

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 USD million <input type="checkbox"/> Guarantee	Co-financier(s):	The World Bank
ES category:	B	Borrower:	Republic of India
Implementing Entity:	Not Applicable		
Project Team Leader:	Yuka Terada		
Project Team Members:	Bernardita Saez, Project Counsel; Aditi Khosla, Alternate Counsel; Yogesh Malla, OSD - Financial Management Specialist; Chee Wee Tan, OSD - Social Development Specialist; Amy Chua Fang Lim, OSD - Environment Specialist; Yangzom Yangzom, OSD - Procurement Specialist;		
Completed Site Visits by AIIB:	Sep, 2021 Virtual Kick off mission		
Planned Site Visits by AIIB:	Visit by Subject to lifting of travel restriction		
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:			
Previous Red Flags Assigned Date:			

2. Project Summary and Objectives

The proposed 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:	125.00	Cancellation (if any):	0.00
Disbursed:	0.31	Most recent disbursement (amount/date):	0.31/Dec. 15, 2021
Undisbursed:	124.69	Disbursement Ratio (%) ¹ :	0.00

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 GoI 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

Currently, GoK's debt to Gross State Domestic Product (GSDP) ratio is 37.3 percent in FY20/21 (WB Estimates) and under this component, the Program aims to achieve GSDP ratio under 35 percent. To achieve this, Dept Management plan is currently under discussion.

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

Currently, Urban Master Plans in Kerala are not risk-informed and many are not sanctioned and not implemented. Working group for the risk-informed Master Plan has been established together with other development partners including Kfw. Three revised urban master plans have already been drafted and currently under the review by assigned experts of Kfw/Afd.

DLI5: Climate risk Information integrated into local DRM plans

Currently, local DRM plans lack integration of climate risk information. Kerala State Disaster Management Authority (KSDMA) is currently working on downscaling climate models. The combined working groups with DLI4 has been formed.

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.

Currently there is no formal district level One Health coordination platform as well as no community based One Health surveillance protocols and systems. the Department of Health and Family Welfare has been working on setting up district level One Health coordination platform.

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

Currently there is no Integrated River Basin Management Plan has been developed for Pamba Basin.

Water Resources Department (WRD) is developing flood forecasting systems for Pamba Basin.

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

Currently there are 12 FPOs exist across all Pamba Basin. Agri-Business Promotion Agencies has already been

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

contracted to support FPOs in Pamba Basin and coordination group has been formed.

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

Currently CRN is not meeting resilient service standards in the Pamba Basin.

The climate compatible Road Maintenance Management System (RMMS) is currently under the development. The RMMS system will be designed to host all related road inventory, pavement quality, traffic and pavement crust data collected and project on GIS map.

Components	Physical Progress	Environmental & Social Compliance	Procurement	Financial Management
DLI1: Sustainable Fiscal and Debt Management	Working group has been formed	N/A	N/A	The existing Financial Management (FM) staff strength in RKI and the participating departments are adequate for managing the FM aspects of the Program. However, a nodal office for FM needs to be engaged at the PMU level. The appointments will be based on the ToR agreed with the Bank. Also, the arrangement of functional responsibilities of existing departments (at the RKI and participating departments) finance and accounts staff for supporting the RKP needs to be clearly established and shall be reviewed as part of the first supervision mission.
DLI4: ULBs with sanctioned risk-informed Master Plans and Priority Action Plans	Three revised risk-informed master plans have been drafted	Environment and Social aspect on the drafted master plans has been reviewed.	Other development partner has procured for the expert to support	

			this DLI.	
DLI5: Climate risk Information integrated into local DRM plans	At least three Local DRM plans have been reviewed	same as DLI4	same as DLI4	
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.	Working group has been formed	N/A	N/A	
DLI7: Integrated River Basin Management Plan for Pamba Basin developed, and implementation commenced	In coordination with working group for DLI4/5, working group has been formed.	N/A	N/A	
DLI8: Farmer Producer Organization (FPOs) have increased access to new and organized markets	Agri-Business Promotion Agencies has already been contracted to support FPOs in Pamba Basin	N/A	N/A	
DLI9: Number of KMs of Core Road Network (CRN) rehabilitated and/or maintained to resilient standards in Pamba Basin	GIS map has been developed	N/A	TOR for the procurement for upgrading of CRN (contract size not exceeding US\$40 million) will be reviewed	

6. Status of the Grievance Redress Mechanism (GRM)

The Program activities being multisectoral 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, a Program-level grievance mechanism (GRMs) will be established to strengthen the existing ones and to make the process more accountable and transparent. The grievances shall be managed by the Rebuild Kerala Initiative (RKI) at the coordination level for its easy implementation, management and coordination. Apart from Program-level grievance mechanism, KRI has an existing GRM.

7. Results Monitoring

The main body to coordinate the implementation will be 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 will collaborate with and coordinate 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 to GoI 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
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
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
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
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
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, 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 Pamba Basin districts on risk-informed urban master planning.	N/A	N/A
Jun. 30, 2025	DTCP and KILA have provided training to at least 9 ULBs in Pamba Basin districts on risk-informed urban master planning.	N/A	N/A

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	N/A

		of local level climate risks to strengthen local level preparedness.	
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, 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, 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, 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
Jun. 30, 2026	150 LSGs in Pamba	N/A	N/A

	Basin districts have satisfactorily completed local level emergency management exercises coordinated by KSDMA as per the updated local body disaster risk management plans		
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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
Jan. 17, 2022	N/A	No DCAT tool	N/A
Jun. 30, 2026	DCAT tool developed	N/A	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
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, 2023	200 LSG resource persons and functionaries are	N/A	N/A

	trained in climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.		
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, 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, 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
Jun. 30, 2026	1700 trained LSG resource persons and functionaries are mobilized for climate-informed DRM investment planning, DCAT, and risk-informed urban	N/A	N/A

	master planning.		
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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
Jan. 17, 2022	N/A	No formal district level One Health coordination platform. No community based One Health surveillance protocols and systems.	N/A
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, 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, 2024	DoHFW has provided training to 250,000 LSG and Kudumbashree members on protocols for community based	N/A	N/A

	One Health surveillance in Pamba Basin districts.		
Jun. 30, 2025	DoHFW undertakes routine joint disease outbreak investigations and inspections in 4 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
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
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, 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, 2024	RBCMA is fully operational with technical and operational staff.	N/A	N/A
Jun. 30, 2025	WRD has adopted and operationalized integrated River Basin plan for Pamba Basin	N/A	N/A
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
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

Year	Target	Actual	Comments, if any
Jan. 17, 2022	N/A	Zero km of CRN is meeting resilient service standards in the Pamba Basin	N/A
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, 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, 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
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:
