



India: Sustainable Coastal Protection and Management Investment Program - Tranche 2

Project Name	Sustainable Coastal Protection and Management Investment Program - Tranche 2	
Project Number	40156-033	
Country	India	
Project Status	Approved	
Project Type / Modality of Assistance	Loan	
Source of Funding / Amount	Loan 3549-IND: Sustainable Coastal Protection and Management Investment Program - Project 2	
	Ordinary capital resources	US\$ 65.50 million
Strategic Agendas	Environmentally sustainable growth Inclusive economic growth	
Drivers of Change	Knowledge solutions Private sector development	
Sector / Subsector	Agriculture, natural resources and rural development - Water-based natural resources management	
Gender Equity and Mainstreaming	Some gender elements	
Description	The Sustainable Coastal Protection and Management Investment Program aims to address immediate coastal protection needs and coastal instability using environmentally and socially appropriate solutions, with a focus on softer options such as artificial reefs, beach nourishments, and dune management. The program also aims to protect the coastline from erosion and in so doing enhances income-generating opportunities for coastal communities. Tranche 2 will support nine subprojects consisting of six coastal protection subprojects designed to address the issues of medium to severe coastal erosion and three community subprojects for areas of low erosion resulting in the protection of approximately 54 km of coastline in Karnataka. Activities will include: (i) addressing immediate coastal protection needs; (ii) capacity building and institutional development; (iii) modeling and other analytical works to assess the impacts of climate change on selected sections of the coast; and (iv) comprehensive nearshore sea bed sand resources analysis designed to assess the issues of sand deficits of selected Karnataka beaches. It will continue to support strengthening of the executing agency on the long term activities on coastal planning and management that would continue after the end of the project period.	

Project Rationale and Linkage to Country/Regional Strategy

Coastal erosion is responsible for loss of land, houses, infrastructure, and business opportunities; and poses a high risk to human well-being, economic development, and ecological integrity. Every year, 400 hectares of land, 75,000 hectares of crop areas, and 34,000 residential houses and/or industrial establishments are lost or damaged by coastal erosion. The impact will be much more extensive and widespread in the coming years, as the coastline is increasingly subject to a wide range of economic developments, many of which create conflicts and pressures on the already disturbed natural coastal environments. The rural poor coastal communities are the most vulnerable to the impacts of erosion and poor coastal management. Many of the rapidly growing Indian urban areas are also vulnerable to coastal erosion; Mumbai, for example, incurs a cost of about \$2.5 million per km on capital works alone to protect some of its prime waterfront property.

The coastal protection strategy in India aims at protecting the land and overall economic growth. Protecting the beach and the environment are relatively new concepts. The most frequently applied methods for coastal protection have been through the use of hard structures, such as seawalls or groynes. Long-term plans to manage coastal erosion are available. However, resource constraints result in the measures being undertaken to target the more vulnerable sections of the coasts and as local emergency measures. Such interventions provide mostly land protection. Seawalls and groynes continue to be preferred measures though they do not necessarily address the root cause of the problem. As the pressure on the coastal zone keeps expanding because of human-induced activities as well as relative sea level rise, there is an urgent need to find sustainable solutions for coastal protection.

Continuing coastal erosion worldwide is leading to the development and installation of innovative techniques for effective and unobtrusive shoreline and near shore control. There are increasing examples of replacement or modification of traditional hard rock protection with softer options such as beach nourishments, dune management, or artificial reefs. The investment program is designed to facilitate the transition to softer solutions, with a focus on environmentally appropriate and sustainable solutions. The benefits of coastal protection to coastal economies are enormous. Interventions to prevent coastal erosion and protect beaches and adjoining land will benefit port operators and users, fisherfolk, tourism operators, beach users, farmers, and other property owners and local communities living near to or depending on the coast. In addition, the introduction and development of new technologies have lower environmental and social impacts than rock walls, which are the traditional solution to coastal erosion problems in India. When solutions include the construction of artificial reefs, there are benefits for beaches, land and property behind beaches, tourism, and artisanal fisheries since reefs provide a beneficial habitat for fish and other marine species. The introduction of these new technologies for coastal protection leads to solutions that not only protect the coastline from erosion but enhance income-generating opportunities for communities living near the affected areas.

