China, People's Republic of: Gansu Internet-Plus Based Socialized Agricultural Service System Development

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<th>Project Name</th>
<th>Gansu Internet-Plus Based Socialized Agricultural Service System Development</th>
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<td>Project Number</td>
<td>50393-001</td>
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<tr>
<td>Country</td>
<td>China, People's Republic of</td>
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<td>Project Status</td>
<td>Active</td>
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<td>Project Type / Modality of Assistance</td>
<td>Technical Assistance</td>
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<td>Source of Funding / Amount</td>
<td>TA 9310-PRC: Gansu Internet-Plus Based Socialized Agricultural Service System Development</td>
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<td>Technical Assistance Special Fund</td>
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<td>US$ 500,000.00</td>
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<td>Strategic Agendas</td>
<td>Environmentally sustainable growth</td>
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<td>Private sector development</td>
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<td>Sector / Subsector</td>
<td>Agriculture, natural resources and rural development - Agro-industry, marketing, and trade</td>
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<td>Gender Equity and Mainstreaming</td>
<td>Effective gender mainstreaming</td>
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<td>Description</td>
<td>The PRC has initiated internet-plus policies with the objective to integrate the agricultural sector into the wider economy through linking rural economic development approaches with ICT solutions to service delivery in rural areas. The Government of the PRC is committed to eradicating poverty and to closing the income gap between urban and rural populations. E-commerce and internet based support services are accelerating growth in rural areas which is contributing to structural reforms towards increased quality and market orientation of the agricultural supply chain. FSMCAs in rural areas represent the backbone of agricultural services and have therefore been identified as the primary organization to deliver internet-plus services to accelerate agriculture sector modernization and integration. The government has requested ADB to provide lending support for the Gansu Internet-Plus Based Socialized Agricultural Service System Development Project. Support to rural development, through agricultural modernization and value chain promotion approaches, is one of the strategic priorities of ADB’s Country Partnership Strategy for the PRC, 2016-2020 and is also aligned with ADB’s Operational Plan for Agriculture and Natural Resources.</td>
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Agricultural production and rural livelihoods have lagged behind industrial production and urban livelihoods in the People's Republic of China (PRC). As a result, income inequality and poverty are still persistent in rural areas of lesser-developed regions of the PRC. Increasing productivity and value addition through modernization and enhanced market linkages has considerable poverty reduction potential in the PRC where agriculture labor still accounts for more than a fourth of total employment. Internet-plus agriculture refers to the application of network connected sensors and tracing technologies to provide product quality and safety information to consumers and to enhance market access and technical support for farmers. Lack of information on the origin, quality, and safety of agricultural products is one key constraint to accessing high value markets. Internet connected sensors and tracing technologies enable the monitoring and quantification of inputs such as soil, air, water, fertilizer, pesticides and also tracing the location of products along the value chain. A socialized agricultural service system utilizes the network generated data to provide farmers with agricultural support services and consumers with product characteristics through mobile internet platforms.

Gansu Province, located in the northwest of the PRC, is the seventh largest province with a population of 26 million, of which 63.9% is rural population. In 2015, Gansu's total gross domestic product (GDP) was CNY769 billion, of which agriculture accounted for 13.3%. Gansu's GDP per capita of CNY26,216 (equivalent to about $3,770) is the second lowest of all provinces in the PRC, and 58 of the province's 87 counties are designated as national poverty counties. In the proposed project cities, 21% 28% of the rural population is living below the national income poverty line of CNY2,300 per capita. Agriculture is still an important means of rural livelihoods in Gansu Province, yet low productivity and low value addition of the agriculture sector limit the opportunities for income generation. The Farmers' Supply and Marketing Cooperative Association (FSMCA) in Gansu Province has already prepared internet-plus agriculture pilot interventions and is therefore well prepared to lead the implementation of this demonstration project for enhanced rural development. Gansu Province’s agro-ecological conditions with specialty products have the potential to capture high value markets through e-commerce technology application. Gansu Province’s potential to achieve rural-urban integration through e-commerce interventions has been assessed in a case study in an Asian Development Bank (ADB)-financed policy advisory technical assistance project.

