India: Orissa Integrated Irrigated Agriculture and Water Management Investment Program - Project 2

Project Name: Orissa Integrated Irrigated Agriculture and Water Management Investment Program - Project 2
Project Number: 38411-043
Country: India
Project Status: Active
Project Type / Modality of Assistance: Loan
Source of Funding / Amount: Loan 3265-IND: Orissa Integrated Irrigated Agriculture & Water Management Investment Program - Tranche 2
Ordinary capital resources
US$ 120.00 million

Strategic Agendas:
- Environmentally sustainable growth
- Inclusive economic growth

Drivers of Change:
Governance and capacity development

Sector / Subsector:
Agriculture, natural resources and rural development
- Agricultural drainage
- Agricultural production
- Irrigation
- Rural flood protection
- Rural water policy, institutional and capacity development

Gender Equity and Mainstreaming:
Effective gender mainstreaming

Description:
ADB and the Government of India are working together to make irrigation systems in the state of Odisha more productive, efficient and sustainable. The Orissa Integrated Irrigated Agriculture and Water Management Investment Program is improving irrigation systems in four northern river basins and a part of the Mahanadi River Delta in Odisha state. The program is renovating and extending irrigation systems; helping to form community water user associations that help manage local water resources; and improving the efficiency and effectiveness of government agencies that deal with water issues in the state. About 1.7 million people are benefiting from the program through the improvement of irrigation systems that serve 215,000 hectares of farm land. The reliable water supply obtained from improved irrigation systems is increasing the outputs of farmers; creating jobs in agriculture; improving nutrition; increasing incomes; and lowering poverty.

Project Rationale and Linkage to Country/Regional Strategy:
Despite India’s rapid overall economic growth, agricultural development has been stagnant. Farmers in India are making a slow transformation to more intensive and high-value production and processing systems. Bottlenecks in water resources are also increasingly seen as a major constraint to economic growth in the country. In this context, irrigation is drawing major attention because it accounts for 84% of total water use. Irrigation is crucial for agriculture and rural growth, but much of the existing irrigation infrastructure is inefficient and underutilized. This is particularly true in Odisha, one of the poorest states in India. Agriculture is the backbone of the state economy and is key to reducing rural poverty. Improving irrigation infrastructure is an effective method of supporting agriculture and thereby reducing poverty in the state.

Impact:
economic growth, including agricultural growth, in Odisha is sustainable, broad-based and more inclusive (12th Five-Year Plan: 2012-2017).

Project Outcome

Description of Outcome:
productivity of agriculture in selected river basins in Odisha increased.

Progress Toward Outcome:
Project declared effective on 28 June 2016.
Project activities started. Target expected by end of project.

Implementation Progress

Description of Project Outputs:
Water resources and irrigation management of state and water user institutions strengthened
Irrigation system and associated infrastructure modernized and managed.
Status of Implementation Progress (Outputs, Activities, and Issues)

Activity yet to start as recruitment of consultants under process
PP Rules updation are in progress
Elections held in 70 out of 138 participating WUAs with 33% women representatives in EC.
37 civil works contracts awarded for main canal and distributaries. Upgradation of Irrigation infrastructure is in progress
Initial stage of implementation. Work yet to start for upgraded on-farm distribution system.
Action initiated for asset management plans for 7 irrigation subprojects and currently, collection of data from 7 subprojects is ongoing.
Preparation and implementation of O&M plans is in initial stage of implementation. Consultants selection under progress
Work completed in 1 package and is in progress in 9 packages for restoration of saline embankments. Re-bidding under process for the remaining 2 packages.

Geographical Location

Safeguard Categories

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<th>Category</th>
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<td>Environment</td>
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<tr>
<td>Involuntary Resettlement</td>
<td>A</td>
</tr>
<tr>
<td>Indigenous Peoples</td>
<td>B</td>
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</table>

Summary of Environmental and Social Aspects

Environmental Aspects

It comprises irrigation system modernization, WUA strengthening, and rehabilitation of embankments. Initial environmental examinations have been prepared for all subprojects and an environmental assessment and review framework prepared for the MFF. Environmental impacts are positive, including improved water availability, water use efficiency, and increased agricultural production. Institutional strengthening for IWRM will deliver further benefits through river basin management. Potential negative impacts include deterioration of water quality due to agriculture intensification, and impacts during construction of infrastructure. These are mitigated by introducing integrated pest management and effective soil nutrient management, and ensuring safe and environmentally sound construction with environmental monitoring (sampling and reporting) to the PIM-CAD Directorate.

