



The World Bank

India Second Kerala State Transport Project (P130339)

REPORT NO.: RES35845

RESTRUCTURING PAPER
ON A
PROPOSED PROJECT RESTRUCTURING
OF
INDIA SECOND KERALA STATE TRANSPORT PROJECT

APPROVED ON MAY 14, 2013
TO REPUBLIC OF INDIA

TRANSPORT
SOUTH ASIA

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ABBREVIATIONS AND ACRONYMS

DEA	Department of Economic Affairs
ECoPs	Environmental Codes of Practice
EIA	Environment Impact Assessment
EMF	Environment Management Framework
EMP	Environmental Management Plan
EPC	Engineering Procurement and Construction
GoK	Government of Kerala
KHRI	Kerala Highway Research Institute
KIIFB	Kerala Infrastructure Investment Fund Board
KSTP	Kerala State Transport Project
KSTP II	India Second Kerala State Transport Project
LSGD	Local Self Government Department
LSGI	Local Self Government Institution
NCRMP II	National Cyclone Risk Mitigation Project II
PDO	Project Development Objective
PIP	Project Implementation Plan
PIU	Project Implementation Unit
PMC	Project Management Consultant
PMU	Project Management Unit
PMGSY	Pradhan Mantri Gram Sadak Yojana or Prime Minister’s Rural Roads Program
PPP	Public Private Partnership
PWD	Public Works Department
RAP	Resettlement Action Plan
RFCTLAR&R Act	Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013
RKI	Rebuild Kerala Initiative
RPF	Resettlement Policy Framework
RPF-TDF	Resettlement Policy Framework cum Tribal Development Framework
RRDA	Rural Roads Development Agency
RSA	(Kerala State) Road Safety Authority
SMP-TDP	Social Management Plan cum Tribal Development Plan
VRU	Vulnerable Road User



BASIC DATA

Product Information

Project ID P130339	Financing Instrument Investment Project Financing
Original EA Category Full Assessment (A)	Current EA Category Full Assessment (A)
Approval Date 14-May-2013	Current Closing Date 30-Jun-2019

Organizations

Borrower Republic of India	Responsible Agency Mr. Anand Singh, Mr. Ajith
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Project Development Objective (PDO)

Original PDO

The project's development objective is to improve condition, traffic flow and road safety with a focus on vulnerable road users on selected roads in Kerala.

Summary Status of Financing

Ln/Cr/Tf	Approval	Signing	Effectiveness	Closing	Net Commitment	Disbursed	Undisbursed
IBRD-82540	14-May-2013	19-Jun-2013	06-Sep-2013	30-Jun-2019	216.00	113.29	102.71

Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No



I. PROJECT STATUS AND RATIONALE FOR RESTRUCTURING

A. Project Status

1. The Second Kerala State Transport Project II (KSTP II) [P130339] was approved by the World Bank Board on May 14, 2013 and became effective on September 6, 2013, with a total project cost of US\$ 445 million, of which US\$ 216 is IBRD financing and US\$ 229 is counterpart funding from the Kerala State Public Works Department (PWD). The project's development objective is to "improve condition, traffic flow and road safety with a focus on Vulnerable Road Users on selected roads in Kerala". The project has three components: Component A - Road Network Upgrading and Safety Improvement (split into sub-components A1 and A2); Component B - Road Safety Management; and Component C - Institutional Strengthening.
2. Overall project implementation of the KSTP II Project has been slow. However, during the last implementation support mission in May 2019¹, the Bank team noted significant improvement in the implementation of the civil works under Component A1. The overall physical progress for civil works under Component A1 is about 92% (with four out of six civil works packages having been substantially completed). Under Component A2, all three contracts under EPC are in advanced stages of procurement and expected to be awarded by end-June 2019. Progress of Components B (Road Safety Management) and C (Institutional Strengthening) has improved. The safe corridor demonstration project under component B has achieved a physical progress of 81% on the civil works front. All key consultancies² for both components, B and C, have been awarded, and consultants fully mobilized. The six-point action plan is also in full compliance. The overall disbursement stands at 52.45%. Considering the steady improvement in overall implementation and continuing compliance with the six-point action plan, the last implementation support mission (May 2019) has upgraded the implementation progress rating of the project to Moderately Satisfactory.
3. In April 2019, based on a formal request from DEA, a simple restructuring was carried out to extend the project closing date by two months, i.e. from April 30, 2019 to June 30, 2019³ to allow for sufficient time for preparation and disclosure (following the due consultation process) of a revised Resettlement Policy Framework (RPF) duly updated with a Tribal Development Framework (TDF), for carrying out proposed works under the emergency response component. This action has since been completed.

B. Rationale for Restructuring

4. From June to August 2018 during the Monsoon season, the state of Kerala was hard hit by an unprecedented level of rain. It was the worst disaster to ravage the state in nearly one hundred years, causing floods and landslides in all 14 districts, and affecting approximately 5.4 million people. The devastating floods and landslides caused extensive damage to houses, roads, railways, bridges, power supplies, communications networks, and other infrastructure. The aftermath of the disaster changed the state's priorities and presents a risk and an opportunity at the same time, for the state to rebuild itself in a more resilient manner to the growing impact of climate change.
5. In this context, the Government of Kerala (GoK) submitted a request to Department of Economic Affairs (DEA) for restructuring the two currently ongoing World Bank-assisted projects in Kerala: National Cyclone Risk Mitigation Project II (NCRMP II) and KSTP II. The request pertaining to KSTP II entailed project restructuring for reallocation

¹ Twelfth Implementation Support Mission; May 21-29, 2019.

² Including the Project Management Consultant, Center of Excellence Consultant and Road Safety Enforcement Consultant.

³ Refer letter dated April 30, 2019 to Department of Economic Affairs regarding extension of closing date



of US\$ 45 million from the current outlay of KSTP II towards reconstruction of roads for the Rebuild Kerala Initiative (RKI), for urgent rebuilding efforts needed in Kerala⁴.

- 6. Pursuant to Section III, Paragraph 12 (Projects in Situations of Urgent Need of Assistance or Capacity Constraints) of the Bank Policy on Investment Project Financing, GoK is deemed by the Bank to be in urgent need of assistance because of natural disaster. Therefore, under this restructuring paper it is proposed to utilize the savings of US\$ 45 million from the KSTP II on RKI in the aftermath of the floods and landslides. The proposed adjustments and interventions will support priority investments planned under RKI from various sources for enhancing disaster resilience in the state.

II. DESCRIPTION OF PROPOSED CHANGES

C. Proposed Changes

- 7. The below listed changes are proposed as part of this restructuring:
 - a. **Changes in project components:** With the shift of priorities after the flood, GoK has decided to include a new component D, on “Climate and disaster resilience enhancement” (estimated cost US\$ 80.35 million equivalent to a loan amount of US\$ 45 million), which would include re-building and re-construction activities for PWD roads [“component D.1”], re-building and re-construction of Local Self Government Institution (LSGI) roads [“component D.2”], and overall programme management. The restructuring would also entail changes in Sub-Component A2 which originally included upgrading 82 km state highway through a Public-Private Partnership (PPP) modified annuity concession. This is now being taken up under EPC mode in suitable packages, owing to the difficulty of implementing the highway on PPP mode arising from poor market response. Further details of the proposed component/sub-component are provided in Annex C. The overall amount of loan allocated by components/sub-components is shown in table 1 (US\$ 45 million would be re-allocated from sub-component A1 to component D, which would both be in the same eligible expenditure category (56%), as shown in table 2).

Table 1: Amount of the Loan Allocated by Components/Sub-components (in US\$ million)

Component	Bank Financing (existing)	Bank Financing (proposed)
A1, B, C, and D*	182.46	182.46
A2	33.00	33.00
Front-end Fee	0.54	0.54
Total	216.00	216.00

*Component D is only included under the Bank (proposed) column.

