



The World Bank

The Resilient Kerala Program for Results (P174778)

Program Information Documents (PID)

Appraisal Stage | Date Prepared/Updated: 03-Mar-2021 | Report No: PIDA237295

**BASIC INFORMATION****A. Basic Program Data**

Country India	Project ID P174778	Program Name The Resilient Kerala Program for Results	Parent Project ID (if any)	
Region SOUTH ASIA	Estimated Appraisal Date 25-Feb-2021	Estimated Board Date 08-Jul-2021	Practice Area (Lead) Urban, Resilience and Land	
Financing Instrument Program-for-Results Financing	Borrower(s) India	Implementing Agency State of Kerala		

Proposed Program Development Objective(s)

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

COST & FINANCING**SUMMARY (USD Millions)**

Government program Cost	1,701.65
Total Operation Cost	530.02
Total Program Cost	530.02
Total Financing	530.02
Financing Gap	0.00

FINANCING (USD Millions)

Total World Bank Group Financing	125.00
World Bank Lending	125.00
Total Government Contribution	160.02
Total Non-World Bank Group and Non-Client Government Financing	245.00



Multilateral and Bilateral Financing (Concessional)	245.00
Decision	
The review did authorize the team to appraise and negotiate	

B. Introduction and Context

Country Context

- India's Gross Domestic Product (GDP) growth has slowed in the past three years, and the COVID-19 outbreak is expected to have a significant impact.** Growth has moderated from an average of 7.4% during FY15/16-FY18/19 to an estimated 4.2% in FY19/20, due mostly to unresolved domestic issues (impaired balance sheets in banking and corporate sectors), compounded by stress in the non-banking segment of the financial sector and a marked decline in consumption on the back of weak rural income growth. The pandemic and the public health responses have significantly altered the growth trajectory of the economy, which is now expected to contract sharply in FY20/21. The general government deficit is expected to widen significantly in FY20/21, owing to weak activity and revenues as well as higher spending needs. However, the current account balance is expected to improve in FY20/21, reflecting mostly a sizeable contraction in imports and a large decline in oil prices. Given this, India's foreign exchange reserves are expected to remain comfortable.
- The pandemic may have reversed the course of poverty reduction.** Between 2011-12 and 2017, India's poverty rate declined from 22.5% to around 8.1% to 11.3%. Recent projections of GDP per capita growth rate indicate that due to the pandemic, 2020 poverty rates have reverted to estimated levels in 2016. Between September-December 2019 and May-August 2020, the proportion of people working in urban and rural areas has fallen by 4.2% and 3.8% respectively¹. Of those identifying as employed, 11% and 7% of urban and rural individuals have performed zero hours of work in the past week. Short-term outlook is contingent on whether these temporarily unemployed workers can fully re-enter the labor force. COVID-19 has created a set of new poor (likely non-farm sector, receiving at least secondary or tertiary education), compared to existing poorer households (predominantly rural with lower levels of education). The baseline scenario reflects the COVID-19 shock, including large negative growth and sharp increase in primary deficit during FY20/21. Government debt-to-GDP ratio is projected to increase significantly, peaking at about 94% in FY22/23 before gradually declining in following years. Under a further combined growth and fiscal shock² the ratio would rise to over 100% of GDP around FY23/24. Public debt is assessed as sustainable as it is mostly denominated in domestic currency, of long/medium-term maturity, and predominantly held by residents. External debt (public and private), at around 20% of GDP and predominantly of long duration, is also assessed to be sustainable.
- Kerala has enjoyed robust economic growth, albeit below the national average, in recent years.** The real Gross State Domestic Product (GSDP) grew by approximately 6.3% on average between FY11/12 and FY18/19 (below the 7.0% average for Indian states), although it has risen to 7.4% in FY15/16-FY18/19. However, due to the COVID-19 outbreak and the subsequent nationwide lockdown, the state's economy will contract in FY20/21 and only recover gradually thereafter. The State has run high fiscal deficits in recent years, resulting in a steady increase in State's public debt-to-GDP ratio. This deterioration in fiscal performance was primarily driven by gradual increases in committed expenditure - especially on salaries, while own tax revenues³ have remained relatively low as a share of GSDP. Kerala adopted a Fiscal

