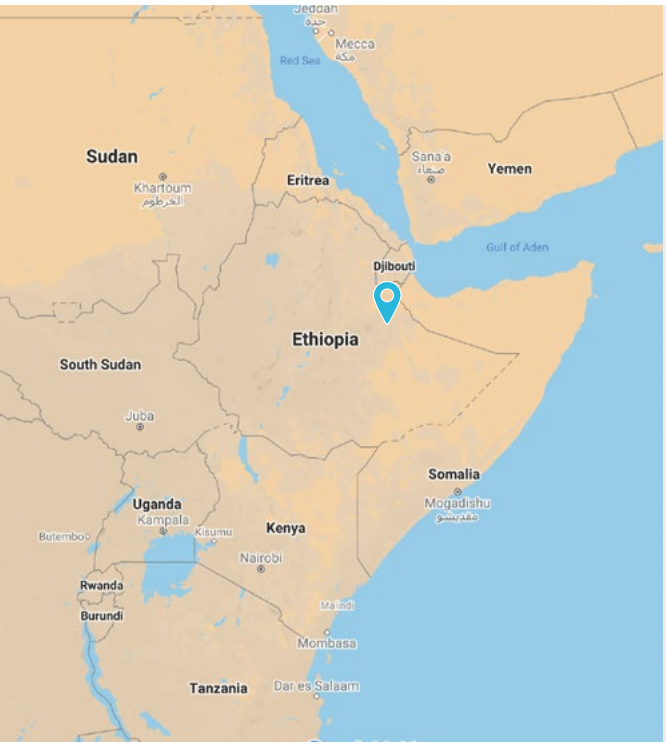
Dire Dawa, Ethiopia

Partner city

Status of the project: ongoing technical assistance



Basic Information

Urban area: 70 km^2

Population: 320,000 | Growth rate: 4%

GDP per capita: USD 855.8 (2019)

Modal Share

- Informal public transport: 42%
- Walking: 46%
- Private cars: 4%
- Private motorbikes or 2-wheelers: 1%
- Other: 8%

National GHG emissions per capita: 1.60 (tCO_2eq)

Exposure to climate change: HIGH

Region capital city

Context

Located on a large flat plain between Addis Ababa and Djibouti, Dire Dawa is meant to become the main economic hub of eastern Ethiopia. Nowadays, it presents a high density of commercial activities, including markets that generate important flows of goods and people at different scale, putting some pressure over roads and public spaces. In the midterm, national freight transit shall boom, along with the development of the national road network and the integration of the new railway into the logistic system.

477,000 trips are made daily in Dire Dawa. Mobility patterns reveal a relatively high propension to move (1.8 daily trips per inhabitants). Dire Dawa is located on a secondary national/international freight corridor between Addis Abeba and Djibouti, meaning that a significant volume of trucks transits through the city. Dire Dawa currently does not have any transport master plan.

Two railway lines currently serve Dire Dawa. The century old Ethio-Djiboutian railway is now nearly disused and only keeps one or two regional services between Dire Dawa and Dewele at the Djibutian border. The new Chinese-built railway line between Addis Abeba and Djibouti is operating since 2018 and links both passenger and freight services with a planned dry port near the new station. Railway does not yet appear as a competitive alternative to road freight, but services are only beginning.

The road network in Dire Dawa is able to bear the different mobility flows going through the city, whether for transit, exchange or internal purposes, without major disturbance. However, the pressured exerted on the network is extremely unbalanced, with an overwhelming weight on local roads and a limited lineage of structuring ones (primary, secondary, tertiary).

There is no existing mass transit system. Bajaj represent most of the public transport supply, with 6,000 units and a hundred lines. It can be used for both people and goods. Bajaj supply varies quite a lot according to places in the city and time of the day. Bajaj is a fully private supply that only targets the most solvent market segments and does not address properly the others, leaving some mobility demand unanswered. On peak hours a few minibuses provide a complementary supply to Bajaj on three routes. The publicly operated service city bus is very limited and consists of 10 urban routes limited to peak hours (four rides a day).

Urban and road transport are managed at both federal and local level. Although responsibilities and perimeters are properly defined, some interfaces regarding road or urban transports can be uneasy to manage. Both the city and the region of Dire Dawa are under the authority of the mayor. The nine urban *Kebeles* are managed by the city administration with different transport related duties falling under its authority: city bus, road authority and traffic police. The Federal Transport Authority (FTA) is another major player regulating the transport sector through the delivery of licenses. It is the main interlocutor for Bajaj drivers associations. The Ethiopian Road Authority (ERA) manages the interurban road network and national interest road projects in the city (industrial park).

