



India: Karnataka Integrated and Sustainable Water Resources Management Investment Program - Project 1

Project Name	Karnataka Integrated and Sustainable Water Resources Management Investment Program - Project 1	
Project Number	43253-023	
Country	India	
Project Status	Active	
Project Type / Modality of Assistance	Loan	
Source of Funding / Amount	Loan 3172-IND: Karnataka Integrated and Sustainable Water Resources Management Investment Program - Project 1	
	Ordinary capital resources	US\$ 31.00 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Governance and capacity development Knowledge solutions Partnerships	
Sector / Subsector	Agriculture, natural resources and rural development - Irrigation - Rural water policy, institutional and capacity development - Water-based natural resources management	
Gender Equity and Mainstreaming	Effective gender mainstreaming	
Description	ADB and the Government of India are working together to bring improved water and irrigation services to farmers in Karnataka state. The Karnataka Integrated and Sustainable Water Resources Management Investment Program is helping people in the state manage the water in river basins so that it can be shared equally among the various users minimizing impacts to the environment. This is being done under the principles of Integrated Water Resources Management (IWRM), which is recognized by many countries around the world as a model for establishing good water practices. The program will help government agencies and beneficiary communities adopt internationally accepted principles for managing the water in river basins. It will have a particular focus on including women in trainee programs and in management positions of community water associations. The objective of the program is to establish a system where water is managed efficiently and shared equally among communities, farmers and industries over the long-term.	

Project Rationale and Linkage to Country/Regional Strategy	<p>Karnataka state in India has a thriving information technology industry and a relatively small agriculture sector. Despite that, farming jobs are the number one source of employment in the state with more than half the population employed in agriculture. While millions of people in Karnataka rely on agriculture, the supply of water that farmers need to thrive is diminishing. The booming cities and rapidly growing industries are using an increasingly large amount of the state's water and leaving farms dry. Frequent droughts and the impact of climate change are expected to make the situation worse. Currently, more than 80 percent of the state's water is used to irrigate farms but the system is inefficient, much of the water is wasted and many agricultural areas that need irrigation are left without. Poor infrastructure, such as antiquated water control structures, and faulty maintenance contribute to the problem. The use of water-saving crops and practices by farmers is also limited. The Government of India has recognized that greater efficiency is needed in order for the state to make the most of the water it has for farmers, factories, private users and others.</p> <p>Strategic Context, Link to Government, and ADB Strategies. The medium-term plan of the state of Karnataka emphasizes greater visibility of agriculture and allied activities to increase rural incomes, and achieve a sustainable and orderly process of industrialization and urbanization for poverty reduction and sustained human development. The water policy of 2002 of the state aims for holistic water resources planning, development, and management to be undertaken for each hydrological unit. The National Water Mission, 2011; National Water Policy, 2012; and the Twelfth Five-Year Plan, 2012 to 2017 all support the requirement for integrated planning of water resources across various users. The investment program is consistent with ADBs Midterm Review of Strategy 2020 and country partnership strategy, 2013 to 2017 for India by reinforcing core areas of operations, like infrastructure development for water resources management, investing in irrigation infrastructure to enhance value addition in agriculture, and developing measures to increase water use efficiency. The investment program is also in accordance with the ADB Water Operational Plan, 2011 to 2020. It will improve water governance by embedding IWRM as an adaptive management process, including for climate change adaptation; and improve water use efficiency to increase availability for competing uses.</p> <p>The state has a number of enabling factors to adopt an IWRM approach, including (i) recognition of the scarcity of, and threats to, water resources; (ii) progressive policy statements; (iii) major investments in water resources infrastructure; (iv) technical capacity; and (v) a progressive outlook, as exemplified by semi-independent institutions of the state WRD like the irrigation corporations or nigams, command area development authorities (CADAs), and the Advanced Centre for Integrated Water Resources Management (AC-IWRM).</p> <p>Improvements in urban water management will be addressed under a separate ADB-financed investment program. The two investment programs will be closely coordinated through the AC-IWRM.</p>
Impact	integrated water resources management in selected river basins in Karnataka successfully implemented.

Project Outcome

Description of Outcome	river basin plan for Krishna-8 (K-8) subbasin successfully implemented.
Progress Toward Outcome	The project became effective on 13 July 2015. As such, it is too early to assess progress toward outcome.

