

## India: The Resilient Kerala Program

### 1. Project Information

Project ID:	P000463	Instrument ID:	L0463A
Member:	India	Region:	Southern Asia
Sector:	Water	Sub-sector:	Water disaster resilience
Instrument type:	<input checked="" type="checkbox"/> Loan:125.00 US Dollar million <input type="checkbox"/> Guarantee	Co-financier(s):	World Bank
ES category:	B	Borrowing Entity:	Ministry of Finance, India
Implementing Entity:	Not Applicable		
Project Team Leader:	Yuka Terada		
Responsible DG:	Rajat Misra		
Responsible Department:	INF1		
Project Team Members:	Jyosyula Siva Rama Krishna Sastry, OSD - Environment & Social Development Specialist; Bernardita Saez, Project Counsel; Aditi Khosla, Alternate Counsel; Yogesh Malla, OSD - Financial Management Specialist; Yangzom Yangzom, OSD - Procurement Specialist; Yuka Terada, Back-up PTL; Jinghui Li, Project admin;		
Completed Site Visits by AIIB:	Sep, 2021 Virtual Kick off mission Feb, 2022 Implementation support mission,		
Planned Site Visits by AIIB:	Nov, 2022 Joint mission with WB		
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:	0		
Previous Red Flags Assigned Date:	2021/12		

### 2. Project Summary and Objectives

The Program for Results (PforR) will support the implementation of the two key government programs – the Rebuild Kerala Development Program (RKDP) and the State Health Mission (SHM) – by adopting an integrated framework to enhance GoK's fiscal and institutional resilience against the impacts of climate change and natural disasters including disease outbreaks. The Program operates at two levels: across the State and in the districts adjoining the Pamba River. While system improvements, establishment of rules and norms and institutional building activities will apply to the entire State, activities that aim to demonstrate an integrated multi-dimensional resilience approach will focus on the Pamba River Basin and the districts along the river. The Program also supports the SHM, which aims to improve availability of and access to quality health care by people, especially for those residing in rural areas, the poor, women and children.

As a subset of the government programs covering the broad resilience agenda, the boundaries of the PforR have been defined to include the following high priority sectors - Health, Road, Urban, Water Resources Management (WRM), Agriculture, Disaster Risk Financing & Insurance, Disaster Risk Management (DRM) and

Fiscal & Governance. The PforR will support two Results Areas (RAs) that contribute to the overall outcomes of the government programs - RA1: Strengthening transversal systems for resilience; and RA2: embedding resilience in key economic sectors.

The Program objective is to enhance the State of Kerala's resilience against the impacts of climate change and natural disasters, including disease outbreaks and pandemics.

### 3. Key Dates

Approval:	Jul. 15, 2021	Signing:	Aug. 10, 2021
Effective:	Dec. 17, 2021	Restructured (if any):	
Orig. Closing:	Dec. 31, 2026	Rev. Closing (if any):	

### 4. Disbursement Summary (USD million)

Contract Awarded:		Cancellation (if any):	0.00
Disbursed:	8.31	Most recent disbursement (amount/date):	8.00/Apr. 22, 2022
Undisbursed:	116.69	Disbursement Ratio (%) <sup>1</sup> :	6.65

### 5. Project Implementation Update

As the Program is based on Program for Result (PforR), the Program funds will be disbursed by the WB/AIIB to Gol on the satisfactory achievement of the DLRs, as verified by an Independent Verification Agent (IVA), following the agreed verification protocols.

#### Result Area 1: Strengthening Transversal Systems for Resilience

##### DLI1: Sustainable Fiscal and Debt Management

>Regarding the adoption of a Debt Management Plan (DMP), a medium-term Fiscal Framework has been prepared and the documentation is in progress.

##### DLI4: ULBs with sanctioned risk-informed Master Plans and Priority Action Plans

>RIMPs were prepared and reviewed for 2 ULBs in Mananthavady and Chengannur. The guidelines are under preparation by DTCP

>A Project Implementing Unit (PIU) will soon be established to develop the guidelines for RIMPs, formulation of State Urban Policy, operationalization of a State Urban Observatory and other related tasks and the TORs are under preparation by LSGD.

##### DLI5: Climate risk Information integrated into local DRM plans

>A Project Implementing Unit (PIU) will soon be established to develop the guidelines for RIMPs, formulation of State Urban Policy, operationalization of a State Urban Observatory and other related tasks and the TORs are under preparation by LSGD.

