China, People's Republic of: Guiyang Integrated Water Resources Management (Sector) Project

Project Name: Guiyang Integrated Water Resources Management (Sector) Project
Project Number: 38594-013
Country: China, People's Republic of
Project Status: Closed
Project Type / Modality of Assistance: Loan
Source of Funding / Amount: Loan 2573-PRC: Guiyang Integrated Water Resources Management (Sector) Project
Ordinary capital resources: US$ 150.00 million

Strategic Agendas:
- Environmentally sustainable growth
- Inclusive economic growth

Drivers of Change:
- Governance and capacity development

Sector / Subsector:
- Agriculture, natural resources and rural development
  - Irrigation
  - Land-based natural resources management
  - Rural water policy, institutional and capacity development
  - Rural water supply services
- Water and other urban infrastructure and services
  - Urban water supply

Gender Equity and Mainstreaming:
- Effective gender mainstreaming

Description:
The proposed Project supports the policies and plans of the Government of the People's Republic of China (PRC) and Guiyang municipal government (GMG) for introducing integrated water resources management (IWRM) in Guiyang Municipality. The Project will finance a slice of the Guiyang Integrated Water Resources Master Plan (2006-2020, the Master Plan), a medium-term investment plan for Guiyang Municipality. While the Master Plan is mainly focused on structural interventions and covers the whole range of water sector investments, including wastewater treatment and flood management, the Project will focus its activities on five segments of the Master Plan: (i) urban water supply, (ii) rural water supply and irrigation, (iii) irrigation system rehabilitation, (iv) soil and water conservation, and (v) small water storage structures. The Project will also address nonstructural interventions including institutional strengthening and capacity development, stakeholder participation, water tariff adjustments, integrated information management system, hydrological monitoring center, and other demand-management measures. The Project will be implemented over a 6-year period, 2010-2016. The Project will follow the sector investment approach and finance six core subprojects that have already been prepared, as well as an undetermined number of noncore subprojects that will be prepared and approved during project implementation.

Project Rationale and Linkage to Country/Regional Strategy:
Guiyang Municipality lies in the mountainous watershed that separates the Yangtze River Basin to the north from the Pearl River Basin to the south. While there are adequate natural water resources in Guiyang Municipality, significant problems relate to the following:
(i) The difficulties in capturing sufficient quantities of water and its distribution to users. Much of the water drains into rivers as quick surface flows through numerous short creeks and streams that run deep in valleys, or through fast-flowing deep aquifers (groundwater rivers) through the limestone layers (karst areas).
(ii) The poor condition of urban water supply infrastructure and Guiyang Municipality's rapidly increasing urban population. This combination has seriously stretched the existing water supply capacity, resulting in reduced water pressure and water rationing in dry periods.
(iii) The shortage of water for potable use and irrigation in the surrounding rural area, constraining the improvement of rural resident incomes and living standards. Only about half of the households in rural areas of Guiyang Municipality have piped water supply and about 420,000 rural residents face potable water shortages.
(iv) The fragmented management in the Guiyang Municipality water sector. There is vertical fragmentation with different responsibilities between provincial, municipal, and district/county levels; and there is horizontal fragmentation with responsibilities for water sector management split between different functional departments of each level of government.

GMG has given a commitment to develop solutions based on IWRM. GMG has also formulated the Master Plan, which covers all aspects of infrastructure needs while recognizing some of the deficiencies of current water sector management, including fragmented institutional arrangements and inadequate attention to water demand management. Investments under the Master Plan will focus predominantly on supply side interventions, but there is a need for parallel efforts in institutional reform and demand management, which will be addressed by the Project.

Impact:
Sustainable and inclusive socioeconomic growth in Guiyang Municipality

Project Outcome:
- Water supply and demand in Guiyang Municipality are balanced in a sustainable manner

Progress Toward Outcome:
- 7 reservoirs are being constructed and 1 reservoir will be constructed under the project. 550 small water storage structures were constructed under the project.

Implementation Progress:
- Increased supply of water for domestic, industrial, and irrigation purposes
- Improved water use efficiency
- Improved institutional and technical capacity to manage water resources
- Improved water quality
One urban water supply subproject (Yudongxia) and two rural water supply and irrigation subprojects (Baianhe and Liaojiuzhai) were completed, four rural water supply and irrigation subprojects (Jinlong, Lancangou, Jinjiaqing, and Maozhuling) are being implemented, and two urban water supply subprojects (Guiyang reservoir and Hongyan water treatment plant) will be implemented.