¹ Data from Center for Monitoring Indian Economy. The Employment survey is conducted over a 4-month period, during May to August 2020

² The combined shock models larger fiscal deficit (by 1pp of GDP over FY21 and FY22) and lower growth (by about 1.4% over FY21 and FY22) relative to the baseline

³ Main sources of own-tax revenue: state goods & services tax, state excise, value-added tax, motor vehicles tax, stamps & registration duty, land tax, taxes on utilities



Responsibility and Budget Management (FRBM) Act in 2003 (amendment in 2017, mandating the State to maintain a fiscal deficit of no more than 3% of GSDP during FY17/18 to FY19/20). Since FY17/18, fiscal deficit has gradually declined from 3.8% of GSDP to less than 3% of GSDP in FY19/20.⁴ However, fiscal consolidation in FY19/20 has been achieved by cutting expenditures significantly (given otherwise declining revenues). Public debt is estimated to have remained stable at around 30% of GSDP, only marginally above the 29.67% target set under the state's FRBM Amendment Act, 2018.

4. The spread of COVID-19 in India and the imposition of a national lockdown have significantly affected the near-term outlook for Kerala, but public debt will stabilize as growth recovers. Growth outlook has deteriorated significantly, as have fiscal prospects. According to FY21/22 budget, GSDP is expected to contract by 3.8% in nominal terms in FY20/21. While total receipts only declined by 2.5%, owing to increased transfers from the central government, the state's own tax revenues declined by over 25%. Spending, on the other hand, increased by over 12% as the government increased spending on welfare programs. Thus, fiscal deficit is estimated to have widened to 4.3% of GSDP and the public debt-to-GSDP ratio increased sharply to 36%. However, as growth recovers in subsequent years, the fiscal deficit is projected to return to below 3% by FY23/24 and debt is projected to stabilize at around 37% of GSDP in FY21/22 and decline thereon.

Sectoral and Institutional Context

5. Kerala is highly vulnerable to natural disasters and the changing climatic dynamics given its location along the coast and steep gradient along the slopes of the Western Ghats. It is prone to a host of natural hazards such as cyclone, monsoon storm surge, coastal erosion, sea level rise, tsunami, flood, drought, lightning, landslide, land subsidence and earthquakes. Kerala's State Disaster Management Plan identifies 39 types of known and reported hazard types that can turn disastrous without proper preparedness and risk reduction planning⁵. With Cyclone Ockhi in 2017, floods and landslides in 2018, 2019, 2020, and COVID-19, the State has experienced major disaster events for four consecutive years. The main vulnerabilities associated with the floods, emblematically, follow the course of the river, starting from basins and reservoirs upstream, to intense development in cities and towns midstream, through to farmlands and livelihoods downstream. Addressing underlying drivers of floods and landslides and better preparing for future disasters, similarly follows the course of the river: upstream, through integrated water resources and reservoir management; midstream, through improved land use planning and management, infrastructure and services; and downstream, through ecologically sound agriculture practices. Addressing these require systematically building the capability of the Government to carry out an integrated and coordinated set of policy, institutional and budgetary changes, over time. They demand political will, institutional capacities, public support, and a continuous and iterative change process.

6. World Bank support to build multidimensional resilience in Kerala commenced after the 2018 floods. The foundation of the engagement was set by the First Resilient Kerala Development Policy Operation (DPO1, US\$250 million) approved June 2019, supporting the Rebuild Kerala Development Programme (RKDP)⁶- Government of Kerala's (GoK) strategic and integrated roadmap for recovery, rebuilding and resilience, developed with Bank support. DPO1 set the course for resilience-related policy and institutional reforms in key crosscutting areas and sectors of the economy. It supported GoK's efforts to improve fiscal sustainability through a variety of approaches including levying a flood cess⁷. Key policy and institutional reforms engendered holistic river basin management, shifted agriculture to sustainable and climate-resilient models and strengthened agriculture value chains. Increased protections were afforded to human settlements by risk-informed land use planning and disaster management plans. Resilience of critical infrastructure was

³ Figures for FY19/20 are based on preliminary estimates published by the Comptroller and Auditor General of India (CAG).

