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Transport, Electricity and Communications
Priorities in Guinea Bissau

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Abstract

Transport, Electricity and Communications Priorities in Guinea Bissau

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This paper details the current situation in Guinea Bissau regarding infrastructure needs and suggests policies for the future. In particular it is noted that the degradation of the country’s only port in Bissau is a serious concern given the likelihood that the port will in a few years cease to be accessible to ocean-going freighters if rehabilitation is not made an immediate priority. While primary roads are in fairly good shape, secondary roads are abysmal and maintenance needs are routinely ignored on all roads. It is shown that completion of bridges connecting Bissau directly to Senegal will have the effect of making Senegalese ports the preferred outlet for many of Guinea Bissau’s exports.
Transport, Electricity and Communications Priorities in Guinea Bissau

I. Transport

A. Roads

A recent study of the transport sector in Guinea Bissau reported that the country has 4,380 km of roads, of which a little more than two thirds are not paved. This gives a road density of 0.12 km/km² in a country with a population density of 2.9/km². The government has defined a “priority network” of roads made up of the primary network and a portion of the secondary network which is targeted for more intensive maintenance and upkeep. 90% of this priority network is paved at the present time. Table 1 shows data on the extent of the national network and the proportions of it that are paved and unpaved. It can be seen that the majority of national primary roads are paved and most of the rest is graded dirt while more than two thirds of roads overall are dirt.

The primary road network (Estradas Nacionais) is in good condition at the present time as they have all been recently resurfaced under various European Commission projects over the past few years. In addition, the EC has also funded the construction of two bridges on the main road between Bissau and Ziguinchor in Senegal, with onward connection to Banjul in The Gambia, freeing traffic of the need to take two ferries across the intervening rivers. The first of these bridges is finished while the second will be completed in 2009.

In essence, this will open a second port for exporters from Guinea Bissau. Given the chronic problems and high costs at the Port of Bissau the incentive to go to the lower cost option just across the border will be high, especially for production originating in the northern parts of the country.

The southern part of the country is still much more difficult to reach, requiring a long trek inland before the intervening river can be crossed. Much of this road has also been resurfaced, though this is still a work in progress. Through traffic to Conakry is still not possible since the necessary link roads do not exist on either side of the border. However, a project has been designed under the auspices of UEMOA to construct the necessary linkages between the two countries. This would open up a border that is at present inaccessible to normal commercial traffic.

The biggest problem in the road network is the state of the secondary network during the rainy season. As can be seen in Table 1 most of these roads are dirt and many become impassable when the rains start. This is a particular problem in terms of the cashew

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1 This paper was written as a contribution to Guinea Bissau’s forthcoming Diagnostic Trade Integration Study
harvest since this continues into the rainy season in most years, but is also a problem in that many rural areas become virtually cut off from the rest of the country for several months each year. This is particularly true in the southern region of the country which in colonial times used rivers as a principal means of transport and communications with the rest of the country, but which now does not have any regular river transport service.

Repair and maintenance of roads is the responsibility of the Direccao Geral de Pontes e Estradas. There is a chronic lack of finances to perform this function adequately, though the recent resurfacing of most priority national roads through the EC-funded project has reduced the immediate need on those roads. However, there are chronic problems in addressing repair issues in a timely fashion as well as a chronic problem on dirt roads in the rainy season. Table 2 shows maintenance costs for different types of roads.

The number of freight and passenger vehicles in the country is shown in Table 3. It is clear that freight capacity is not large, though Bissau itself is well served in terms of intra-urban passenger traffic. There are currently no limits on licenses given nor are there any limits on who can own and operate such vehicles.

It is reported by the Transporters Association that the biggest problem facing private trucking operators is the lack of credit with which to purchase trucks. There are various facets to this problem, the first being that banks are not currently willing to lend for the 4-5 year period required to finance a freight truck. In addition, it is reportedly not possible to fully insure vehicles that are not purchased new – and this is typically required by banks in order to extend credit.

A study performed in support of the DTIS in late 2008 of the costs of transport within Guinea Bissau showed that fully two thirds of the cost of trucking lies in charges incurred at the many roadblocks throughout the country. These fees and charges have no legal basis but are in many cases the primary source of income for the police and other officials involved. However, if these costs are in fact twice a large as the fuel and other costs associated with trucking it is clear that they have become a major impediment to internal trade in the country. Given that all exports and imports must also travel on these same routes, this amounts to a tax on international trade as well.

Table 4 shows reported approximate shipping costs from the interior of Guinea Bissau to Bissau and also the rates between Bissau and other regional ports. These rates were reported to be somewhat inflated due to the usual need to wait to unload at the port. Waits of as much as a week are common and though trucks can park at the port for free for two days they are charged CFA 10,000 for each day after that.