Table 2: Percentage of eligible expenditures to be financed by the Bank – proposed

⁴ Request letter dated April 8, 2019 from DEA, Government of India to the World Bank, following several communications between Government of Kerala and DEA (copy to the Bank) regarding the scope of the restructuring, between November 2018 and February 2019 (the last of which was dated 28th February 2019).



Category	Amount of the loan allocated (US\$ million) – proposed	Percentage of eligible expenditures to be financed (inclusive of taxes) – original & proposed
(1) Goods, works, non-consulting services, consultants’ services, and Workshops & Training for Components A.1, B, C, and D under the Project	182.5	56%
(2) Goods, works, non-consulting services and consultants’ services under Component A.2 of the Project	33	100%
(3) [Front-end Fee]	[0.5]	Amount payable pursuant to Section 2.03 of this Agreement in accordance with Section 2.07 (b) of the General Conditions
(4) Interest Rate Cap or Interest Rate Collar premium	-0-	Amount payable pursuant to Section 2.07 (c) of this Agreement
Total	216.0	

- b. **Change in implementing agencies and institutional arrangements:** This includes addition of the Kerala Local Self Government Department (LSGD), the state’s agency responsible for local self-government institutions, as one of the implementing agencies of the project, for implementing part of the newly introduced proposed climate and disaster resilience enhancement component. LSGD would be responsible for re-building and re-construction activities for LSGI roads including: (a) construction, rehabilitation and/or improvement of the LSGI Roads; and (b) supporting day-to-day implementation of Component D.2 of the Project. Details of the proposed institutional changes are provided in Annex A.
- c. **Change in Project’s Development Objectives:** In accordance with the proposed changes in scope and development objectives of the project to include enhanced resilience to climate change and disaster risk, the PDO is proposed to be revised. The original PDO is: *“to improve condition, traffic flow and road safety with a focus on vulnerable road users on selected roads in Kerala.”* Considering the impact of the state’s vulnerability to climate and disaster risks, the new PDO will be *“to improve condition, traffic flow and road safety with a focus on Vulnerable Road Users on selected roads in Kerala, and to enhance resilience to climate change and disaster risk.”*
- d. **Changes in the Results Framework:** Following the changes in the project scope, results framework will have to be partly modified to reflect changes in the PDO and project components, and also to reflect changes in some targets/indicators, necessitated by changes in project circumstances. Detailed proposed changes are provided in the Project Implementation Plan (PIP) under preparation/revision by July 31, 2019 (as the prioritization for LSGI roads is still under finalization) and Annex B.
- e. **Extension of Loan Closing Date(s).** The loan closing date is proposed to be extended by 22 months from the current closing date of June 30, 2019 to April 30, 2021 in order to provide sufficient time for completion of all proposed activities under the new component D as well as satisfactory completion of other works such as Punalur-Ponkunnam road which was recently converted from PPP to EPC mode, and activities under



components B and C. A revised procurement and implementation schedule for the proposed and existing components is shown below. This amounts to a cumulative extension of 24 months including the two months’ interim extension given earlier.

Table 3: Revised Procurement and Implementation Schedule

Project Component	Procurement Schedule	Implementation Schedule
A2 (EPC Roads)	Feb 2019 – May 2019	May 2019 – April 2021
B & C	Procurement completed	Implementation ongoing, to be complete by April 2021
D	Jan 2019 – Aug 2019	May 2019 – April 2021

- f. **Revision of the Disbursement Estimates.** The revised disbursement schedule is proposed according to table 4 below, given actual disbursements of US\$ 113.29 million and the proposed remaining project implementation time period of 22 months.

Table 4: Revised Disbursements (in US\$ million)

Fiscal Year	Disbursed Amount (up to date)	FY 20	FY 21	FY 22
Annual	-	40.00	50.00	12.71
Cumulative	113.29	153.29	203.29	216.00

- g. **Changes in Legal Covenants:** Following inclusion of the new component under the proposed restructuring, changes and additions have been made in the legal covenants of the project agreement.

D. Proposed Prioritization Framework for proposed Climate and Disaster Resilience Enhancement Component

8. As stated, the proposed Component D on “Climate and disaster resilience enhancement” would include re-building and re-construction activities for PWD roads, re-building and reconstruction of LSGI roads, and overall programme management. While the exact contours of these sub-components are still under finalization, works and schemes under this component would be selected on the basis of a set of prioritization/eligibility criteria including strategic importance, usage of public/bus transport, population served/habitation connectivity, extent of flood/geo hazard impact and vulnerability, complexity of technical design and social and environmental impacts. These criteria would be detailed out in the PIP, currently under preparation/revision and due to be finalized by July 31, 2019 as the prioritization plan for LSGI roads is still under finalization. The PIP would include names of the roads to be re-built/re-constructed and specific procurement and implementation plan for these roads. The loan is expected to be fully committed⁵ by August 2019 to enable completion of all the works and utilization of the loan proceeds by the revised loan closing date.
9. **Overall programme management:** This sub-component would include:
- a. Various consultancies towards re-building/re-construction of PWD roads and LSGI roads, all of which would be procured by KSTP. Both PWD (KSTP) and LSGD would engage two sets of consultants for (a) prioritization and engineering designs, and (b) supervision and contract management.

⁵ US\$ 81 million of the loan is yet to be committed, of which US\$ 78 million pertains to components A2 and D (proposed).



- b. Support to RKI Secretariat for overall programme management and monitoring and prioritization and engineering designs for selected infrastructure development identified under the RKI post damage needs assessment⁶.
- c. Salaries/travel costs of individual consultants and advisers, and expenses incurred towards logistics arrangements including vehicle hire, etc. The list of consultancies and expenses is being finalized by KSTP and LSGD.

E. Environment Management and Safeguards

10. From an environment management and safeguards perspective, the following changes under the proposed project restructuring are of significance: (a) addition of a new component on “Climate and Disaster Resilience Enhancement” (Component D), which would include re-building and re-construction activities for PWD (~75 km) and LSGI roads (~300 km across various flood affected districts); (b) addition of Kerala Local Self Government Department as one of the implementing agencies for rebuilding and reconstructing roads under the said new component and; (c) changes in Sub-Component A2, which originally included upgrading 82 km state highway through a PPP modified annuity concession to an EPC mode.
11. The Environment Management Framework (EMF) prepared for the original project continues to be applicable and will guide the environment management process, including preparation of sub-project specific instruments/ designs for the restructured project as well. It has been updated/ revised in April 2019 to include the aspects pertaining to the additional/new component, associated changes in scope of works and implementation arrangements, specifically regarding works to be managed by LSGD. It also addresses requirements of OP 4.11 on Physical Cultural Resources, which is now being triggered for the proposed project restructuring and includes (but is not limited to) procedures related to ‘chance finds’ at work sites.
12. While the same approach, similar management instruments and akin implementation arrangements, as agreed and executed for the original project, will continue to apply to the new road works to be managed by PWD, the process and procedures with regard to environment management for roads to be supervised by LSGD will follow the norms and methodology adopted for PMGSY (also financed and supported by the World Bank with an Additional Financing operation currently under execution).
13. Similar to PMGSY, the national rural roads program, the LSGD works are likely to be confined to existing tracks (in most cases), are similar in nature despite dispersed locations and the scale of the operation is fairly limited (smaller lengths involved for an individual road). Therefore, instead of sub-project specific assessments and management plan preparation, the procedures for environment management, like the national program, will include: (a) screening to identify significant environmental issues, right at the sub-project selection stage; (b) application and implementation of Environmental Codes of Practice (ECoPs) that includes use of comprehensive assessment/audit checklists at four stages - DPR preparation (integrating site specific requirements/mitigation within the design itself and includes transect walk and consultations with community); Pre-construction; Construction and Post-construction; and (c) integration of the standard/generic Environment Management Plan in the Bidding Document to address construction stage environment, health and safety issues. Implementation arrangements, including supervision, monitoring and reporting systems, will be akin to those agreed for PWD and used under the original project.
14. All investments to be covered under the proposed project restructuring (both PWD and LSGD) will first apply the screening protocol for upfront identification of any significant environmental issues, on lines similar to the original project. In the eight flood affected districts (of which some will be selected for reconstruction of damaged roads) as

⁶ As mentioned in Annex A, while KSTP would support the RKI Secretariat in procurement of consultants for above activities covered under the RKI, all payments/reimbursement claims would continue to be routed through KSTP.



part of the new component, there are ecologically sensitive areas like wildlife sanctuaries, national parks and bioreserves. Some road segments in these districts traverse eco sensitive zones and pass through reserved forests areas as well. Therefore, to avoid/minimize significant environmental impacts, a key sub-project selection criterion entails exclusion of roads located within ecological sensitive areas and critical natural habitats. To minimize potential adverse environmental impacts, roads having available right of way and those with lower environmental/ecological impacts, will be selected and the inclusion or exclusion of a road will be based on results of the screening exercise. Environmental screening exercises for the additional investments are currently underway.

15. The road reconstruction/widening activities could have some local level adverse environmental impacts. Based on the on-going screening exercises and field investigations, it is envisaged that the potential environmental impacts could include: (a) felling of roadside trees; (b) impact on local rivers, water bodies and drainage; (c) possible effect on water resources during construction stage; (d) impacts on slope stability; and (e) construction related Environment, Health, and Safety (EHS) impacts, including work zone safety and camp/plant issues. The exact nature and magnitude of environmental impacts will vary in accordance to the location and type of engineering interventions. In addition to these issues, the sub-project investigations (through sub-project specific EIAs for PWD roads and DPR stage assessment through application of ECoPs/climate screening checklist for LSGI roads) will also assess potential climate change impacts and suggest appropriate measures to be incorporated in the sub-project design, as needed in the light of site conditions, including on the possibilities to reduce damages from floods (such as damage to structures, breach due to missing drainage arrangements etc.) and landslides. Alternative techniques/material options (such as use of rubber, plastic, bio-engineering etc.) will also be explored as part of these assessments and promoted based on site conditions.
16. Sub-project specific EMPs to minimize and mitigate adverse environment, health and safety impacts will be prepared for PWD works and appropriately integrated into the Bidding Documents. Such EMPs will be reviewed and cleared by the Bank prior to approval of the bid documents. For LSGI roads, a generic Environment Management Plan to address typical construction stage environment, health and safety issues will be reviewed/approved by the Bank while giving concurrence to the Model Bidding Document.

F. Social Safeguards

17. One of the criteria for selection of roads is availability of clear Right of Way along the corridors considered for rehabilitation. Both PWD and LSGD, will be responsible agency for 3 (~75 km) and 330 (~300 km) roads, respectively. It is assumed that there will be no land acquisition. However, land may be required for geometric improvement and few encroachments (commercial and mixed) along the corridors. Further, the project roads implemented by LSGD will pass through 2 districts Idukki and Wayanad that have high percentage of tribal population. Moreover, the project roads may impact community owned assets in some areas.
18. The Resettlement Policy Framework (RPF) of December 2012 has been updated to align with GoK's State Resettlement and Rehabilitation (R&R) Policy 2017, organizational responsibility to facilitate negotiated purchase of land for KSTP II roads, automation of grievance management systems, and the PMGSY guidelines to prepare Resettlement Policy Framework-Tribal Development Framework (RPF-TDF) that complies with World Bank's Operational Policy on Indigenous People and State Panchayat (Extension) Scheduled Areas Act for LSGI roads.
19. LSGD has proposed to rehabilitate 330 roads across 8 districts. These roads are in both rural and urban areas i.e. under gram panchayat and municipalities. LSGD has adopted the safeguard instrument designed for the PMGSY which also covers provisions to comply with the RFLAR⁷ Act and World Bank's Operational Policy 4.12 on Involuntary Resettlement. According to it, the following steps would need to be carried out: (a) information dissemination; (b) consultation in Gram Sabha; (c) transect walk for collaboration and firming up alignment, identifying beneficiaries and

⁷ Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013.



those adversely impacted and agreeing on land donation; (d) census of affected people and finalizing list of those who require livelihood support; (f) implementing the mitigation measures; and (g) completing the transfer of land in record of rights. This existing process involves Gram Panchayat – the RPF-TDF has been modified to expand the coverage to include urban local government. The revision has taken into account the requirements of state laws and policy on Indigenous People and on Land Acquisition and Resettlement and Rehabilitation. Accordingly, one document, namely, Resettlement Policy Framework cum Tribal Development Framework (RPF-TDF), has been prepared for the roads to be rehabilitated by LSGD. It also includes action plan to develop a robust grievance management system along the lines of KSTP II. The Detailed Project Report will include the outputs from the implementation of frameworks which will be tracked on real time (geo-referenced) basis.

- 20. Given the terrain of Kerala, construction induced impacts on people become very pronounced and require appropriate measures. Also, the issues related to labor influx and compliance of labor laws and gender-based violence will be addressed. The revised frameworks for KSTP II and LSGI include guidelines and mechanism to address such risks.
- 21. Following the finalization of sub-projects, the frameworks will guide the preparation of Resettlement Action Plans (RAPs)/Social Management Plans cum Tribal Development Plan (SMP-TDPs) for the identified sub-projects. It will include site specific Labor Influx Management Plan. The contractors will submit site specific action plan to ensure that the labor follows the code of conduct. This would be monitored including the compliance of applicable labor laws by the Project.
- 22. In context of the project to address the issues related to Gender based violence at work place, an Internal Complaints Committee (ICC) to address complaints of sexual harassment in accordance with the Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal Act, 2013 (SHWW Act 2013) will be constituted. The contractors and supervision consultants engaged on the project would also be required to establish their respective Internal Complaints Committees.
- 23. As part of the preparation of RPF and RPF-TDF, the draft document was disclosed in Malayalam and in English language at public places and on the project website as per World Bank’s policy on disclosure, on May 9, 2019. Prior information on the scheduled consultation was provided, following which, consultation was carried out in Idukki District on May 22, 29 and 30, 2019. The final RPF and RPF-TDF (as updated on May 30, 2019) were disclosed on project website and Bank’s external site on June 10, 2019.

III. SUMMARY OF CHANGES

	Changed	Not Changed
Implementing Agency	✓	
Project's Development Objectives	✓	
Results Framework	✓	
Components and Cost	✓	
Loan Closing Date(s)	✓	
Disbursement Estimates	✓	
Safeguard Policies Triggered	✓	



Legal Covenants	✓	
Institutional Arrangements	✓	
Procurement	✓	
Implementation Schedule	✓	
DDO Status		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Disbursements Arrangements		✓
Overall Risk Rating		✓
EA category		✓
Financial Management		✓
APA Reliance		✓
Other Change(s)		✓
Economic and Financial Analysis		✓
Technical Analysis		✓
Social Analysis		✓
Environmental Analysis		✓

IV. DETAILED CHANGE(S)

IMPLEMENTING AGENCY

Implementing Agency Name	Type	Action
Mr. Anand Singh	Implementing Agency	No Change

PROJECT DEVELOPMENT OBJECTIVE

Current PDO

The project's development objective is to improve condition, traffic flow and road safety with a focus on vulnerable road users on selected roads in Kerala.

Proposed New PDO

To improve condition, traffic flow and road safety with a focus on Vulnerable Road Users on selected roads in Kerala, and to enhance resilience to climate change and disaster risk.