⁵ Kerala State Disaster Management Authority: Government of Kerala, State Disaster Management Plan 2016

⁶ Rebuild Kerala Development Programme (RKDP): https://rebuild.kerala.gov.in/reports/RKDP_Master%2021May2019.pdf

⁷ A 1% 'Kerala flood cess' is levied on goods coming within the GST tax bracket of 12%, 18%, and 28% imposed on the value of supply. A 0.25% flood cess is levied on all goods coming under the fifth schedule, including gold, silver, and platinum ornaments, on the value of supply. All services attract 1% cess.



strengthened through multi-year capital planning, improved standards and mobilization of private sector expertise. A dedicated institutional modality, the Rebuild Kerala Initiative, was set up to coordinate, manage and monitor the roll out of RKDP and DPO1 across various government departments, agencies, civil society and private sector. These efforts have improved GoK's capacity to respond to disasters. In part, they allowed GoK to tackle the 2019 and 2020 floods and landslides with much reduced loss of lives, assets and livelihoods.

7. The Global COVID-19 Pandemic impacted Kerala starting from January 2020. Kerala is susceptible due to high levels of urbanization and population density, tourist inflows, regular inward and outward travel of non-residents, and an aging population with co-morbidities. To deal with COVID-19 and future disease outbreaks, GoK needs to further strengthen its disease outbreak warning and response systems and commence recovery from the current crisis amidst serious economic and fiscal constraints. Kerala has recognized the importance of One Health (OH) approach to address the threat of emerging infectious diseases, ensuring food safety, and minimizing the impact of endemic zoonoses.

8. Building on the RKDP and the DPO 1, the partnership between the GoK and the World Bank has both expanded and deepened. Among its highlights are advanced engagements in sectors such as agriculture, roads, solid waste management and water resource management (WRM), all built around the core theme of enhancing resilience. A number of additional policy actions were completed by the GoK during the preparations of a follow on DPO operation, which was replaced by the proposed Resilient Kerala PforR. These further reforms in emerging foundational and crosscutting priorities in multidimensional resilience have supported the design of the PforR operation. As the engagement becomes programmatic through these operations, the partnership between GoK and the Bank is now guided through a strategic framework which guides the Bank's interventions in the State. The close working relationship between the GoK and the Bank at multiple levels has influenced the State's policy, institutional, and investment agenda to advance resilience to climate change impacts and natural disasters. In advancing the partnership, GoK and the Bank have worked closely to bring other partners on board, among them, the Kreditanstalt für Wiederaufbau, the Asian Infrastructure Investment Bank, and the Agence Française De Développement.

9. However, much more remains to be done. One, these policy shifts must translate into actions on the ground. To make that happen, institutional and community norms and capacities on resilience must be established or strengthened. Two, policy, institutional and budgetary actions on resilience must break departmental silos. Experience has shown that resilience is a multi-dimensional concept, therefore there is a need to build an integrated platform bringing together foundational and crosscutting elements, synergizing them with resilience in sectors, and syncing these actions across state and local levels.

PforR Program Scope

10. A subset of the RDKP and the State Health Mission (SHM) are strategically selected and merged into the government program (the program) within which the proposed PforR Program (the Program) is situated. The RKDP is the programmatic framework driving Kerala's resilient, risk-informed development and recovery from 2018 floods. It aims to rebuild Kerala in a speedy and effective manner in a way that ensures higher standards of infrastructure, assets and livelihoods for resilience against future disasters, and build individual, community and institutional resilience to natural hazards while fostering equitable, inclusive and participatory reconstruction that builds back better. Taking into consideration the health scope of the PforR program, which includes promoting an integrated OH approach to diagnose, track and respond to disease outbreaks, the "Public Health" head of the State Budget has been considered as the Government program. The "Public Health" subset of activities include prevention and control of diseases, strengthening public health laboratories, and public health education and training.



