Antananarivo, Madagascar

Status of the project: Ongoing Sustainable Urban Mobility Plan & ongoing implementation support



Basic Information

Urban area: 85,01 km²

Population: 3,209,933 | Growth rate: +4.84%

Country capital city

GDP per capita: USD 522

National GHG emissions per capita: 0.13 (tCO₂eq)

Exposure to climate change: HIGH

Context

Antananarivo, commonly known as Tana, is the capital and largest city of Madagascar. Centrally located on the island at 1,280 m above sea level, Tana serves as the primary hub for the country's industrial and administrative activity.

The city grapples with rapid demographic growth, resulting in challenges such as overcrowding, traffic congestion, inadequate waste management, severe air pollution, security concerns, and shortages of public water and electricity. Despite these issues, the local authority's efforts to address them are hindered by limited funds and management challenges associated with the burgeoning population.

Notably, a report by the French Embassy reveals that walking accounts for more than 60% of travel within Antananarivo. Paratransit constitutes the bulk of motorised trips, of which *taxi-bé* minibuses account for nearly 72%. However, the absence of a mass transit system exacerbates the problems of increasing travel demand and road congestion.

The city lacks an updated urban mobility planning document to tackle these challenges, and the existing transport organisations, the urban commune of Antananarivo (CUA) and the suburban transport agency (ATT), face complexity due to overlapping competencies, financial constraints, and outdated regulations.

Previous initiatives, such as the 2008 Urban Mobility Improvement Programme (PAMU), failed to yield all the expected outcomes, therefore recent efforts include studies on creating a transport organising authority, an economic analysis of taxi-bé, defining specifications for operators, implementing a ticketing system, and operator training. The World Bank is currently conducting a study to develop a master plan for urban transport.

In addition to these plans, the city is engaged in various ambitious projects. These include an electric cable transport initiative, the development of an urban train network, the inauguration of a bypass road in 2021, a pilot Bus Class project to enhance the taxi-be service, and an AFD and EU-supported project initiated in 2011 to improve pedestrian mobility and traffic on specific urban roads.

Support from the Partnership: Mobility Planning 1

Project description

Technical Assistance: Urban Mobility Forum

Funded by: AFD

Funding amount: EUR 40,000

Implemented by: CODATU

Local counterpart: Ministry of Transport and Meteorology (Ministère des Transports et de la Météorologie) ans Ministry of Decentralization and Land Planning (Ministère de la Décentralisation et de l'Aménagement du Territoire)

In collaboration with Urban Municipality of Antananarivo (CUA) (Commune Urbaine d'Antananarivo), Land Transport Agency (ATT) (Agence des Transports Terrestres), Urban Planning Agency of Greater Antananarivo (IPAM)

Supported activities:

- Urban Mobility Forum: an inclusive forum was established to engage the various and diverse stakeholders in
 discussions about urban mobility issues, with the objective of building consensus on objectives and strategies to be
 taken;
- Diagnostic Report: a shared and detailed diagnostic of the current mobility system was produced, developed with input from all stakeholders (public authorities, private sector, and users) during the Urban Mobility Forum;
- Preliminary Strategic Roadmap: a roadmap with initial priority actions was created, focusing on governance reform (e.g., creating an integrated mobility authority), intermodal transport, and professionalising paratransit transport systems such as the Taxi be.

Status of the project

Project started: April 2024

Project completion: August 2024

Completed outputs:

- Detailed report of the Forum;
- Roadmap related to the four workshops;
- Feedback sheet on the Forum's logistical organisation.

Main Challenges

Building Consensus on Governance Reforms

Preparing clear guidelines for the roadmap, especially for the governance workshop, required strong coordination with authorities. Aligning stakeholders around governance reforms, such as creating an integrated mobility authority, was complex due to varying interests and institutional constraints.

Ensuring a Shared Understanding of Mobility Issues

Developing a diagnostic report that all stakeholders accepted posed a challenge. Innovative tools like cartoons and synthesised mobility data were used to make the findings accessible and engaging. However, achieving broad consensus on the diagnosis required extensive consultation and careful framing of key issues.

Translating Discussions into Actionable Outcomes

Turning workshop discussions into a concrete and operational roadmap was a key challenge. The success of the Urban Mobility Forum depended not only on logistics—such as organising a large conference hall and multiple workshop rooms—but also on effectively capturing insights from the discussions and translating them into strategic, implementable actions.

