



The Resilient Kerala Program (P174778)

Program-For-Results

The 1st Biannual Progress Report
(1st September 2021 - 28th February 2022)



Abbreviations and Acronyms

ABPA	Agri-Business Promotion Agency
ACS	Additional Chief Secretary
AEU	Agroecological Unit
AFC	Agriculture Finance Corporation India Ltd
AFD	<i>Agence Française De Développement</i>
AIIB	Asian Infrastructure Investment Bank
CPRCS	Kerala e-Governance IT Procurement Portal (http://cprcs.kerala.gov.in/)
CRN	Core Road Network
DBT	Direct Benefit Transfer
DCAT	Disaster and Climate Action Tracker
DDMA	District Disaster Management Authority
DEA	Department of Economic Affairs
DLI	Disbursement-Linked Indicator
DLR	Disbursement-Linked Result
DMP	Debt Management Plan
DoA	Department of Agriculture
DoAH	Department of Animal Husbandry
DoECC	Department of Environment and Climate Change
DoF	Department of Finance
DoHFW	Department of Health and Family Welfare
DoR	Department of Revenue
DPL	Development Policy Loan
DPO	Development Policy Operation
DRF	Disaster Risk Financing
DRFI	Disaster Risk Financing and Insurance
DRM	Disaster Risk Management
DTCP	Department of Town and Country Planning
E&S	Environmental and Social
EHS	Environment, Health, and Safety
ESF	Environmental and Social Framework
ESSA	Environmental and Social Systems Assessment
FF & IROS	Flood Forecasting and Integrated Reservoir Operation Systems
FM	Financial Management
FPO	Farmer Producer Organization
FSI	Fiduciary System Assessment
FWP	Forward Works Program
GBV	Gender-Based Violence
GDP	Gross Domestic Product
GIS	Geographic Information System
GoI	Government of India

GoK	Government of Kerala
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
GSDP	Gross State Domestic Product
HLEC	High-Level Empowered Committee
IA	Implementing Agency
IAMIS	Integrated Agricultural Management Information System
IC	Implementation Committee
ICCOA	International Competency Centre for Organic Agriculture
ICR	Implementation Completion Report
IDSP	Integrated Disease Surveillance Programme
IFC	International Finance Corporation
IFMIS	Integrated Financial Management Information System
IFSA	Integrated Fiduciary System Assessment
IPF	Investment Project Financing
IPHL	Integrated Public Health Laboratory
IRR	Internal Rate of Return
IVA	Independent Verification Agent
IWRM	Integrated Water Resources Management
KfW	<i>Kreditanstalt für Wiederaufbau</i>
KHRI	Kerala Highway Research Institute
KILA	Kerala Institute of Local Administration
KMSCL	Kerala Medical Services Corporation Limited
KSAD	Kerala State Audit Department
KSDMA	Kerala State Disaster Management Authority
KSTP	Kerala State Transport Project
LSG	Local Self-Government
LSGD	Local Self-Government Department
LSGI	Local Self-Government Institution
M&E	Monitoring and Evaluation
MIS	Management Information System
NKKP	Nava Kerala Karma Padhathi
O&M	Operations and Maintenance
OPBRC	Output and Performance-Based Road Contracts
OPRC	Operations Procurement Review Committee
PAD	Program Appraisal Document
PAP	Program Action Plan
PDO	Program Development Objective
PDS	Public Distribution System
PFM	Public Financial Management
PforR	Program-for-Results
PHL	Public Health Laboratory
PIU	Project Implementing Unit

PMC	Project Management Consultant
PMSS	Project Management Support Services
PMT	Program Management Team
PMU	Program Management Unit
POM	Program Operations Manual
PWD	Public Works Department
PRI	Panchayati Raj Institution
PWD	Public Works Department
RA	Results Area
RBCMA	River Basin Conservation and Management Authority
RIMP	Risk Informed Master Plan
RKDP	Rebuild Kerala Development Programme
RKI	Rebuild Kerala Initiative
RKP	Resilient Kerala Program for Results
RMMS	Road Maintenance Management System
SC	Scheduled Caste
SEC	State Executive Council
SFAC	Small Farmer Agribusiness Consortium
SDRF	State Disaster Response Fund
SIAD	State Institute for Animal Diseases
SPCB	State Pollution Control Board
SPF	State Partnership Framework
ST	Scheduled Tribe
TA	Technical Assistance
TCP Act	Town and Country Planning Act
ToR	Terms of Reference
TPRM	Tripartite Portfolio Review Meeting
ULB	Urban Local Body
WBG	World Bank Group
WRD	Water Resources Department
WRM	Water Resources Management

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1. The Resilient Kerala Program PforR

First Development Policy Operation (DPO1): The World Bank’s support to build multidimensional resilience in Kerala commenced right after the 2018 floods and landslides. The foundation of the engagement was set by the World Bank-supported First Resilient Kerala Development Policy Operation (DPO1, US\$250 million), approved in June 2019. DPO1 set the course for centering resilience-related policies and institutional reforms in key cross-cutting areas and sectors of the economy to enhance resilience to enable holistic river basin management, sustainable and climate-resilient agriculture, risk-informed land-use planning and multi-year capital planning, disaster management plans at all levels.

