

INTEGRATED SUSTAINABLE URBAN TRANSPORT  
SYSTEMS FOR SMART CITIES (SMART-SUT)

# ROAD REDEVELOPMENT PLAN FOR SAHODARAN AYYAPPAN ROAD IN KOCHI



## CONTEXT

Sahodaran Ayyappan (SA) Road is the second main arterial road in the CBD area of Kochi. It establishes east-west connectivity and accommodates the metro system of the city. The

road width varies from 21m to 24m and it is congested during peak hours, with inadequate and discontinuous footpaths, insufficient public activity spaces and poorly designed intersections.

## OBJECTIVE

The objective of the project is to redesign both SA Road (3.5 km) and Church Landing Road (0.5 km) as model roads, considering all road users. This includes high-quality, safe footpaths with utility ducts, street lights, landscaping and creating public spaces, junction improvement, signage, street furniture, traffic calming elements etc. to improve safety and convenience for pedestrians and other road users.

The project also attempts to promote public transport by improving first and last mile connectivity through supporting infrastructure and by incorporating it in street design. This will result in better accessibility for various user groups, better air quality and lower CO2 emissions. The project is being conceptualised and implemented jointly by the Kochi Municipal Corporation (KMC) and the Kochi Metro Rail Limited (KMRL), with technical support from the GIZ-supported SMART-SUT project.

## APPROACH

- Transportation and land use surveys (topographical, land use, traffic, pedestrian, speed & delay, boarding alighting at bus and auto stands and parking surveys) were conducted to understand the existing road conditions
- Preparation of a layout design and an implementation plan for the 4-km road stretch with due consideration for all road users
- Stakeholder consultations to ensure that respective concerns and suggestions may be incorporated in the design





## Integrated Sustainable Urban Transport Systems for Smart Cities (SMART-SUT) Project

Technical cooperation project commissioned by German Ministry for Economic Cooperation and Development (BMZ) under the German Climate Technology Initiative

Project duration: 4 years. August 2017- July 2021

The project is jointly implemented by the Ministry of Housing and Urban Affairs (MoHUA) and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

The project works with the three Smart Cities of Bhubaneswar, Coimbatore, and Kochi, and their respective state governments, to promote low-carbon mobility, and to plan and implement sustainable urban transport projects in the fields of public transport, non-motorised transport and modal integration. It also supports urban transport agencies to set up the required institutional structures and processes, and enhance their capacities for efficient delivery of services. A consortium comprising GFA, WRI India and the Wuppertal Institute is supporting GIZ in the implementation of this project.

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### EXPECTED OUTCOMES

- **Unobstructed pedestrian movement** will be ensured by proposed continuous footpaths, safe pedestrian crossings at every 500 m and at intersections
- **Improved access to public transport and IPT:** re-allocation of road space allows designing and repositioning of existing bus stops and auto stands, with quality pedestrian infrastructure, and space allocation for new auto stands near metro stations and bus stops. This ensures quality last mile connectivity to public transit stations located along the two road stretches, leading to improved public transit patronage in the city
- **Public spaces:** the development of footpaths and public activity spaces along the carriageway to adds to the vibrancy of activities along urban roads.
- **Improved maintenance practice:** utilities will be shifted to designated underground utility ducts/corridors below the footpath and carriage way edge. The movable paver blocks of footpaths ensure speedy maintenance work and avoids the existing practice of carriageway excavation during repairs or relaying
- **Replication potential:** the city can showcase this arterial road re-development project as an example of how urban roads can be developed in the city.

### NEXT STEPS

Technical support to KMC for project implementation, including support towards availing funds from various sources including the Government of Kerala.