be examined and incorporated in relevant subproject investment plans. During project implementation, the performance of the IB-qualifying PACs will be evaluated; and the results will be used to enhance their poverty and social impact.

4. **Designing the project based on value chain analysis.** After the selection of the PACs and cooperatives, the project will (i) analyze the value chain of each PAC to prepare the subproject investment plan, which will map out the investment for project output 1; and possible cooperation arrangements with relevant private sector services and government programs for

¹ ADB. 2013. *Technical Assistance Report for Inclusive Business Support (Cofinanced by the Government of Sweden and Credit Suisse AG)*. Manila (TA 8550-REG). The technical assistance (TA), administered by the Social Development Thematic Group (SDTC-SOC) under the Thematic Advisory Service Cluster (SDTC) ADB's Sustainable Development and Climate Change Department (SDCC) will provide support for the inclusive business (IB) approach.

² ADB. 2015. *Technical Assistance Report for Building Sustainable Food and Nutrition Security in Asia and the Pacific (Phase 1)*. Manila (TA 9057-REG). The TA, administered by the Agriculture, Rural Development, and Food Security Unit (SDCC-AR) of SDCC, will provide support for value chain analysis.

³ ADB defines inclusive business (IB) as commercially viable companies whose core business models create a scaled-up, systemic, and innovative solution to the relevant problems of the poor and low-income population. Promoting the IB approach is important to the PRC government which currently chairs the G20 discussions where the IB is one of the topics. In addition, the Asia-Pacific Economic Cooperation (APEC) is also considering the IB promotion as a new area of focus. ADB is currently doing a market-scoping study on the IB approach in the PRC.

⁴ Due to the preliminary appraisal, not all the PACs will qualify the IB selection criteria.

project output 2; (ii) prepare a value chain analysis manual; and (iii) train the SPADO, its lower administrative bureaus, and the project agricultural value chain participants on value chain analysis.⁵ The value chain analysis will examine if the PACs and cooperatives have stable cooperation with farmers, and if the cooperation is beneficial for the farmers; and propose forms of cooperation that will ensure benefits for those farmers, as needed. The value chain analysis will also assess financial viability of the PACs and cooperatives, and their value chains; identify government policies or programs that hinder the development of the agriculture-based industry in the province; and explore climate change adaptation and mitigation opportunities.

B. Major Outputs and Activities

5. The PPTA will (i) assess the project's technical, economic, and financial feasibility; (ii) assess safeguards requirements; (iii) conduct social survey and consultations for poverty, social, and gender analyses; (iv) prepare project documents according to ADB's requirements; (v) assist the SPG in revising domestic feasibility studies and improving safeguard documents in line with ADB's and the government's requirements; and (vi) conduct training and capacity development. The key 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 |
|---|---------------------------------|---|---------------------------------|
| Project company and/or cooperative selection | 31 Nov 2016 | Investment plans for all subprojects; and sector, financial management, and procurement capacity assessments | 15 Dec 2016 |
| Value chain analysis of project companies and subproject design | 15 Dec 2016 | | |
| Due diligence on governance (financial management, procurement, and integrity) | 25 Jan 2016 | Draft report and recommendation of the President, project administration manual, and economic and financial analysis | 31 Mar 2017 |
| Due diligence on economic and financial feasibility | 31 Mar 2017 | Land contract due diligence report; a social and poverty analysis report; a gender action plan; a resettlement plan, if required; and an initial environmental examination report | 31 Mar 2017 |
| Due diligence on safeguard requirements and social dimensions | 31 Mar 2017 | | |
| Capacity building on inclusive business and value chain approaches, financial management, procurement, and safeguards | 31 May 2017 | | |

Source: Asian Development Bank.

⁵ Value chain analysis is an analytical tool used to understand the structure and interactions of the value chain for a product. It comprises (i) identifying participants to the value chain (e.g., primary producers, processors, traders, and service providers), and determining the chain governance or leadership that will facilitate the chain formation and strengthening; (ii) identifying value-adding activities in the chain, and assigning costs and added value to each of those activities; and (iii) identifying opportunities for investment, capacity building, and other measures by bridging the chain with public and private services, and government programs that are external, yet critical, to the chain.

C. Cost Estimate and Proposed Financing Arrangement

6. The PPTA is estimated to cost \$550,000 equivalent, of which \$500,000 equivalent will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-other sources). The SPG will provide counterpart support in the form of organizing workshops for ADB PPTA review missions, counterpart staff, office space, facilities, supplies, and other in-kind contributions.⁶ The disbursement under the PPTA will follow the *Technical Assistance Disbursement Handbook* (2010, as amended from time to time). The detailed cost estimates are presented in Table A3.2.