Support from the Partnership - Mobility Planning 2

Project description

Technical Assistance: Sustainable Urban Mobility Plan (SUMP) Development

Funded by: AFD and National Government of Madagascar

Funding amount: EUR 500,0001

Implemented by: AFD

Local counterpart: Commune Urbaine d'Antananarivo (CUA), ATT (Agence des Transports Terrestres)

Supported activities:

- Diagnosis
- Definition of a vision and strategic objectives, development of scenarios, formulation of priority measures proposed by the SUMP
- Elaboration of a detailed scenario into an action plan, including monitoring and evaluation indicators, implementation modalities and timelines, budgeting, and financing of measures
- Participatory process (dialogue and consultation)

Status of the SUMP development process

Project start: 2024 Q2

Expected project completion: 2025 Q4

Completed Outputs:

A first version of the diagnosis was shared and presented to the AUC and AFD.

Next expected Outputs:

- SUMP Vision
- Scenarios
- Action plan

¹ This SUMP support project is a component of the larger support AFD is providing to Antananarivo on active mobility with a total budget of 10 M EUR. See the Implementation Support activities of this factsheet to know more.

SUMP impact indicators baselines

Indicator Baseline - 2024

Total annual transport related GHG emissions (Mt CO2eq)	160 Mt CO₂eq
Annual transport related GHG emissions per capita (kg CO ₂ eq)	0.5 kg CO₂eq / capita
Access to public transport in urban areas Proportion of the population living within 500 meters of a public transport stop	N/A
Air pollution Mean urban air pollution of particulate matter (in μ g PM _{2.5}) at road-based monitoring stations.	29 μg/m³ of PM _{2.5}
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	N/A
Affordability of public transport Percentage of disposable household income spent on public transport for the second quintile household income group.	N/A

Insights from practice: lessons learned from the SUMP development process

To create a shared and actionable urban mobility strategy, building an inclusive stakeholder dialogue is necessary to bring together public authorities, private operators, users, and development partners. This ensures that the plan will be targeted to real-world challenges, gain widespread acceptance, and secure long-term commitment for implementation (especially in complex and resource-constrained contexts like Antananarivo).

Support from the Partnership: Implementation Support 1

Project description

Technical Assistance: Paratransit Pilot Project

Funded by: AFD

Funding amount: EUR 600,000

Implemented by: CODATU

Local counterpart: Ministry of Transport and Meteorology (Ministère des Transports et de la Météorologie) ans Ministry of Decentralisation and Land Planning (Ministère de la Décentralisation et de l'Aménagement du Territoire)

In collaboration with Urban Commune of Antananarivo (CUA) (Commune Urbaine d'Antananarivo), Rural Commune of Ambohimangakely, Land Transport Agency (ATT) (Agence des Transports Terrestres), Urban Planning Agency of Greater Antananarivo (IPAM)

Supported activities:

The pilot project aims to modernise and professionalise Antananarivo's public transport and paratransit system. The project seeks to demonstrate that it can significantly improve user service, reduce air pollution, greenhouse gas emissions, and improve road safety while enhancing the operators' working conditions. All of this is expected to be achieved without any public subsidy while maintaining the principles of collective transport by Taxi-Be on the pilot corridor.

The project considers two main phases:

- Pilot project line for the new larivo bypass, inaugurated in 2021;
- Pilot project line for existing bus network based on the bypass line demonstrator.

The project aims to demonstrate the profitability of the new rolling stock on new infrastructure operated by a private operator or a consortium, followed by creating an association of owners who own the new rolling stock and commit to respect the new operating rules. CODATU provides technical assistance throughout the process, including advising a steering committee, drafting technical and operating specifications, supporting operators to create the operators association, delivering training, assessing results, and scaling the project.

Status of the pilot project implementation

Project start: 2023 Q1

Expected project completion: 2025 Q1 (Extension under review)

Completed Outputs:

- The necessary studies to define the number of buses required for the pilot project.
- Financial studies, including a consultation tool and a comprehensive economic model.
- · Operator selection strategies.
- Specifications for the new vehicles, sourcing vehicles that can be adapted to the local context and meet the specifications.
- Analysis of the operation of the digital ticketing system.
- Training transport operators on legal structures on "Championing the modernisation of Taxi Be" (November 2023).
- Database of existing Taxi-Be routes.
- A strategic note on gender issues.
- The action plan and communication strategy for field occupancy communication have already been prepared to maintain public attention on the project.

Next expected Outputs:

- For public authorities: training on transport network planning and market studies.
- Recruitment of technical support to conduct a diagnosis, develop a strategic plan, and implement the operationalisation plan.
- Train the authorities on the operation of bus routes and public service delegation contracts adapted to the selection of bus routes.
- Organise a study visit to Dakar, Senegal for the transport operators.
- Assist the authorities in selecting operators and service providers for the ticketing system.
- CODATU will help the transport operators choose the firm to assist them in structuring themselves as a transport company.
- Studies on the necessary roadworks for the launch of the ring road route.
- Study related to the depot platform.