The Government of Kerala and the World Bank worked closely to bring other partners on board, among them, the Kreditanstalt für Wiederaufbau (KfW), the Asian Infrastructure Investment Bank (AIIB), and Agence Française De Développement (AFD). These donor partners have committed to supporting the Rebuild Kerala Development Program (RKDP) through loans and grants to support the GoK’s policy, institutional, and investment agenda to advance resilience towards climate change impacts and natural disasters.

Second Resilient Kerala Development Policy Operation (DPO2): The DPO1 was followed by the preparation of a Second Resilient Kerala Development Policy Operation (DPO2, US\$250 million) aimed at deepening policy and institutional reforms initiated under the DPO1. Due to the COVID-19 outbreak and a change in India’s strategy in using World Bank financing, DPO2 was subsequently reconfigured as a Program for Results (PforR).

Program For Results (PforR): The PforR aims to support and incentivize the GoK in a transformational shift to build long-term resilience to climate change, natural disaster and pandemics through deepening and solidifying the policy and institutional reforms emerging from DPO1 and capacities enhanced through a programmatic TA program. The PforR allows linking policy and institutional shifts with enhanced capacities, real expenditures, and verifiable results on the ground. It provides financing-linked incentives for a range of stakeholders at all levels to converge on an integrated and multisectoral resilience framework and platform, toward achieving an agreed set of results

Project Development Objective	To enhance Kerala’s resilience against the impacts of climate change, natural disasters and disease outbreaks
Sectors	Agriculture, Disaster Risk Financing & Insurance (DRFI), Disaster Risk Management (DRM), Fiscal & Governance, Health, Road, Urban, Water Resource Management
Duration	5 years (FY21-22 to FY25-26)
Financing (in millions)	US\$125 (IBRD), US\$125 (AIIB), Euro 100 {~US\$120 equivalent} (AFD), and US\$160.02 (GoK)
Geographical Coverage	Four districts at Pamba Basin (Kottayam, Idukki, Alappuzha and Pathanamthitta)

The PforR partnership with the World Bank was formalized through signing of the Program Agreement in July 2021 and with AIIB in August 2021.

2. Key Discussions during the Reporting Period

Reporting Period of this Biannual Progress Report: Since the World Bank loan became effective on 9th September 2021, the reporting period of this biannual progress report has been considered as **1st September 2021 – 28th February 2022.**

Therefore, the Reporting Period of the next Biannual Progress Report will be 1st March to 31st August 2022

A Snapshot of the Key Discussions of the Reporting Period:

The major discussions and deliberations related to the operationalization of the PforR are listed below:

- Discussion between AFD and RKI in February 2022 on the formalization of the agreements between GoK and AFD
- World Bank's DLR review in February 2022
- Discussions on PforR DLIs in September 2021 with the participation of RKI Team, Departments, and Donor Partners (World Bank, KfW, AIIB and AFD)
- A series of discussions between RKI, Departments and World Bank on Road Maintenance Management System (RMMS), Forward Works Program (FWP), Disaster and Climate Action Tracker (DCAT) during September-November 2021
- A virtual orientation programme on AIIB's Environmental and Social Framework (ESF) in November 2021
- The 6th Tripartite Portfolio Review Meeting (TPRM) for AIIB-funded projects in India, in November 2021
- The 5th Tripartite Portfolio Review Meeting (TPRM) for World Bank-funded projects in India, in November 2021
- World Bank Mission for PForR Additional Financing in December 2021
- World Bank Virtual Implementation Support and Results (ISR) Mission for review of activities under PForR in February 2022
- Workshops on preparation of Detailed Action Plan (DAP) for achievement of DLRs, during December 2021 – January 2022
- 15th meeting of the High-Level Empowered Committee (HLEC) in December 2021
- Meetings of the RKI Implementation Committee (RKI-IC) in September 2021, October 2021, December 2021 and February 2022
- 3rd meeting of the KfW Accompanying Measures (AM) Advisory Council during September 2021 to finalize the TA area in the DRFI sector which is also related to Year 2 target for the DLI3: Disaster risk financing and insurance capacity of GoK and vulnerable households in Kerala are improved

3. A Snapshot of Fund Disbursements

The following table provides details of the total external financing allocation for the RKP PforR, the fund disbursement requested by the GOK and the fund disbursements received.

Financing Sources: World Bank, AIIB and AFD (Amount in Million USD)						
DLI	Total external financing allocation	Total fund disbursement request submitted	Total funds received by GOK	Fund disbursement request submitted in current reporting period	Funds received by GOK in current reporting period	Expected fund disbursement request to be submitted in next reporting period
DLI 1	24.38	0.00	0.00	0.00	0.00	3.58
DLI 2	25.00	0.00	0.00	0.00	0.00	6.25
DLI 3	35.00	0.00	0.00	0.00	0.00	7.00
DLI 4	30.00	0.00	0.00	0.00	0.00	5.40
DLI 5	65.00	0.00	0.00	0.00	0.00	7.43
DLI 6	35.00	0.00	0.00	0.00	0.00	7.00
DLI 7	35.00	0.00	0.00	0.00	0.00	0.00
DLI 8	40.00	0.00	0.00	0.00	0.00	8.00
DLI 9	80.00	0.00	0.00	0.00	0.00	4.57
Front-end-Fee (FEF) to be paid	0.62	0.00	0.00	0.00	0.00	4.57
TOTAL	370.00	0.00	0.00	0.00	0.00	49.53

3.1. Fund Disbursements from World Bank

The following table provides details of the World Bank's fund allocation, fund disbursement requested by the GOK and the fund disbursements received.