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

| Item | Total Cost |
|--|--------------|
| Asian Development Bank^a | |
| 1. Consultants | |
| a. Remuneration and per diem | |
| i. International consultants (11.0 person-months) | 205.0 |
| ii. National consultants (24.5 person-months) | 139.0 |
| b. International and local travel | 50.0 |
| c. Reports, translation, and communication | 10.0 |
| 2. Equipment ^b | 10.0 |
| 3. Workshops, training, seminars, and conferences ^c | 10.0 |
| 4. Surveys | 13.0 |
| 5. Miscellaneous administration and support costs | 10.0 |
| 6. Contingencies | 53.0 |
| Total | 500.0 |

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

^b The equipment will be procured by the Shanxi Provincial Government in accordance with ADB's Procurement Guidelines (2015) to support PPTA activities and will be retained upon the completion of the project preparatory technical assistance.

| Type | Quantity | Cost (\$) |
|--|----------|-----------|
| Computer | 5 | 6.1 |
| Wireless portable printer | 1 | 0.4 |
| Portable projector | 1 | 0.4 |
| Color laser (all-in-one [AIO]) | 1 | 0.9 |
| Handheld global positioning system (GPS) | 1 | 0.5 |
| Black and white laser | 1 | 0.5 |
| Aerial photo machine | 1 | 1.2 |

^c Workshops, training, seminars, and conferences will be administered by the executing agency.

| Purpose | Venue |
|---|--------------------------|
| Stakeholder consultation workshop | Taiyuan, Shanxi Province |
| Inception, interim, and final workshops | Taiyuan, Shanxi Province |
| Training on social and environmental safeguards, financial management and procurement and technical matters | Taiyuan, Shanxi Province |

Source: Asian Development Bank estimates.

D. Consulting Services

7. The PPTA will require services of 11.0 person-months (pm) of international and 24.5 pm of national consultants. All consultants will be engaged through individual consultant selection method according to ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). This selection method is found practical because (i) the agricultural value chain

⁶ The Shanxi Provincial Government provides counterpart fund to organize some of PPTA workshops for ADB missions, which will be organized in Taiyuan, the provincial capital.

specialists and the IB specialist, who were already engaged under TA 9057-REG and TA 8550-REG to supplement the PPTA in designing the project, will also be engaged under the PPTA through the single source selection (footnotes 1–2); (ii) there is no need for coordinated input and quality control by a consulting firm as each ADB team member will be working closely with respective counterpart consultants; and (iii) urgent consultant fielding is required to complete the PPTA by April 2017 for approval in the third quarter of 2017 to contribute to the poverty eradication target by 2020. Table A3.3 provides the consultant requirements. The outline terms of reference for the PPTA consultants are described in paras. 8–16.

Table A3.3: Summary of Consulting Services Requirement

| International Position | Person-month | National Position | Person-month |
|-------------------------------------|---------------------|--------------------------------------|---------------------|
| Agricultural economist | 3.5 | Financial specialist | 3.5 |
| Environment specialist | 2.5 | Financial institution specialist | 2.0 |
| Social development specialist | 2.0 | Environment specialist | 3.5 |
| Agricultural value chain specialist | 3.0 | Social development specialist | 3.0 |
| | | Resettlement specialist | 1.5 |
| | | Procurement specialist | 2.0 |
| | | Agricultural value chain specialist | 4.0 |
| | | Senior inclusive business specialist | 3.0 |
| | | Inclusive business specialist | 2.0 |
| Total | 11.0 | Total | 24.5 |

Source: Asian Development Bank estimates.

8. **Agricultural economist** (international, 3.5 pm). The economist will have at least a master's degree in agricultural economics or a relevant discipline, and work experience with economic analysis of at least five investment projects of international financial intermediaries (IFIs). The economist will have team leader experience with at least two IFI projects. 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. The economist will prepare project cost estimates and financing plan in cooperation with the financial specialist.

9. **Financial specialist** (national, 3.5 pm). The specialist will have a master's degree in financial management or relevant discipline, a professional accountancy qualification, and work experience with financial management assessment (FMA) of at least two IFI projects. For the FMA, the specialist will (i) conduct the FMAs of the SPG, the implementing agencies, and the PACs, including assessments of their capacity to manage the imprest account and statement of expenditure procedures; (ii) propose an appropriate fund flow design and disbursement mechanisms; and (iii) provide training on financial management and disbursement. For financial analysis, the specialist will (i) conduct financial statement analysis for each PAC or cooperative using key operating and financial ratios, and (ii) conduct financial evaluation for each subproject using financial internal rate of return. The specialist will also help the agricultural economist prepare the cost estimates and financing plan.

10. **Financial institution specialist** (national, 2.0 pm). The specialist will have a bachelor's degree in economics, finance, or relevant discipline, and work experience in agricultural or rural banking. The specialist will (i) assess the existing government financial assistance programs for agriculture and small- and medium-sized enterprises through financial institutions, (ii) identify bottlenecks of those programs, (iii) propose solutions to those programs, (iv) introduce successful agricultural and rural financing by financial institutions, (v) provide capacity building for financial institutions for agricultural and rural financing, and (vi) assess the participation of financial institutions in the project.