>The finalization of the TOR for a limited tender for development of the DCAT Tool is currently being undertaken by the KSDMA

>KSDMA has initiated the tasks for down-scaling of climate models

<sup>1</sup> Disbursement Ratio is defined as the volume (e.g. the dollar amount) of total disbursed amount as a percentage of the net committed volume.

>GIS Specialists have been engaged to work with KSDMA's in-house team.

#### Result Area 2: Embedding Resilience in Key Economic Sectors

DLI6: Capacity of GoK to track and respond to zoonotic disease outbreaks of human importance in a timely manner through the One Health platform enhanced at the local level.

>The 1st State-level meeting on OH Program was conducted on 10th December 2021 under the Chairmanship of the Minister of Health, Woman and Child Development.

>Detailed guidelines for OH Program were issued on 19th February 2022

>The State Institute for Animal Diseases (SIAD) under AHD has epidemiologists, and the network of district and regional labs needs to be strengthened to facilitate data sharing between AHD and other Departments

DLI7: Integrated River Basin Management Plan for Pamba Basin developed, and implementation commenced

>The development of model for the FF&IROS of Pamba basin is in progress; the Bhakra Beas Management Board which has developed similar forecasting systems was consulted with and inputs were taken.

>Stakeholder consultations for the development of flood data sharing protocol are in progress

DLI8: Farmer Producer Organization (FPOs) have increased access to new and organized markets

>The SFAC has entered into agreements with the following ABPAs in July 2021:

> International Competence Center for Organic Agriculture (ICCOA) for Kottayam, Idukki and Alappuzha districts

DLI9: Number of KMs of Core Road Network (CRN) rehabilitated and/or maintained to resilient standards in Pamba Basin

>The PWD has identified 7000 kms of the CRN in the State, for which the data collection (road condition survey, Falling Weight Deflectometer survey, traffic survey etc.) for 4000 kms of CRN has been completed. The data collection of the remaining 3000 kms is in progress.

>As part of institutionalization of the RMMS Cell, the following activities are being undertaken: -

>On 5th March 2022, the PWD has issued a GO for reconstitution of the RMMS Cell and engaged officials from KHRI, PWD IT Cell, NH Division, PWD

Components	Physical Progress	Environmental & Social Compliance	Procurement
DLI1: Sustainable Fiscal and Debt Management	Medium-Term Fiscal Framework has been prepared	N/A	To comply with the Program Action Plan to address issues of transparency and accountability in procurement, a Program Operation Manual was prepared and issued, and it was agreed that along with POM actions to be implemented by the Departments will be notified.
DLI4: ULBs with sanctioned risk-informed Master Plans and Priority Action Plans	The Risk-Informed Master Plans (RIMPs) for Chengannur and Mananthavady have been completed. The planning process adopted in these plans	Guidelines are being developed based on the feedback from master plan preparation Consultations to be organized on the draft Guidelines with select stakeholders Risk informed master plan	Under DLI 4 and 5 other development partner has procured for the expert to support this DLI. To comply with the Program Action Plan to address issues of transparency and

	and the expert feedback received on it will be used to draft the guidelines.	preparation initiated in all ULBs Department to share information on how trainings and planning processes are ensuring engagement of women and vulnerable groups	accountability in procurement, a Program Operation Manual was prepared and issued, and it was agreed that along with POM actions to be implemented by the Departments will be notified.
DLI5: Climate risk Information integrated into local DRM plans	The LSGD is working with KILA and KSDMA to procure the downscaled data from IITM. Steering Committee for guiding the program implementation has been established.	Downscale climate models provided to LGs Trainings and planning processes to ensure engagement of women and vulnerable groups	Under DLI 4 and 5 other development partner has procured for the expert to support this DLI. Under DLI5, ToR for development of a Disaster and Climate Action Tracking (DCAT) tool is being finalized. To comply with the Program Action Plan to address issues of transparency and accountability in procurement, a Program Operation Manual was prepared and issued, and it was agreed that along with POM actions to be implemented by the Departments will be notified.
DLI6: Capacity of GoK to track and respond to zoonotic disease outbreaks of human importance in a timely manner through the One Health platform enhanced at the local level.	The DoHFW undertook extensive planning work to develop the OH program utilizing a consultative process of engaging key stakeholders across the various levels, in order to facilitate program ownership.	Consultations held by engaging key stakeholders to facilitate program ownership Collaboration between communities and decision makers for ensuring success of community based OH surveillance and response on large scale.	To comply with the Program Action Plan to address issues of transparency and accountability in procurement, a Program Operation Manual was prepared and issued, and it was agreed that along with POM actions to be implemented by the Departments will be notified.
DLI7: Integrated River Basin Management Plan for Pamba Basin developed, and implementation commenced	Flood Forecasting (FF) and Integrated Reservoir Operation Systems (IROS) of Pamba basin are under development in association with Bhakra Beas Management Board team.	Management Plan to ensure Access restrictions and landuse restrictions are avoided	To comply with the Program Action Plan to address issues of transparency and accountability in procurement, a Program Operation Manual was prepared and issued, and it was agreed that along with POM actions to be implemented by the Departments will be notified.
DLI8: Farmer Producer Organization	Small Farmer Agribusiness Consortium (SFAC) has	Ensured representation of women farmers in FPOs Collected and shared gender disaggregated data	To comply with the Program Action Plan to address issues of transparency and

