

DESIGN AND MONITORING FRAMEWORK FOR TRANCHE 2

| Impact the Program is Aligned with | | | |
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| Mobility and accessibility in India improved (India: Three Year Action Agenda, 2017–2018 to 2019–2020) ^a | | | |
| Results Chain | Performance Indicators with Targets and Baselines | Data Sources and Reporting Mechanisms | Risks |
| Outcome Rural connectivity in Madhya Pradesh improved | By 2023: a. Average travel time on PMGSY-II roads in Madhya Pradesh reduced by 20% (2017 baseline: 2.5 minutes per km) b. Use of roads upgraded to PMGSY-II standard increased to 2.41 average daily million vehicle-kilometers in the first full year of operation (2017 baseline: 1.89 million vehicle-kilometers) | a.–b. RRNMU annual report and annual socioeconomic impact report | Extreme weather conditions beyond projections cause significant damage to the project roads |
| Outputs 1. Rural roads in Madhya Pradesh improved | By 2022: 1a. At least 2,800 km of rural roads upgraded to all-weather standards with climate resilient features in accordance with PMGSY-II guidelines ^b (2017 baseline: 0 km) 1b. At least 15% of total length constructed used innovative approaches ^c (2017 baseline: 0) 1c. At least 33% of workers hired in road construction works are women (2017 baseline: 0) | 1a. OMMAS of PMGSY 1b.–c. TSC report | Low response by contractors during the initial stage of procurement |
| 2. Institutional capacity of PMGSY implementing agencies strengthened | By 2022: 2a. At least 500 PMGSY engineers (at least 15% women) reported increased knowledge and skills on rural road development, road maintenance, and road safety (2017 baseline: 0) | 2a. RCTRC annual report | |
| 3. Safety of PMGSY roads sustained | By 2022: 3a. Road safety audits completed for 100% of project roads at design, construction and operational stages (2017 baseline: 0) | 3a.–c. PIC and TSC reports | |

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| | 3b. 100% of the recommendations from road safety audits implemented (2017 baseline: not applicable) 3c. At least 4,000 students (at least 40% girls) reported increased understanding on road safety (2017 baseline: 0) 3d. Road safety impact study on selected investment program roads conducted (2017 baseline: not conducted) | 3d. Report on road safety impact study | |
| Key Activities with Milestones 1. Rural roads in Madhya Pradesh improved 1.1 Select PMGSY-II roads in Madhya Pradesh and consult with communities along the selected roads, especially women, through transect walks by November 2017. ^d 1.2 Secure approval of the selected roads from MORD's Empowered Committee by January 2018. 1.3 Ensure that DPRs are cleared by TSC 1 month before submitting PFRs to ADB. 1.4 Award all civil works contracts by November 2018. 2. Institutional capacity of PMGSY implementing agencies strengthened 2.1 Roll out training program by August 2018. 3. Safety of PMGSY roads sustained 3.1 Conduct road safety audit at design stage by January 2018, and at construction and operation stages by December 2022. 3.2 Conduct safety awareness sessions for schools and rural communities by December 2022. 3.3 Conduct road safety impact study on selected roads by December 2022. | | | |
| Inputs ADB: \$110 million (loan) Government: \$193 million | | | |

ADB = Asian Development Bank, DPR = detailed program report, km = kilometer, MORD = Ministry of Rural Development, OMMAS = online management, monitoring, and accounting system, PFR = periodic financing request, PIC = program implementation consultant, PMGSY = Pradhan Mantri Gram Sadak Yojana (Prime Minister's Rural Road Program), RCTRC = rural connectivity training and research center, RRNMU = rural road network management unit, TSC = technical support consultant.

^a Government of India, National Institution for Transforming India Aayog. 2017. [India: Three Year Action Agenda, 2017–18 to 2019–20](#). New Delhi.

^b The rural road design will include climate change adaptation measures, such as increased capacity of side and cross drains, and slope protection.

^c Including the use of asphalt cold-mixing method, chemical for waterproofing of subbase course, plastic waste and paneled concrete pavement.

^d Based on the gender action plan, 20% of participants in the transect walk are women.

Source: Asian Development Bank.