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Moving people to help people move

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Abstract

The 24-km Dakar Toll Road (Autoroute de l’Avenir Dakar – Dianmiadio), built to solve severe congestion problems, was inaugurated in 2013 on schedule and below budget. It has reduced travel times by two thirds between downtown and the outskirts and is spurring the development of the conurbation. Long recognized to be an urgent priority, it took however about 30 years to eventuate, mainly because decision makers were deterred by the magnitude of the resettlement plan needed to insert this infrastructure into densely populated informal settlements. The paper explains (i) how the relocation of 38,000 people was mitigated through a comprehensive compensation scheme combined with the construction of a new town to accommodate some of those relocated, and the upgrading of low-income settlements along the Road and (ii) how this USD760 million project, first greenfield toll road in Sub-Saharan Africa (excluding South Africa), and structured as a Public Private Partnership, materialized through funding from multilaterals, government, commercial banks and the private sector. The paper describes how compensation of affected households, commercial buildings, etc. were estimated, making sure all those affected end up in at least an equivalent position as they were in prior to the project. It also explains how a new city was designed to accommodate 20,000 persons, with schools, health centers, paved roads, community facilities, running water, electricity, market, sewage, etc. In addition, it details the rationale for providing consolidated settlements along this road with better urban roads, community facilities and drainage structures, to ensure that those who are too poor to drive, would still benefit from the project.

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1. Introduction

The 24-km Dakar Toll Road was inaugurated in 2013. Even though it was long recognized to be an urgent priority, it took about 30 years to eventuate, mainly – in the last 15 years - because decision makers were deterred by the magnitude of the resettlement plan needed to insert this infrastructure into densely populated informal settlements. This paper describes two key features of the project: (i) how the relocation of approximately 38,000 people, required by the construction of the Toll Road and the upgrading of the neighboring urban areas, was handled and (ii) how this USD 760 million project, the first greenfield toll road in Sub-Saharan Africa (excluding South Africa) and structured as a PPP, materialized through funding from multilaterals, government, commercial banks and the private sector.

2. Context

Situated at the western tip of the African continent, Senegal covers about 200,000 square kilometers and is bordered by Mauritania, Mali, The Gambia, Guinea Bissau and Guinea. 25 percent of the 14 million inhabitants of the country live in its political and economic capital, Dakar, where more than 80 percent of industrial and economic activities are concentrated, in less than 0.3 percent of the land space. Almost all the administrative and business services are in the Dakar peninsula.

Thus, massive back-and-forth movements at peak hours between suburban areas and the historic center of Dakar were generating serious bottle-necks and the plateauing of economic growth. Before the Toll Road was inaugurated, traveling on the 2x2 lane National Road (RN1) could take from two to four hours for about 30 km, as it was the only route in and out of Dakar for about 120,000 vehicles per day. The cost of such congestion to the Senegalese economy was estimated at about 4.6 percent of GDP. With a population growth rate of about 150,000 to 200,000 people per year, the city’s infrastructure, initially built to accommodate 300,000 people, was getting more and more over-stretched. As a result, available space to accommodate a highway became virtually inexistent due to the densification of the urban and suburban areas.

At the same time, in the low-income and informal neighborhoods, expansion was continuing, often in flood prone areas without the appropriate land ownership and adequate infrastructure (utility connections, drainage, roads, etc.). In the early 2000’s, the Government of Senegal realized that because of heavy congestion in the greater Dakar, the country was incurring large productivity losses for local and regional businesses. In consequence, its ability to serve as a regional economic hub was threatened. The construction of a Toll Road was eventually deemed necessary, despite the herculean but unavoidable task of having to relocate more than 30,000 people to clear the alignment required for the high capacity highway. The project was envisaged as a comprehensive one and thus not limited to only the road infrastructure. It offered a golden opportunity to improve the lives of thousands of residents in the vicinity of the Toll Road, and to upgrade slums, especially in Pikine Irrégulier Sud, a low-income neighborhood of 240,000 inhabitants.

