Mingora (Swat District), Pakistan

Status of the project: Completed Sustainable Urban Mobility Plan



Basic Information

Urban area: 5,337 km² (district scale) Population: 2,309,570 (district scale) | Growth rate: 1,5% The largest city of Swat District: Khyber Pakhtunkhwa province Modal Share: Public transport: 25% Walking: 58% Private motorised modes: 17% National GHG emissions per capita: 1.99 (tCO₂eq) Exposure to climate change: HIGH

Context

Mingora is the largest city and commercial centre of the Swat district, while Swat's administrative capital is Saidu Sharif. Mingora is located on the Swat Riverside, north of Saidu Sharif. This district is part of the Malakand division of the Khyber Pakhtunkhwa province of Pakistan. It is renowned for its natural beauty and is well known as a tourist centre. The N-95 and N-45 highways connect Mingora to Peshawar and Islamabad through Mardan. Locally, the administration is run by the Deputy Commissioner. Tehsil Municipal Administration is responsible for urban transport, and the Regional Transport Authority regulates private vehicles.

Mingora suffers from inadequate road capacity (including infrastructure facilities such as flyovers and underpasses) due to the high traffic growth rate and rising private vehicle ownership. Road safety is a major issue due to a lack of proper traffic control devices (such as signs, signals, and markings) and little enforcement of regulations by traffic wardens. There is currently no master plan for transportation and land use available.

The local Counterpart, the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA), has the mandate and responsibility to finance mass public transport infrastructure. However, it does not have the capacity to borrow from international finance sources. Some systems and procedures are partially in place to monitor, evaluate, and report on urban issues.

The Sustainable Urban Mobility Plan (SUMP) elaboration aims to provide a comprehensive sustainable mobility plan at the urban scale and propose a conceptual design for priority projects that will be identified in the SUMP.

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: French Development Agency (AFD)

Funding amount: EUR 1,200,000 (budget includes SUMP for 3 cities in the Khyber Pakhtunkhwa province)

Partner city

Implemented by: French Development Agency (AFD) and the Asian Development Bank (ADB) through MobiliseYourCity Asia

Local counterpart: Transport Department, Government of Khyber Pakhtunkhwa Province, and the Khyber Pakhtunkhwa Urban Mobility Authority (KPUMA)

Supported activities:

- Development of a Sustainable Urban Mobility Plan
- · Conceptual design for identified priority projects

Status of the SUMP process

Project start: 2021 Q3

Project completion: 2024 Q1 - Administrative approval received; political approval is in progress.

Completed outputs:

- Inception report
- Urban Mobility diagnosis
- Vision and Scenario building
- Action plan
- Final SUMP and Concept Design for priority projects

SUMP key measures and cost estimates

The following table highlights the most significant measures identified in the SUMP.

Measure	Cost Estimate
Swat River Walkway (concept design)	EUR 7.5 million

The following table summarises the total capital expenses (CAPEX) estimates for different types of measures in the SUMP.

Urban transport investment measures	CAPEX Estimate (€M)
Road network	EUR 48.4 million
Urban transit	EUR 86.1 million
Non-Motorized Transport (NMT)	EUR 15.8 million
Urban logistics	EUR 9 million
Transit Oriented Development (TOD)	EUR 4.5 million
TOTAL	EUR 163.8 million

Projected impacts

Indicator	BAU 2022	Scenario 1 Scattered city and restructured paratransit	Scenario 2 Compact city bus network	Scenario 3 Decongested city bus network
Total annual GHG emissions (Mt $\ensuremath{\texttt{CO}_2eq}\xspace)$	72,080 tCO2eq	72,080 tCO2eq	41,370 tCO2eq	41,680 tCO2eq
Annual transport-related GHG emissions per capita (kg CO₂eq)	0.0537 tCO₂eq/ capita	0.115 tCO₂eq/capita	0.066 tCO2eq/ capita	0.067 tCO2eq/ capita
Trips Daily Average Total generated trips	915,300	1,394,100	1,393,100	1,394,900
Modal share Related to the carbon footprint	Motorcycle: 20% Car: 25% Paratransit: 55%	Motorcycle: 20% Car: 35% Paratransit: 45%	Motorcycle: 25% Car: 50% Paratransit: 17% Bus: 7%	Motorcycle: 25% Car: 50% Paratransit: 17% Bus: 7%

Perspectives for implementation

The SUMP's administrative approval has been secured, and the process for obtaining political approval is currently underway.

After completing the three SUMPs in the Khyber Pakhtunkhwa province, public transport is recognised as a priority, and additional feasibility studies are expected to be conducted at the province's scale. The city is expected to draw further inspiration from the SUMP's strategic directions, including the implementation of green corridors.

Insights from practice: lessons learned from the SUMP process

The institutional framework of the transport sector in the Khyber Pakhtunkhwa province presents significant challenges linked to siloed operations and overlapping responsibilities. These issues highlight the need for clearer mandates, capacity building, and enhanced coordination mechanisms to streamline the SUMP process.

Highlights in the past year

SUMP Vision and Scenario Building with the development of a Concept Design for a priority project

As part of the joint SUMP process for the city of Mingora, three scenarios have been developed with the local counterparts and the KPUMA in 2023. One prominent feature of sustainable mobility would be the introduction of a Bus Rapid Transit line, which would also trigger improvements along the potential corridor (road intersections, traffic signals, pedestrian crossings, and pavements). A paratransit reform will be engaged as part of this project and before the launch of the BRT project.

The diagnosis showed that the primary mode of transport in Mingora is paratransit, accounting for around 25% of total trips, followed by walking. However, the city lacks integration between paratransit regulation, road planning, design, maintenance, and traffic regulation, which can affect decision-making and administration. Significant ongoing road projects, such as the Kanju Interchange, aimed at reducing congestion, the planned Swat Motorway extension, and the development of Kanju Township Park to accommodate urban growth, were noted.

The SUMP diagnosis also revealed the lack of consideration for the Swat riverbank. Despite its significant potential, there is insufficient infrastructure and facilities to support leisure and related activities that would attract residents and tourists. In the context of the SUMP, a 2 km section on the southern bank of the Swat River has been chosen as a showcase for the development of a walkway and recreational area as a priority project.

The development of the Swat riverbank will facilitate the city's connection to the river while ensuring continuous urbanism. It will provide a sustainable and inviting recreational area for Mingora residents. In summary, developing such a project would (i) reinforce urban continuity by integrating the Swat River banks as an integral part of the city; (ii) contribute to the development of non-motorised Transport mobility potential along the riverbank as a continuous axis through different neighbourhoods; (iii) add value to the city's tourism by developing a green and blue corridor; (iv) provide road network improvements to access the riverbank area.

Updated in December 2024