Uncordinated business relationships between the primary and processing segment predominate the agriculture sector in Gansu. Information asymmetry about product quality and safety characteristics (e.g., origin of inputs, farming system, food safety, nutrition values) has led to adverse selection for low value products which are not competitive in growing high value online and offline markets in Gansu and other provinces. Automated and credible traceability systems covering the entire value chain from farmer to consumer stage are rare. Farmers' decisions on the quality and quantity of applied water, fertilizers, and pesticides for crop growth is not documented while real time information services tailored to agro-ecological conditions, such as soil fertility, moisture, and temperature, are missing for decision support. Limited information and communication technology (ICT) capacity of farmers, processors, and other service providers is constraining the adoption of integrated and automated information exchange systems which could facilitate the coordination and cooperation between business entities in the production and marketing segments. If coordinated cooperation and services were available, it would provide an opportunity for market-led innovation through the network of relevant business entities (e.g., farmers, traders, logistics services, wholesalers, retailers) and thereby enhance the sector competitiveness.

The low productivity of Gansu’s agriculture sector originates from constraints at different segments of agricultural production. Operations in the agriculture processing segment are too small and fragmented to have adequate quality assurance systems for sourced raw materials. Business upscaling of processing operations to realize economies of scale is constrained by high sourcing costs for inputs due to high transaction costs with small scale scattered production and distribution entities. Many operations in the processing segment lack adequate storage, transportation, and marketing capacity to produce the required volume and quality to access premium online and offline markets with high quality food products. The primary production segment is characterized by low-value crop production. Excessive application of water, fertilizer, and pesticides are one common cause for inefficient input use in crop production and resulting in high production costs, negative externalities on the environment and food safety and inefficient water usage. Adoption of modern agricultural technologies is constrained by deficiencies in technical knowledge of smallholders. In addition, smallholders' access to extension services is hampered by the absence of adequate agricultural technology and management support services. Although Gansu Provincial Government is employing agricultural specialists to provide agro-technology advice to farmers, meeting the high demand for product specific support in scattered rural areas with regular technical meetings is not feasible.

Impact

Project Outcome

Description of Outcome

Progress Toward Outcome

Implementation Progress

Description of Project Outputs

Status of Implementation Progress (Outputs, Activities, and Issues)

Geographical Location

Nation-wide

Summary of Environmental and Social Aspects

Environmental Aspects

Involuntary Resettlement

Indigenous Peoples

Stakeholder Communication, Participation, and Consultation

During Project Design

During Project Implementation

Business Opportunities

Consulting Services

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.

Procurement

Equipment will be procured following ADB’s Procurement Guidelines (2015, as amended from time to time), and handed over to SMCGP upon TA completion.

Responsible ADB Officer

Jan Hinrichs

Responsible ADB Department

East Asia Department

Responsible ADB Division

Environment, Natural Resources & Agriculture Division, EARD

Executing Agencies

Gansu Provincial Government

No. 136 Jinning Road

Lanzhou City, Gansu Province

People’s Republic of China
### TA 9310-PRC

#### Timetable
- Concept Clearance: 
- Fact Finding: 
- MRM: 
- Approval: 17 Apr 2017
- Last Review Mission: 
- Last PDS Update: 27 Mar 2019

#### Milestones
- **Approval**
  - Signing Date: 17 Apr 2017
  - Effectivity Date: 10 May 2017
  - Closing Date: 31 Mar 2018
- **Financing Plan/TA Utilization**
  - Cumulative Disbursements:
    - **ADB**: 500,000.00
    - **Cofinancing**: 0.00
    - **Counterpart**: 0.00
    - **Total**: 500,000.00
    - **Date**: 17 Apr 2017
    - **Amount**: 395,929.08

#### Project Page
- [https://www.adb.org/projects/50393-001/main](https://www.adb.org/projects/50393-001/main)

#### Request for Information

#### Date Generated
- 19 August 2019

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