Financing Source: World Bank						
DLI	Total fund allocation (USD Millions)	Total fund disbursement request submitted	Total funds received by GOK	Fund disbursement request submitted in current reporting period	Funds received by GOK in current reporting period	Expected fund disbursement request to be submitted in next reporting period
DLI 1	4.69	0.00	0.00	0.00	0.00	0.69
DLI 2	10.00	0.00	0.00	0.00	0.00	2.50
DLI 3	10.00	0.00	0.00	0.00	0.00	2.00
DLI 4	7.50	0.00	0.00	0.00	0.00	1.35
DLI 5	17.50	0.00	0.00	0.00	0.00	2.00
DLI 6	15.00	0.00	0.00	0.00	0.00	3.00
DLI 7	10.00	0.00	0.00	0.00	0.00	0.00

DLI 8	15.00	0.00	0.00	0.00	0.00	3.00
DLI 9	35.00	0.00	0.00	0.00	0.00	2.00
Front-end-Fee (FEF) to be paid	0.31					
TOTAL	125.00	0.00	0.00	0.00	0.00	16.54

3.2. Fund Disbursements from AIIB

The following table provides details of the AIIB's fund allocation, fund disbursement requested by the GOK and the fund disbursements received:

Financing Source: AIIB						
DLI	Total fund allocation	Total fund disbursement request submitted	Total funds received by GOK	Fund disbursement request submitted in current reporting period	Funds received by GOK in current reporting period	Expected fund disbursement request to be submitted in next reporting period
DLI 1	4.69	0.00	0.00	0.00	0.00	0.69
DLI 2	0.00	0.00	0.00	0.00	0.00	0.00
DLI 3	0.00	0.00	0.00	0.00	0.00	0.00
DLI 4	7.50	0.00	0.00	0.00	0.00	1.35
DLI 5	17.50	0.00	0.00	0.00	0.00	2.00
DLI 6	15.00	0.00	0.00	0.00	0.00	3.00
DLI 7	10.00	0.00	0.00	0.00	0.00	0.00
DLI 8	25.00	0.00	0.00	0.00	0.00	5.00
DLI 9	45.00	0.00	0.00	0.00	0.00	2.57
Front-end-Fee (FEF) to be paid	0.31					0.00
TOTAL	125.00	0.00	0.00	0.00	0.00	14.61

3.3. Fund Disbursements from AFD

The following table provides details of the AFD's fund allocation, fund disbursement requested by the GOK and the fund disbursements received.

Financing Source: AFD						
DLI	Total fund allocation	Total fund disbursement request submitted	Total funds received by GOK	Fund disbursement request submitted in current	Funds received by GOK in current	Expected fund disbursement request to be submitted in

				reporting period	reporting period	next reporting period
DLI 1	15.00	0.00	0.00	0.00	0.00	2.20
DLI 2	15.00	0.00	0.00	0.00	0.00	3.75
DLI 3	25.00	0.00	0.00	0.00	0.00	5.00
DLI 4	15.00	0.00	0.00	0.00	0.00	2.70
DLI 5	30.00	0.00	0.00	0.00	0.00	3.43
DLI 6	5.00	0.00	0.00	0.00	0.00	1.00
DLI 7	15.00	0.00	0.00	0.00	0.00	0.00
DLI 8	0.00	0.00	0.00	0.00	0.00	0.00
DLI 9	0.00	0.00	0.00	0.00	0.00	0.00
Front-end-Fee (FEF) to be paid	0.00					0.00
TOTAL	120.00					18.08

4. Progress achieved against PDO Indicators

4.1 Disbursement Linked Indicators

Indicator# and Name:		DLI 1: Fiscal sustainability of GOK to cope with disease outbreaks and natural disasters is strengthened
Baseline:		GOK's debt to Gross State Domestic Product (GSDP) ratio is 37.3 percent (WB estimate for FY20/21)
Period	Targets to be achieved	Status of the achievements of results
Year 1	DoF has adopted a debt management plan.	<ul style="list-style-type: none"> Regarding the adoption of a Debt Management Plan (DMP), a medium-term Fiscal Framework has been prepared and the documentation is in progress. DMP preparation is a routine process, and it is placed before the Legislative Assembly (LA) every year. DMPs are public documents after being placed in LA. Regarding achievement of the Year 4 targets, it was decided that WB and DoF shall jointly identify 4-5 priority areas to be adopted as part of the DMP. The following were discussed during the WB Mission in February 2022: <ul style="list-style-type: none"> The State budget for the current FY may include a directional statement "The Government intends to reduce debt to GSDP ratio below 35% over a period of 5 years" RKI shall facilitate a meeting with WB to sensitize DoF team and provide an overview of the Fiduciary System Assessment (FSA) tool. The DoF may be requested to prepare a template/framework for the DMP and the quantitative figures may added after further discussions with relevant stakeholders. DoF may also identify TA areas which could be supported through external aid
Year 2	-	
Year 3	-	
Year 4	DoF implements at least five short- to medium-term priority actions in the debt management plan.	
Year 5	GoK's debt to Gross State Domestic Product (GSDP) ratio is below 35%.	
Status of IVA-related activities: The IVA has finalized the methodology document for DLI1 based on the observations shared by RKI and the World Bank		
Next Steps: <ul style="list-style-type: none"> Facilitation of the workshop on FSA Tool Finalization of the Detailed Action Plan (DAP) for achieving the DLRs 		

