

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: 85588

Project Name	National Cyclone Risk Mitigation Project I Additional Financing
Region	SOUTH ASIA
Country	India
Sector(s)	General water, sanitation and flood protection sector (100%)
Theme(s)	Natural disaster management (100%)
Lending Instrument	Investment Project Financing
Project ID	P148870
Borrower(s)	GOI (80%); State Government (20%)
Implementing Agency	Ministry of Home Affairs
Environmental Category	<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
Date PID Prepared	December 18, 2013
Estimated Date of Appraisal Completion	January 10, 2014
Estimated Date of Board Approval	April 10, 2014
Decision	

I. Project Context

Country Context

India is highly vulnerable to natural hazards, particularly earthquakes, flood, drought, cyclone and landslides. Cyclones are one of the most frequently recurring natural disasters in India, with nearly 300 cyclones (of which 40 percent were severe) affecting the country during the past century. Analyzed data for the period 1980-2000 indicates that on an average, annually, 370 million people are exposed to tropical storms and cyclones in India and economic losses resulting from these cyclones are staggeringly high, estimated at about US\$ 200 million annually. As climate change and variability become more pronounced, hazard events are set to grow, both in terms of frequency and intensity. Climate change prediction models show greater number of high storm surges. In addition, models show an increased occurrence of cyclones in the Bay of Bengal, particularly in the post-monsoon period, along with increased maximum wind speeds associated with cyclones.

Sectoral and Institutional Context

For more than a decade now, the World Bank has been assisting the Government of India (GoI) in effectively responding to disasters including the Latur (Maharashtra) earthquake in 1993, the Andhra Pradesh cyclone in 1997, the Orissa super-cyclone in 1999, the Bhuj, Gujarat earthquake in 2001, the Tsunami in South India in 2004, Uttarakhand floods in 2013 and most recently Cyclone Phailin in 2013. Globally, understanding has grown over the past decade around the important role played by disaster risk mitigation and preparedness projects in reducing the overall impacts of a disaster. In India too, this partnership between GoI and the

World Bank and their joint learning experience of disaster recovery and reconstruction, are leading to an increased focus towards future oriented, risk mitigation programs and strategies.

India's response to the biggest disasters of the past decade, the Gujarat earthquake and the Asian tsunami, has been efficient and very effective. Through this period India has made great strides in moving from reactive emergency response to being proactive and implementing disaster preparedness and risk reduction initiatives. India enacted the Disaster Management Act in 2005 paving the way for the establishment of the National Disaster Management Authority (NDMA) and State Disaster Management Authorities (State DMAs). The NDMA has proactively formulated guidelines and procedures for dealing with specific calamities. NDMA is mandated to lay down the policies, plans and guidelines for Disaster Management to ensure timely and effective response to disasters. They are engaged in prioritizing and building capacity for risk mitigation programs across the country. The Risk Framework developed in India has served as blue print and best practice model for other countries.

Rationale for Additional Financing

On October 12 2013, Cyclone Phailin hit the states of Odisha and Andhra Pradesh with wind gusts up to 220 kilometer per hour, heavy rains measuring up to 25 centimeter and storm surge over 3 meters; the sea pushed in as much as 40 meters along parts of the coast. It was the strongest cyclone to hit the Indian coast in the past 14 years: a category 4 cyclone (Katrina in comparison, was category 3 upon landfall) similar to the Super Cyclone 05B of 1999 to hit Odisha and kill more than 10,000, destroying 275,000 homes and leaving 1.67 million homeless. The cyclone hit a densely populated area, with 4.5 million people within the hurricane force wind path and significant informal housing.

The death toll, according to reports was 44, which was 0.4 percent that of the 1999 cyclone; the National Cyclone Risk Mitigation Project (NCRMP Phase I) contributed to this enhanced resilience. The state governments of Odisha and Andhra Pradesh (the target states of NCRMP-I which were also most affected by Cyclone Phailin), in collaboration with the National Disaster Management Authority (NDMA), evacuated over 900,000 people from low-lying coastal areas - the largest such operation in India's history. State authorities set up over 1,200 relief camps and stocked over 500 cyclone shelter with adequate food, water and supplies. Over 2,300 officers from the National Disaster Response Force and 600 personnel from the Indian Army fanned out to provide relief and assess the damage across 14,500 affected villages.

As a result of Cyclone Phailin, the Government of India, ever more conscious of the need for cyclone risk mitigation infrastructure in the vulnerable coastal states of Odisha and Andhra Pradesh, has requested an additional credit to further the engagement of NCRMP in these states by providing improved access to emergency shelter and evacuation against wind storms, flooding and storm surge in high risk areas currently not covered by the original project.

The World Bank is committed to continuing its efforts of reducing vulnerability of India to natural disaster events and its social and economic impacts by promoting a proactive and strategic approach to managing natural disaster risk. The underlying principles of the framework are that both loss of life and economic impact of disasters can be reduced by advance planning and investment. This commitment is consistent with the Country Partnership Strategy for India

(2013-17) in promoting integration, transformation and inclusion: integration through connecting communities through additional roads and bridges used for evacuation and resilience but also for market integration; transformation by enhancing capacity at both central and community levels to promote disaster risk management capacity and inclusion through building resilience infrastructure which support fragile segments of the population most at risk of being left behind.

