India: Madhya Pradesh Irrigation Efficiency Improvement Project

Project Name: Madhya Pradesh Irrigation Efficiency Improvement Project
Project Number: 45371-007
Country: India
Project Status: Active
Project Type / Modality of Assistance: Loan
Source of Funding / Amount: Loan 3662-IND: Madhya Pradesh Irrigation Efficiency Improvement Project
Ordinary capital resources
US$ 375.00 million

Strategic Agendas
- Environmentally sustainable growth
- Inclusive economic growth

Drivers of Change
- Governance and capacity development
- Knowledge solutions
- Private sector development

Sector / Subsector
- Agriculture, natural resources and rural development - Agricultural production - Irrigation

Gender Equity and Mainstreaming
- Some gender elements

Description
The Madhya Pradesh Irrigation Efficiency Improvement Project is designed to support higher irrigation efficiency and expansion of irrigation in Madhya Pradesh. It will focus on developing 125,000 hectares of new, highly efficient and climate resilient irrigation networks and productive command area under the Kundalia Irrigation Project. It will also finance a feasibility study and detailed designs for modernizing the existing Sanjay Sarovar Irrigation Project.

Project Rationale and Linkage to Country/Regional Strategy
India requires irrigation water use efficiency and productivity improvement. Water plays a critical role in India’s food security and welfare of the rural poor as 84% of all water withdrawals are dedicated to agriculture and 42% of all agricultural land is irrigated. India benefits from only 4% of the world’s renewable fresh water but has 16% of the world’s population. With intense urbanization and industrialization, the need for water from the nonagriculture sector is fast increasing and water shortage is becoming a major concern for industries. At the same time, population growth and change in dietary habits require continued growth in agricultural production. By 2050, annual water availability per capita in India is expected to drop from 1,530 cubic meters to 1,140 cubic meters, indicating severe water stress. The current average irrigation water use efficiency of 38% points towards the need for serious performance improvement in this sector. The productivity of irrigation water is further hampered by low crop yields and cultivation of low-value crops. Therefore, most of India’s utilized water not only supports activities with low economic value but is also inefficiently used. In the meantime, water shortages are constraining water-dependent power production and the development of high-value industries that are required to fuel the country’s economic growth. These problems will worsen in the future with the projected impacts of population and economic growth, and with climate change, which will increase both irrigation water demand and uncertainty around the reliability of water resources.

Irrigation modernization is a key strategy to reducing water wastage. The Government of India recognizes the situation. Both the Three Year Action Agenda (2017-2020) and the 2015 Pradhan Mantri Krishi Sinchayee Yojana program have acknowledged the necessity to improve water use efficiency in irrigation. In 2014, the Asian Development Bank (ADB) funded the Scoping Study for a National Water Use Efficiency Improvement Support Program. The study identified the following three main causes for low water use efficiency: (i) inadequate irrigation and drainage infrastructure because of faulty designs and lack of maintenance; (ii) inadequate management, operation and maintenance (MOM) of the irrigation systems; and (iii) inadequate capacity building and training services. The study highlights the need to modernize the design and management of major- and medium-sized irrigation (MMI) schemes to reduce system inefficiencies and substantially improve water delivery services to farmers. It proposed a framework for assessing and improving water use efficiency on MMI schemes. Under a subsequent regional technical assistance, the framework was successfully pilot tested on such schemes within South Asia. The study also developed comprehensive modernization strategies for existing irrigation systems and recommended a tailored investment plan for the SSIP.

Impact
India farmers’ income doubled by 2023
India’s “more crop per drop” achieved
Resilience of farmers in the project area to ongoing and uncertain future climate change increased
Involuntary Resettlement

Indigenous Peoples

Summary of Environmental and Social Aspects

Environmental Aspects

Involuntary Resettlement

Indigenous Peoples

Stakeholder Communication, Participation, and Consultation

During Project Design

Focus group discussions with future beneficiaries to understand their needs and constraints

During Project Implementation

TBD

Business Opportunities

Consulting Services

All consultants will be recruited according to ADB’s Guidelines on the Use of Consultants (2013, as amended from time to time).

Procurement

All procurement of goods and works will be undertaken in accordance with ADB’s Procurement Guidelines (2015, as amended from time to time).

Responsible ADB Officer

Arnaud M. Cauchois

Responsible ADB Department

South Asia Department

Responsible ADB Division

Environment, Natural Resources & Agriculture Division, SARD

Executing Agencies

Water Resources Department Madhya Pradesh

INFO@MPWIRD.GOV.IN

Water Resources Department Namada Bhawan, Tulsi Nagar Bhopal (M.P.) - 462003

Timetable

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<tr>
<th>Milestone</th>
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<tr>
<td>Concept Clearance</td>
<td>15 Dec 2015</td>
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<tr>
<td>Fact Finding</td>
<td>27 Jun 2017 to 07 Jul 2017</td>
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<td>MRM</td>
<td>15 Nov 2017</td>
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<td>Approval</td>
<td>31 May 2018</td>
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<td>Last Review Mission</td>
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<td>Last PDS Update</td>
<td>24 Sep 2018</td>
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Loan 3662-IND

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Project Page

https://www.adb.org/projects/45371-007/main

Request for Information

http://www.adb.org/forms/request-information-form?subject=45371-007

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28 July 2019

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