Implementation Progress

Description of Project Outputs	<p>State and basin institutions strengthened for IWRM.</p> <p>Irrigation system infrastructure and management modernized</p> <p>Project and management systems operational</p>
Status of Implementation Progress (Outputs, Activities, and Issues)	<p>1) The IWRM training program commenced in November 2016 with 30 participants for the first batch. Further trainings to be undertaken in 2017 include hydrological modelling, river basin modelling, climate change modelling, water accounting plus, and GIS and remote sensing.</p> <p>2) The Gondi contract was signed on 26 February 2016 and civil works are being implemented during canal closures. The telemetry equipment contract signed 23 November 2015 and installation activities will be completed in 2017. Contract awards for about 30 command area development (CAD) community participation packages are expected in Q1 2016.</p> <p>3) The Program Management Unit and Project Implementation Office for Gondi are fully operational.</p>

Geographical Location

Safeguard Categories

Environment	B
Involuntary Resettlement	C
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	Project 1 is categorized B for environment in accordance with ADB's Safeguard Policy Statement (2009). It comprises canal modernization for the Gondi medium irrigation subproject and installation of flow measurement devices within the subbasin. An initial environmental examination has been prepared for project 1. An environmental assessment and review framework has also been developed for the MFF to guide subsequent subprojects and development interventions. Consultations were undertaken with affected stakeholders, and the existing grievance redress mechanism of the state will be adopted.
Involuntary Resettlement	Project 1 is categorized C for involuntary resettlement. This is because the project involves modernization of an existing canal system within the existing right-of-way, and the WRD already owns the right-of-way of 5 meters alongside the canals for facilitating maintenance works and for access. No land acquisition or other losses will result in involuntary resettlement under project 1. A resettlement framework has been prepared for the entire MFF pursuant to the Safeguard Policy Statement, and it will be followed for the subsequent projects.
Indigenous Peoples	Project 1 is categorized C for the indigenous peoples safeguard. There are no indigenous peoples, as defined by the Safeguard Policy Statement, in any of the areas of project 1 or subsequent projects under the investment program. As subsequent projects would also be categorized C, an indigenous peoples planning framework has not been prepared.

Stakeholder Communication, Participation, and Consultation

During Project Design	ADB initiated a consultation process as an opportunity to get information, as well as to learn about the local context in which a project will take place, to raise issues and concerns, ask questions, and potentially help shape the project by making suggestions for the ADB to consider and respond to. Further, participation and consultation (P&C) process was undertaken to help increase the level of support for the Project and related activities from a range of stakeholders, to speed up processing and reduce challenges during implementation. P&C is also expected to improve the effectiveness, relevance, and sustainability of development activities in the long run.
During Project Implementation	The participation and consultations (P&C) process is aimed at informing the stakeholders of the project plans and activities. Consultations and communication will be a continuous agenda and an integral part of the project. To ensure this, the Program Communication Plan will be an instrument to carry forward the P&C process. The Program Communication Plan covers a range of communication needs of the project. First, it delineates the stakeholder consultation process to be adopted by project management to facilitate awareness and participation for effective project implementation and safeguards. Second, it addresses the need to introduce and explain the project to a wide range of audiences who can influence and affect an enabling environment for the project. Finally, it also informs the general public in the State and outside about the IWRM-based water management actions being initiated by the government to elicit their support, knowledge and participation.

Business Opportunities

Consulting Services	Consulting services will provide technical support for program implementation. The three main consulting services packages will be for the (i) project support consultants (PSCs), (ii) integrated water resources management (IWRM), and (iii) services for monitoring and evaluation (including environmental and effects monitoring). Firms will be recruited using the quality- and cost-based selection method.
Procurement	All procurement of works and equipment will be undertaken in accordance with ADBs Procurement Guidelines (2013, as amended from time to time), while recruitment of consultants and other services will be undertaken in accordance with ADBs Guidelines on the Use of Consultants (2013, as amended from time to time). Civil works include modernization of irrigation infrastructures on the Gondi subproject. Small community works are planned to be undertaken with water user cooperative societies associated with the minor canal and community area development works.

Responsible Staff

Responsible ADB Officer	Gore, Lance W.
Responsible ADB Department	South Asia Department
Responsible ADB Division	Environment, Natural Resources & Agriculture Division, SARD
Executing Agencies	<i>Karnataka Neeravari Nigam Limited</i> <i>PDADB.KNNL@GMAIL.COM</i> <i>4th Floor, Coffee Board Building, No. 1, Dr. B R. Ambedkar Beedhi, Bangalore, Karnataka, India</i>

Timetable

Concept Clearance	-
Fact Finding	-
MRM	24 Jul 2013
Approval	17 Oct 2014
Last Review Mission	-

Loan 3172-IND

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
17 Oct 2014	07 May 2015	13 Jul 2015	31 Mar 2019	-	-

Financing Plan		Loan Utilization			
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	48.00	Cumulative Contract Awards			
ADB	31.00	17 Oct 2014	19.48	0.00	63%
Counterpart	17.00	Cumulative Disbursements			
Cofinancing	0.00	17 Oct 2014	7.60	0.00	25%

Project Page <https://www.adb.org/projects/43253-023/main>

Request for Information <http://www.adb.org/forms/request-information-form?subject=43253-023>

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