11. **Environment specialists** (international, 2.5 pm; national, 3.5 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 IFI projects. The specialists will cooperate with each other to (i) assess possible environmental impacts of the project as a whole and of each subproject; (ii) prepare an initial environmental examination, including an environmental management plan, which will be tailored to the site-specific conditions of each subproject; and (iii) provide training on environmental safeguards.

12. **Social development specialists** (international, 2.0 pm; national, 3.0 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, including IFI projects. The specialists will cooperate each other to (i) conduct a poverty and social analysis with particular attention to poverty and vulnerability, gender, inclusion, and labor and employment; (ii) prepare a consultation and participation plan, a social action plan, and a gender action plan; (iii) confirm that the project does not have impacts on ethnic minorities; and (iv) provide training on social safeguards and dimensions. The specialists will work closely with the IB specialists.

13. **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 resettlement for at least two IFI projects. The specialist will (i) collect data on land use for each subproject, and assess whether any land acquisition was done in the last 5 years in anticipation of the project; and if so, conduct due diligence in accordance with safeguard requirements 2 of ADB's Safeguard Policy Statement (2009); and (ii) assess the land-leasing contract farming system to ensure land transfer is voluntary, transparent, fair, and beneficial to farmers; and assist the SPG in proposing corrective action plan(s) for subproject(s), if needed.

14. **Procurement specialist** (national, 2.0 pm). The specialist will have at least a bachelor degree in engineering or relevant discipline, and work experience with procurement and consultant recruitment for three donor-funded projects, including the IFI projects. The specialist will (i) assess the procurement and consultant recruitment capacity of the executing agency, and the procurement capacity of the implementing agencies; (ii) propose an appropriate implementation structure for procurement; (iii) work with the agricultural value chain (AVC) specialists to prepare procurement, consultant, and training packages required for each subproject investment plan; (iv) compile those procurement, consultant, and training packages for a procurement plan that will contain a list of all packages for procurement of works and goods, consulting services, and training envisaged under the project; (v) prepare model bidding documents for works and goods in different procurement methods (i.e., international competitive bidding, national competitive bidding); and (vi) provide training on procurement.

15. **Agricultural value chain specialists** (international, 3.0 pm; national, 4.0 pm). Each AVC specialist will have a master's degree in agricultural economics or a relevant discipline,

and at least 7-year work experience with the AVC projects and analysis. Building upon the preparatory work by the research and development technical assistance (six value chain analysis case studies and a value chain analysis manual) and in cooperation with the SPADO, the specialist will (i) select approximately ten additional agricultural products; (ii) conduct value chain analysis for each product; (iii) prepare a subproject investment plan for each product; and (iv) train the SPADO staff and its lower administrative bureaus, and the project AVC participants on value chain analysis. The subproject investment will describe investment and capacity building (output 1) and coordination arrangements with external private and public services (e.g., agricultural insurances, logistic services, wholesale market, cooperatives' professional farming services), and government programs (e.g., subprograms such as infrastructure improvement and employment promotion under the Shanxi Provincial Rural Poverty Alleviation and Development Program, 2011–2020) relevant to the AVCs for the subproject (output 2).

16. **Inclusive business (IB) specialists** (national, 3.0 pm for senior IB specialist and 2.0 pm for IB specialist). Senior IB specialist currently engaged for the preliminary design of the project will be engaged for continuity of the ongoing assignment for the project and IB specialist will be newly recruited. The IB specialist will have at least a master's degree in business administration or a relevant discipline; and have experience in IB assessment, IB due diligence, and IB incubation. The IB specialist will have at least 5-year experience in development and private sector, and 4 years in impact investing, with particular emphasis on financial due diligence and on social impact investment. A team of the senior IB specialist and IB specialist will help enhance the IB dimension in the project design. The senior IB specialist will lead the team to (i) carry out quick assessments of 25 companies on their IB readiness; (ii) do deep dives for four companies; (iii) identify three new IB companies to invest in Shanxi and propose them to the PMO and ADB; (iv) assist four IB potential companies in shaping their IB business models; (v) assist the value chain team in their work with four companies to access additional financing from commercial banks; (vi) carry out background research on the companies and prepare market benchmarks for the respective subsectors and type of investments.

E. Implementation Arrangements

17. The SPG will be the executing agency. The project management office under the SPADO will be responsible for the PPTA implementation and coordination with ADB. The PPTA will commence in November 2016 and be completed in May 2017. The proposed PPTA 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/PPTA approval | October 2016 |
| PPTA consultant mobilization | November 2016 |
| PPTA inception mission | November 2016 |
| PPTA interim review mission | February 2017 |
| Loan fact-finding mission | April 2017 |
| Submission of PPTA final report | May 2017 |

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