



India: Chhattisgarh Irrigation Development Project

Project Name	Chhattisgarh Irrigation Development Project																
Project Number	37056-013																
Country	India																
Project Status	Closed																
Project Type / Modality of Assistance	Loan Technical Assistance																
Source of Funding / Amount	<table border="1"> <tr> <td colspan="2">Loan 2159-IND: Chhattisgarh Irrigation Development Project</td> </tr> <tr> <td>Ordinary capital resources</td> <td>US\$ 46.10 million</td> </tr> <tr> <td colspan="2">TA 4573-IND: Water Users Association Empowerment for Improved Irrigation Management in Chhattisgarh (Supplementary)</td> </tr> <tr> <td>ATF - DFID-United Kingdom</td> <td>US\$ 1.35 million</td> </tr> <tr> <td colspan="2">TA 4573-IND: Water Users Association Empowerment for Improved Irrigation Management in Chhattisgarh (Supplementary)</td> </tr> <tr> <td>Multi-Donor Trust Fund under the Water Financing Partnership Facility</td> <td>US\$ 400,000.00</td> </tr> <tr> <td colspan="2">TA 4573-IND: Water Users Association Empowerment for Improved Irrigation Management in Chhattisgarh (Supplementary)</td> </tr> <tr> <td>Multi-Donor Trust Fund under the Water Financing Partnership Facility</td> <td>US\$ 150,000.00</td> </tr> </table>	Loan 2159-IND: Chhattisgarh Irrigation Development Project		Ordinary capital resources	US\$ 46.10 million	TA 4573-IND: Water Users Association Empowerment for Improved Irrigation Management in Chhattisgarh (Supplementary)		ATF - DFID-United Kingdom	US\$ 1.35 million	TA 4573-IND: Water Users Association Empowerment for Improved Irrigation Management in Chhattisgarh (Supplementary)		Multi-Donor Trust Fund under the Water Financing Partnership Facility	US\$ 400,000.00	TA 4573-IND: Water Users Association Empowerment for Improved Irrigation Management in Chhattisgarh (Supplementary)		Multi-Donor Trust Fund under the Water Financing Partnership Facility	US\$ 150,000.00
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Strategic Agendas	Inclusive economic growth																
Drivers of Change	Governance and capacity development																
Sector / Subsector	Agriculture, natural resources and rural development - Agricultural drainage - Agricultural production - Irrigation - Rural water policy, institutional and capacity development																
Gender Equity and Mainstreaming	Effective gender mainstreaming																
Description	The Project aims to improve rural livelihoods and reduce rural poverty through improved irrigation service delivery, enhanced agricultural practices, and strengthened water resources management to increase the productivity of irrigated agriculture in Chhattisgarh.																
Project Rationale and Linkage to Country/Regional Strategy	The Project is closely aligned with the development objectives of ADB, Government of India, and Chhattisgarh that promote equitable growth through sustainable agriculture and rural development. ADB's country strategy and program places emphasis on supporting new states (including Chhattisgarh) with higher than average poverty incidence and a strong commitment to reform.																
Impact	Improve rural livelihoods and reduce rural poverty.																

Project Outcome

Description of Outcome	<ol style="list-style-type: none"> 1. Attain more effective management, development, and operation and maintenance (O&M) of irrigation systems by Water Resource Department (WRD) and water users associations (WUAs) for improved irrigation service delivery. 2. Improve agricultural practices for increased yields and expand area of rabi (dry season) and more diversified cropping.
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Progress Toward Outcome	<p>Project implementation commenced in September 2006. Policy and institutional reforms are in progress and being monitored. In 2012 Kharif cropping intensity was maintained at 100% and rabi (2012-13) intensity increased to 53% in the irrigation schemes where water is available for Rabi season and R&U work are not preventing irrigation.</p> <p>Average rice yield increased to 5.9MT/ha for schemes under Intensive Irrigation Program (IIP) during 2012 Kharif season. This is more than 110% above pre-project level for irrigated rice. Average wheat yield for 2011-12 Rabi was 1.4 t/ha. In all the systems covered under IIP formation of sub-committees as per the PIM Act have been completed. Farmers are cultivating diversified Rabi cropping in all systems under IIP.</p>
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Implementation Progress

