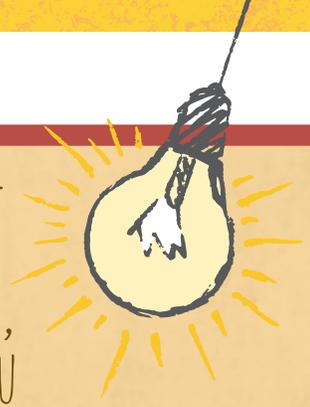


GUINEA-BISSAU RURAL TRANSPORT PROJECT IMPACT EVALUATION ON RURAL ROADS, TRANSPORT COSTS, WOMEN'S ACCESS AND LOCAL WELFARE IN GUINEA-BISSAU



Guinea Bissau-Rural Transport Project (P161923)

PROJECT STATUS:

Under Implementation

OBJECTIVE:

The project is aimed at improving the rural population's physical access to markets and social services in selected areas.

TARGET AREA:

The proposed project impact area covers the north of the country in the regions of Cacheu and Oio.

NUMBER OF DIRECT BENEFICIARIES:

It is expected to directly benefit about 30,000 people in the targeted rural areas living within 2 km of the roads to be improved.

TIMELINE:

2019–2025

SECTOR:

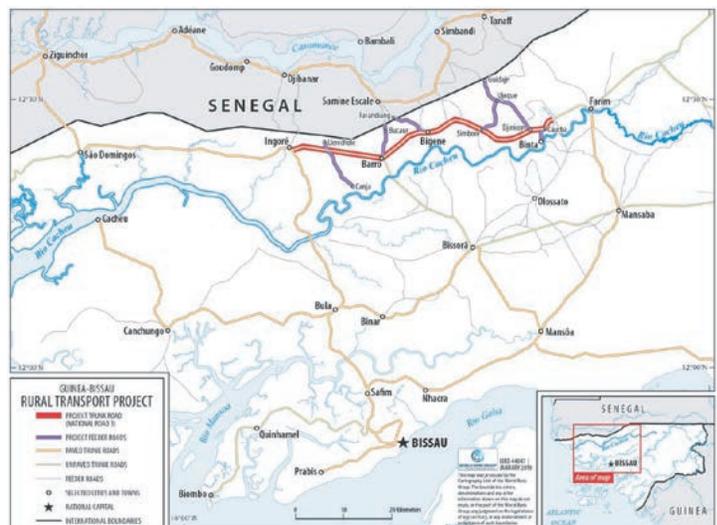
Public Administration–Transportation,
Rural and Inter-Urban Roads,
Ports/Waterways

IMPLEMENTING AGENCIES:

Ministry of Economy and Finance;
Project Management Unit located at
Ministry of Public Works.

Context

Guinea-Bissau is one of the poorest countries in the world, ranking 177th out of 189 countries in the 2018 Human Development Index, with 70% of the population living in moderate poverty and about 33% in extreme poverty. The regions of Cacheu and Oio are among the poorest in the country and suffer gravely from food insecurity. A key contributing factor to this situation is the road infrastructure, especially rural roads. The country's transport system remains under-developed and the poor quality of rural transport network constrains basic mobility needs such as access to markets and essential services thus limiting poverty reduction and overall welfare in rural areas. This effect is particularly pronounced for women who find their access to healthcare, especially maternal care, severely hampered, thereby contributing to the country's very high ratio of maternal mortality (790 deaths per 100,000 live births). Furthermore, long-distance commutes to school appear to be a critical barrier for girls to get educated, where the adult literacy rate of females as a percentage of males is 61% from 2008–2012. This IE is designed to help quantify the impact of better road infrastructure on local



Roads to be improved by the project: Ingoré-Bigene-Farim

economic development with a special focus on women. It also tests whether investment in a complementary policy (feeder roads connected to the main trunk road) can help magnify the wider economic benefit of the road project.

Impact Evaluation

The impact evaluation will be carried out as a part of the Guinea Bissau-Rural Transport Project (P161923) and focus on the rehabilitation and maintenance of about 110 km of unpaved trunk roads and connecting feeder roads in rural areas in the regions of Cacheu and Oio, between the towns of Ingoré, Bigene, and Farim in Northern Guinea-Bissau. There are three goals for this Impact Evaluation. The first is to document the effects of a road infrastructure investment on local economic development. The second is to look at the importance of a complementary intervention like the last mile connectivity which in this context can be defined as a widespread improvement in a rural road network that connects directly to a national network of primary roads. The third is to assess the impact of the trunk and feeder roads on women's access to markets and essential services. The impact evaluation methodology goal is to first provide a structural model that relates road infrastructure to occupational choice, productivity, and welfare, with a special focus on women operating in rural areas and then suggest three evaluation strategies to capture local socio-economic impacts of the road improvement on households, settlements or localities along the road, comparing socio-economic outcomes in the vicinity



Quality of the existing road to be improved

of the Ingoré-Farim road to similar areas in a wider catchment. The fundamental design which is shared across all three objectives and outcomes is a difference-in-difference model. This model compares changes in a "treatment" group to changes in a set of controls. By focusing on changes over time, pre-existing differences between treatment and control are permissible. The key assumption is that while selection into treatment may be correlated with baseline characteristics, treatment and comparison groups would have followed parallel trends in the absence of the intervention. The proposed identification strategy combines administrative and survey data: ILAP household survey, DMSP, VIIRS nighttime lights, and Multiple Indicator Cluster Survey (MICS4). It also relies on primary data collection (household, markets, and traffic surveys).

Policy Relevance

The transport and infrastructure sectors for a long time were gender blind. There was a belief that transport/infrastructure improvements will benefit women and men equally. Now we know that women and men have different needs and mobility patterns, mainly determined by gender norms. In rural areas, women normally travel by foot and do not have access to intermediate forms of transportation. Empirical research has shown that women are very active (especially in rural areas) and their travel time is longer than men's travel time and that they often travel shorter distances. However, there is still a knowledge gap on the extent to which these mobility patterns and social norms will undermine the impact of the rehabilitation of roads on women's potential increased access to social services and opportunities. This IE will inform policymakers in Guinea-Bissau whether the infrastructure is improving local economic development and leading to equitable access for all or if additional interventions are necessary to increase the impact of road rehabilitation for women. Future road projects can then be designed to maximize the impact for women and help decrease the gender gap. Additionally, few infrastructure evaluations study the differential benefits for men and women, so the knowledge generated from this evaluation can be used by policymakers more widely as they seek to achieve equitable access for all.



The ieConnect for Impact program links project teams with researchers to develop rigorous and innovative impact evaluations that both substantially improve the evidence-base for policy making and induce global shifts in transport policy. The ieConnect program is a collaboration between the World Bank's Development Impact Evaluation (DIME) group and the Transport Global Practice. This program is part of the Impact Evaluation to Development Impact (i2i) multi-donor trust fund and is funded with UK aid from the UK government and by the European Union.