COMPONENTS

Current Component Name	Current Cost (US\$M)	Action	Proposed Component Name	Proposed Cost (US\$M)
Component A: Road Network Upgrading and Safety Improvement	413.00	Revised	Component A: Road Network Upgrading and Safety Improvement	333.00
Component B: Road Safety Management	22.00	No Change	Component B: Road Safety Management	22.00
Component C: Institutional Strengthening	10.00	No Change	Component C: Institutional Strengthening	10.00
	0.00	New	Component D: Climate and Disaster Resilience Enhancement	80.00
TOTAL	445.00			445.00

LOAN CLOSING DATE(S)

Ln/Cr/Tf	Status	Original Closing	Revised Closing(s)	Proposed Closing	Proposed Deadline for Withdrawal Applications
IBRD-82540	Effective	30-Apr-2019	30-Jun-2019	30-Apr-2021	30-Aug-2021

DISBURSEMENT ESTIMATES

Change in Disbursement Estimates

Yes

Year	Current	Proposed
2013	0.00	0.00
2014	22,000,000.00	0.00
2015	43,000,000.00	0.00
2016	45,000,000.00	0.00
2017	54,000,000.00	0.00
2018	32,000,000.00	0.00
2019	20,000,000.00	0.00



2020	0.00	40,000,000.00
2021	0.00	50,000,000.00
2022	0.00	12,710,000.00

COMPLIANCE

Safeguard Policies

Safeguard Policies Triggered	Current	Proposed
Environmental Assessment (OP) (BP 4.01)	Yes	Yes
Performance Standards for Private Sector Activities OP/BP 4.03	No	No
Natural Habitats (OP) (BP 4.04)	No	No
Forests (OP) (BP 4.36)	No	No
Pest Management (OP 4.09)	No	No
Physical Cultural Resources (OP) (BP 4.11)	Yes	Yes
Indigenous Peoples (OP) (BP 4.10)	Yes	Yes
Involuntary Resettlement (OP) (BP 4.12)	Yes	Yes
Safety of Dams (OP) (BP 4.37)	No	No
Projects on International Waterways (OP) (BP 7.50)	No	No
Projects in Disputed Areas (OP) (BP 7.60)	No	No

LEGAL COVENANTS

Loan/Credit/TF	Description	Status	Action
IBRD-82540	Finance Agreement :Implementation Units Description :Kerala to maintain: (i) a Project Steering Committee, for policy guidance, general oversight and procurement approvals; (ii) management unit (KSTP) within the PWD, for day-to-day coordination/implementation of Project activities. Frequency :Yearly	Complied with	No Change



IBRD-82540	Finance Agreement :Implementation Units (contd..) Description :Kerala to maintain: (iii) an Evaluation Committee, for the evaluation of procurement bids and the preparation of recommendation reports; and (iv) an Environmental & Social Management Cell for assisting KSTP with the implementation of the safeguard documents, and monitoring and evaluating contractors' compliance therewith. Frequency :Yearly	Complied with	No Change
IBRD-82540	Finance Agreement :Construction Supervision Consultant (contd...) Description :Kerala to: (ii) to engage and maintain a supervision consulting firm (Independent Engineer) in order to serve as the construction engineer for the civil works to be carried out under the Project, all of them with qualifications and experience, and terms of reference acceptable to the Bank. Due Date: Twelve (12) months as of the Effective Date Frequency :Yearly	Complied with	No Change
IBRD-82540	Finance Agreement :Internal Auditors Description :Kerala to engage and maintain a firm of chartered accountants with qualifications and experience, and under terms of reference acceptable to the Bank, in order to perform the internal audit functions within PWD, monitor payments and ensure compliance with internal control mechanisms. Due Date: Six (6) months after the Effective date. Frequency :Yearly	Complied with	No Change
IBRD-82540	Finance Agreement :Project Documents Description :Kerala to implement the Project in accordance with the Project Implementation Plan, the FM manual, the GAAP and the Safeguard Documents (i.e. EIAs, EMPs, EMF and RAP). Frequency :Yearly	Complied with	No Change
IBRD-82540	Finance Agreement :Challenge Fund & Cost Sharing Agreements Description :Kerala through collaborative efforts of the PWD and the RSA shall mobilize local stakeholders to prepare proposal for the implementation of safe corridors/zones and the piloting of road safety measures; and upon screening and	Partially complied with	No Change



	selecting feasible proposals shall cause PWD and the RSA to enter into cost sharing agreement for the financing of such proposal (to be implemented by KSTP). Frequency :Yearly		
IBRD-82540	Finance Agreement :Bidding Restriction / Safeguard Compliance Description :Kerala to refrain from inviting bids and/or selecting any contractors for roads for which: (i) EMPs have not been prepared and disclosed; and/or (ii) further details to the existing social impact assessments might be needed. Kerala to ensure that each contract for civil works includes the obligation of the relevant contractor to comply with the relevant safeguard documents. Frequency :Yearly	Complied with	No Change
IBRD-82540	Finance Agreement :Government Permits / Clearances Description :Kerala to ensure that, prior to commencement of any civil works on roads or sections thereof, all relevant government permits/clearances have been obtained, and/or any conditions imposed have been fulfilled/met. Due date: Before any civil work commences Frequency :Yearly	Complied with	No Change
IBRD-82540	Finance Agreement :Safeguard Reporting & Monitoring Description :Kerala to (i) maintain monitoring and evaluation protocols and record keeping procedures to supervise and assess compliance with Safeguard Documents; and (ii) to report on quarterly basis on compliance with Safeguard Documents. Frequency :Yearly	Complied with	No Change
IBRD-82540	Project Agreement: Schedule - Section 1 - H: For purposes of implementing activities for the constructing, rehabilitating and/or improving of the PWD Roads, and the LSGI Roads set forth in Component D of the Project, the PWD and the LSGD shall identify the roads in accordance with prioritization/eligibility criteria, acceptable to the World Bank and further described in the Project Implementation.	Expected soon	Marked for Deletion



IBRD-82540	Kerala to ensure that the Kerala Water Authority shall have removed and relocated all water utilities along the Pribilavu-Perinthalmanna Link corridor, avoiding to the extent possible, any disruption to civil works.	Partially complied with	No Change
IBRD-82540	Finance Agreement :Suggestions & Complaint Mechanism Description :Kerala to maintain and operate a district level grievance redressal mechanism, satisfactory to the Bank, for resettlement and rehabilitation and a state level grievance redressal mechanism for all other aspects of the Project. Frequency :Yearly	Complied with	No Change
IBRD-82540	PA-Schedule-Sec.I.E.4-The Project Implementing Entity shall ensure that each contract for civil works under the Project includes the obligation of the relevant contractor to comply with the relevant Safeguard Documents & all consultancies related to technical assistance, design & capacity building under the Project shall only be undertaken pursuant to TOR reviewed & found satisfactory to the Bank.	Expected soon	Marked for Deletion
IBRD-82540	Project Agreement - Article II - Section 2.01 - the Project Implementing Entity shall carry out Components A, B, C, D.1 and D.3 of the Project through the PWD, and Component D.2 of the Project through the LSGD, in accordance with the provisions of Article V of the General Conditions, and shall provide promptly as needed, the funds, facilities, services and other resources required for the Project	Expected soon	Marked for Deletion
IBRD-82540	Project Agreement-Schedule-Section I A.1(e)-a project management unit within the LSGD (the "LSGD-PMU"): (i) headed by a chief engineer and assisted by competent staff, all with experience and qualifications, in numbers and under TOR acceptable to the Bank and provided with such powers, financial resources, functions and competencies, acceptable to the Bank	Expected soon	Marked for Deletion