Indicator# and Name:	DLI 2: Disaster-related adaptive safety net system of GOK is strengthened
Baseline:	There is no Unified Database of beneficiary households for direct benefit transfers (DBTs)

Period	Targets to be achieved	Status of the achievements of results
Year 1	A State Unified Database has been built for the provision of safety nets in case of disaster, populated with beneficiary data using clear data protection protocols.	<ul style="list-style-type: none"> • Cabinet approval was obtained for implementation of Unified Registry in the State. RKI has issued in-principle sanction of INR 34.32 crores for Unified Registry implementation. • A Technical Committee has been constituted for the finalization of the techno-functional specifications of the Unified Registry. • Aadhaar Vault will be established as a first step towards the de-duplication of beneficiary details. RKI issued Administrative Sanction (AS) for INR 26.29 crores for establishment of the Aadhaar Vault. Procurement processes are in progress. <ul style="list-style-type: none"> ○ Additional AS of INR 8.03 crores was issued on 17th January 2022 for setting up of the Unified Registry Platform. Recruitment of resources for development of the platform and the migration of PDS database are to be completed.
Year 2	-	
Year 3	500,000 beneficiary households are registered in the State's Unified Database	
Year 4	-	
Year 5	100,000 beneficiary households are receiving social protection benefits (adaptive safety net /insurance) through direct benefit transfers (DBTs) linked to the state's unified database.	
Status of IVA related activities: The IVA has finalized the methodology document for DLI2 based on the observations shared by RKI and the World Bank		
Next Steps: <ul style="list-style-type: none"> • Recruitment of manpower for development of the Unified Registry platform • Completion of the migration of PDS database to Unified Registry • Development of legal framework for the Unified Registry 		

Indicator# and Name:		DLI 3: Disaster risk financing and insurance capacity of GoK and vulnerable households in Kerala are improved
Baseline:		\$0 mobilized through market-based disaster risk financing mechanism in Pamba Basin. Low uptake of insurance by households: 27,578 farmers insured (< 2 percent of farmers) in Pamba Basin.
Period	Targets to be achieved	Status of the achievements of results
Year 1	DoA has developed and notified guidelines on payment norms, modalities, administrative rules, and monitoring	<ul style="list-style-type: none"> • In February 2022, the Department of Agriculture and the World Bank Team held discussions on the key policy, institutional and operational changes required to be made to the existing State Crop Insurance Schemes as well as the customization of select components of the national scheme PMFBY. Presently, the Department of Agriculture is

	arrangements for crop insurance.	revamping the insurance schemes in line with the suggestions of the World Bank Team.
Year 2	DoF has adopted and notified institutional mechanism and implementing arrangements for disaster risk financing.	<ul style="list-style-type: none"> • Efforts are in progress for the creation of a dedicated Disaster Risk Financing (DRF) Unit to anchor and drive the DRF-related components of DLI3. • In continuation to the report prepared by a Committee headed by Dr. Ravi Raman of the State Planning Board on Risk Transfer Mechanism for Disaster Risk Financing, the RKI is making efforts to commission a study on developing State Disaster Risk Financing Strategy. The TOR of this study was shared by the World Bank, vetted by the KSDMA and Dr Ravi Raman and subsequently approved by the State Executive Council (SEC). This study will be funded under the KfW AM Grant, and the Pre-Qualification (PQ) document is expected to be issued by the end of March 2022
Year 3	33,000 farmers from Pamba Basin districts are enrolled in crop insurance	<ul style="list-style-type: none"> • Enrolment will be facilitated after the revamped insurance scheme is notified
Year 4	-	-
Year 5	DoF has mobilized \$50 million using market-based disaster risk financing instrument to complement the State Disaster Response Fund (SDRF) / Chief Minister's Distress Relief Fund (CMDRF).	<ul style="list-style-type: none"> • Mobilization of \$50 million is expected to be completed by end of Year 5

Status of IVA related activities: The final version of the IVA Methodology Document is awaited

Next Steps:

- Finalization of the Detailed Action Plan (DAP) for achieving the DLRs
- Notification of the revamped crop insurances guidelines
- Roll-out of study for development of developing State Disaster Risk Financing Strategy