Involuntary Resettlement

DOWR prepared a resettlement plan (RP) for the Mahanadi Chitropola Island subproject in 2011; the subproject will be constructed with tranche 2 resources but the RP was prepared and implemented using tranche 1 resources. DOWR prepared RPs for Macchagaon, Pattamundai and HLC Range-1 (major) subprojects in 2014. All four RPs were disclosed in accordance with the SPS, and meaningful consultation and information disclosure was conducted with affected people. The main IR impact will be loss of assets (residential, commercial and common property structures) and livelihoods of non-titleholders on existing canal embankments. Land acquisition of 43 ha will occur in Mahanadi Chitropola Island subproject, and the remaining IR is on existing land. The number of affected households is 811 in Macchagaon, 834 in Pattamundai, 302 in HLC Range-1, and 1149 in Mahanadi Chitropola Island, for a total of 3096 affected households. DOWR will compensate all affected households for loss of structures and income restoration.
DOWR demonstrated adequate institutional capacity and commitment for managing social risks during the implementation of the Mahanadi Chitropola Island RP. The resettlement framework prepared for the investment program was revised to be consistent with the SPS and outlines the objectives, policy, principles, and procedures for land acquisition, resettlement compensation, and other assistance measures for affected persons. DOWR will ensure that the payment of compensation to the affected households under the sub-projects is as per the respective entitlement in the RPs.
A grievance redress committee will be constituted for each subproject, comprising the Project Director, PMU Resettlement Officer, resettlement specialist of the project management consultants, representative from local CSOs, elected representative from Municipality / Panchayat as observers, representatives of affected persons including vulnerable groups and women in the committee. The PMU will monitor RP implementation with assistance from the construction supervision consultants. Safeguards reporting from the PMU to ADB will be done on a semi-annual basis.

Indigenous Peoples

Odisha has a relatively high indigenous population (22%) compared with other states. There are IP populations of 79.3% and 52% in the Project 1 medium irrigation subprojects of Kansbahal and Ramial, respectively. The scheduled caste and scheduled tribe households are culturally and economically integrated with the mainstream population and the subprojects will not cause any differential impacts on these communities. These communities will benefit from their participation through WUAs and will gain better access to on and off-farm employment opportunities through grant financing. Project 1 has demonstrated that there is a high representation of IPs in WUAs and they have been included in decision making. Investment program has an approved IP development framework and specific actions for IPs to benefit them from the positive impacts of subproject development through inclusion in the WUA, and livelihoods activities.

Stakeholder Communication, Participation, and Consultation
During Project Design

A participatory process was used during the preparation of the investment program. Consultations were carried out with women, the landless, scheduled tribes & other vulnerable groups in the subproject areas using participatory rapid rural appraisal techniques. An inventory of local needs was prepared, covering problems/constraints on (i) water resources in relation to agriculture, fisheries, transport, environment, & other uses; (ii) possible solutions to resolve the constraints identified including their positive & negative impact on various local interest groups; (iii) implications of solutions for poverty reduction; & (iv) prioritizing water resources needs compared with other development needs. The role of service providers, people’s willingness to contribute to O&M, & the scope of enhancing impacts of water interventions with others such as micro credit, & extension services were also discussed. Non-government organizations were engaged to facilitate this process. This process identified the future actions to institutionalize community participation in the expected implementation areas.

During Project Implementation

Farmer beneficiaries are involved at each stage of subproject planning and implementation and take the lead role in command area development and sub-minor canal construction works. Detailed micro-plans are prepared by each WUAs, covering agriculture, livelihood enhancement, organizational development, and O&M and water management. Women and other vulnerable groups receive support to ensure their meaningful participation in all subproject activities.

Business Opportunities

Consulting Services

Institutional strengthening and project management consultants engaged for Project 1 will continue for Project 2. Additional packages of consultants for Project 2 include (i) construction management and supervision, (ii) WUA strengthening, (iii) minor lift irrigation implementation, (iv) management information system development and implementation, (v) integrated water resources management advisory services, and (vi) resettlement plan implementation.

Procurement

The procurement plan calls for 66 NCB packages for irrigation main, distributary and minor canal works and 12 packages for saline embankment restoration, and several goods packages for minor lift and management information system equipment. Subminor canal work and minor lift installation will be done by water users associations.

Responsible Staff

Responsible ADB Officer
Yadav, Rajesh

Responsible ADB Department
South Asia Department

Responsible ADB Division
India Resident Mission

Executing Agencies
Department of Water Resources, Gov’t of Odisha
Rajiv Bhavan, Bhubaneshwar, Orissa

Timetable

Concept Clearance 07 Sep 2007
Fact Finding -
MRM 23 Apr 2015
Approval 30 Jun 2015
Last Review Mission -
PDS Creation Date 26 Nov 2009
Last PDS Update 29 Mar 2017

Loan 3265-IND

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