



India: Bengaluru Metro Rail Project

Project Name	Bengaluru Metro Rail Project								
Project Number	53326-001								
Country	India								
Project Status	Proposed								
Project Type / Modality of Assistance	Loan Technical Assistance								
Source of Funding / Amount	<table border="1"> <tr> <td>Loan: Bengaluru Metro Rail Project</td> <td></td> </tr> <tr> <td>Ordinary capital resources</td> <td>US\$ 500.00 million</td> </tr> <tr> <td>TA: Bengaluru Metro Rail Project</td> <td></td> </tr> <tr> <td>Technical Assistance Special Fund</td> <td>US\$ 2.00 million</td> </tr> </table>	Loan: Bengaluru Metro Rail Project		Ordinary capital resources	US\$ 500.00 million	TA: Bengaluru Metro Rail Project		Technical Assistance Special Fund	US\$ 2.00 million
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Strategic Agendas	Environmentally sustainable growth Inclusive economic growth								
Drivers of Change	Private sector development								
Sector / Subsector	Transport - Urban public transport								
Gender Equity and Mainstreaming	Effective gender mainstreaming								
Description	<p>Extension of metro rail network to alleviate congestion in the city center and along arterial roads, and to promote use of public transport in the city. The output of the project will be new metro lines of 56.2 km constructed. The project will finance two new metro lines as phase 2A and 2B of the Bangalore Metro. Phase 2A will improve connectivity among different metro lines and with railways at two junction stations along the Outer Ring Roads while Phase 2B will connect the city center with the airport. With the proposed lines, network coverage and density of Bangalore Metro will be heightened, and the metro will offer more convenient services to users. Multimodal facilities will also be developed at metro stations, including car and motor pool, bus bay and taxi pool as well as pedestrian bridges, will enable smooth transit with other transport modes, minimize traffic blockage by buses, and provide better last mile connectivity.</p>								
Project Rationale and Linkage to Country/Regional Strategy	<p>Bengaluru is the capital city of Karnataka State located in Southern India and serving as an engine of national economic growth. The city's economy is flourishing with major contribution by secondary and tertiary sectors, due to high concentration of major industries and infrastructures. Bengaluru is well known for prosperous knowledge-based industry cluster such as information technology, robotics, biotechnology and engineering, and electronics.</p> <p>Bengaluru is India's third populous city and fifth most populous urban agglomeration. Bengaluru is the most urbanized district in Karnataka State with 91 percent of its population in the urban area. Bengaluru is one of the fastest growing urban areas in the country in terms of population as well as size of economy. Population in Bengaluru has recorded 42% growth during the decade 2001-2011. It is expected the population of Bengaluru Metropolitan region will keep growing and reach 20.3 million by 2031, from the estimated population of over 9 million in 2011. The Population growth has been contributed by migration from other areas. Migration accounts for between 25-40% of population increase, and 30% of migrants are for opportunity to work. The city has been experiencing an unprecedented population growth translating into varied challenges of urbanization especially in traffic congestion.</p> <p>Combination of growth in secondary and tertiary sectors and rapid population increase in urban area is resulting in severe traffic congestion problem in Bengaluru. Avoidable cost of congestion in Bengaluru is estimated at \$6 billion per year. Congestion of the city is worse to other major Asian cities including Delhi and Mumbai. Bengaluru is excessively relying on Road transport due to insufficiency of public transport, leading to drastic increase of private vehicles. Number of registered vehicles in Bengaluru City increased from 3.2 million in FY 2009 to 7.4 million in FY2018.</p> <p>Due to congestion in the city, strengthening public transport in Bengaluru is in urgent needs. it is in line with National Urban Transportation Policy 2014 of India which promotes non-motorized and public transport, rather than catering to the needs of private automobile as an effective platform for integrating land use and transport planning. It also promotes Transit Oriented Development (TOD) where urban development with highly dense and multipurpose land use around stations of public transport modes and facilitation of public transport usage are pursued. Public transport development with TOD is also in line with development plan by municipality government in Bangalore.</p> <p>Public transport in the city comprises railway, bus and metro. Railway has six radial routes, serving as mass and longer-distance transport plying city center and suburban areas as well as intercity services. Public bus service is operated by Bangalore Metropolitan Transport Corporation with 6,000 bus fleets, to provide intra-city transportation including last mile connectivity to over 5 million passengers per day. However, congestion on roads is worsened and adversely affecting bus operation by slowing average speed on road.</p> <p>Bangalore Metro is constructed and operated by Bangalore Metro Rail Corporation Ltd. (BMRCL) which was established as special purpose vehicle financed jointly of the government of India and the government of Karnataka State in 2011. Phase 1 of Bangalore Metro, which is 42.3km long, was completed and became fully operational in 2017. Phase 1 comprises East-West line, vis Purple Line and North-South line, vis Green Line. Phase 2 comprising 7 sections with total length 74.2km, will be commissioned section by section from 2020 and become fully operational by 2023.</p> <p>Demand for public transport from users of Kempegowda International Airport is rapidly growing as well. The airport is located 50km North of the city center and is the third busiest airport in India. In fiscal year 2017, number of passengers using the airport reached 23 million, with 20.6% of annual growth. Road transport is currently only available transportation mode plying the city and the airport while taxi and buses are operation as public transport. Given that the airport is expanding with new runway and terminal building to meet the growing demand, mass transportation mode is awaited to strengthen the transportation capacity.</p>								
Impact	The project will be aligned with the following impact: Urban mobility in Bengaluru city improved.								
Outcome	Efficient, safe, and gender- and socially- inclusive rail-based urban transit mobility in Bengaluru city increased								
Outputs	New metro lines constructed Support on TOD provided, including TOD-based urban development policy and plan, and multimodal integration plan for Bengaluru Capacity development of TOD related agencies, including BMRCL, for planning, design, and implementation of TOD projects								
Geographical Location	Nation-wide, Bengaluru								
Safeguard Categories									

Environment	A
Involuntary Resettlement	A
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects
Involuntary Resettlement
Indigenous Peoples
Stakeholder Communication, Participation, and Consultation
During Project Design
During Project Implementation

Business Opportunities

Consulting Services	Advance contracting and retroactive financing will be undertaken for consulting services in conformity with ADB's Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). Bidding documents for civil works and consultants will be prepared by BMRCL and approved by ADB.
Procurement	Advance contracting and retroactive financing will be undertaken for civil works in conformity with ADB's Procurement Policy (2017, as amended from time to time) and Procurement Regulations for ADB Borrowers (2017, as amended from time to time). Bidding documents for civil works and consultants will be prepared by BMRCL and approved by ADB.

Responsible ADB Officer	Kaoru Kasahara
Responsible ADB Department	South Asia Department
Responsible ADB Division	Transport and Communications Division, SARD
Executing Agencies	Ministry of Housing and Urban Affairs Nirman Bhawan, Maulana Azad Road New Delhi 110 011 India

Timetable

Concept Clearance	06 Dec 2019
Fact Finding	03 Feb 2020 to 14 Feb 2020
MRM	09 Apr 2020
Approval	-
Last Review Mission	-
Last PDS Update	09 Dec 2019

Project Page	https://www.adb.org/projects/53326-001/main
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