Indicator# and Name:		DLI 4: ULBs developed and sanctioned risk-informed Urban Master Plans and Priority Action Plans
Baseline:		Urban Master Plans are not risk-informed; many are not sanctioned; and few are implemented
Period	Targets to be achieved	Status of the achievements of results
Year 1	DTCP, with support from KILA, has developed and notified the guidelines for risk-informed master	<ul style="list-style-type: none"> • As part of DPO1, RIMPs were prepared for 2 ULBs in Mananthavady and Chengannur. These were reviewed by CEREMA as part of the proposed AFD TA Grant and the guidelines are under preparation by DTCP

	planning for the state, and the training program for urban local bodies in Pamba Basin districts.	<ul style="list-style-type: none"> The LSGD has constituted a Steering Committee to work on the preliminary tasks for DLIs 4 & 5. 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. The consultancies related to the PIU are being considered to be funded through the KfW AM Grant; the TORs for these are under preparation by LSGD in close collaboration with KfW
Year 2	-	
Year 3	KILA has trained 9 urban local bodies in Pamba Basin districts on risk-informed urban master planning.	
Year 4	-	
Year 5	4 urban local bodies in Pamba Basin districts have sanctioned the final urban master plans and priority action plans	
Status of IVA related activities: The final version of the IVA Methodology Document is awaited		
Next Steps:		
<ul style="list-style-type: none"> Finalization of the Detailed Action Plan (DAP) for achieving the DLRs Establishment of PIU 		

Indicator# and Name:		DLI 5: Climate risk Information is integrated into local body DRM plans
Baseline:		There lacks integration and use of local level climate risks to strengthen local level preparedness
Period	Targets to be achieved	Status of the achievements of results
Year 1	KSDMA has downscaled climate models and provided this information to all Local Governments (LGs) in the State	<ul style="list-style-type: none"> The LSGD has constituted a Steering Committee to work on the preliminary tasks for DLIs 4 & 5. 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. The consultancies related to the PIU are being considered to be funded through the KfW AM Grant; the TORs for these are under preparation by LSGD in close collaboration with KfW During a meeting between the LSGD, KSDMA, RKI and World Bank on 8th December 2021, the World Bank suggested issuing a limited tender for development of the DCAT Tool. The finalization of the TOR is currently being undertaken by the KSDMA KSDMA has initiated the tasks for downscaling of climate models; GIS Specialists have been engaged to work with KSDMA's inhouse team. If required, technical experts from
Year 2	200 LGs in Pamba Basin districts have integrated climate information into the local body disaster risk management plans.	
Year 3	100 LGs in Pamba Basin districts have been assessed through DCAT and achieved the target of 30% co-benefits score.	

Year 4	150 LGs 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.	Indian Institute of Tropical Meteorology (IITM) Pune may be engaged to further supplement the in-house capacity of KSDMA
Year 5	150 LGs have been assessed through DCAT and achieved enhanced target of 50% co-benefits score.	

Status of IVA related activities: The final version of the IVA Methodology Document is awaited

Next Steps:

- Finalization of the Detailed Action Plan (DAP) for achieving the DLRs
- Establishment of PIU
- Development of the DCAT Tool

Indicator# and Name:		DLI 6: Capacity to track and respond to zoonotic disease outbreaks of human importance in a timely manner is strengthened
Baseline:		No formal district level One Health (OH) coordination platform. No community based OH surveillance protocols and systems
Period	Targets to be achieved	Status of the achievements of results
Year 1	DoHFW has operationalized district level OH coordination platform with trained and certified staff in Pamba Basin districts.	<ul style="list-style-type: none"> • 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. The following were the major decisions taken: <ul style="list-style-type: none"> ○ State-level, District-level and Panchayat-level Committees shall be constituted for OH Program with defined organization structure and functions ○ Kerala Institute of Local Administration (KILA) will be the nodal agency for providing capacity building support to Local Self Government (LSGs) for OH surveillance ○ The existing system in the LSGs shall be strengthened to support the implementation of the OH program at Panchayati Raj Institutions (PRIs) level - both Urban and Rural. • Detailed guidelines for OH Program were issued on 19th February 2022 and the major highlights are as follows: <ul style="list-style-type: none"> ○ The One Health programme by GoK is a focuses on the requirement of creating: Sustained community surveillance, of unusual events that could trigger zoonotic diseases; early detection of suspected Zoonotic Disease Outbreaks; Effective Community participation
Year 2	DoHFW has provided training to 250,000 LG and Kudumbashree members on protocols for community based OH surveillance in Pamba Basin districts.	
Year 3	DoHFW undertakes routine joint disease outbreak investigations and inspections in 4 Pamba Basin districts.	
Year 4	150 LGs are implementing community based OH	

	surveillance in Pamba Basin districts.	for preventing and containing the spread of Zoonotic diseases.
Year 5	DoHFW has identified and controlled at least one zoonotic disease outbreak of human importance in Pamba Basin districts in a year.	<ul style="list-style-type: none"> ○ Government has planned to implement One Health programme as part of the Nava Kerala Karma Padhathi 2 (NKKP2) in all the districts of the State. As a first phase, the programme will be initiated in 4 Pamba basin districts - Kottayarn, Idukki, Pathanamthitta and Alappuzha under RKI and shall be later expanded to the remaining 10 districts. ● 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 ● The launch of OH Program at State-level, District-level and PRI-level in the Pamba Basin districts is expected to be completed in April 2022
Status of IVA related activities: The verification of Year 1 DLR has been completed in March 2022		
Next Steps:		
<ul style="list-style-type: none"> ● Finalization of the Detailed Action Plan (DAP) for achieving the DLRs ● Official launch of the OH Program 		

