

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	Lead Co-financier (s):	World Bank
ES category:	B	Borrowing Entity:	Ministry of Finance, India
Implementing Entity:	Government of Kerala		
Project Team Leader:	Mohd Sharib Khan		
Responsible DG:	Rajat Misra		
Responsible Department:	PSC1		
Project Team Members:	Yogesh Malla, SFD - Financial Management Specialist; Jingrong He, SFD - Procurement Specialist; Shagun Mehrotra, SFD - Social Development Specialist; Jinghui Li, Project admin		
Completed Site Visits by AIIB:	Feb, 2024 AIIB joined the mid term review mission led by the World Bank. Nov, 2024 To carry out an implementation support mission.		
Planned Site Visits by AIIB:	Mar, 2025 AIIB to join a technical mission with the World Bank and other development partners.		
Current Red Flags Assigned:	0		
Current Monitoring Regime:	Regular Monitoring		
Previous Red Flags Assigned:	0		
Previous Red Flags Assigned Date:	2024/08		

2. Project Summary and Objectives

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. The Program for Results (PforR) supports 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 Government of Kerala (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 under AIIB financing - Health, Road, Urban, Water Resources Management (WRM), Agriculture, Disaster Risk Management (DRM) and Fiscal & Governance.

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:	36.21	Latest disbursement (amount/date):	4.50/Dec. 05, 2024
Undisbursed:	88.79	Disbursement Ratio (%) ¹ :	28.97

5. Project Implementation Update

As the Program is based on the PforR instrument, the Program funds will be disbursed on the satisfactory achievement of the Disbursement-Linked Results (DLRs), which are the yearly targets of Disbursement-linked Indicators (DLIs), as verified by an Independent Verification Agent (IVA), following the agreed verification protocols. The Program includes the following DLIs: DLI 1: Fiscal sustainability of GoK to cope with disease outbreaks and natural disasters is strengthened; DLI 2: Disaster-related adaptive safety net system of GoK is strengthened; DLI 3: Disaster risk financing and insurance capacity of GoK and vulnerable households in Kerala are improved; DLI 4: Urban local bodies developed and sanctioned risk-informed urban master plans and priority action plans; DLI 5: Climate risk information integrated into local body Disaster Risk Management (DRM) plans; DLI 6: Capacity to track and respond to zoonotic disease outbreaks of human importance in a timely manner; DLI 7: Integrated river basin management plan is developed for Pamba Basin, and implementation commenced; DLI 8: Farmer producer organizations have increased access to new and organized markets; and DLI 9: Core Road Network (CRN) is rehabilitated and/or maintained to meet resilient service standards in the Pamba Basin. AIIB is financing DLI 1,4,5,6,7,8 and 9. The Program is in the fourth year of implementation and has made steady but slower-than-expected progress toward achieving results and development objectives. All the Year-1 targets have been achieved except the DLI1 Year-1 target, which is under verification with expected linked disbursement by March 2025. The DLI1 year four target is progressing and is on track. DLI4 and DLI5 are on track, meeting yearly targets. For DLI6, The verification process is ongoing for Year-3 targets and is on track for Year-4.

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.

DLI7, which is related to the operationalization of the River Basin Conservation and Management Authority, is still in progress, with Year-2 and Year-3 targets delayed; however, it is expected to be disbursed by September 2025, and the Year-4 target is currently on track. DLI8 targets are achieved. DLI9 Year-3 target is delayed but progressing and expected to be completed by June 2026.

Components	Physical Progress	Environmental & Social Compliance	Procurement
DLI1: Sustainable Fiscal and Debt Management	<p>Year 1 target of adoption of the Debt Management Plan (DMP) has been completed and sent for verification.</p> <p>There are no targets for Year 2 and Year 3.</p> <p>For the Year 4 target, the Department of Finance (DoF) has simultaneously advanced the work on the achievement of the priority actions identified under the DMP and is likely to achieve the Year 4 target as planned.</p>	N/A	N/A
DLI4: Urban Local Bodies (ULBs) with sanctioned risk-informed Master Plans and Priority Action Plans	<p>The Year 1 target has been achieved; guidelines for risk-informed master planning and the training program for urban local bodies in the Pamba Basin districts have been prepared.</p> <p>There was no Year 2 target under this DLI.</p> <p>For Year 3 target, Kerala Institute of Local Administration (KILA) has trained 9 urban local bodies in Pamba Basin districts on risk-</p>	N/A	N/A