Dire Dawa Administration, the local counterpart, has mandate and responsibility to finance mass public transport infrastructure and the running cost of public transports is part of the public authority's budget. The budget for the urban transport sector was set between 480 and 655 million BRR (14 – 19 M USD) in the past few years.

Challenges and main aim of the SUMP

Mobility in Dire Dawa faces several problems at the same time. They include:

- Lack of road network structuring
- Lack of integrated road axis management
- Lack of proper Bajaj supply structuration
- Lack of infrastructure for non-motorized modes leading to poor consideration in planning, investments and policy-making
- Lack of robust logistic chains organization
- Lack of an integrated mobility strategy or multimodal approach
- Lack of coordination between economical, urban and mobility development strategies

The technical assistance will contribute to institutional strengthening by providing training sessions on the following topics:

- Data analysis and updating (including household surveys analysis) – module 3 or 4
- Modelling and demand studies – module 3 or 4 (after the model has been developed)
- SUMP follow-up and evaluation use and analysis of the household surveys – module 4

Support from the Partnership

Technical Assistance: Sustainable Urban Mobility Plan (SUMP)

Funded by: European Commission

Funding amount: EUR 550,000

Implemented by: AFD through Intra-ACP

Local counterpart: Dire Dawa Administration mayor and Cabinet Affairs Office, Finance and Economy Bureau

Supported activities:

- Project implementation support of the city government for the preparation of a SUMP

Status of implementation

Project start: 2019 Q4

Expected project completion: 2022 Q1

Completed outputs:

- Reporting notes following missions 1 & 2
- Minutes of stakeholders meeting
- Surveys results
- Module 1 report (Urban mobility diagnosis)
- Module 2 report (Vision, goal setting and measure planning)
- Training conducted on transport modelling in July 2021

Next expected outputs

- Module 3 Action plan
- Presentation of the final SUMP and implementation strategy

Core impact indicators baselines

Indicator	Baseline – 2020
Total annual transport related GHG emissions (Mt CO_2eq)	8.6 Mt CO_2eq
Annual transport related GHG emissions per capita (kg CO_2eq)	27 kg CO_2eq / capita
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	10 fatalities / 100,000 hab (2018)
Affordability of public transport Share of monthly household budget for public transport	17%

Highlights

Linking urban planning and mobility planning will become essential in light of the changing city scale

It is expected that the number of inhabitants in Dire Dawa will nearly triple by 2040 (reaching 800 000 – 900 000 people). The patterns of this growth will significantly influence the mobility behaviour in the city. The SUMP scenarios are thus structured around the different future shapes of the city, taking the construction of an already planned new industrial city 15km away from the urban core into account. While the *scattered city scenario* could lead to an increase of the urban area by 114km^2, significantly increasing the length of trips, the alternative, desired scenarios of a polycentric city would ensure more efficient and sustainable transport through a densified development. They would also significantly reduce the newly urbanized areas until 2040 to 41km^2.

A structural plan for urban development has already been prepared by the municipality. Linking the SUMP to the structural plan and coordinating between urban development and mobility planning will be a key to future sustainable mobility in Dire Dawa.

Walking is a shadow mode – data can shed a better light on its importance

The results of the household survey indicated that a majority of trips in Dire Dawa are made by foot (46%). Collecting this data showed that the importance of walking had been underestimated before by local decision-makers and helped to put active modes of transport on the agenda in the SUMP process. One objective of the SUMP is thus to keep the current modal share of active modes while making the city fully walkable. Non-motorised modes will for instance be taken into account in the planning and upgrading of roads to ensure that enough space is provided for pedestrians.

Covid and political cycles have minimally affected the SUMP elaboration

Despite the ongoing COVID-19 pandemic and the political context in Ethiopia the SUMP process has only been delayed by about six months. In 2021 the missions continued as planned in February, April and July. The visits in Dire Dawa allowed for exchange with local stakeholders, politicians and public participation. Throughout the three missions, the diagnosis was validated, the scenarios and key objectives for the SUMP could be finalised and the action plan was discussed and agreed upon by local politicians. In September 2021, a new mayor was elected in Dire Dawa and the former mayor appointed as the director of transport.