Indicator# and Name:		DLI 7: Integrated River basin management plan is developed and implemented for Pamba Basin
Baseline:		No Integrated River Basin Management Plan has been developed for Pamba Basin
Period	Targets to be achieved	Status of the achievements of results
Year 1	WRD has developed flood forecasting and integrated reservoir operation systems for Pamba Basin.	<ul style="list-style-type: none"> ● 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
Year 2	River Basin Conservation and Management Authority (RBCMA) is fully operational with technical and operational staff.	<ul style="list-style-type: none"> ● The draft RBCMA Act has been prepared and is currently being modified to incorporate the observations of the LSGD & the Revenue Department
Year 3	WRD has adopted and operationalized integrated river basin plan for Pamba Basin.	<ul style="list-style-type: none"> ● The draft (level 1) Integrated Pamba River Basin Plan has been developed for regulating available water for demand management.
Year 4	WRD has interfaced the WRM systems with	-

	KSDMA, DoA, PWD and LSGD.	
Year 5	WRD has implemented at least two critical investments identified in the Integrated River Basin Management Plan for Pamba Basin.	-
Status of IVA related activities: The final version of the IVA Methodology Document is awaited		
Next Steps:		
<ul style="list-style-type: none"> • Notification of the RBCMA • Establishment of dedicated teams for the development of FF&IROS for Pamba Basin and for preparation of Pamba River basin plan. 		

Indicator# and Name:		DLI 8: Farmer Producer Organizations (FPOs) have increased access to new and organized markets
Baseline:		12 FPOs exist across all Pamba Basin districts.
Period	Targets to be achieved	Status of the achievements of results
Year 1	Small Farmer Agribusiness Consortium (SFAC) has entered an agreement with an Agri-Business Promoting Agency (ABPA) to support FPOs in Pamba Basin districts.	<ul style="list-style-type: none"> • The SFAC has entered into agreements with the following ABPAs in July 2021: <ul style="list-style-type: none"> ○ AFC India Ltd for Pathanamthitta district • International Competence Center for Organic Agriculture (ICCOA) for Kottayam, Idukki and Alappuzha districts
Year 2	12,500 farmers have been mobilized into at least 25 FPOs.	<ul style="list-style-type: none"> • In addition to the existing 12 FPOs in Pamba basin districts, 13 new FPOs have been selected out of which 11 FPOs were approved in the State Level Selection Committee (SLSC) headed by the Secretary of the Department of Agriculture
Year 3	-	-
Year 4	-	-
Year 5	15 FPOs have increased access of farmers to new and organized markets	Enhancement of access of 15 FPOs to new and organized markets is expected to be completed by December 2025
Status of IVA related activities: The verification of Year 1 DLR has been completed on 3 rd March 2022 and the IVA has submitted the Verification Report.		
Next Steps:		
<ul style="list-style-type: none"> • Completion of verification of targets for Year 2 by the end of May 2022 		

Indicator# and Name:		DLI 9: Core Road Network (CRN) is rehabilitated and/or maintained to meet resilient service standards in the Pamba Basin
Baseline:		Zero km of CRN is meeting resilient service standards in the Pamba Basin
Period	Targets to be achieved	Status of the achievements of results
Year 1	PWD has launched the climate compatible Road Maintenance Management System (RMMS)	<ul style="list-style-type: none"> 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: - <ul style="list-style-type: none"> The PWD had constituted a RMMS Cell under Road Maintenance Wing in 2020. 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 Buildings and PWD Design for RMMS implementation
Year 2	-	-
Year 3	Forward Works Program (FWP) is generated for at least 6000 km of CRN with budgetary allocation through a separate climate works budget head	FWP has been generated for 4000 kms of CRN based on the surveyed data.
Year 4	-	-
Year 5	400 km of CRN is meeting resilient standards in Pamba Basin with sustainable asset management practices established.	As on 3 rd March 2022, PWD has identified a total of 53.15 kms of CRN in the Pamba Basin. This 53.15 kms is already covered in the ongoing 6 road upgradation projects being funded by RKI; these projects are expected to be completed by end of December 2023
Status of IVA related activities: The final version of the IVA Methodology Document is awaited		
Next Steps:		
<ul style="list-style-type: none"> Finalization of the Detailed Action Plan (DAP) for achieving the DLRs Institutionalization of Climate Cell in KHRI towards achievement of Year 1 target Creation of a separate climate works budget head for that CRN where FWP is generated Identification of the remaining 346.85 Kms of CRN in the Pamba Basin 		