11. **The Resilient Kerala PforR aims to translate state level regulatory and policy reforms into institutional actions and tangible results and demonstrate a model of multidimensional resilience on the ground.** The Program will bring a whole-of-government approach in rolling out an integrated platform of resilience across four districts of Pamba river basin, namely Alappuzha, Idukki, Kottayam, and Pathanamthitta, to advance multidimensional resilience, bringing together foundational areas like fiscal sustainability and crosscutting elements of resilience such as disaster risk planning and financing and synergizing them with resilience in key socioeconomic sectors (health, WRM, agriculture, roads), as well as syncing these actions across state and local levels.

12. **The Program will be structured along two results areas that will support the GoK to: (i) strengthen transversal systems for resilience; and (ii) embed resilience in key economic sectors.** The implementation period of the Program will be five years. It will be financed in the amount of US\$125 million by IBRD, US\$125 million by AIIB, €100 million by AFD (to be confirmed) and US\$160.02 million counterpart funding by the GoK.

13. **Results Area 1: Strengthening transversal systems for resilience.** This results area will focus on strengthening transversal systems of resilience to help the State prepare and respond systemically to a broad set of challenges posed by exogenous shocks from climate change, natural disasters or disease outbreaks. Key objectives include: (i) financial protection against disasters through sustainable fiscal and debt management and a comprehensive disaster risk finance and social protection system; and (ii) disaster preparedness through mainstreaming climate and disaster risk informed urban and local Disaster Risk Management (DRM) planning.

14. **Results Area 2: Embedding resilience in key economic sectors.** This results area aims at embedding norms and practices of resilience in a sample of socioeconomic sectors: health, water resources management, agriculture and road. The sectors were chosen based on their relevance to the multidimensional resilience agenda in the State and in the Pamba river basin districts, progress achieved during the DPO, and where departments have shown ownership. By overlaying sectors on a foundation of transversal systems, the Program will demonstrate an integrated and whole-of-government approach to build multi-sectoral and multidimensional resilience. Key objectives of this results area are: (i) strengthening public health systems against disease outbreaks and natural hazards; (ii) implementing integrated water resources management to mitigate risks of floods and other natural disasters; (iii) achieving sustainable and resilient food systems through agroecological farming; and (iv) strengthening climate resilience of core road networks.

C. Proposed Program Development Objective(s)

Program Development Objective(s)

To enhance Kerala's resilience against the impacts of climate change, natural disasters and disease outbreaks.

15. **The PDO level results indicators include the following:**

- Fiscal sustainability of GOK strengthened to cope with natural disasters and disease outbreaks (Debt to GSDP ratio)
- Women with access to post-disaster adaptive safety net payment (Number)
- Population benefiting from local DRM plans and One Health Community Surveillance systems in Pamba Basin districts (Number, Gender disaggregated)
- Farmer Producer Organizations (FPOs) with increased access to new and organized markets (Number)
- Population benefiting from flood early warning services and flood protection measures in Pamba Basin districts (Number, Gender disaggregated)
- Increased share of climate adaptation or mitigation investments by LSGIs in Pamba Basin districts (to be measured by the Disaster and Climate Action Tracker (DCAT)) (Percentage)



D. Environmental and Social Effects

16. **An environmental and social systems assessment (ESSA) was conducted.** Initiated with a desk review of relevant systems documents, this ESSA was informed by state-level stakeholders across all implementing departments and consultations with ULB and Gram Panchayat community members in the four districts. These included dedicated consultations with women, the poor and socially vulnerable. The ESSA analyzed the collected information to determine GoK and its implementing departments' systems capacity to manage the environmental and social effects under this Program. The ESSA identified gaps for strengthening systems and capacities that are included in the Program Action Plan (PAP). The ESSA confirmed consistency with the core principles, and exclusion of activities ineligible for PforR financing.