One urban water supply subproject (Yudongxia) and two rural water supply and irrigation subprojects (Baianhe and Liaojiuzhai) were completed, and the reservoir capacity increased to 211.5 million m³.

One urban water supply subproject (Yudongxia) and two rural water supply and irrigation subprojects (Baianhe and Liaojiuzhai) were completed, four rural water supply and irrigation subprojects (Jinlong, Lancangou, Jinjiaqing, and Maozhuling) are being implemented, and two urban water supply subprojects (Guiyang reservoir and Hongyan water treatment plant) will be implemented.

Originally, this component was planned to include 7 subprojects (1 core and 6 noncore), 6 noncore subprojects and major portion of the core subproject have withdrawn from the project. Only the remaining small portion of the core subproject for rehabilitation of 431.66 ha will be implemented under the project.

A team of consultants is assisting the Guiyang municipal government in implementing integrated water resources management and shifting from water supply control to water demand control. In November 2014, a water sector management structure has been established with the creation of the Guiyang Municipal Water Service Administration Bureau.

The Project will support capacity development for public consultation and participatory planning targeting the project canals) and small tank construction. The project preparatory technical assistance (TA) conducted urban and rural household surveys and interviews, management. Public consultation meetings and stakeholder panels will provide forums for participation in multipurpose reservoir management and river association (WUA), and prepare for implementation of operation and maintenance where the WUA will have primary responsibility for irrigation with irrigation, a further consultation will be held with irrigator representatives to participate in the preliminary and detailed design, form a water users association (WUA) and prepare for implementation of operation and maintenance where the WUA will have primary responsibility for irrigation acquisition, compensation includes land compensation, resettlement subsidy, and compensation for young crops. The land compensation will be paid to the affected village and/or affected persons and the resettlement subsidy and other compensation for individual asset loss will be paid to the affected persons. For small businesses and housing demolition, compensation will be paid directly to owners in cash according to the appraised value of the land and fixed property assets. Income losses resulting from reduced production/sales and wages caused by the Project will be assessed and compensated to affected persons* will have to be relocated. For the core subprojects, the resettlement impacts are relatively small except for the Yudongxia reservoir subproject. The Guiyang PMO has prepared and ADB has approved the resettlement plan for the Yudongxia subproject and three resettlement plans for the Jinlong, Liaojiuzhai, and Wudang subprojects. No resettlement plans are required for the other two core subprojects, as these do not involve land acquisition or involuntary resettlement. Based on satisfactory resettlement experience in Guizhou Province, the EA and local governments were assessed to have the capacity to manage resettlement impacts properly. The IAs will fund the resettlement costs according to the standards set out in the resettlement plans, based on national policies and local regulations. Entitlements will be provided to affected persons before demolition and ground leveling commences, and before any loss of land. A resettlement information booklet was distributed to those affected through village offices, and the resettlement plans for the four core subprojects were made available at the village offices.

Compensation for land acquisition, residential housing, and nonresidential housing will be paid to all users regardless of whether titled or not. For land acquisition, compensation includes land compensation, resettlement subsidy, and compensation for young crops. The land compensation will be paid to the affected village and/or affected persons and the resettlement subsidy and other compensation for individual asset loss will be paid to the affected persons. For small businesses and housing demolition, compensation will be paid directly to owners in cash according to the appraised value of the land and fixed property assets. Income losses resulting from reduced production/sales and wages caused by the Project will be assessed and compensated to affected persons in cash.

For subsequent noncore subprojects, resettlement plans will be prepared based on the detailed engineering designs and resettlement impact surveys. A resettlement framework providing procedural guidelines for the EA and IAs to follow has been agreed upon between GMG and ADB. The PMO, assisted by the IAs, will be responsible for monitoring resettlement plan implementation and submitting progress reports to ADB. A regular reporting system will be established to ensure that key resettlement activities are implemented on schedule. The PMO will conduct independent monitoring and evaluation of resettlement implementation and report progress semi-annually, to evaluate results through annual survey updates and reports for 2 years after completion of resettlement. Monitoring and evaluation reports will be submitted to Guiyang PMO and ADB for review and follow up action, if required.

* These figures will change since some indicative noncore subprojects will be removed from the project and some new noncore subprojects will be added to the project.