4.2. Intermediate Result Indicators

Result Area 1: Strengthening transversal systems for resilience		
Indicator Name: Women's access to post-disaster adaptive safety net payment is enhanced (Text)		
Baseline: Safety net payments are processed to the head of the household regardless of the gender		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	Bank accounts for relief payments are registered under eligible female member of beneficiary households.	The establishment of the Unified Registry is in progress.
Year 2	-	-
Year 3	500,000 women owned bank accounts are registered for relief payments through Direct Benefit Transfers (DBTs)	-
Year 4	-	-
Year 5	100,000 women are benefiting from relief payments through DBTs	-
Status of IVA related activities: Verification has not commenced		
Indicator Name: People are benefiting from local DRM plans and One Health Community Surveillance systems in Pamba Basin districts		
Baseline: State level DRM plans and emergency response protocols are in place, but local level preparedness to disasters and disease outbreaks is low		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	-	-
Year 2	-	-
Year 3	-	-
Year 4	-	-
Year 5	3.9 million people are benefiting from local DRM plans and One Health Community Surveillance systems in Pamba Basin districts. (Gender disaggregated)	The downscaling of climate models is in progress; the downscaled models shall be incorporated into local DRM plans. Also, the operationalization of the One health Program is in progress and community surveillance is yet to be initiated
Status of IVA related activities: Verification has not commenced		
Indicator Name: Share of climate adaptation or mitigation investments by LSGIs in Pamba Basin districts has increased (Percentage)		
Baseline: 0.00		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	-	
Year 2	-	
Year 3	-	
Year 4	-	
Year 5	20.00	The downscaling of climate models and the development of DCAT Tool are in progress. The share of climate adaptation or mitigation investments by LSGIs in Pamba Basin districts can

		be determined only after the DCAT Tool is established
Status of IVA related activities: Verification has not commenced		
Indicator Name: Disaster and Climate Action Tracker (DCAT) tool is developed and adopted for assessing climate adaptation and mitigation investments		
Baseline: No		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	Yes	The development of DCAT Tool is in progress
Year 2	Yes	
Year 3	Yes	
Year 4	Yes	
Year 5	Yes	
Status of IVA related activities: Verification has not commenced		
Indicator Name: Capacity of GOK is enhanced on disaster and climate risk-informed urban and DRM planning		
Baseline: GOK lacks of 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		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	200 LSG resource persons and functionaries are trained in climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	The development of DCAT Tool is in progress. The downscaling of climate models is in progress; the downscaled models shall be incorporated into local DRM plans.
Year 2	700 LSG resource persons and functionaries are trained in climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	
Year 3	1200 LSG resource persons and functionaries are trained in climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	
Year 4	1700 trained LSG resource persons and functionaries are mobilized for climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	
Year 5	1700 trained LSG resource persons and functionaries are mobilized for climate-informed DRM investment planning, DCAT, and risk-informed urban master planning.	
Status of IVA related activities: Verification has not commenced		
Result Area 2: Embedding resilience in key economic sectors		
Indicator Name: People are benefiting from flood early warning services and flood protection measures in Pamba Basin (Text)		

Baseline: Not available		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	-	-
Year 2	-	-
Year 3	-	-
Year 4	-	-
Year 5	4.8 million people are benefiting from flood early warning services and flood protection interventions in Pamba Basin districts. (Gender disaggregated)	The development of model for the FF&IROS of Pamba basin is in progress.
Status of IVA related activities: Verification has not commenced		
Indicator Name: Disease surveillance, referral care and case management are improved at district level through Integrated Public Health Laboratories (IPHLs)		
Baseline: The district level IPHLs have low capacity on outbreak investigation, referral services and informing infectious diseases management.		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	-	-
Year 2	7 districts and one apex center have prepared comprehensive plans to operationalize IPHLs.	The preparations of comprehensive plans to operationalize IPHLs is expected to commence after the Nava Kerala Karmma Padhathi 2 (NKKP2) is implemented in the State.
Year 3	7 district level IPHLs are fully operational and each IPHL is undertaking at least 1200 culture and sensitivity tests annually	-
Year 4	7 district level IPHLs and one apex center are participating in at least one outbreak investigation in the past quarter.	-
Year 5	6,000,000 beneficiaries are utilizing specialized tests offered by IPHLs. (Gender disaggregated)	-
Status of IVA related activities: Verification has not commenced		
Indicator Name: Female members in the Board of Directors of all FPOs (Percentage)		
Baseline: 5.00		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	-	The Board of Directors has been constituted for 12 existing FPOs. The Department of Agriculture has communicated that currently the percentage of female members in the Board is approximately 1%.
Year 2	-	
Year 3	-	
Year 4	-	
Year 5	25.00	
Status of IVA related activities: Verification has not commenced		
Indicator Name: Farmers in 16 AEU's have access to technical and financial support for AEU-wise designated crops (Text)		

Baseline: Agriculture Management Information System is launched with one scheme (crop loan assistance)		
Period	Targets to be achieved	Progress achieved against year-wise targets
Year 1	Integrated Agriculture Management Information System (IAMIS) is expanded to include all modules and functions.	A detailed review of the IAMIS is in progress, and the requirement for additional modules and functions is being identified
Year 2	AEU-wise plans are prepared for 16 AEU's in Pamba Basin.	Preparation of AEU-wise plans is in progress
Year 3	30,000 farmers across 16 AEU's have accessed technical and financial support as per AEU plans through IAMIS.	-
Year 4	-	-
Year 5	80,000 farmers across 16 AEU's have access to technical and financial support through as per AEU plans IAMIS.	-
Status of IVA related activities: Verification has not commenced		