Description of Project Outputs	<ol style="list-style-type: none"> 1. Institutional strengthening and capacity development for WRD. 2. Improved institutional framework and capacity development for WUAs 3. R&U of existing irrigation schemes leading to improved performance 4. Improved capacity and willingness of farmers to engage in rabi cropping and diversified farming in irrigation system.
Status of Implementation Progress (Outputs, Activities, and Issues)	<p>PIM unit is functioning with one executive engineer and nine assistant engineers and one PIM Expert at Raipur, Ambikapur and Bilaspur training centres in addition to office staff.</p> <p>SDU was not functional and during the Mission (6-9 Aug 2012), SDU has been revived with the assignment of one Executive Engineer and two assistant engineers. WRD has initiated process for approval of PSC for engaging experts for SDU, and the approval is still awaited.</p> <p>WRD's needs assessment and capacity development programs have been prepared and about 1500 WRD staff have been trained in PIM and water management aspects. A participatory workshop on the capacity building plan was organized with WRD staff. Training manuals for trainers and trainees were developed and training provided to WRD staff. In addition, WRD staff participates in TA-managed WUA capacity building (PIM Training conducted for WUAs by NGO; and intensive interventions).</p> <p>The training center building of Raipur, Bilaspur and Ambikapur are completed. A training center development strategy was prepared by the PMU but need to be revised as it is not ensuring a long term institutionalization. ADB engaged capacity development expert to develop strategy for short and long term capacity development for WRD officers, who has submitted the report.</p> <p>Progressive PIM act approved in 2006.</p> <p>The second amendment to the PIM Act includes change/addition in the rule numbers 37 and 83 and section 5, 8 and 11 of the PIM act, which was sent for approval of GOC and notification in Gazette. Amendment to rule number 37 has been notified in the gazette on 23 December 2011 and amendment to Rule 83 is added and published in gazette notification on 3.8.2012. Cabinet approval to the proposal sent by WRD on 23 September 2011 for amendment to section 5, 8 and 11 of the PIM act section is still awaited. On 10 August 2010, based on the approval received from the Department of Finance (DOF), WRD approved the proposal to enhance the percentage of water fee to be shared with WUAs from 25% to 50% to be implemented only for CIDP schemes which was later extended to the entire state through a second note from WRD dated 29 September 2010. After the approval of WRD and concurrence of the Law Department, a note to modify the relevant rules to increase the share of WUAs from 25% to 50% has been sent to GOC for cabinet approval on 4 May 2011 which is still awaited.</p> <p>3rd amendment to allow WUAs to retain part of the collected water fee at the source has been submitted for approval of the Government of Chattisgarh on 29 June 2011- Government approval still awaited</p> <p>WUA capacity building is being done at three levels:</p> <ol style="list-style-type: none"> (i) Experiential capacity building through WUA-managed interventions under Intensive Intervention Program (IIP). In Rabi 2012-13 covering 50 CIDP systems (about 100,000ha), WUA capacity is being developed through WUA-managed Irrigation O&M and agriculture interventions. WUAs are involved in input-output marketing and are developed as Multi-functional organizations (ii) Periodic capacity building through formal sessions in the balance CIDP systems and (iii) State-wide basic (formal) training on PIM for selected WUA Representatives from all the 1324 WUAs in the State and sharing IIP strategy, process and experience gained in CIDP pilot schemes with Non-CIDP WUAs. <p>A list of 902 eligible WUAs (CIDP-189 and non-CIDP-713) has been finalized and grant released to 150 WUAs (CIDP 106 and non-CIDP 44).</p> <p>Return of a share of the water fee by DOF/WRD to WUA as per PIM Act provision is still to be implemented. As of 31 December 2012 R&U works of 134 minor and medium schemes covering about 151,209 ha are reported to be completed and works for the remaining 10 schemes are ongoing. Out of 148 sub projects taken up for implementation, 4 sub projects (3146 ha) have been dropped. Remaining 144 schemes cover an area of 173984ha.</p>
Geographical Location	State of Chhattisgarh