3. Resettlement Action Plan (RAP)

The project was made possible due to a comprehensive compensation scheme combined with the construction of a new town to accommodate some of those relocated, and the upgrading of low-income settlements along the Toll Road. The latter was deemed key to ensuring that communities beyond car drivers benefited in order to positively impact the poor directly. This was seen by the Government and the supporting donors as a crucial ingredient to the success of the overall project. The basic principle of the compensation scheme for the displaced people was to make sure that they ended up in at least as good a position as they were in prior to the project (home owners, tenants, shopkeepers, religious communities, etc.).
World Bank safeguards were applied to segments of the road financed by the donors (World Bank, African Development Bank and French Agency for Development), but also retroactively to initial segments that had already been fully financed by the Government. An ex-post resettlement audit of the Government-financed *Malick Sy-Patte d’Oie* (Phase 1, see figure 3) and *Patte d’Oie- Pikine* sections (Phase 2) of the road provided critical lessons which were incorporated into the resettlement program. These included the recruitment of facilitating NGOs to assist the people impacted, implementation of a more rapid and time-bound response mechanism to queries and grievances in a manner accessible to all (many of whom are illiterate), and the strengthening of the monitoring and evaluation system. USD 16 million was deposited in an escrow account as a condition of World Bank credit effectiveness to redress the issues arising from the government-financed road segments.

Regarding the new *Pikine-Keur Massar* road section (Phase 3), the inter-Ministerial *Groupe Opérationnel* undertook the property inventory and asset valuation. APIX (Agency for Investment Promotion and Major Projects, the Project Implementation Unit) verified the list of affected people, publishing them locally and providing staff to review these lists with and for illiterate affected people.

A survey was carried out to identify the main concerns of the people displaced, and the following top three priorities emerged: (i) getting access to basic infrastructure, (ii) ending chronic flooding, and (iii) securing land tenure.

![Figure 1: The alignment of the Dakar Toll Road](image1)

![Figures 2, 3: Floods in Pikine Irrégulier Sud](image2)
The Government decided to build a relocation site in Tivaouane Peulh (TP) (co-financed by the World Bank (WB) and the Agence Française de Développement (AFD), an area that covers 165 hectares and would accommodate 2,000 families on 80 hectares. These families would benefit from secure land ownership and modern infrastructure, including appropriate sanitation, electricity and water connections, which were missing in parts of the right-of-way area. Schools, health centers, mosques and markets were part of the design. All the communal infrastructure (markets, schools, health centers) in the TP relocation site have been completed. The schools, the medical center and the social center are operational. However, the installation of the beneficiaries is proceeding more slowly than expected, with only 200 families already living in TP as of May 2017, about 500 houses under construction, and 1,500 lots attributed out of a total of 2,000. Thus, a critical mass of inhabitants and hence of potential customers is not there yet to justify the opening of the market, or to have the site served with high enough frequencies by public transport operators. The same applies to the wastewater treatment plant that is operating under its minimum capacity (which may potentially damage the facility) and the local state-owned wastewater company has been refusing to cover the corresponding operating costs because they have not been included in their budget. At one point, there was some concerns that these issues were actually more than a few teething pains that would go away with time; the lack of adequate service provision due to the insufficient number of inhabitants creates in turn disincentives for new people to move to the relocation site, generating some sort of vicious circle or self-perpetuating deadlock. However, APIX confirmed that the rate of occupation of the relocation site will to pick up substantially in the second half of 2017, as more houses and structures are built and more lots are attributed to people affected by the upgrading of Pikine Irrégulier Sud.

![Figures 4 and 5: Community facilities in Tivaouane Peulh: Health center (right), mosque (left).](image1.png)

![Figures 6 and 7: Community facilities in Tivaouane Peulh: market (left), school (right).](image2.png)
The value of the properties expropriated was estimated based on a survey of real estate agents. All homeowners declined the option of receiving a house instead of cash compensation, opting to use their compensation to build their new houses. Property owners were thus compensated for the value of their property and their moving expenses. They were also offered, depending on the value of their assets, a land title in the relocation site which was free of charge for the most vulnerable, while others paid half price or full price (eq. USD 4,500). Those who decided to move to the relocation site were also offered a rental allowance until the date at which it was considered feasible for them to complete the construction of their new house. Landlords and businesses received compensation for their properties and losses of revenues and renters were offered 6 months of rent.

To facilitate the implementation and monitoring of the process, APIX opened a one-shop office in Pikine to be closer to those impacted. All administration units who are needed to comprehensively handle the dossiers are located there, and it also recruited two NGOs to assist them during the process. Similarly, for Tivaouane Peuhl, APIX contracted an NGO to assist throughout the resettlement operation, especially to validate their construction plans, handle the building permits requests, and to facilitate access to building materials.