IBRD-82540	Project Agreement:Schedule-Section I B (c) - By no later than June 30, 2019, update the Project Implementation Plan, with the prior concurrence of the Bank, and adopt the Project Implementation Plan as updated for carrying out the Project.	Not yet due	Marked for Deletion
IBRD-82540	PA-Schedule-Sec.I.E.2(c)-PWD Roads & LSGI Roads, and/or any other sections thereof, agreed in writing between the Project Implementing Entity (PIE) & the Bank, for which detailed EAs & EMPs, or SIAs have not been completed, updated and/or finalized as of April 30, 2019, will not be awarded until the PIE submits to the Bank the relevant updated/finalized documents to the satisfaction of the Bank.	Expected soon	Marked for Deletion
IBRD-82540	PA-Schedule-Section I.E.1(a)-carry out the Project in accordance/compliance with the EMF, EIAs, EMPs, RPF, RPF-TDF, RAPs, SMP-TDPs and the instruments (to be prepared pursuant to paragraphs 2 of this Sub-Section, and pursuant to the objectives, policies, procedures, time schedules, compensation arrangements and other provisions set forth therein, in a manner & substance satisfactory to the Bank.	Expected soon	Marked for Deletion
IBRD-82540	PA-Schedule-Section I.E.5(b)(ii)-The Project Implementing Entity shall maintain a supervision consulting firm (Construction Supervision Consultant [CSC]) to assist KSTP with the management & supervision of regular construction contracts including payments and quality control and shall furnish to the Bank quarterly reports for sub-components - A.1, D.1 and D.2.prepared by CSC.	Partially complied with	No Change
IBRD-82540	PA-Schedule-Sec.I.E.2(c)-PWD Roads & LSGI Roads, and/or any other sections thereof, agreed in writing between the Project Implementing Entity (PIE) & the Bank, for which detailed EAs & EMPs, or SIAs have not been completed, updated and/or finalized as of June 30, 2019, will not be awarded until the PIE submits to the Bank the relevant updated/finalized documents to the satisfaction of the Bank.	Expected soon	New



IBRD-82540	Project Agreement: Schedule - Section 1 - H: For purposes of implementing activities for the constructing, rehabilitating and/or improving of the PWD Roads, and the LSGI Roads set forth in Component D of the Project, the PWD and the LSGD shall identify the roads in accordance with prioritization/eligibility criteria, acceptable to the World Bank and further described in the Project Implementation.	Expected soon	New
IBRD-82540	Project Agreement: Schedule-Section I B (c) - By no later than July 31, 2019, update the Project Implementation Plan, with the prior concurrence of the Bank, and adopt the Project Implementation Plan as updated for carrying out the Project.	Not yet due	New
IBRD-82540	Project Agreement - Article II - Section 2.01 - the Project Implementing Entity shall carry out Components A, B, C, D.1 and D.3 of the Project through the PWD, and Component D.2 of the Project through the LSGD, in accordance with the provisions of Article V of the General Conditions, and shall provide promptly as needed, the funds, facilities, services and other resources required for the Project.	Expected soon	New
IBRD-82540	Project Agreement-Schedule-Section I A.1(e)-a project management unit within the LSGD (the "LSGD-PMU"): (i) headed by a chief engineer and assisted by competent staff, all with experience and qualifications, in numbers and under TOR acceptable to the Bank and provided with such powers, financial resources, functions and competencies, acceptable to the Bank.	Expected soon	New
IBRD-82540	PA-Schedule-Section I.E.1(a)-carry out the Project in accordance/compliance with the EMF, EIAs, EMPs, RPF, RPF-TDF, RAPs, SMP-TDPs and the instruments (to be) prepared pursuant to paragraphs 2 of this Sub-Section, and pursuant to the objectives, policies, procedures, time schedules, compensation arrangements and other provisions set forth therein, in a manner & substance satisfactory to the Bank.	Expected soon	New



IBRD-82540	PA-Schedule-Sec.I.E.4-The Project Implementing Entity shall ensure that each contract for civil works under the Project includes the obligation of the relevant contractor to comply with the relevant Safeguard Documents & all consultancies related to technical assistance, design & capacity building under the Project shall only be undertaken pursuant to TOR reviewed & found satisfactory to the Bank.	Expected soon	New
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Results framework

COUNTRY: India

India Second Kerala State Transport Project

Project Development Objectives(s)

The project's development objective is to improve condition, traffic flow and road safety with a focus on vulnerable road users on selected roads in Kerala.

Project Development Objective Indicators by Objectives/ Outcomes

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Improve condition, traffic flow & road safety, enhance resilience to climate change & disaster risk (Action: This Objective has been Revised)							
Direct project beneficiaries (Number)		13.40					14.80
Action: This indicator has been Revised							
Female beneficiaries (Percentage)		7.00					7.70
A reduction of travel time on the improved project roads (3 priority corridors) (Text)		Kasaragod to Kanjanghai: 29					Kasaragod to Kanjanghai: 25
		Pilathara to Pappinissery: 21					Pilathara to Pappinissery: 19
		Thalassery to Valavupara: 58					Thalassery to Valavupara: 50



The World Bank

India Second Kerala State Transport Project (P130339)

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Action: This indicator has been Revised							
Improved riding quality of project roads (Text)		0.00					363.00
Action: This indicator has been Revised							
A reduction in annual fatality count of total and vulnerable road users on demonstration corridor (No. of fatalities/year of which women) (Number)		80.00	0.00		20.00	18.00	65.00
Action: This indicator has been Revised							
Reduction in number of vulnerable fatalities/year (Number)		49.00					40.00
Action: This indicator has been Revised							
Climate change and disaster resilience vulnerability assessment on all new project corridors taken up under RKI (Yes/No)		No					Yes
Action: This indicator is New							



Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	Intermediate Targets			End Target
			1	2	3	
Component A: Road Network Upgrading and Safety Improvement (Action: This Component has been Revised)						
State Highways upgraded (Kilometers)		0.00				363.00
Action: This indicator has been Revised						
Financial closure achieved on PPP pilot project (Yes/No)		Yes				Yes
Action: This indicator has been Marked for Deletion	Rationale: Indicator proposed to be dropped owing to change in mode of implementation of this sub-component from PPP to EPC					
Component B: Road Safety (Action: This Component has been Revised)						
Pilot safety corridor developed (Kilometers)		0.00				80.00
Action: This indicator has been Revised						
Number of district level road safety improvement schemes implemented through challenge fund (Number)		0.00				5.00
Action: This indicator has been Revised	Rationale: The end target is proposed to be revised because the state is taking other initiatives such as Safe Kerala Program. Also since only 5 districts have evinced interest, it is proposed to do more in these districts with the same resources, rather than spreading resources thin.					
Component C: Institutional Strengthening (Action: This Component has been Revised)						



Indicator Name	DLI	Baseline	Intermediate Targets			End Target
			1	2	3	
Modernization of PWD (Text)		Existing PWD				Study on institutional and financial options for management of road network completed and recommendations adopted
Action: This indicator has been Revised						
Functioning Road Asset Management System (Text)		No functional road asset management system				Annual maintenance plans disclosed
Action: This indicator has been Revised						
Communications strategy and interfaces for public engagement implemented (Text)		No communications strategy	Communications strategy developed and action plan adopted		At least two consultations/stakeholder forums held/year	At least two consultations/stakeholder forums held/year
Action: This indicator has been Revised						
Regular road user surveys conducted (Text)		No formal road user survey	Baseline survey undertaken		Survey Undertaken and user feedback facilitated through development of states mobile governance platform	Final survey undertaken
Action: This indicator has been Revised						
Component D. climate and Disaster Resilience Enhancement (Action: This Component is New)						
Number of km of PWD roads re-built/re-constructed (Kilometers)		0.00				75.00



The World Bank

India Second Kerala State Transport Project (P130339)

Indicator Name	DLI	Baseline	Intermediate Targets			End Target
			1	2	3	
<i>Action: This indicator is New</i>						
Number of LSGI roads re-built/re-constructed (Kilometers) (Kilometers)		0.00				300.00
<i>Action: This indicator is New</i>						