II. Project Development Objectives

The overall development objectives of the program remains to assist the Government of India mitigate the risks and vulnerability of the people of India to natural disasters, particularly cyclones, in order to save lives and reduce social, economic and financial impacts in the event of future disasters. The PDO of the NCRMP and its additional financing is to reduce the vulnerability of coastal communities to cyclone and other hydrometeorological hazards through (i) improved early warning and communication systems, (ii) enhanced capacity of local communities to respond to disasters, (iii) improved access to emergency shelter, evacuation, and protection against wind storms, flooding and storm surge in high risk areas, and (iv) strengthening disaster risk management capacity at central, state and local levels in order to enable mainstreaming of risk mitigation measures into the overall development agenda.

The program is designed as an Adaptable Program Loan (APL) and is expected to have three phases. Phase I includes the states of Odisha and Andhra Pradesh that are ready to start implementation of the program. Phase II will focus on West Bengal, Maharashtra, Kerala and Gujarat. The remaining coastal states will be covered under Phase III. The programmatic approach of the APL will allow for incorporation of lessons learned from earlier phases, as well as the adoption of new ideas and technologies into subsequent phases of the program. The programmatic approach will also help in the creation of monitoring and evaluation capacities of the NDMA and other state nodal agencies, and will also relate to the readiness of various coastal states vis-à-vis identification and detailing of the specific investment proposals.

The proposed additional financing will scale up risk mitigation activities under Phase I and strengthen their impact and development effectiveness in the context of the October 2013 cyclone. These aims would be targeted through expanded construction of multi-purpose cyclone shelters and its related evacuation infrastructure.

III. Project Description (Phase I)

The project development objective is expected to be achieved through the following main components:

Component A: Early Warning Dissemination to Coastal Communities (\$15 million): The objective of this component is to reduce the vulnerability of coastal communities by addressing the gap of early warning dissemination in a timely, reliable and efficient manner. The component will support the installation of an early warning system, allowing the state and/or district/sub district level control centre to send communications directly to the village level; it will also help strengthen the community's capacity to maintain and operate the early warning system, as well as community mobilization during an emergency.

Component B: Cyclone Risk Mitigation Infrastructure (\$379million): The objective of this component is to mitigate cyclone risks through strengthening related infrastructure along the coastal areas. These include cyclone shelters and evacuation routes; improving access to key roads and bridges; strengthening coastal embankments; drainage improvement measures and creation of corpus funds for operation and maintenance of cyclone shelters.

Component C: Technical Assistance for Strengthening Capacity towards Disaster Risk Management (\$6 million): The objective of this component is to help understand risk and vulnerabilities better, and prepare the key institutions for addressing them effectively, across all 13 vulnerable coastal states and UTs in a demand responsive manner. This component mainly consists of studies, assessments, training and capacity activities related to risk and damage assessments, institutional capacities; development of training modules, training and capacity building action plans and implementing them.

Component D: Project Management and Implementation Support (\$29 million): This Component's objective is to support project implementation through provision of necessary office equipment and financing of associated incremental cost of project management teams with NDMA, State PIU's and various Implementing Agencies. This component would also finance the cost of related consulting services for design, planning, implementation support and monitoring.

The additional financing would expand activities under component B (Cyclone risk Mitigation Infrastructure) by \$ 129 million including both IDA and GoI financing and the related increment management and coordination support under Component D (Project Management and Implementation Support) by \$ 8 million, for a total amount of \$137 million additional financing (\$ 105 million of IDA financing and \$ 32 million GoI financing).

IV. Project Total Financing

Source:	(\$m.)
BORROWER/RECIPIENT	96
INTERNATIONAL DEVELOPMENT ASSOCIATION	360
Total	456

V. Implementation

Implementation arrangements for the Additional Financing would remain the same as existing ones for component B of the project - implemented by the state line departments with management by the state PIU's. The NDMA, on behalf of MHA, will have overall responsibility for implementation.

VI. Safeguard policies

Cyclone risk mitigation investments have the potential to have some environmental and social (involuntary settlement) impacts, particularly in the construction/repair/reconstruction of cyclone shelters, coastal embankments, drainage improvement measures, road and bridge works. In order to ensure effective environmental management in a scenario where multiple sub-projects will be located in different parts of the coastal region across different states the approach of Environment and Social Management Framework (ESMF) preparation has been adopted in the project. The ESMF serves as a comprehensive and a systematic guide covering policies, procedures and provisions, which are being/will be integrated with the over-all project cycle to ensure that the social and environmental aspects are systematically identified and addressed in all the sub-projects funded under the project. It will also support and assist the compliance with applicable GoI and state laws/regulations apart from Bank policies. Each sub-project investment will undergo a social and environmental screening to identify the likely adverse/undesirable impacts. In case significant impacts are identified, detailed environment and social impact studies will be carried out and sub-project specific social and environmental management plans will be prepared.

Safeguard Policies Triggered by the Project	Yes	No
<u>Environmental Assessment (OP/BP 4.01)</u>	[X]	[]
<u>Natural Habitats (OP/BP 4.04)</u>	[]	[X]
<u>Pest Management (OP 4.09)</u>	[]	[X]
<u>Physical Cultural Resources (OP/BP 4.11)</u>	[X]	[]
<u>Involuntary Resettlement (OP/BP 4.12)</u>	[X]	[]
<u>Indigenous Peoples (OP/BP 4.10)</u>	[X]	[]
<u>Forests (OP/BP 4.36)</u>	[X]	[]
<u>Safety of Dams (OP/BP 4.37)</u>	[]	[X]
<u>Projects in Disputed Areas (OP/BP 7.60)*</u>	[]	[X]
<u>Projects on International Waterways (OP/BP 7.50)</u>	[]	[X]

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

VII. Contact point

Responsible Agency

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