Insights from practice: key pilot project takeaways

Facilitating financial viability for transporters is key for upscale

Access to financing and tax incentives is crucial for enabling transport operators to formalise their services. Establishing financial facilitation mechanisms and advocating for supportive fiscal policies can reduce barriers to investment and encourage participation.

Ensuring High-Level Political Support is a pre-requisite for project execution.

In a highly centralised country, securing commitment from high-level authorities is essential for overcoming bureaucratic challenges and ensuring the project's long-term success. Political backing strengthens institutional support and helps drive policy changes.

The pilot project contributes to defining a valid approach to reform.

Successful paratransit formalisation requires a structured implementation process, including demand and financial studies, technical assessments (equipment and road infrastructure needs), change management strategies, capacity building, assistance in structuring transport companies and acquiring necessary equipment. A well-defined project logic ensures that all critical aspects are addressed in a coordinated manner. A simple and transparent financial model, particularly for the future line's income statement, is essential for gaining trust and buy-in from transport operators and decision-makers. Precise consultation tools help align stakeholders and improve project feasibility.

Perspectives for scaling

In January 2025, the Malagasy government decided to purchase 300 buses to be resold to transport operators. CODATU is involved in reflecting on the scaling strategy based on the pilot project, using the same processes and techniques that were put in place.

Support from the Partnership: Implementation Support 2

Project description

Technical Assistance: Active Modes Deployment Project

Funded by: AFD

Funding amount: EUR 10,000,000²

Implemented by: Communauté Urbaine d'Antananarive and GRET - Cabanon Vertical

Local counterpart: Communauté Urbaine d'Antananarive (CUA)

² The total amount includes the support to Antananarivo's SUMP development support for 500,000 EUR (description of the project included above).

Supported activities:

The project is structured in 3 main components:

Component 1: Securing and Developing Active Mobility – Urban Mobility Planning (€7.5M)

The project will enable the development of infrastructure for active mobility, implemented by the CUA with the support of a Project Management Team. The main objectives of this component include:

- I. Upgrading the most frequented pedestrian routes (rehabilitation and widening of sidewalks, securing pedestrian zones);
- II. Creating cycling routes between key urban areas;
- III. Securing areas around schools and markets;
- IV. Improving waiting areas for taxi-bés; and
- V. Addressing critical crossing points.

This component also funds and supports the development of a Sustainable Urban Mobility Plan (SUMP) for the city for 500,000 EUR.

Component 2: Capacity Building for the CUA (€1.3M)

Strengthen the CUA's institutional capacities (change management planning, procurement, governance, etc.) while supporting the implementation of the active mobility program (Component 1). This component provides technical assistance on Social Urban Project Management (MOUS) guidance and contributes to communication and user awareness campaigns.

Component 3: Urban Incubator (€1.2M)

Implemented by GRET³, this component aims to enhance community participation. Small-scale urban improvements will be carried out through the engagement of civil society and/or local residents to improve the quality and inclusiveness of public spaces. Activities will help prefigure the developments financed under the active mobility component or target Lalankely project sites to foster user ownership of the infrastructure.

Status of pilot project implementation

Project start: 2023 Q2

Expected project completion: 2026 Q4

Completed Outputs:

- The tender process to implement the technical assistance (Component 2) has been launched.
- The Project Management Team to carry out the more complex studies and oversee Component 1 is being recruited.

Next expected Outputs:

Strengthen institutional capacities of CUA

- Institutional diagnosis of the CUA to implement urban mobility projects
- Plan of institutional strengthening for the CUA
- Strengthening CUA in team management, project management, and tender processes

³ To know more about GRET https://gret.org/qui-sommes-nous/

Implement the active modes projects, including planning, executing, and monitoring

- Modernisation of digital tools and software (Autocad, QGIS)
- Training on the acquired softwares and tools
- Trainings, exchanges, and sharing experiences in active mobility

Reinforce dialogue with citizens to raise awareness in terms of active mobility

- Support the local government to carry out awareness-raising campaigns to free public spaces
- Work with the police to interact with the public and make comply with the public space usage rules
- Information dissemination and awareness-raising about the active mobility strategy in Antananarivo.

Highlights in the past year

CODATU invited other cities to join the Partnership Antsirabe and Toamasina, who officially became members in December 2024.

Last updated in December 2024