

PILOT PROGRAM FOR CLIMATE RESILIENCE

Summary – Project/Program Approval Request

1. Country/Region:	Cambodia	2. CIF Project ID#:	(Trustee will assign ID)
3. Project/Program Title:	SPCR Investment Component III (Project 1): Climate Proofing of Roads in Prey Veng, Svay Rieng, Kampong Chhnang and Kampong Speu Provinces as a part of ADB-funded Provincial Roads Improvement Project		
4. Type of PPCR Investment	Private: No	Public: YES	Mixed: NO
5. Funding Request (in USD million total) for Project/Program::	Grant: \$7 million		Loan: \$10 million
6. Approved Preparation Grant	Amount (USD): NONE Requested		Date: NOT APPLICABLE
7. Implementing MDB:	Asian Development Bank (ADB)		
8. Other MDB Involvement	MDB: --	Type of Involvement: --	
9. National Project Focal Point:	<i>Mr. Peng Sovicheano Deputy Director General, Department of Public Works Ministry of Public Works and Transport (MPWT)</i>		
10. National Implementing Agency ¹ for project/program:	<i>Ministry of Public Works and Transport (MPWT)</i>		
11. MDB PPCR Focal Point and Project/Program Task Team Leader (TTL):	<i>Headquarters-PPCR Focal Point: Ancha Srinivasan, Principal Climate Change Specialist (ADB-Southeast Asia Department)</i>		<i>TTL: Shihiru Date, Senior Transport Specialist</i>

¹ Can be Government agency or private sector firm

12. Project/Program Description:

- The project will support mainstreaming of climate risk and resilience in transport infrastructure planning at national and provincial levels. It will include an assessment of the vulnerability of project road network to climate change impacts with a view to improve adaptation planning. It will also develop emergency management planning for project roads.
- The project provides climate change adaptation support at both policy and operational levels to a sector and a geographical area, which has been identified as highly vulnerable to impacts of climate change.
- The adaptation strategy for the project includes a mixture of civil works design adjustments, hazard mapping, bioengineering and other ecosystem-based adaptation measures to cope with both observed and projected changes in climate in the project area.
- The engineering changes are mainstreamed in the project design itself. These include, but not limited to, elevation of roads in areas where major flooding is becoming increasingly common and changing the selection of sub-grade materials to withstand higher moisture content.
- Several low risk options and no-regrets adaptation measures such as piloting water capture and storage systems, and planting appropriate species to restore ecosystem functions will be undertaken.
- A community-based emergency management intervention will be piloted in Kampong Chhnang province, with participation of the Red Cross.

Sector: Infrastructure

Themes: Climate proofing of roads; Climate risk management; Flood and drought management; Disaster risk reduction; Ecosystem-based adaptation; Capacity strengthening for mainstreaming resilience into transport planning; Stakeholder participation

13. Objective

- To rehabilitate and upgrade 157 km of flood-vulnerable roads in Kampong Chhnang, Kampong Speu, Prey Vang, and Svay Rieng provinces to **climate change-resilient condition** thereby providing all-year access to markets, jobs, and social services in agricultural areas of project provinces

14. Expected Outcomes:

- Increased resilience of road infrastructure to climate variability and change in some of the most vulnerable provinces of Cambodia with large agricultural populations.
- Improved technical and financial planning capacity to mainstream climate change concerns into road infrastructure development at national, provincial and local levels.
- Enhanced quality of life of people living in four agricultural provinces most affected by climate variability and change through improved access to markets and other social services including early warning systems for disaster risk reduction

15. Key Results and Indicators for Success (consistent with PPCR results framework):	
Results	Indicators
(a) Ministry of Public Works and Transport (MPWT) mainstreams climate change risks and resilience in provincial road planning, maintenance and budgeting by 2017	<ul style="list-style-type: none"> (i) MPWT road transport policies adjusted to incorporate climate risks, and decision making appropriately reflects vulnerability (including gender dimension) studies (ii) Road maintenance works in MPWT are aligned with climate change trends and projections (iii) MPWT budget allocations consider climate change vulnerabilities of priority roads (iv) Number and value of climate-resilient investments in road infrastructure increased and continuity of services provided by road infrastructure ensured
(b) MPWT changes manuals to incorporate climate resilient design of roads by 2017	<ul style="list-style-type: none"> (i) Road rehabilitation and new road construction will follow 100-year flood design (ii) Hazard maps for national and provincial roads of MPWT completed and used routinely in prioritizing road maintenance operations
(c) MPWT strengthens climate change adaptation training and disseminates knowledge on climate resilience by 2017	<ul style="list-style-type: none"> (i) At least 20 staff members from MPWT including women participate in regional climate change adaptation forums and participate in PPCR knowledge dissemination (e.g., publications, studies, knowledge sharing platforms, learning briefs, communities of practice, etc.) (ii) MPWT organizes climate resilience related conferences annually in collaboration with the Ministry of Environment (MOE) and the Ministry of Rural Development (MRD) (iii) MPWT collaborates with Cambodian universities to integrate climate change in curriculum of environmental and transport engineering
(d) Capacity of provincial roads in southeastern and mid-west Cambodia to withstand climate change impacts enhanced through implementing ecosystem-based adaptation strategies by 2017	<ul style="list-style-type: none"> (i) 157 km of provincial roads rehabilitated and upgraded to paved condition, including 117 km of road enhanced to climate resilient codes and standards for ensuring all-year access (ii) “Green planning” and planting implemented along at least 100 km of roads to improve flood and drought management (iii) Incidence of seasonal flooding of about 100 km roads reduced substantially (iv) Percentage of women in climate resilience-related economic opportunities increased (v) Access to markets and other social services for communities improved

(e) Number and size of water capture facilities in provincial areas increased by 2017	(i) Number of new water capture interventions in Kampong Chhnang province completed (ii) Dredging of irrigation lake in Kampong Chhnang province completed
(f) Emergency planning, management and disaster risk reduction in Kampong Chhnang province to cope with extreme climate induced calamities strengthened by 2017	(i) Early warning systems established in Kampong Chhnang province and coverage under local early warning systems increased (ii) All residents are evacuated in a timely manner during a calamity in Kampong Chhnang province (iii) All livestock are moved to safe areas (with no shortage of feed) during a calamity in affected areas of Kampong Chhnang province

16. Budget:

Expenditures ²	Amount (USD) – estimates	
Civil works of road improvements in contract packages A, B, and C road adjustments, framework agreement and borrow-pits	7.68	
Civil works for climate resilience including Water Capture and Storage, planting and equipment	2.77	
Consultants proportion of civil works related to climate resilience	2.27	
Consultants exclusively for climate resilience measures including training	2.58	
Contingencies (max. 10%)	1.70	
Total Cost (PPCR Finance)	17.00	
Co-Financing ³ :	<i>Amount (USD million):</i>	<i>Type of contribution:</i>
• Government	10.10	In-kind
• MDB	52.00	ADF Loan
• Private Sector	0.00	Not Applicable
• Others (please specify)	TBD	
Co-Financing Total	62.10	

² Expenditure categories should be provided by the MDBs based on own procedures.

³ This includes: in-kind contributions (monetary value), MDB loan or grant, parallel financing, etc.