17. **Environmental Risk Rating:** This risk is rated as '**Moderate**' as there are investment activities – in Health, Roads and WRM – that will require environmental management attention during implementation. The respective departments have the capacity to manage these limited construction-related impacts with the support of external consultants as necessary. The residual risks will be mitigated through the capacity building included in the PAP. The Program's institutional development has no direct environmental impacts. The Program's investment activities in the Pamba river basin (mainly in roads and WRM) may have construction related environment, health and safety (EHS) impacts such as air, noise, safety, waste and debris management. All of these were assessed to be minor, localized, generic and reversible, and can be mitigated effectively through appropriate management measures. The assessment revealed that the applicable legislations are adequate to address any of the environmental impacts of the Program. GoK's regulatory agencies, such as the Department of Environment, the State Forest Department and the State Pollution Control Board are well-established, and their functions are streamlined. As the Program activities have only limited environmental impacts, there are only certain procedural requirements such as the contractor obtaining consents prior to the commencement of civil works. The organizational capacity of the implementing agencies is satisfactory to deal with the environmental impacts under the Program.

18. The assessment focused on environmental management systems and public and worker safety, the two core principles that are applicable to this Program. The ESSA confirmed adequacy and consistency with these Core Principles. The assessment confirmed that the activities do not include those that are ineligible for PforR financing. Stakeholder feedback revealed the need for awareness and competence in dealing with the environmental issues (such as water pollution, waste management, soil run-off, pesticide/fertilizer use) through training and capacity building of the LSGIs. Importance of scientific pre-investment studies and proper management of construction related EHS issues was emphasized, as required for investment activities. The feedback about adopting an integrated approach was repeatedly raised. All the feedback was reviewed to ensure that these are adequately addressed in the Program design. The Bank needs to focus largely on further strengthening environmental management capacity, specifically in WRM. Further, the Bank needs to direct attention to compliance of contractual requirements and good EHS practices in investment activities, particularly in the roads sector, as well as ensure that activities that are not eligible for PforR financing are excluded.

19. **Social Risk Rating:** The social risk rating is assessed as being '**Substantial**' as certain investments are likely to lead to adverse social impacts, particularly in case of road sector in the Pamba river basin. These investments are likely to lead to displacement of non-titleholders, especially in areas where roads pass through urban settlements, which tend to have large encroachments. Current institutional capacities within the PWD are not adequate to meet the Bank's social safeguard requirements and may therefore carry additional reputational risks for the Bank. These investments are also likely to lead to large migrant labor influx at selected sites with likely adverse impacts on host communities unless mitigated. Road Sector attracts substantial risks related to large-scale economic and physical displacement of squatters, encroachers and vendors during construction works. There are also likely risks of increased GBV due to the transfer of social protection entitlements into the bank accounts of female members of vulnerable households. There are also risks



of exclusion of women, Scheduled Tribes/ Scheduled Castes, migrant workers, fisherfolk and urban poor from resource and investment planning process. There are also risks of exclusion of migrant workers, fishing and tribal communities from social protection entitlements and exclusion of migrants from access to public health facilities.

20. In order to address these risks, the program will focus on enhancing the social management capacities of the staff of participating institutions to ensure investments do not result in exclusion, while also promoting mechanisms for increased voice and participation of vulnerable and marginalized groups, especially women, tribals, migrants and fisherfolks in the process of planning and implementation. The program will also support the alignment of GoK's resettlement policy with Bank policy, especially with respect to the treatment of non- titleholders as well as capacity building of the PWD staff on resettlement and management of adverse social impacts related to labor influx.