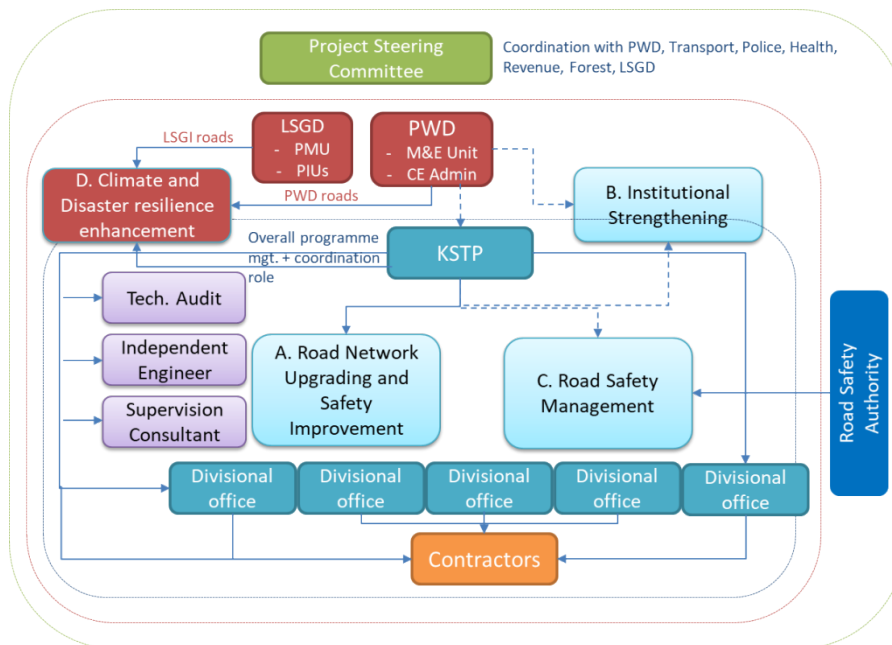
Annex A: Proposed Implementation Arrangements

India: Kerala State Transport Project II

Revised Project Implementation Arrangements:

1. The proposed restructuring would entail changes in the project institutional and implementation arrangements to include a new implementing agency, the Kerala Local Self Government Department (LSGD) - the state’s agency responsible for local self-government institutions, as one of the implementing agencies of the project. This agency would be primarily responsible for construction, rehabilitation and/or improvement of the LSGI Roads, and supporting day-to-day implementation of the LSGI roads sub-component as part of the proposed new component D, on “Climate and disaster resilience enhancement”, which would include re-building and re-construction activities for PWD roads [“component D.1”], re-building and re-construction of LSGI roads [“component D.2”] and overall programme management. The revised project institutional arrangements are depicted in figure A below, with inclusion of component D, and LSGD as an additional implementing agency.

Figure A: Revised Project Institutional Arrangements



2. Implementation of the Climate and Disaster resilience enhancement component: The responsibility for implementation of this component (planning, budgeting, procurement, implementation) would be with PWD, LSGD, KSTP, for respective modules on:
 - a. Re-building and re-construction activities for PWD roads including: (a) construction, rehabilitation and/or improvement of the PWD Roads; and (b) supporting day-to-day implementation of Component D.1 of the Project (PWD).
 - b. Re-building and re-construction activities for LSGI roads including: (a) construction, rehabilitation and/or improvement of the LSGI Roads; and (b) supporting day-to-day implementation of Component D.2 of the Project (LSGD).
 - c. Overall programme management, including: (a) overall coordination and management, including monitoring and evaluation, financial audits and reporting to support implementation of Component D; (b)



carrying out of a post disaster needs assessment to identify adaptation measures through a vulnerability and risk assessment along the proposed road network covered under the RKI; and (c) providing technical support to the RKI Secretariat for carrying out of prioritization, program formulation and designs for infrastructure covered under the RKI (KSTP).

3. Specifically under point 2c. (c) above, KSTP would support the RKI Secretariat in procurement of consultants for carrying out of prioritization, program formulation and designs for various infrastructure (roads, and also other infrastructure such as water, agriculture, solid waste management etc.) covered under the RKI. The consultants would report to the RKI Secretariat. All payments/reimbursement claims would however continue to be routed through KSTP. Further, to the extent that these consultancies/technical assistance (TA) activities have environmental and social implications, triggering one or more Safeguard Policies, these will need to be carried out in a manner satisfactory to the Bank and in accordance with the Safeguard Policies.
4. To ensure successful implementation and day to day management and administration of component D.2, a Project Management Unit (PMU) headed by a Superintending Engineer (SE) Level Officer [Project Director] with at least three years of service to retirement, and supported by a team of one Executive Engineer (EE) [Deputy Director], one Assistant Executive Engineer (AEE), a Procurement Specialist, a Finance Management Specialist, a Social Safeguards Specialist and an Environmental Specialist would be constituted at the head office of LSGD in Trivandrum. The PMU would also include staff from PMGSY Rural Roads Development Agency (RRDA) that are conversant with PMGSY procedures and have been involved in the implementation of the programme. Although procurement of all works and approval of bids, etc. by LSGD are usually subject to Panchayat/Municipality councils, however, all procurement under the World Bank project would be done centrally at the PMU (following the same arrangements as under "PMGSY"), for which LSGD officials (and contractors) would require to be provided with hand-holding support and training in World Bank procurement standards, possibly in partnership with Kerala Highway Research Institute - KHRI.
5. The PMU would be supported by Project Implementation Units (PIUs) at Division levels for implementation (since the number of works would be less in the first phase of the restructured KSTP loan, the number of PIUs would be decided on the basis of the number/length of roads taken up under each district, or alternatively one PIU may manage two or more districts). The Prioritization and Design Consultants, as well as Supervision and Contract Management Consultants would contractually report to the PMU and work alongside the PIUs, in effect being the "engineer" responsible for supervision of works, certifying payments, etc. The prioritization and design consultants would also be responsible for preparing the PIP, doing a second level screening of damages on the 300 km roads to identify whether they qualify to be taken up, helping undertake social and environmental assessments, preparing relevant safeguards documents, and recommending packaging and contract types for selected roads. The PIU would act as the "Employer's representative" during implementation. Thus, while design would follow the PMGSY framework, implementation would follow the existing KSTP model.
6. While the Prioritization and Design Consultants and the Supervision and Contract Management Consultants are in the process of being procured and brought on board, in the interim, a team of individual consultants from the empaneled consultants of Kerala Infrastructure Investment Fund Board (KIIFB) would be engaged to support the LSGD engineers in prioritization and shortlisting of 300 km roads. The prioritization exercise would also include social and environmental screening of the proposed roads, to identify any significant issues/concerns early-on in the project cycle. KIIFB would also deploy around 30 field engineers for ground truthing, and undertake recruitment of environment and social safeguards consultants with prior experience of working in KSTP. The



aforesaid team would prepare the DPRs, draft bidding documents, EMPs, and SMPs, as applicable, and initiate the bidding process by end July 2019. The PMU team in LSGD would work full-time with KIIFB consultants, accompany them in ground truthing, and jointly work with the consultants in the preparation of relevant documentation, in addition to coordination with KSTP.

7. The specific responsibilities of the proposed additional implementing agency, LSGD, would thus be as follows:
 - Post disaster needs assessment (through a vulnerability and risk assessment) along the proposed road network (LSGD responsible along with PWD and KSTP);
 - Selection and procurement of the re-building and re-construction activities for proposed LSGI roads under the climate and disaster resilience enhancement component.
 - Acting as the “Employer” for supervision and monitoring of the said roads.
8. As LSGD has been added as a new implementing agency under the project, a procurement assessment of the agency was carried out, the results of which are outlined below.
9. *Procurement assessment of LSGD:* A procurement assessment of the LSGD was carried out and it was found that the department has an Engineering wing (formed by pooling staff from various departments such as Public Works Department, Water Resources Department, Municipal Common Service, Panchayat Department etc.) headed by a Chief Engineer, which manages all civil works procurement including LSGI roads. LSGD has two circles - south and north - headed by an SE in each circle, managing seven districts each. LSGD has an elaborate process flow for handling civil works. Based on availability of funds, a Municipal Committee/Panchayat Committee selects the work, after which the Overseer/AE in the Municipality prepares the estimate using Price software, which is scrutinized by the office of the Technical Sanctioning authority. Estimates are based on Department Scheduled Rates (DSR). The Municipal Council issues the administrative sanction, while the competent authority of the Engineering wing grants the technical sanction. LSGD states that it uses an e-procurement system for *all civil works valued at more than Rs. 5 lakh*. However, in reality, the e-procurement system is being used for all civil works irrespective of value. After the tenders are opened, the recommendations of the Tender Committee are accepted by the Municipal Council. A similar system is followed by the Panchayat for procuring civil works. During an emergency, the Chairman of the Municipality has the power to order for execution of works, which can be ratified in the next Executive Council meeting. It was found that the activities are completed in time and there is good bidder participation.
10. During the procurement assessment it was also noted that some LSGD engineers have prior World Bank project experience. As mentioned above, for the World Bank funded component, LSGD plans to procure civil works for rebuilding LSGI roads centrally at the state level in the CE office although as per current practice, the LSGD central office is not responsible for procurement, but only for managing the funds. For managing procurement for the LSGI roads, the CE office of LSGD would form a PMU with officers from the field as well as from PMGSY RRDA. In addition, LSGD plans to hire a Supervision and Contract Management Consultant, who would also assist the PMU in procurement processing. Because of general lack of experience of LSGD engineers on World Bank funded projects, the procurement risk is rated as substantial. Action has been taken to mitigate procurement risks under the project. Residual risks relate to: (i) low bidder participation for works in remote villages, (b) limited capacity of new officials involved in the implementation of activities under RKI, and (c) governance risks relating to interference, fraud and corruption. Measures for risk mitigation and the time frame for their implementation are summarized in table A1:



Table A1: Assessed Procurement Risks and Mitigation Measures

Risk Factor	Initial Risk	Mitigation Measure	Completion Date	Residual Risk
Limited capacity and inefficiencies resulting in delays in procurement and contract management processes	Substantial	<ul style="list-style-type: none"> Hiring of skilled procurement staff with World Bank procurement knowledge for handling procurement activities Monitoring through Procurement Plan and quarterly reports Use of e-Procurement and contract management tools Participation in trainings and workshops 	During the project implementation period	Substantial
Noncompliance with agreed procurement arrangements	Moderate	<ul style="list-style-type: none"> Training and hand-holding provided by the World Bank Prior and post reviews by the World Bank Internal and external audits 	Continuous for Year 1	Moderate
Governance risks relating to interference, corruption etc. in procurement process	Substantial	<ul style="list-style-type: none"> Disclosure of procurement-related information Appropriate handling of complaints 	Continuous for Year 1	Substantial
Overall Risk	Substantial			Substantial

11. **Record keeping.** All records pertaining to award of contracts, including bid notification, register pertaining to sale and receipt of bids, bid opening minutes, bid evaluation reports and all correspondence pertaining to bid evaluation, bid securities, etc. would be retained by the implementing agencies for two years after the project closure date.

12. **Procurement information disclosure requirements.** The project shall comply with the disclosure requirements stipulated in the World Bank’s Procurement Guidelines. Accordingly, the following documents shall be disclosed on the project’s website: (i) Procurement Plan and all subsequent updates; (ii) invitations for bids for works/goods; (iii) requests for expression of interest (REOIs) for selection/hiring of consulting services; (iv) shortlisting of consultants; (v) details of contract awards; (vi) lists of contracts following Direct Contracting, selection based on the Consultants’ Qualifications (CQS), or Single-Source Selection on a quarterly basis; and (vii) action-taken reports on the complaints received on a quarterly basis.

13. **Oversight and monitoring by the World Bank.** All contracts not covered under prior review by the World Bank would be subject to post review during implementation support missions and/or special post review missions. The World Bank may conduct, at any time, independent procurement reviews of all the contracts financed under the loan. Bank prior review will be carried out for values of procurement as per table A2 below:

Table A2: World Bank prior review thresholds

Type of Procurement	Prior Review Threshold (US\$, million)
Works	10
Goods and non-consulting services	2



Type of Procurement	Prior Review Threshold (US\$, million)
Consultant firms	1

14. **Complaint handling mechanism.** In LSGD, complaints are handled by the next higher officer in the department. However, timelines for complaint handling are not defined. KSTP has already established a complaint handling mechanism to address complaints/grievances from contractors/suppliers more effectively. A similar complaint handling mechanism would be established by LSGD. On receipt of complaints, immediate action would be initiated to acknowledge the complaint and address it within a reasonable timeframe. All complaints during bidding/award stage as well as complaints during contract execution along with the analysis and response of PMU should be submitted to the World Bank for review.
15. **Financial Management arrangements.** The KSTP PMU will continue to be the nodal agency for overall financial management, monitoring and processing reimbursement requests. For LSGI roads under Component D, the LSGD PIUs will submit the expense records, which will be further processed by KSTP PMU for preparing reimbursement request to the Bank. The LSGD PMU will include a finance management specialist for collating the expense records and processing of contract payments for LSGI roads. For KSTP roads, the current financial management arrangement will continue.
16. **Implementation arrangements for PWD:** PWD would continue to follow arrangements as were followed under KSTP for implementation of component D.2.



Annex B: Revised Results Framework

India: Kerala State Transport Project II

Revised PDO: To improve condition, traffic flow and road safety with a focus on Vulnerable Road Users on selected roads in Kerala, and to enhance resilience to climate change and disaster risk.

ORIGINAL PROJECT					RESTRUCTURED PROJECT			
Original Indicator	Associated Original PDO Outcome	Original Baseline	Original Target	Retain/Delete/Revise	New, Revised or Retained Indicator	Associated Revised PDO Outcome	New or Revised Baseline	New or Revised Target
PDO Indicators								
Direct project beneficiaries, of which female	Improve condition, traffic flow and road safety with a focus on Vulnerable Road Users on selected roads in Kerala	13.4 million ⁸ (7 million)	14.8 million (7.7 million)	Retain	Direct project beneficiaries, of which female	Improve condition, traffic flow and road safety with a focus on Vulnerable Road Users on selected roads in Kerala	Same as original	Same as original
A reduction of travel time on the improved project roads (3 priority corridors)	Improve traffic flow on selected roads in Kerala	Kasaragod to Kanjanghai: 29 minutes Pilathara to Pappinissery: 21 minutes Thalassery to Valavupara: 58 minutes	Kasaragod to Kanjanghai: 25 Pilathara to Pappinissery: 19 Thalassery to Valavupara: 50	Retain	A reduction of travel time on the improved project roads (3 priority corridors)	Improve traffic flow on selected roads in Kerala	Same as original	Same as original
Improved riding quality of project roads	Improve condition on selected	0 km with IRI <4	363 km with IRI <4	Retain	Improved riding quality of project roads	Improve condition on	Same as original	Same as original

⁸ Assumes direct beneficiaries are all those living in the eight districts covered by project.



	roads in Kerala					selected roads in Kerala		
A reduction in annual fatality count of total and Vulnerable Road Users on demonstration corridor	Improve road safety with a focus on Vulnerable Road Users on selected roads in Kerala	80 ⁹ 49 ¹⁰	56 34	Revise (target)	A reduction in annual fatality count of total and Vulnerable Road Users on demonstration corridor	Improve road safety with a focus on Vulnerable Road Users on selected roads in Kerala	Same as original	65 40 ¹¹
-	-	-	-	Revise (new indicator)	Climate change and disaster resilience vulnerability assessment on all new project corridors taken up under RKI	Enhance resilience to climate change and disaster risk	None (no vulnerability assessment undertaken)	Climate change and disaster resilience vulnerability assessment undertaken & incorporated in all designs for the new project corridors taken up under RKI
Intermediate Indicators								
State Highways Upgraded	Improve traffic flow on selected	0 km	363 km	Retain	Improve traffic flow on selected roads in Kerala		Same as original	Same as original

⁹ The baseline estimates for fatality count on the demonstration corridor has been drawn from the 2012 Kerala State Crime Records Bureau data as available. During the implementation of the project a detailed review and assessment of fatality estimates will be done which may revised the baseline values. In addition to the total fatality count, the assessment will also identify the fatality count for Vulnerable Road Users and female road users for the purposes of the results framework.

¹⁰ The fatality count for Vulnerable Road Users was estimated using the fatal victim to crash ratio for all road users and then applying the same ration for Vulnerable Road User victims. The Vulnerable Road Users identified in the results framework includes pedestrians and passengers of two wheelers.

¹¹ These revisions are necessitated by an increase in vulnerable fatality count on the selected corridor since the project baseline, with total fatalities remaining unchanged at a rate of 1/km/year, rather than decreasing. Current counts for number of fatalities/year and number of vulnerable fatalities/year on the demonstration corridor are 79 fatalities/year, of which 52 are vulnerable fatalities/year (2017), as against 80 and 49 as baselines respectively; source: NATPAC analysis.



	roads in Kerala							
Financial closure achieved on PPP pilot project	Improve traffic flow and condition of selected roads in Kerala	No	Financial closure achieved on selected pilot (YR 3)	Delete	-	-	-	Indicator proposed to be dropped
Pilot safety corridor developed	Improve road safety with a focus on Vulnerable Road Users on selected roads in Kerala	0 km	80 km	Retain	Pilot safety corridor developed	Improve road safety with a focus on Vulnerable Road Users on selected roads in Kerala	Same as original	Same as original
Number of district level road safety improvement schemes implemented through challenge fund	Improve road safety with a focus on Vulnerable Road Users on selected roads in Kerala	0	10	Revise (target)	Number of district level road safety improvement schemes implemented through challenge fund	Improve road safety with a focus on Vulnerable Road Users on selected roads in Kerala	Same as original	5 ¹²
Modernization of PWD	-	None	Study on institutional and financial options for management of road network completed and	Retain	Modernization of PWD	-	Same as original	Same as original

¹² The end target is proposed to be revised because the state is taking other initiatives such as Safe Kerala program. Also, since only 5 districts have evinced interest, it is proposed to do more in these districts with the same resources, rather than spreading resources thin.



			recommendations adopted					
Functioning Road Asset Management System	-	None	Annual maintenance plans disclosed	Retain	Functioning Road Asset Management System	-	Same as original	Same as original
Communications strategy and interfaces for public engagement implemented	-	None	At least two consultations/ stakeholder forums held/year	Retain	Communications strategy and interfaces for public engagement implemented	-	Same as original	Same as original
Regular road user surveys conducted	-	-	Final survey undertaken	Retain	Regular road user surveys conducted	-	Same as original	Same as original
-	-	-	-	Revise (new indicator)	Number of km of PWD roads re-built/reconstructed	-	0 km	75 km
-	-	-	-	Revise (new indicator)	Number of km of LSGI roads re-built/reconstructed	-	0 km	300 km



Annex C: Detailed Project Description

India: Kerala State Transport Project II

Revised Project Components:

1. The proposed restructuring would entail changes in the following components/sub-components of the KSTP II Project. All civil works costs include contingencies, environmental management, land acquisition and resettlement. The revised components are as follows:
2. **Sub Component A 2 (US\$ 91 million; Bank financing US\$ 33 million) [under Component A: Road Network Upgrading and Safety Improvement (Revised cost US\$ 333 million; of which US\$ 154 million Bank financing)]:**
3. This sub-component will include upgrading 82 km state highway (Punalur-Ponkunnam road) through the EPC mode. The previously prepared DPR which was updated by L&T Infra (Transaction Advisor to KSTP) recently, including revised topographic surveys using LIDAR, would be used. The road has been divided into 3 contract packages, and the Bank approved EPC standard bidding document is being used for NCB procurement (new ESHS and GBV clauses have been included), and bidding is being undertaken separately for each package. L&T would also provide back end support for preparation of tender documents and award of contracts. The procurement process for all three packages has now been initiated. The existing carriageway (5.5m ~ 7 m) is proposed to be widened to 2 lanes with paved shoulders (7m + 2x1.5m). Geometric correction is proposed in a few stretches, which would require land acquisition. Nearly 99.2% acquisition has been completed and about 34 private (8 are along the proposed carriageway, thus critical) and 23 government properties are yet to be acquired. Out of the 8 critical cases, 5 need to follow the LA Act 2013 and may need about one year for settlement. For the other 3 cases, direct purchase would be adopted and this could be completed in 3 months. The cases of Government land comprise 2 Postal, 1 BSNL and the rest state owned (Education-7, Home-2, Irrigation-3, LSGD- 6, Technical-1 and Revenue-1). Further, a nearly 2-3 km stretch under package C falls in forest land and joint ownership of this land is claimed by Revenue and Forest Departments, and private owners. In case this is Reserved Forest Land, MoEF clearance would be required; else no objection from State Forest Department would be needed prior to construction. The number and type of utilities to be shifted would need be included in the bid documents. A provision for mandatory use of RAP (Reclaimed Asphalt Concrete) in percentage terms with proof of compliance as part of the SCC would also be included. As such, the contract schedules and cost would be updated prior to proceeding with the procurement process.
4. Changes in Component A2 are required because GoK has decided, vide their letter dated June 26, 2018, to adopt the EPC mode for implementation of the Punalur-Ponkunnam road. Procurement for the said road under the PPP mode was initiated in early 2014 and the bid published on 25th February, 2016. While procurement was preceded by an investors' meet, the response was lukewarm with only one qualified bidder. GoK accordingly decided to consider alternative modes of implementation, and decided to change the mode of implementation from PPP to EPC. As agreed with the Bank, the DPR was revised, and the cost of construction is Rs. 6,093.3 million.
5. **Component D: Climate and Disaster Resilience Enhancement (US\$ 80.35 million; Bank financing US\$ 45 million):** This component would include the following:
 - a. Provision of assistance to PWD for: (a) construction, rehabilitation and/or improvement of the PWD Roads; and (b) supporting day-to-day implementation of Component D.1 of the Project.



- b. Provision of assistance to LSGD for: (a) construction, rehabilitation and/or improvement of the LSGI Roads; and (b) supporting day-to-day implementation of Component D.2 of the Project.
- c. Provision of assistance to KSTP for: (a) overall coordination and management, including monitoring and evaluation, financial audits and reporting to support implementation of Component D; (b) carrying out of a post disaster needs assessment to identify adaptation measures through a vulnerability and risk assessment along the proposed road network covered under the RKI; and (c) providing technical support to the RKI Secretariat for carrying out of prioritization, program formulation and designs for infrastructures covered under the RKI.

6. Estimated outlay on various sub-components is provided in table C1 below.

Table C1: Break-up of loan amount for proposed Component D (in US\$ million)

No.	Activity	Cost	Bank financing
1	Re-building and re-construction of PWD roads (D.1)		23.00
2	Re-building and re-construction of LSGI roads (D.2)		19.00
3	Overall programme management		3.00
4	TOTAL	80.35	45.00

7. Inclusion of Component D is necessitated by changes in scope and development objectives of the project, to include proposed interventions for re-building and reconstruction under the Resilient Kerala Initiative, following the 2018 Kerala floods. Existing and proposed costs by component and Bank funding are indicated in table C2 below.

Table C2: Amount of the Loan Allocated by Components/Sub-components (in US\$ million)

Component/Sub-component	Total cost (existing)	Bank Financing (existing)	Total cost (proposed)	Bank Financing (proposed)
A1, B, and C	354	182.46	274	137.46
A2	91	33.00	91	33.00
D		-	80	45.00
Front-end Fee	-	0.54	-	0.54
Total	445	216.00	445	216.00

Component/Sub-component	Total cost (existing)	Bank Financing (existing)	Total cost (proposed)	Bank Financing (proposed)
A1	322	166	242	121
A2	91	33	91	33
B	22	12	22	12
C	10	5	10	5
D	-	-	80	45
Front-end Fee	-	0.54	-	0.54
Total	445	216	445	216