	<p>informed urban master planning and target has been achieved.</p> <p>There was no Year 4 target under this DLI.</p>		
DLI5: Climate risk Information integrated into local Disaster Risk Management (DRM) plans	<p>The Year 1 and Year 2 targets have been achieved. 200 Local Governments in Pamba Basin districts have integrated climate information into the local body disaster risk management plans. Local Self Government Department (LSGD) has developed and notified guidelines for the Disaster and Climate Action Tracker (DCAT) tool for the preparation of Disaster Management Plan (DMP) and Local Action Plan on Climate Change (LAPCC).</p> <p>Year 3 target was achieved in October 2024, with all three stages of the DCAT assessment (self-assessment, peer assessment, and technical assessment by expert group) completed in 265 out of 266 LGs in the Pamba Basin districts and more than 100 LGs achieving the target 30% co-benefit score.</p> <p>Under the Year 4 target, the Standard Operating Procedure (SOP) for the local level emergency management exercises; training modules; draft</p>	N/A	N/A

	<p>clustering and scheduling; mock drills in Alappuzha (Chambakulam, Nedumudy, Pulikunnu, Kainakari and Alp municipalities); mock drill report; feedback and reviews; and revisions to the SOP have been completed. Preparation for mock drills in the districts of Idduki, Kottayam, and Pathanamthitta are currently underway. The DLI is in progress and is likely to achieve the Year 4 target as planned.</p>		
<p>DLI6: Capacity development of GoK to track and respond to zoonotic disease outbreaks of human importance in a timely manner is strengthened.</p>	<p>The Year 1 and Year 2 target have been achieved. District level One Health coordination platform has been operationalized with trained staff in Pamba Basin districts. A total of 253,701 Community Mentors (CM) and Community Volunteers (CV) in the districts of Pathanamthitta, Kottayam, Alappuzha, and Idukki trained.</p> <p>For Year 3 target, the SoP/Protocol development for Joint Outbreak investigations was developed through participation of departments of Animal Husbandry, Agriculture, Food Safety, Fisheries, Forest, Environment, Local Self Government Institutions (LSGI), Water and Irrigation. A</p>	N/A	N/A

	<p>total of three workshops were conducted. The protocol was piloted in the 4 Pamba basin districts. This target has been completed and under verification.</p> <p>For the Year 4 target, overall plan for the community based One Health (OH) surveillance including the district level plans have been developed. Draft of the community based OH surveillance tool kit has also been developed. The implementation process has been initiated and will be completed by May 2025.</p>		
DLI7: Integrated River Basin Management Plan for Pamba Basin developed, and implementation commenced	<p>The Year 1 target has been achieved. Year 2 target is delayed – the Water Resource Department (WRD) intends to notify the framework for River Basin Conservation and Management which will be approved the cabinet. The framework is with minister of WRD which after approval will go to chief minister before approval by cabinet. The target is expected to be completed and verified by March 2025.</p> <p>Target for Year 3 is under progress.</p> <p>Target will be claimed for WRD operationalizing integrated river basin plan for Pamba Basin</p>	N/A	N/A

	<p>and for 26 interventions identified in the integrated river basin plan in Pamba Basin by September 2025.</p> <p>Target for year 4 is under progress.</p> <ul style="list-style-type: none"> The WRD has developed a hydrodynamic model of the Greater Pamba Basin (GPB), which can be further enhanced using the results of the Light Detection and Ranging (LiDAR) survey (A proposal for the LiDAR survey has been submitted to KfW under Technical Assistance – Grants.). A local consultant, ICCS, has developed a SWAT model, with its analysis results integrated into the chapters of the Integrated River Basin Management (IRBM) Plan. The Terms of Reference for Water Auditing being a key instrument under IRBM has been agreed and an audit will be conducted within 6 months. 		
DLI8: Farmer Producer Organization (FPOs) have increased access to new and organized markets	<p>The Year 1 and Year 2 targets have been achieved. The Department of Agriculture through Small Farmer Agribusiness Consortium has formed 12 FPOs in Pamba Basin districts and strengthened the</p>	N/A	N/A

	<p>existing 13 FPOs. A total of 16,179 farmers have been mobilized into the 25 FPOs.</p> <p>There is no year 3 and year 4 target under this DLI.</p>		
DLI9: Number of KMs of Core Road Network (CRN) rehabilitated and/or maintained to resilient standards in Pamba Basin	<p>The Year 1 target has been achieved. There was no Year 2 target. For Year 3 target:</p> <ul style="list-style-type: none"> Separate Climate Budget Head 3054-03-337-92 has been created, the Reconstitution of Road Maintenance Management System cell was reconstituted (housed in Kerala Highway Research Institute) in April 2024, and experts have been recruited and started functioning as per mandates. PWD is currently filling inventory and traffic data gaps through a combination of reconnaissance survey and data collection for 1000 km by March 2025. The process is to be scaled up to the 3000 km to generate Forward Works Program of 3000 km by Sept 2025. Remaining 3000 Km to be completed by March 2026. Disbursements sought in batches of 3000 km (September 2025 & March 2026 respectively). There is no target for Year 4 under this DLI. 	N/A	N/A