(FPOs) have increased access to new and organized markets	entered an agreement with an Agri-Business Promoting Agency (ABPA) The DoA has supported a total of 13 FPOs in Pampa basin with 14910 members.	on mobilized farmers	accountability in procurement, a Program Operation Manual was prepared and issued, and it was agreed that along with POM actions to be implemented by the Departments will be notified
DLI9: Number of KMs of Core Road Network (CRN) rehabilitated and/or maintained to resilient standards in Pampa Basin	The RMMS Cell constituted per GO, reconstituting underway. 7000 kms of CRN identified in State and RMMS launched with FWP generated for strategic Core Road Networks of 4000 km.	Climate enhancement study to be conducted with KFW funding and Climate module to be developed. Through surveys/ assessments presence of squatters, encroachers, non-titleholders to be identified Prior to commencement of works for 7000 kms of corridor Orientation to be provided by WB team on E&S measures in bidding documents, contracts as well as labour management procedures	TOR for the procurement for upgrading of CRN (contract size not exceeding US\$40 million) will be reviewed

**Financial Management:**

On Fiduciary PAP, PMU has prepared TOR for engaging an audit Firm to conduct the Program internal audit covering all Program participating Departments in consultation with the World Bank.

A clarification on inclusion of an “audit report with no disclaimed or adverse audit opinion” was sought from the World Bank Team.

Based on the response provided, the LSGD shall issue the updated evaluation guidelines for incremental performance incentive grants.

**6. Status of the Grievance Redress Mechanism (GRM)**

Kerala has an existing well-functioning central Grievance Redressal Mechanism.

The Program activities being multi-sectoral in nature, the time bound processes for bolstering the capabilities of key institutions for ensuring the inclusiveness in the sector/resource planning and implementation. On that note, state and department level Grievance Redressal Mechanisms will be further assessed to evolve most appropriate GRM for project (centralized or strengthened department-level GRMs).

**7. Results Monitoring**

The main body to coordinate the implementation is the Rebuild Kerala Initiative (RKI) which was established following the 2018 floods, to better prepare the State against future disasters and act as a vehicle to operationalize the RKDP. The RKI has been collaborating with and coordinating across departments and technical agencies to implement the Program. Each DLI has responsible department and technical agencies by whom local level implementation has been closely followed up.

As mentioned above, the Program funds will be disbursed by the WB/AIIB as well as AFD to Gol on the satisfactory achievement of the DLRs, as verified by an IVA.

**Project Objective Indicators #1**

People are benefiting from local DRM plans and One Health Community Surveillance systems in Pamba Basin districts

Year	Target	Actual	Comments, if any
Jan. 17, 2022	N/A	State level DRM plans and emergency response protocols are in place, but local level preparedness to disasters and disease outbreaks is low.	N/A
Jun. 30, 2026	3.9 million people are benefiting from local DRM plans and One Health Community Surveillance systems in Pamba Basin districts.	N/A	N/A

### Project Objective Indicators #2

People are benefiting from flood early warning services and flood protection measures in Pamba Basin

Year	Target	Actual	Comments, if any
Jan. 17, 2022	N/A	0.0	N/A
Jun. 30, 2026	4.8 million people are benefiting from flood early warning services and flood protection interventions in Pamba Basin districts.	N/A	N/A

### Intermediate Result Indicators #1

ULBs developed and sanctioned risk-informed Urban Master Plans and Priority Action Plans

Year	Target	Actual	Comments, if any
Jan. 17, 2022	N/A	Urban Master Plans are not risk-informed; many are not sanctioned; and few are implemented	N/A
Jun. 30, 2023	Department of Town and Country Planning (DTCP) and KILA have developed and notified guidelines and training program for risk-informed master planning for ULBs.	N/A	N/A
Jun. 30, 2025	DTCP and KILA have provided training to at least 9 ULBs in	N/A	N/A