In addition, the Government, the World Bank and the AFD agreed to finance the upgrading of Pikine Irrégulier Sud, the neighborhood located on both sides of the right-of-way, as it represented an opportunity to resolve some of the resettlement issues arising from the building of the Toll Road. The construction of fences on either side of the Toll Road divided the community in half, and the upcoming investments will ensure access to basic social services (schools, clinics) in both areas, and improve living conditions especially through improved drainage works to prevent floods, wider urban roads, and additional community facilities. Works started in mid-2015 and are still ongoing in mid-2017.

Revised statistics show that displacements related to the clearing of the Toll Road alignment have involved: (i) 4,405 households, (ii) 1,184 small businesses, (iii) 89 agricultural plots, (iv) 23 titled plots, and (v) 30 public buildings. The estimated cost of the Pikine-Keur Massar RAP is close to USD 55 million.

The resettlement action plan needed for the restructuring of Pikine Irrégulier Sud includes approximately 960 households (around 8,000 persons) and shops at a cost of USD 36 million.
The Financial Structuring

The total cost of the project (including all components and not just the Toll Road) is estimated at USD 760 million, out of which USD 462 million correspond to the road infrastructure. The remainder corresponds to: (i) the compensation payments for those displaced by the project, (ii) a relocation site, and (iii) urban upgrading in Pikine Irrégulier Sud, the low-income neighborhood located on both sides of the alignment. USD 387 million are financed by the Government of Senegal. Bi- and multilateral donors were also involved, such as the International Development Agency (USD 105 million), the African Development Bank (USD 66.4 million) and the French Agency for Development (USD 80 million). In addition, the International Finance Corporation (IFC) closed in November 2010 as Sole Arranger of the financing of SENAC S.A., the project company established to build, operate and maintain the Toll Road, on a 30-year BOT (Build Operate Transfer). It also invested for its own account 22.0 million Euros in the company. SENAC is a subsidiary of Eiffage, a leading figure in the European concessions and public works sector, with a long history of involvement in Senegal, operating through four business lines: concessions and public-private partnerships, construction, public works, and energy. This was a first for IFC: taking full contractual and traffic risk in an urban context and in a country and a region with no past history of tolling. All in all, the total private equity and debt raised by the concessionaire amounted to USD 120 million. The amount of the debt financing package was about two thirds of this, of which USD 54 million was mobilized from the Western African Development Bank (BOAD), the African Development Bank and CBAO, one of the main Senegalese commercial banks. The Multilateral Investment Guarantee Agency (MIGA) also supported the project in 2011 by backing a US dollar cross-currency swap arrangement between Standard Bank Plc (SB) and the Government of Senegal.

The World Bank / IDA concessional credit, approved in May 2009, mostly focused on the need to mitigate the potentially negative social impacts of the project and to provide communities affected by the construction of the highway access to basic social and economic services. USD 58.5 million of the credit proceeds are assigned to the resettlement component (mainly payment of compensations, and construction of the Tivaouane Peuhl relocation site). USD 27.2 million was directed towards the restructuring of the neighborhood located on each side of the Toll Road (Pikine Irrégulier Sud) for drainage, roads and equipment, and USD 14 million for Project Management, Supervision and Monitoring and Evaluation.
5. Conclusion

In conclusion, large resettlement plans should not impede the realization of high risk, high return projects. When properly handled and with adequate resources, they can maximize the number of beneficiaries, help build confidence in the marketplace and increase competition at the bidding stage thus reducing overall costs. In Dakar, donors' support to the resettlement plan contributed to the lowering of the risk premium factored in the bids and ensured the timely clearance of the right-of-way, making it possible for the works to be completed as planned and consequently for the toll revenues to start flowing. The project was delivered on schedule and below budget. The Toll Road is used today by around 45,000 vehicles per day and has drastically reduced travel times by two thirds between downtown and the outskirts, including for those using the national road as a free alternative to the Toll Road.
The Project has leveraged about USD 120 million from the Private Sector through Eiffage, in a continent where investors are often reluctant to invest due to a perceived higher level of risk. This success story is expected to set a precedent and aims to have a strong flow-on effect, as it expands the Public Private Partnership space in Africa where there is promising potential for replication. As a testimony to this, the Government of Senegal awarded in January 2015 the concession to design, build, finance, and operate the 17-km expansion of the existing Dakar toll road to SENAC S.A. It was inaugurated in October 2016 and connects central Dakar to the new international airport as well as to other important economic zones of the country.

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