Early Warning System

ADB-45371-007

Madhya Pradesh Irrigation Efficiency Improvement Project

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Quick Facts

Countries	India
Financial Institutions	Asian Development Bank (ADB)
Status	Proposed
Bank Risk Rating	B
Sectors	Agriculture and Forestry, Energy, Infrastructure
Investment Type(s)	Loan
Investment Amount (USD)	$ 366.10 million

Project Description

DESCRIPTION

The Madhya Pradesh Irrigation Efficiency Investment Program will achieve high irrigation efficiency and water productivity in two large irrigation schemes in Madhya Pradesh, India. The investment program will develop 125,000 hectares (ha) of new, highly efficient irrigation networks and productive command area under the Kundaliya Irrigation Project in Rajgargh and Shejahpur districts. It will also modernize and expand the existing Sanjay Sarovar Irrigation Project (SSIP) in Seoni and Balaghat districts. Water savings will allow irrigation expansion for increased food security or reallocation to other sectors.

PROJECT RATIONALE AND LINKAGE TO COUNTRY/REGIONAL STRATEGY

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 agriculture 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 non-agriculture sector is fast increasing and water shortage is becoming an area of major concern for industries. At the same time, population growth and change in dietary habits requires agriculture production to continue to grow. By 2050, annual water availability per capita is expected to drop from 1,530 cubic meters (m3) to 1,140 m3, indicating severe water stress. The current 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 it is also inefficiently used. In the meantime, water shortages are constraining power production and the development of high value industries that are required to fuel the country's economic growth. About 29% of India' s power is generated from hydropower and 65% from thermal power, which requires plentiful water. These problems will worsen in the future with the projected impacts of population growth, economic growth, and climate change.The Government of India is well aware of the situation. Both the National Water Mission and the Twelfth Five-Year Plan have acknowledged the necessity to improve water use efficiency in irrigation and have set a target to improve current level by 20% by 2018. In 2014, ADB funded the Scoping Study for a National Water Use Efficiency Improvement Program. The study identified the following three main causes for low water use efficiency: (i) inadequate irrigation and drainage infrastructure due to faulty designs and lack of maintenance; (ii) inadequate management, operation and maintenance 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 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. Under a subsequent regional technical assistance, the framework was pilot tested on a number of MMI within South Asia; it developed a comprehensive modernization strategy for existing irrigation systems and recommended a tailored investment plan for SSIP.

IMPACT

Irrigation water use efficiency increased by 20% in India (Twelfth Five-Year Plan 2012 -2017 and National Water Mission 2012-2017)1

2.8 million hectares additional irrigated area developed in Madhya Pradesh state by 2025 (Madhya Pradesh Water Resource Development Plan 2015 -2025)2

OUTCOME

High irrigation efficiency and water productivity achieved in two major irrigation schemes in Madhya Pradesh

Investment Description

- Asian Development Bank (ADB)

Loan: Madhya Pradesh Irrigation Efficiency Improvement Project
Ordinary capital resources US$ 366.10 million

Contact Information

ACCOUNTABILITY MECHANISM OF ADB

The Accountability Mechanism is an independent complaint mechanism and fact-finding body for people who believe they are likely to be, or have been, adversely affected by an Asian Development Bank-financed project. If you submit a complaint to the Accountability Mechanism, they may investigate to assess whether the Asian Development Bank is following its own policies and procedures for preventing harm to people or the environment. You can learn more about the Accountability Mechanism and how to file a complaint at: http://www.adb.org/site/accountability-mechanism/main

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Bank Documents

- Project Disclosure PDF

Other Related Projects

- ADB-45371-003 Madhya Pradesh Irrigation Efficiency Investment Program
- ADB-45371-001 Madhya Pradesh Irrigation Efficiency Investment Program