Impact	Income and poverty status of coastal communities in the subproject areas of Karnataka improved (Defined by Investment Program)
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Project Outcome

Description of Outcome	Shorelines in Karnataka protected and managed.
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Progress Toward Outcome

Implementation Progress

Description of Project Outputs	coastal erosion and instability mitigation structures constructed or upgraded capacity for integrated shoreline planning and development enhanced.
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Status of Implementation Progress (Outputs, Activities, and Issues)

Geographical Location

Safeguard Categories

Environment	B
Involuntary Resettlement	C
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	Project 2, in accordance with ADB SPS 2009, is categorized as "B" for environment. The Initial Environmental Examination (IEE) and its Environmental Management Plan (EMP) including Monitoring Plan were prepared during project preparation. The Government through the EA is obliged to implement recommendations from the IEE report. With respect to the requirement of the facility to comply with ADB SPS 2009, the government through the State Executing Agency has updated and provided ADB with the following safeguards framework documents: (i) Environmental Assessment and Review Framework (EARF); (ii) Resettlement Framework (RF); and (iii) Indigenous Peoples Planning Framework (IPPF).
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Involuntary Resettlement	Project 2 will not require any land acquisition. Project 2 is categorized as C in accordance with ADB SPS 2009, for both social safeguards: Involuntary Resettlement (IR) and Impact to Indigenous People (IP).
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Indigenous Peoples	The poverty and social assessment study confirms that there are no indigenous peoples or Schedule Tribes present in the project areas.
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Stakeholder Communication, Participation, and Consultation

During Project Design	<p>Between February 2013 and December 2014, public consultations were carried out on the design aspects of tranche 2 structures, with three specific groups of stakeholders i.e. (i) communities (ii) gram panchayats (GPs), and (iii) district officials. The initial consultation meetings at the community level were held at or near the proposed project sites. It involved presentations in local language on the coastal erosion status and the proposed technical design. Brochures printed in local language were also shared with the members. The participants at the community level included fisher-folks, fish retailers, farmers, small traders, members of youth clubs and prayer halls.</p> <p>This was followed by a meeting at the GP level, where discussions were held with the elected body members and officials. GPs were considered as the <u>converging point</u> for all sub-project consultations. Some prominent citizens such as office bearers of the fisher folks association, retired school teachers, past ward members were also invited to these meetings. This was followed by a common meeting (sometimes two or more) convened by the District Collector. These meetings were generally large with as many as 50 to 60 participants attending each meeting. A cross-spectrum of department officials, political representatives and prominent citizens attended these meetings.</p> <p>At the end of each of these meetings, the team sought stakeholders concerns and apprehensions specific to the design. The suggestions received were incorporated in the final design.</p>
During Project Implementation	The public consultation and disclosure program will remain a continuous process throughout the subprojects implementation.

Business Opportunities

Consulting Services	All consulting services will be procured in accordance with ADB's Guidelines on the Use of Consultants (2013, as amended from time to time). The core consultancy is for project management and design consultant. The requirement is for 198 person-months (38 international, 160 national) of consulting services. The consultants have been recruited using quality- and cost-based selection method and have been mobilized.
Procurement	All procurement of goods and works will be planned in accordance with ADB's Procurement Guidelines (2013, as amended from time to time). Less complex civil works contracts costing less than \$40 million will be procured through national competitive bidding. This will include 5 packages with works including: geobags, rock revetment, planting and beach nourishment with total aggregate value of \$38.0 million. More complex civil works contracts costing less than \$40 million will be procured through international competitive bidding. This will include 3 packages with works including groynes, offshore reef and beach nourishment with a value of total aggregate value of \$31.9 million. ADB standard bidding documents with post qualification under the single-stage two-envelope system will be used for all 8 packages. Six out of 8 civil works packages have been tendered. Out of these, 3 packages totaling approximately \$32 million, have already been awarded, another two packages of about \$15.7 million to be awarded in shortly, and one package of about \$0.30 million will be for re-bid. The remaining two packages worth \$21.9 million to be advertised early and are expected to be awarded by December 2017.

Responsible Staff

Responsible ADB Officer	Yadav, Rajesh
Responsible ADB Department	South Asia Department
Responsible ADB Division	Environment, Natural Resources & Agriculture Division, SARD
Executing Agencies	<i>Public Works, Ports & Inland Water Transport Dept. 3rd Floor, Vikasa Soudha Bangalore-560 001 Karnataka, India</i>

Timetable

Concept Clearance	-
Fact Finding	-
MRM	08 Jun 2016
Approval	27 Jul 2017
Last Review Mission	-
Last PDS Update	01 Aug 2017

Loan 3549-IND

Financing Plan	Loan Utilization
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	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	93.54	Cumulative Contract Awards			
ADB	65.50	-	0.00	0.00	%
Counterpart	28.04	Cumulative Disbursements			
Cofinancing	0.00	-	0.00	0.00	%

Project Page <https://www.adb.org/projects/40156-033/main>

Request for Information <http://www.adb.org/forms/request-information-form?subject=40156-033>

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