5. Compliance to Program Action Plan (PAP)

Sl. No	Action Description	Source	Responsibility	Timing	Completion Measurement	Status
1	Notify Program, geographical coverage, institutional and fiduciary arrangements for implementation	Technical	RKI	Within one month of loan effectiveness	Government Order/ Gazette notification issued	The finalization of the Program Operational Manual (POM) is in progress, and will be notified in March 2022
2	Continue Program Management Support Services (PMSS) support to Rebuild Kerala Development Programme (RKDP)	Technical	RKI	Continuous	Progress reports/ M&E reports from RKI with PMSS support	The existing contract with PMSS is valid until June 2022. Steps will be taken to ensure the availability of PMSS services Progress reports and M&E reports shall be regularly submitted by RKI with PMSS support
3	Operationalize the implementation of the Anti-corruption Guidelines by performing actions agreed as per the Program Operations Manual (POM)	Other	RKI and Implementing Agencies	Continuous	Reports on ACG implementation to be shared with the WB as part of the regular implementation support reviews	The actions to be ensured by the Departments as part of adherence to the Anti-corruption Guidelines shall be notified as part of notification of the Program Operations Manual. RKI shall regularly track and monitor the compliance.
4	Finalize the ToR and team composition (from Implementing Agencies) of Program Internal Auditors for conducting the	Fiduciary Systems	RKI	Within six months from the date of loan effectiveness; Biannual	Program Internal Audit team in place for submission of semi-annual internal audit reports for the Program to RKI	As per the discussion with the World Bank Team in February 2022, a TOR has been prepared for engaging an audit Firm to conduct the Program

Sl. No	Action Description	Source	Responsibility	Timing	Completion Measurement	Status
	Program internal audit covering all Program participating Departments					internal audit covering all Program participating Departments. This TOR is under finalization and will be shared with the World Bank Team in March 2022
5	Include 'Financial Audit' review clause in the comprehensive guidelines for eligibility of incremental performance Incentive grants for promoting local capital investments to tackle climate change under the Program.	Fiduciary Systems	LSGD	Within six months from the date of loan effectiveness	Guidelines for incremental performance grants issued to LGs. The clause will detail the requirement and procedure for review of annual audited Financial Accounts and audit opinion for continuity and material misstatement.	A clarification on the inclusion of an "audit report with no disclaimed or adverse audit opinion" was sought from the World Bank Team in March 2022. Based on the response provided, the LSGD shall issue the updated evaluation guidelines for incremental performance incentive grants.
6	Develop and implement guidance to address issues of transparency and accountability in procurement, including streamlining complaint handling and debarment processes	Fiduciary Systems	GOK	Within six months from the date of loan effectiveness	Notification issued to implementing agencies, providing guidance on transparency and accountability in procurement	The actions to be ensured by the Department to address issues of transparency and accountability in procurement will be notified as part of notification of the Program Operations Manual. Also, since it is mandatory that tenders have to be facilitated through the e-

Sl. No	Action Description	Source	Responsibility	Timing	Completion Measurement	Status
						procurement portal, transparency is ensured.
7	Mainstreaming of environmental and social management through plans and bid documents in civil works, and integration of environmental & social safeguards and social inclusion content in capacity building programs	Environmental and Social Systems	RKI and implementing agencies	Continuous. To commence within three months of loan effectiveness	Incorporation of environment and social safeguards compliance in plans, bid documents for the civil works / investments. Inclusion of environment and social safeguard modules in training & capacity building programs.	<p>Detailed discussions were conducted with the World Bank Team in February 2022.</p> <p>RKI has issued a circular on environment and social safeguards compliance to all implementing departments. Department of Agriculture, Water Resources Department, Health Department, and Public Works Department have shared a list of training themes which could be considered for capacity building programs, and also a list of Department officials who shall participate in the training and capacity building programs.</p> <p>The ESHS guidelines which have to be a part of bid documents for civil works / investments, and also the monitoring templates and monitoring mechanisms shall be notified as part of notification of the Program Operations Manual</p>

Sl. No	Action Description	Source	Responsibility	Timing	Completion Measurement	Status
8	Strengthen existing grievance redress mechanism at state, Department, and local levels to enhance transparency and responsiveness by enabling creation of an open log of grievances and redressal actions.	Environmental and Social Systems	GoK	Within one year from the date of loan effectiveness	Data detailing grievances received and resolved maintained by the Implementing Agencies/RKI	

6. Support Required from Development Partners

The following table mentions the support required from the Development Partners.

Development Partner	Areas of Support
World Bank	<ul style="list-style-type: none"> • Support towards achievement of DLRs <ul style="list-style-type: none"> ○ DLI1 – Facilitation of Workshop on FSA Tool • Support towards verification of DLRs <ul style="list-style-type: none"> ○ DLI 3 – Correction of the verification protocol outlined for DLRs for Year 1 & 2 ○ Provision of feedback on the revised version of the IVA Methodology documents submitted by the IVA • Facilitation of procurement <ul style="list-style-type: none"> ○ Conduct of STEPS Training to RKI and Implementing Departments • Facilitation of compliance to environmental and social safeguards <ul style="list-style-type: none"> ○ Conduct of orientation training for officials of Implementing Departments
Agence Française De Développement (AFD)	<ul style="list-style-type: none"> • Sharing of draft Program Agreement and Loan Agreement for legal vetting by GOK