China, People's Republic of: Shanxi Urban-Rural Water Source Protection and Environmental Demonstration Project

Project Name: Shanxi Urban-Rural Water Source Protection and Environmental Demonstration Project

Country: People's Republic of China

Project Status: Active

Project Type / Modality of Assistance: Loan

Source of Funding / Amount: Loan 3557-PRC: Shanxi Urban-Rural Water Source Protection and Environmental Demonstration Project

Ordinary capital resources: US$ 100.00 million

Description:
The project will improve water source protection and environmental sustainability in Zuoquan County. The project will include four outputs: (i) water source protection of the Qingzhang River, rehabilitation of integrated river basin management in Zuoquan County; (ii) water demand management, and institutional reform support from upstream to downstream of the Qingzhang River, and construction of embankment (about 8.9 km); (iii) construction of wetland of about 35.35 ha and associated river amenity facilities; and (iv) improved and integrated river basin management in Zuoquan County. The project will include four outputs: (i) water source protection of the Qingzhang River, (ii) Qingzhang River rehabilitation and integrated low-impact facilities, (iii) inclusive water supply and wastewater collection services, and (iv) strengthened institutional capacity.

Output 1 will support (i) re-vegetation around the Shixia Reservoir and planting of forest belt along two headwaters for about 12,800 hectares (ha); (ii) installation of the Shixia Reservoir spillway gates; (iii) construction of a flood-discharging and washout tunnel; and (iv) construction of five hydrological and water quality monitoring stations with telecommunication system in the Shixia Reservoir catchment. Output 2 will support (i) dredging of selected sections of the Qingzhang River which are heavily silted (about 11.6 kilometers [km]); (ii) rehabilitation of the Qingzhang River, and construction of embankment (about 8.9 km); (iii) construction of wetland of about 35.35 ha and associated river amenity facilities; and (iv) low-impact design (sponge city concept) for Binhe road expansion and stormwater drain installation. Output 3 will support (i) construction of 45.3-km raw water transmission pipelines and expansion of a pumping station; (ii) construction of 48.3-km water distribution pipelines and expansion of four pumping stations; (iii) replacement of 36.5-km existing water supply pipelines and construction of two rural domestic water treatment stations; (iv) expansion of the Zuoquan County wastewater treatment plant from 10,000 m3 per day to 15,000 m3 per day, with improvement of treatment technologies and renovation of some equipment; (v) construction of 4.97-km trunk sewers; (vi) replacement of 1.29-km existing main sewer pipelines; and (vii) low-impact design (sponge city concept) for Binhe road expansion and stormwater drain installation.

Output 4 will support institutional and capacity development for (i) project management; (ii) improvement of existing flood warning system; (iii) safety inspection of the reservoir and replacement of aged dam, equipment, and vegetation for the areas upstream of the Shixia reservoir to reduce soil erosion; safety inspection of the reservoir and replacement of aged facilities; improvement of flood protection standard of the Qingzhang River and enhancement of ecological values along the river banks; provision of low impact facilities such as wetland park and enhanced road design; improvement of urban stormwater drainage system, and sewage collection and treatment; and provision of reliable water supply to rural and urban area including commercial and industry; (iv) Sponge city is an important concept from an integrated urban land and water management perspective. The important sponge city concept is applied to implement the Binhe Road as a pilot scheme which incorporates permeable pavement, low-impact development (LID) tree pits and bio-retention swales. The LID facilities not only retard surface runoff, but also reduce non-point source pollution from urban runoff. The scale will be further extended to prepare an action plan to identify LID technologies and practices for Zuoquan's new district development; and (v) Inclusive Zuoquan County's urbanization and poverty reduction. Zuoquan is a national designated poverty county which lags behind the average in terms of social economic development due partially to uncoordinated development and inadequate infrastructure. People are exposed to natural disaster of floods and droughts, as well as polluted environment. The project will create enabling environment for future city's development and poverty reduction by providing improved infrastructure, flood risk reduction measures, water security and effective wastewater collection and treatment system.

Impact:
Quality of life and environmental sustainability in Zuoquan County improved

Project Outcome:

Description of Outcome:
Living and environmental conditions for urban and rural residents of Zuoquan County improved
Progress Toward Outcome
Procurement has not yet started

Implementation Progress

Description of Project Outputs
Shixia Reservoir operation and its watershed vegetation improved
Qingzhang River and Binhe Road rehabilitated
Inclusive water supply and wastewater collection services achieved
Institutional capacity strengthened

Status of Implementation Progress (Outputs, Activities, and Issues)
Two works contract have been awarded and construction is ongoing. The following consultants have been recruited and mobilized: start-up consultants, external resettlement monitoring agency, and loan implementation consultants.

Geographical Location
Zuoquan Xian

Safeguard Categories

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<th>Environment</th>
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<tbody>
<tr>
<td>Involuntary Resettlement</td>
<td>A</td>
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<tr>
<td>Indigenous Peoples</td>
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Summary of Environmental and Social Aspects

Environmental Aspects
Environmental safeguards (Category B): Domestic environmental impact assessment (EIA) has been approved by Jinzhong Municipality Environment Protection Bureau.

Involuntary Resettlement
Resettlement (Category A): Land acquisition and resettlement report has been completed.

Indigenous Peoples
Ethnic minorities (Category C): Category C was confirmed during PPTA stage.

Stakeholder Communication, Participation, and Consultation
During Project Design
Consultations with local government agencies, farmer communities, and other stakeholders were conducted during project preparation. Social dimensions: Gender action plan, social action plan, and participation and stakeholder communication strategy have been prepared.

During Project Implementation

Business Opportunities
Consulting Services
It is expected that consultants will be required for conducting capacity development and institutional strengthening activities, including project management support. All consulting services will be engaged in accordance with the ADB’s Guidelines on the Use of Consultants (2013, as amended from time to time). Consulting services will be selected by (i) inviting simplified technical proposals and (ii) using the quality- and cost-based selection method, with a quality cost ratio of 90:10.

Procurement
Procurement will be done in accordance with ADB’s Procurement Guidelines (2013, as amended from time to time).

Responsible ADB Officer
Au Shion Yee

Responsible ADB Department
East Asia Department

Responsible ADB Division
Environment, Natural Resources & Agriculture Division, EARD

Executing Agencies
Zuoquan County Government
JZZQJW@163.COM
Zuoquan County, Shanxi Province
People’s Republic of China

Timetable

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<tr>
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Loan 3557-PRC

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Project Page  https://www.adb.org/projects/48274-002/main
Request for Information  http://www.adb.org/forms/request-information-form?subject=48274-002
Date Generated  16 November 2019

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