Safeguard Categories

Environment	B
Involuntary Resettlement	B
Indigenous Peoples	B

Summary of Environmental and Social Aspects

Environmental Aspects	An initial environmental examination (IEE) for the pilot subprojects and for the entire Project has been prepared. The IEE for the pilot subprojects did not predict impacts of significance. The IEE for the entire Project concluded that all the components should provide substantial environmental benefits in the medium to long term except for R&U, which is not anticipated to create any negative impacts. During project implementation the IEE reports including site specific environmental management and monitoring plans were developed for 159 schemes (including 4 pilot subprojects) out of which 148 schemes were taken up for implementation. The environmental impacts during construction phase were limited to canal corridor, and mostly remained temporary and reversible in nature.
Involuntary Resettlement	The social impact assessment studies inferred that none of the subprojects entailed any land acquisition, involved any resettlement and impacted any tribal community and accordingly no resettlement plan and indigenous peoples development plan was required under the Project.
Indigenous Peoples	The social impact assessment studies inferred that none of the subprojects entailed any land acquisition, involved any resettlement and impacted any tribal community and accordingly no resettlement plan and indigenous peoples development plan was required under the Project.

Stakeholder Communication, Participation, and Consultation

During Project Design

During Project Implementation	INRM continued to monitor the progress closely to ensure the project delivers the expected outcome and outputs that were accepted by the EA.
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Business Opportunities

Consulting Services	The Project will require 382 person-months of consulting services: 92 international and 290 domestic (an additional consulting package will be financed through a grant from the Government of the United Kingdom). The input reflects the combination of support to implement the physical works as well as the institutional strengthening necessary to make the investments effective and sustainable. Assistance is required to introduce new concepts of participatory irrigation management, social development, and modern design procedures through both formal and on-the-job training for the Water Resources Department (WRD) staff that will support the new WRD units. NGOs have been contracted to support implementation of project activities through procedures acceptable to ADB. Consultants have been engaged in accordance with ADB's Guidelines on the Use of Consultants and other arrangements satisfactory to ADB for selecting domestic consultants. The quality- and cost-based selection method used to select consulting firms.
Procurement	Procurement financed from the ADB loan proceeds will be carried out in accordance with ADB's Guidelines for Procurement. Civil works costing over \$3 million will be procured through international competitive bidding procedures, and those estimated to cost \$3 million or less will be procured through local competitive bidding procedures acceptable to ADB. Civil works awarded under local competitive bidding will be procured from prequalified bidders based on the Water Resources Department's existing system of advance prequalification acceptable to ADB, and award of contracts will be consistent with procurement procedures acceptable to ADB.

Responsible Staff

Responsible ADB Officer	Naduvnamani, Raghavendra R.
Responsible ADB Department	South Asia Department
Responsible ADB Division	India Resident Mission
Executing Agencies	<i>Water Resources Department, Gov't of Chhattisgarh Mr. C. K. Khaitan R. NO 316, Mantralaya, DKS Bhawan, Raipur Chhattisgarh</i>

Timetable

Concept Clearance	08 Mar 2003
Fact Finding	05 Jul 2004 to 27 Jul 2004
MRM	20 Aug 2004
Approval	29 Mar 2005
Last Review Mission	-
PDS Creation Date	02 Feb 2007
Last PDS Update	26 Mar 2013

Loan 2159-IND

Milestones

Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
29 Mar 2005	20 Mar 2006	30 Jun 2006	31 Mar 2013	-	22 Aug 2013

Financing Plan			Loan Utilization			
	Total (Amount in US\$ million)		Date	ADB	Others	Net Percentage
Project Cost	66.60		Cumulative Contract Awards			
ADB	46.10		29 Mar 2005	32.44	0.00	100%
Counterpart	20.50		Cumulative Disbursements			
Cofinancing	0.00		29 Mar 2005	32.44	0.00	100%

Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	-	-	-	Satisfactory

TA 4573-IND

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
29 Mar 2005	09 Nov 2005	09 Nov 2005	31 Mar 2012	31 Mar 2013	-

Financing Plan/TA Utilization						Cumulative Disbursements		
ADB	Cofinancing	Counterpart				Total	Date	Amount
		Gov	Beneficiaries	Project Sponsor	Others			
0.00	1,900,000.00	475,000.00	0.00	0.00	0.00	2,375,000.00	29 Mar 2005	2,641,441.81

Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	-	-	-	Satisfactory

Project Page <https://www.adb.org/projects/37056-013/main>

Request for Information <http://www.adb.org/forms/request-information-form?subject=37056-013>

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