China, People's Republic of: Study on Building an Ecological Security System for the National Core Grain Growing Area of Henan Province

**Project Name**
Study on Building an Ecological Security System for the National Core Grain Growing Area of Henan Province

**Country**
China, People's Republic of

**Project Status**
Closed

**Project Type / Modality of Assistance**
Technical Assistance

**Source of Funding / Amount**
TA 8962-PRC: Study on Building an Ecological Security System for the National Core Grain Growing Area of Henan Province
Technical Assistance Special Fund
US$ 400,000.00

**Strategic Agendas**
- Environmentally sustainable growth
- Inclusive economic growth

**Drivers of Change**
Knowledge solutions

**Sector / Subsector**
Agriculture, natural resources and rural development - Forestry

**Gender Equity and Mainstreaming**
Effective gender mainstreaming

**Description**
The technical assistance (TA) supports Asian Development Bank's (ADB's) strategic priorities in the country partnership strategy (2011-2015) for the PRC. It aims to promote increased agricultural productivity and improved quality and quality of natural resources. The TA will address important objectives of the ADB Operational Plan for Sustainable Food Security in Asia and the Pacific (2011-2020). It is also in line with the key issues under development for PRC's Thirteenth Five-Year Plan (2016-2020) which includes the importance of stabilizing grain production for food security and promoting sustainable land and forestry resource use.

The TA also supports the Third Plenum of the 18th Communist Party of China Central Committee to build an ecological civilization through the construction of an ecological security system which can safeguard the grain production bases, and through combining new rural construction, will improve urban and rural environment, and promote the country ecological civilization construction.

The TA impact, which is increased Henan grain production systems contribution to national food security, is aligned with the Henan Provincial Grain Production Core Region Plan 2008-2020. The outcome of the TA is improved ecosystem of the core grain cropping region of Henan Province. The TA will have three outputs to support the achievement of the TA outcome, which are: (i) Agroforestry best practices in technical management recommended; (ii) Strategy for agroforestry development drafted; and (iii) Government and community capacity to implement agroforestry activities enhanced.

**Project Rationale and Linkage to Country/Regional Strategy**
Henan, along with Jilin and Heilongjiang provinces, are the three core regions for grain production in the People's Republic of China (PRC). They are considered by the State Council as the primary contributors to national food security for their grain production and provision. Covering a large part of the fertile North China Plain, Henan produces the nation's highest wheat and sesame output and second highest rice output. Cropping an area of 10,081,810 hectares, Henan agriculture has seen a decline in environmental quality and growing areas with reduced fertility, soil erosion and land degradation. These constraints will need to be reversed if Henan is to maintain its grain production systems and contribute to national food security. Improving the quality of the cropping ecosystem is of highest importance. The productivity of cropping areas can be linked to its surrounding environment, whereby high quality ecosystems have the ability to support and promote high yielding and sustainable crop production systems. A key element of a healthy cropping ecosystem is the accompanying agroforestry system. Agroforestry is the close association of trees or shrubs with crops which can be both ecological and economic and have been shown to improve crop yields and soil fertility, reduce soil erosion, conserve soil moisture, recycle nutrients, provide wind and storm protection to crops, sequester carbon from the atmosphere, and increase biodiversity. Agroforestry shelterbelts were a traditional part of Henan cropping systems but have been lost or degraded due to agriculture mechanization and poor maintenance and management. Although Henan has carried out significant efforts in forestry activities, afforestation projects reforested the uplands and mountainous areas with little attention paid to the lowland cropping areas. To improve the cropping ecosystem and ensure national food security from grain production, there is a need to re-establish the agroforestry shelterbelts.

The construction of agroforestry shelterbelts aims to provide an ecological security system for grain production. Although an ancient approach, the knowledge and skills for establishing, maintaining and managing such a system has been mostly lost. There is a need to increase the awareness about the importance of such systems, their association with cropping, and the technical skills related to their management. At the policy and institutional level, agroforestry actions need to be strengthened. Falling between the agriculture and forestry sectors for management and upkeep, it struggles to compete with conflicting demands and priorities within these sectors. A development framework that can endorse the promotion and development of agroforestry, including policy support and a financing plan for agroforestry activities, is needed.

**Impact**
The contribution of grain production systems in Henan Province to national food security in the PRC is increased (Henan Provincial Grain Production Core Region Plan, 2008-2020)

**Project Outcome**

**Description of Outcome**
The ecosystem of the core grain cropping region of Henan Province improved

**Progress Toward Outcome**

**Implementation Progress**

**Description of Project Outputs**
Agroforestry best practices in technical management recommended
Strategy for agroforestry development drafted
Government and community capacity to implement agroforestry activities enhanced
Status of Implementation Progress (Outputs, Activities, and Issues)

The final review mission was conducted during 18-20 July 2017. The final review workshop was held in two sessions to present the TA to (i) a technical review panel for final evaluation, and (ii) the provincial authorities from the rural affairs office, development and reform commission, and departments of finance, forestry, and agriculture. The workshop endorsed the proposed strategy and action plan as being highly relevant to Henan Province, timely, and in line with the national and provincial priorities. It was proposed to submit the strategy and action plan to the provincial government for endorsement. The consultants produced a comprehensive analysis of the constraints to and opportunities for ecological security in Henan Province, which forms the basis for the ecological security strategy and implementation action plan.

Geographical Location

Zhengzhou

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 estimated that the TA will require 3 person-months of international and 18 person-months of national consulting services. One international specialist (team leader and agroforestry management specialist) and six national specialists (deputy team leader and ecology specialist, institutional and policy specialist, climate change specialist, finance specialist, forestry specialist, and a training and extension specialist) will be required for TA implementation. A consulting firm will be engaged in accordance with ADB’s Guidelines on the Use of Consultants (2013, as amended from time to time) using the quality- and cost-based selection method, with a quality-cost ratio of 90:10 due to the high technical complexity of the consulting assignment.

Responsible ADB Officer

Suzanne Robertson

Responsible ADB Department

East Asia Department

Responsible ADB Division

Environment, Natural Resources & Agriculture Division, EARD

Executing Agencies

Henan Provincial Forestry Department

No. 40, Weiwu Road, Zhengzhou Municipality.

Timetable

Concept Clearance 13 Jul 2015
Fact Finding 27 Jul 2015 to 28 Jul 2015
MRM -
Approval 25 Sep 2015
Last Review Mission 25 Sep 2015
Last PDS Update 25 Sep 2017

TA 8962-PRC

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Financing Plan/TA Utilization

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