EMDPs have been prepared for four of the core subprojects. About 200 ethnic minority persons in each of these four core subprojects will have their livelihoods affected by the Project, although the overall impact of the Project will be beneficial to the ethnic minority communities as a result of improved water supplies and consequential livelihood benefits. Ethnic minority villages will be specifically targeted for the provision of small water storage tanks, and special provisions will be made in resettlement plans, where construction activity has a serious impact on ethnic minority communities. An ethnic minorities development framework (EMDF) for the subsequent noncore subprojects has also been prepared. The PMO, assisted by the IAs, will be responsible for preparing the EMDPs for the noncore subprojects, as required, and monitoring the implementation of all EMDPs.

The Project will support capacity development for public consultation and participatory planning targeting the project management office (PMO) and local communities in the subproject area.

Business Opportunities

### Stakeholder Communication, Participation, and Consultation

#### During Project Design

Primary stakeholders include rural and urban households using domestic water, irrigators, and water-using enterprises, as well as those affected by land acquisition and resettlement. Secondary stakeholders include village councils, and government units at township level and above, particularly water resources bureaus. The Project supports integrated water resources management (IWRM), which emphasizes involvement of stakeholders in improving governance and management of water resources.

Two rounds of public consultation rounds were held during the preparation of feasibility studies reports (FSRs) for each subproject. For each subproject with irrigation, a further consultation will be held with irrigator representatives to participate in the preliminary and detailed design, form a water users association (WUA), and prepare for implementation of operation and maintenance where the WUA will have primary responsibility for irrigation management. Public consultation meetings and stakeholder panels will provide forums for participation in multipurpose reservoir management and river sub-basin planning. Where appropriate, community-managed modalities will be used for implementation of irrigation canal system (particularly tertiary canals) and small tank construction. The project preparatory technical assistance (TA) conducted urban and rural household surveys and interviews, including key informant interviews and female and male focus group discussions.

#### During Project Implementation

The Project will support capacity development for public consultation and participatory planning targeting the project management office (PMO) and local communities in the subproject area.
Consulting Services

More than Twenty-six person-months of international and 146 person-months of national consulting services will be required. ADB will finance consulting services for (i) project management support (one contract package), (ii) implementation of integrated water resources management (IWRM) and water demand management (WDM) (one contract package), (iii) independent dam safety panel members (three contract packages), and (iv) future requirements. For each of the two contract packages for project management support and implementation of IWRM and WDM, a team of consultants were recruited through an international firm, using quality- and cost-based selection method and inviting simplified technical proposals. Three national consultants for the independent dam safety panel were also recruited on individual basis. For consulting services for future requirements mentioned in (iv) above, an external resettlement monitor and an environmental monitoring agency will be recruited. Detailed design and engineering and construction supervision will be carried out using government counterpart funds by qualified local design institutes recruited by the local implementing agencies.

Procurement

ADB-financed goods and services will be procured in accordance with ADB’s Procurement Guidelines (2007, as amended from time to time). Major contracts for equipment and materials valued at $1 million equivalent or more will be awarded through ADB’s international competitive bidding (ICB) procedures. Smaller packages for equipment and materials valued at less than $1 million equivalent will be procured following national competitive bidding (NCB) procedures in accordance with the 1999 PRC’s Tendering and Bidding Law, subject to modifications agreed with ADB. Civil works contracts estimated to cost $10 million equivalent or more will be carried out using ICB procedures, while those costing less than $10 million equivalent will be carried out using NCB procedures. Shopping will be allowed for goods and contracts valued at $100,000 equivalent or less and for civil works contracts valued at $200,000 or less. Small civil works contracts of $100,000 equivalent or less on subprojects involving small-scale reservoirs, irrigation system rehabilitation, soil and water conservation, and small water storage tanks may be carried out on a force account basis or through community participation, whenever practicable, to ensure sustainability and to achieve the Project’s social objectives. International contractors may participate in bidding for contracts using NCB procedures.

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Timetable

| Concept Clearance | 10 Aug 2006 |
| Fact Finding | 24 Jul 2006 to 09 Aug 2006 |
| MRW | - |
| Approval | 29 Oct 2009 |
| Last Review Mission | - |
| PDS Creation Date | 03 Mar 2006 |
| Last PDS Update | 23 Sep 2019 |

Loan 2573-PRC

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