**Fundo Rodoviario**

The EC has stated that they will be ending their campaign of road improvement when the main road in the south of the country is resurfaced in the near future. Instead they will direct their efforts toward maintenance, supporting the Fundo Rodoviario. The Fundo
Rodoviario is designed to provide a sustainable financing mechanism for maintenance and repair of the priority portions of the road system, consisting of most (though not all) of the Estradas Nacionais as well as some of the Estradas Regionais. As can be seen in Table 2 these costs can be substantial. The Fundo Rodoviario is responsible for funding these costs and gets its revenue from a portion of the tax on imported petroleum products as well as tolls on the bridges and an annual fee for each vehicle registered in the country.

These tolls are currently at a level of CFAF 1000 for cars and CFAF 20,000 for heavy trucks. Though this is a considerable expense it must be realized that the time savings and cost savings through avoiding the need to go on the ferries compensate for the additional cost. The Fundo is considering the institution of a toll on the principal national highways but no decision has been reached on this.

The most important source of funds (in theory) for the Fundo Rodoviario is from the 4% tax on all fuels imported into the country. This money has not, however, been forthcoming to date as it is first paid into the Treasury but is not subsequently transferred to the accounts of the Fundo Rodoviario. In the past year, only about CFA 70 million were transferred out of a total of CFA 234 million. Efforts to transfer the remainder continue with the support of the EU, which signed a contract with the government conditioning continued financing of road rehabilitation on adequate funding for maintenance.

Maintenance funded by the Fundo is contracted out through the Ministry of Public Works. Though there are few contractors with the necessary equipment and financial means, it was reported that at least four routinely compete for the business. There are various smaller contractors but these are more difficult to work with since they have no capital and therefore need payment in advance in addition to lacking much of the necessary equipment to do the work.

B. Ports

Currently, the Port of Bissau is the only major functioning international port in the country. As such it is the principal gateway for all exports and imports and its smooth functioning is key to the efficient transport of the vast majority of traded goods exiting and entering the country. Current estimates are that 85% of exports move through the Port of Bissau while more than 90% of imports do the same. At the present time, the port is operating well in excess of its designed capacity. Originally constructed to move 5,000 containers per year, the port is now moving approximately 20,000, though with considerable delays.

One can not overemphasize the importance of improving port operations for the success of virtually every other activity covered in this report. Almost every interview conducted in the preparation of this study generated comments about the importance of port rehabilitation, with its current state often characterized as “terrible”.

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The port is currently managed by a government entity, Administracao dos Porto da Guinea Bissau, which took over from a private firm, Tertir, in 1999. There are still some outstanding financial issues related to this transfer which need to be resolved in order to proceed with any kind of contracting of port services or public-private partnership. Settlement of these issues with Tertir is necessary before re-privatizing the operations. Negotiations have occurred and it is apparent that an agreement is possible, though it has not yet been finalized.

Several observers noted that APGB had been used as a conduit for patronage appointments over the years and that this has resulted in a highly paid and redundant staff. According to one observer, no more than one third of the approximately 800 current employees may actually be needed to run the operations of APGB. A review of staffing and training needs may be appropriate to ensure that excess costs are not loaded onto port fees paid by exporters and importers.

However, given the stated intention of the government to privatize direct management of the port (thus leaving APGB in the role of regulatory agency) it is far preferable to proceed with the privatization as rapidly as possible and leave staffing decisions to the new port operator. Indeed, contracting out these direct management responsibilities would further reduce the staffing needs of APGB. However, in order to be able to negotiate effectively with potential private sector operators, it will be essential to ensure rehabilitation of at least some of the basic infrastructural needs of the port since it cannot be expected that port management operators can effectively implement the wide range of rehabilitation needs. In particular, it is clearly the government’s responsibility to ensure that the approach channels and the harbor itself are dredged to a depth sufficient to allow access. It is also clearly within the government’s responsibility to ensure adequate road access to the port as well as paving those areas designated for container storage. These issues are discussed below in more detail. Generally speaking, the better the condition of the port, the more favorable a contract can be negotiated by the government.

The main physical problems with the port of Bissau are clear and stem from neglect and growth over the 35 years since independence. These can be summarized as follows: Insufficient capacity, insufficient depth of port and approaches, lack of navigational aids, and old and inadequate container equipment.

**Insufficient Capacity**

As noted above, the container facilities at the port were originally designed for 5,000 containers per year but are currently transiting approximately 4 times that number. This has resulted in extreme delays and congestion in the port itself as well as in access roads through the City of Bissau. At the time of writing, work was in progress to address some of these issues.

First, the access roads to the port are being paved using resources of the port authority. This will be essential to adequate traffic flow, particularly for the peak traffic season.
during the cashew harvest. This period, from May through July, coincides with the beginning of the rainy season and it is essential to have adequate all weather roads for the large trucks which transport cashews to the port. Consideration is already being given to the construction of a second access road to expand capacity.

Second, there is currently insufficient space in which to store containers within the port. As of May 2008 work was in progress to demolish some old warehouses in order to make way for additional areas in which to store containers. All container areas are slated to be paved in the near future, but this will wait until after the current harvest and rainy season.

Third, the port currently has insufficient machinery to move containers and what it does have is in poor condition, necessitating constant stoppages for repair. Indeed, at the time of the writing, there were no functional container carriers in the port, though one was being repaired by mechanics brought in from Dakar. A study performed under the Private Sector Development Project estimated that this problem could be remedied at a cost of 1.1 million euros.