21. Kerala has a comprehensive framework for citizen's engagement; its decentralized, annual planning and appraisal process ensures large scale mobilization; it is also invested in ensuring gender empowerment through measures like gender budgeting, tracking of gender outcomes, and the Kudumbshree campaign for women's political and economic empowerment. It has strong, centralized mechanisms for grievance redress; systems for inclusion of vulnerable communities through development of Tribal Sub-Plans, Special Component Plans, Action Plans for Elderly, and their monitoring. Sector institutions however have limited capacities to manage social risks and ensure participation and social inclusion in their sectoral/departmental works due to their predominantly technical focus and overlapping and unclear mandates. These institutions will need to build capacities in citizen's engagement (for making planning more inclusive and participatory), awareness generation (about schemes, eligibilities and access) and accountability (grievance redress).

22. Two activities are recommended for exclusion: (i) any road repair and maintenance works requiring resettlement and removal of structures (on a single alignment/ package) impacting more than 50 persons; and (ii) any town/ city to be selected for risk informed master planning, if this spatial planning is likely to adversely impact existing settlements or resources accessed by indigenous communities residing within or near municipal limits.

E. Financing

23. **The cost of the Government Reform Program for FY 2021-2026 is estimated at US\$ 1.7 billion.** The government reform program converges with the broad umbrella of GoK's ongoing RKDP. The cost of the Resilient Kerala PforR is US\$ 530.02 million out of which the World Bank will finance US\$125 million, representing 24 percent of the Program cost. Further, AIIB will support the Program with a financing of US\$125 million, equal share to Bank financing, and AFD tentatively plans providing Euro 100 million (US\$120 million equivalent). The remaining US\$ 160.02 million which is 30 percent of the Program will be financed by GoK. The PforR Program will be complemented by a strong TA program financed by the GoK, the KfW and the World Bank.

24. **A large part of the funding will be directed towards institutional strengthening, systems development and resilient investments.** The Program expenditures include consulting services, investment elements for IT and infrastructure, and goods, and operational costs required to achieve the PDO. High priority investments to demonstrate integrated multi-sector resilience in Pamba Basin are critical elements of the expenditure framework as well as strengthening overall human resources capacity. Funding predictability is high and risks to the Program Expenditure Framework arising out of budget constraints are low. The Program cost constitutes a relatively small portion of the overall budgeted departmental spending of the program participating departments and is well aligned with the GoK's priorities both at overall state and departmental level.



25. **The Integrated Fiduciary System Assessment (IFSA) of the arrangements under the PforR Program concludes that the present systems together with proposed mitigation measures will provide reasonable assurance that financing proceeds will be used for the intended purpose, with due attention to the principles of economy, efficiency, effectiveness, transparency and accountability.** The IFSA identified key fiduciary risks that may affect the Program's development outcomes and recommended system improvements and capacity strengthening measures that have to be implemented during the life of the Program. The fiduciary risk of the Program is assessed as 'Substantial'. The Program will be implemented by the RKI and six participating GoK departments. The Program will, therefore, be influenced by the extant GoI and GoK's fiduciary systems like the Kerala Budget Manuals, Kerala State Treasury Codes, Indian Government Accounting Standard (IGAS), Public Works Account Codes, State delegation of financial powers and staffing regulations. The overarching framework of FM systems across the participating departments (PD) are similar however, the practice of the applicable rules and regulations may slightly vary across them. The Program Expenditure framework comprises the cost of ongoing activities and incremental initiatives. The FM systems are considered adequate to account and report on Program activities as it sufficiently captures the Program expenditure details.

Program Financing

Sources	Amount (USD Million)	% of Total
Counterpart Funding	160.02	30.19
Borrower/Recipient	160.02	30.19
International Bank for Reconstruction and Development (IBRD)	125.00	23.58
Cofinancing - Other Sources (IFIs, Bilaterals, Foundations)	245.00	46.22
Asian Infrastructure Investment Bank	125.00	23.58
Agence Française de Développement (AFD) - TBC	120.00	22.64
Total Program Financing	530.02	100.00

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