Financial Management:

Financial Management: FM-related Program Action Plans (PAPs) such as the ToR of the Program Internal Audit and the Financial Audit review clause in the comprehensive guidelines for eligibility of incremental performance incentive grants have been completed. The audited program financial statement (APFS) for FY22/23 has been submitted to the World Bank (WB) with substantial delays. It was found acceptable, and the audit management letter highlighted issues related to internal audit and reconciliation differences. The Program Internal Audit report for FY23-24 was expected to be submitted by August 30, 2024, and it is outstanding. The APFS for FY23/24 is due on March 31, 2025.

Procurement: No substantial procurement implementation or compliance issues were identified during the reporting period.

6. Status of the Grievance Redress Mechanism (GRM)

Kerala has a well-functioning central Grievance Redressal Mechanism. The Standard Operating Procedure (SOP) of the Program specific GRM is being finalized. During the current reporting period, 15 complaints were received, out of which 10 complaints were resolved. The complaints include pending water pipe, access issues, culvert issues, tree cutting, livelihood affected, bus shelter relocation, compound wall, and drainage-related issues.

7. Results Monitoring

Results are being monitored and verified by an Independent Verification Agency (IVA).

Project Objective: To enhance the State of Kerala's resilience against the impacts of climate change and natural disasters, including disease outbreaks and pandemics.

Project Objective Indicators

Monitoring end year : 2024

Indicator Name	Unit of Measure	Baseline	Actual (Previous)	Actual (Current)	Current Target	End Target
People are benefiting from local DRM plans and One Health Community Surveillance systems in Pamba Basin districts	Number (gender disaggregated)	State level DRM plans and emergency response protocols are in place, but local level preparedness to disasters and disease outbreaks is	NA	NA		3.9 million people are benefiting from local DRM plans and One Health Community Surveillance systems in Pamba Basin districts.

		low.				
People are benefiting from flood early warning services and flood protection measures in Pamba Basin	Number (gender disaggregated)	0.0	NA	NA		4.8 million people are benefiting from flood early warning services and flood protection interventions in Pamba Basin districts.

Comments:

Intermediate Result Indicators

Monitoring end year : 2024

Indicator Name	Unit of Measure	Baseline	Actual (Previous)	Actual (Current)	Current Target	End Target
ULBs developed and sanctioned risk-informed Urban Master Plans and Priority Action Plans	Number	Urban Master Plans are not risk-informed; many are not sanctioned; and few are implemented.	Yes	NA		At least 4 ULBs in Pamba Basin districts have developed and sanctioned the final urban master plans and priority action plans.
Climate risk Information is integrated into local DRM plans	Number	There is a lack of integration and use of local level climate risks to strengthen local level preparedness.	Yes	Yes	150 LSGs in Pamba Basin districts have satisfactorily completed local level emergency management exercises coordinated by KSDMA as	150 LSGs have been assessed through DCAT and achieved enhanced target of 50% co-benefits.

					per the updated local body disaster risk management plans	
DCAT tool is developed and adopted for assessing climate adaptation and mitigation Investments	(Yes/No)	No	NA	NA		Yes
Capacity of GoK is enhanced in disaster and climate risk-informed urban and DRM planning	Number	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.	Yes	In progress	1700 trained LSG resource persons and functionaries are mobilized for climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	1700 trained LSG resource persons and functionaries are mobilized for climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.
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	a) Number b) Percentage	No formal district level One Health coordination platform. No community based One Health surveillance protocols and systems.	Yes	In progress	At least 150 LSGs are implementing community based One Health surveillance in Pamba Basin districts.	DoHFW has identified and controlled at least one zoonotic disease outbreak of human importance in Pamba Basin districts in a year
Integrated River Basin Management Plan is developed and implemented for Pamba Basin	(Yes/No)	No Integrated River Basin Management Plan has been developed for Pamba Basin.	No	In progress	WRD has interfaced the WRM systems with KSDMA, DoA, PWD and LSGD.	WRD has implemented at least two critical investments identified in the Integrated River Basin

						Management Plan for Pamba Basin.
CRN is rehabilitated and/or maintained to meet resilient service standards in the Pamba Basin	(Yes/No)	Zero km of CRN is meeting resilient service standards in the Pamba Basin.	No	N/A		At least 400 km of CRN is meeting resilient standards in Pamba Basin with sustainable asset management practices established.

Comments:

Remarks: