

## RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Rating	Mitigation Measures	Responsibility
1. Low response by contractors during the initial stage of procurement	M	Advance action for procurement will be used for each tranche, and experienced and fully staffed PIUs are already in place. PIUs will be supported by PICs, with overall guidance and due diligence by the TSC at the central level. Both PICs and TSC are already in place. The chosen road design procedure with its emphasis on consultation with communities, improvement of the alignments to avoid unnecessary social and environmental impacts, road safety audits, and additional quality control has expedited the start-up of the subprojects under the investment program. The template for detailed subproject reports, with checklists in each section as adopted for the first RCIP, has also ensured that all essentials of the design process are properly managed and checked by designers. These measures have kept delays—whether caused by omissions in the design or by affected communities insisting on design changes to minimize social or agricultural impacts or to improve road safety—to a minimum. The e-procurement procedure adopted in each investment program state will be continued.	SRRDAs
2. Inadequate post-investment road maintenance	M	All contracts for civil works under the investment program will include a provision requiring construction contractors to perform 5-year post-construction maintenance. The maintenance component is separately financed by the states, as required in the PMGSY guidelines. Under the PMGSY, the Ministry of Rural Development strictly enforces the built-in mechanism linking availability of central funds for construction with the provision of adequate maintenance financing by the states. Funding of PMGSY roads after the 5-year post-construction period is covered by the states and augmented by the central government in certain cases. The investment program will further increase the effectiveness of maintenance planning, budgeting, contracting, and administration by strengthening the operation of RRNMUs and RCTRCs.	SRRDAs
3. Start-up delay of operations of RRNMUs and RCTRCs	M	Now that five RCTRCs and 30 RRNMUs are operational in the investment program states, the consultants will further train their staff to fully qualify them for the duties and responsibilities of	SRRDAs

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		these institutions. All states have committed to budget for RCTRCs and RRNMUs; (ii) avoid transferring key staff from the RRNMUs for at least 3 consecutive years, whenever possible; (iii) not leave key positions vacant for more than 30 days; and (iv) not transfer more than one key staff member within a 6-month period.	
4. Extreme weather conditions	L	Negative impacts of extreme weather conditions were identified as part of the climate risk assessment and management plan, and mitigation measures were incorporated in program designs. The investment program will help the state governments prepare disaster risk and vulnerability assessments and establish a database on natural disasters to be considered in rural road design and maintenance needs in the future.	SRRDAs

Note: H = high, S = substantial, M = moderate, L = low.

PIC = program implementation consultant, PIU = program implementation unit, PMGSY = Pradhan Mantri Gram Sadak Yojana (Prime Minister's Rural Roads Program), RCIP = Rural Connectivity Investment Program, RCTRC = rural connectivity training and research center, RRNMU = rural road network management unit, SRRDA = state rural road development agency, TSC = technical support consultant.

Source: Asian Development Bank.