	Pamba Basin districts on risk-informed urban master planning.		
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**Intermediate Result Indicators #2**

Climate risk Information is integrated into local DRM plans

Year	Target	Actual	Comments, if any
Jan. 17, 2022	N/A	There is a lack of integration and use of local level climate risks to strengthen local level preparedness.	N/A
Jun. 30, 2023	KSDMA has downscaled climate models and provided this information to all LSGs in the State.	N/A	N/A
Jun. 30, 2024	200 LSGs in Pamba Basin districts have integrated climate information into the local body disaster risk management plans.	N/A	N/A
Jun. 30, 2025	100 LSGs in Pamba Basin districts have been assessed through DCAT and achieved the target of 30% co-benefits.	N/A	N/A
Jun. 30, 2026	150 LSGs in Pamba Basin districts have satisfactorily completed local level emergency management exercises coordinated by KSDMA as per the updated local body disaster risk management plans	N/A	N/A

**Intermediate Result Indicators #3**

DCAT tool is developed and adopted for assessing climate adaptation and mitigation investments

Year	Target	Actual	Comments, if any
Jan. 17, 2022	N/A	No DCAT tool	N/A
Jun. 30, 2026	DCAT tool developed	N/A	N/A

**Intermediate Result Indicators #4**

Capacity of GoK is enhanced in disaster and climate risk-informed urban and DRM planning

Year	Target	Actual	Comments, if any
Jan. 17, 2022	N/A	GoK lacks capacity to integrate DRM and climate risk into planning and tools to enforce Urban and DRM plans as well as to monitor climate change co-benefits.	N/A
Jun. 30, 2023	200 LSG resource persons and functionaries are trained in climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	N/A	N/A
Jun. 30, 2024	700 LSG resource persons and functionaries are trained in climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	N/A	N/A
Jun. 30, 2025	1200 LSG resource persons and functionaries are trained in climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	N/A	N/A
Jun. 30, 2026	1700 trained LSG resource persons and functionaries are mobilized for climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	N/A	N/A

**Intermediate Result Indicators #5**

Capacity to track and respond to zoonotic disease outbreaks of human importance in a timely manner is strengthened through the enhanced One Health platform at the local level

Year	Target	Actual	Comments, if any
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Jan. 17, 2022	N/A	No formal district level One Health coordination platform. No community based One Health surveillance protocols and systems.	N/A
Jun. 30, 2023	DoHFW has operationalized district level One Health coordination platform with trained and certified staff in Pamba Basin districts	N/A	N/A
Jun. 30, 2024	DoHFW has provided training to 250,000 LSG and Kudumbashree members on protocols for community based One Health surveillance in Pamba Basin districts.	N/A	N/A
Jun. 30, 2025	DoHFW undertakes routine joint disease outbreak investigations and inspections in 4 Pamba Basin districts.	N/A	N/A
Jun. 30, 2026	At least 150 LSGs are implementing community based One Health surveillance in Pamba Basin districts.	N/A	N/A

**Intermediate Result Indicators #6**

Integrated River Basin Management Plan is developed and implemented for Pamba Basin

Year	Target	Actual	Comments, if any
Jan. 17, 2022	N/A	No Integrated River Basin Management Plan has been developed for Pamba Basin.	N/A
Jun. 30, 2023	WRD has developed flood forecasting and integrated reservoir operation systems for Pamba Basin.	N/A	N/A
Jun. 30, 2024	RBCMA is fully operational with technical and	N/A	N/A

	operational staff.		
Jun. 30, 2025	WRD has adopted and operationalized integrated River Basin plan for Pamba Basin	N/A	N/A
Jun. 30, 2026	WRD has interfaced the WRM systems with KSDMA, DoA, PWD and LSGD.	N/A	N/A

**Intermediate Result Indicators #7**

CRN is rehabilitated and/or maintained to meet resilient service standards in the Pamba Basin

<b>Year</b>	<b>Target</b>	<b>Actual</b>	<b>Comments, if any</b>
Jan. 17, 2022	N/A	Zero km of CRN is meeting resilient service standards in the Pamba Basin	N/A
Jun. 30, 2023	CRN is rehabilitated and/or maintained to meet resilient service standards in the Pamba Basin	N/A	N/A
Jun. 30, 2025	Forward Works Program is generated for at least 6000 km of CRN with budgetary allocation.	N/A	N/A
Jun. 30, 2026	At least 400 km of CRN is meeting resilient standards in Pamba Basin with sustainable asset management practices established.	N/A	N/A

**Remarks:**

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