**Dredging**

Located on a river estuary, Bissau and its approaches suffer from constant silting which reduces the maximum draft of vessels which can load and unload in the port. Until 1972 the port and its approaches were regularly dredged to a depth that allowed large merchant vessels to dock. However, at the present time it has been 36 years since this was last done with the result that the water depth has been reduced to 3-4 meters. This limits the size of the ships that can enter to 20,000 tons.

Preliminary design and feasibility studies for dredging the port and its access channels was completed in 2006 under the Private Sector Development Project. Dredging to a depth of at least 5 meters would allow ships of up to 30,000 tons to enter the port, greatly expanding the ability of shipping companies to service Bissau, and reducing the unit cost for exporters and importers. However, this work must be repeated periodically to avoid having the same problems arise in the future. Hiring dredging services from other ports (e.g. Banjul) along the coast would eliminate the need to purchase dedicated dredging equipment for Bissau since this is likely to be prohibitively expensive.

An additional task needed to make the port fully functional is the removal of several wrecks which block access to some of the facilities. Unlike wrecks further out in the approaches which can be simply marked to ensure that ships avoid them, those wrecks at the docks will need to be removed.

**Aids to Navigation**

Over the years since independence the previous buoys, lighthouses and range markers which guided shipping into the port have either disappeared or become non-functional due to lack of maintenance. Regular maintenance on at least an annual basis is essential.
to any installation located in the ocean or on exposed areas. The buoys marking the main channel were last replaced in 1995 but are now all either gone or non-functional.

The project design and feasibility study performed in 2006 details the necessary improvements as well as the need for establishing a regular maintenance schedule in order to avoid another round of neglect and deterioration. The total cost for Bissau alone amounted to 1.13 million euros. The benefits of doing this in terms of reducing shipping costs accrue in several different ways. First and most obvious is the fact that ships will no longer need to wait for daylight hours to enter or leave the port. Second, the time and cost of bringing on board a pilot before entering the harbor will be eliminated. Third, insurance costs will be reduced since Bissau is now regarded as a dangerous port given the lack of any aids to navigation and the existence of shallow areas, wrecks, etc.

**On the Priority of Port Rehabilitation**

The action items listed below are *virtually identical to the action items contained in a report on the condition of the port dated July of 1997* and repeated in numerous reports by various observers since that time. The messages are clear:

- The problems with the port are well known and have been studied for more than a decade.
- There is no disagreement or mystery regarding what needs to be done;
- The necessary studies have been done;
- All that remains is to find the financing and the political will to go ahead.

Proposals to conduct further studies which do not directly lead to the initiation of the required work should be resisted. This is the highest priority identified in this report and should be regarded as a necessary condition for any other trade-related activities to achieve success.

And yet, the urgency of rehabilitating the port is still not clearly understood by many observers. Rather it is implicitly assumed that the port is the only viable means of importing into and exporting from the country. This may be essentially true at present but within a year the Port of Bissau will be undercut by the Port of Banjul as the lowest cost alternative to import containers and export cashews. Cashew traders who moved to Banjul as a result of the civil war are already handling some of the Guinea Bissau harvest.

At the present time there is no direct land route for large trucks from Banjul and Dakar to get to Bissau. The main road crosses two major rivers, one of which is still unbridged, with ferry service that is inadequate for large numbers of large vehicles. However, this situation will change in 2009 with the completion of the bridge at Sao Vicente. At that point it will be cheaper to ship goods through Banjul and even Dakar.

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Consider the figures in Table 5 which show costs in various ports in the subregion. Banjul is $118 per ton cheaper than Bissau. As shown in Table 4, a container can be transported for CFA 950,000 between the two cities. Assuming a load of 20 MT and an exchange rate of 420 CFA to the dollar, this works out to an additional cost of about $113, resulting in a saving of US$5 per ton even without the bridge. The estimated trucking costs after the bridge is in place will undoubtedly drop lower.

There is one caveat. Though Guinea Bissau, Senegal and The Gambia are all in the ECOWAS free trade zone, the theoretical free passage of goods and services across the border does not in fact exist. Border guards can and do impose costs at the border, sometimes for extended periods of time, and other unofficial roadside taxes also exist. However, efforts are under way to facilitate genuine free trade, and even if some payments are still required, they will likely be absorbed as a relatively minor cost of doing business. The port and customs in Banjul have a reputation for speedy service, at least by the standards of the region, which will prove very attractive in comparison to Bissau.

The bottom line is clear: unless the Port of Bissau is rehabilitated to the point where it is competitive with Banjul and Dakar it will lose the vast majority of the traffic to those two destinations. Instead of providing revenue to the government it will become an expensive but little used facility. Even worse, if dredging is not done soon, and the port and approaches continue to silt up at the rate they have in recent years, it will within a very few years be impossible for freighters to enter. The port will cease to be a viable entry point and the country will be dependent on its neighbors for access to international markets.

Construction of a Second Port at Buba and/or Biombo

As noted elsewhere in this report, the proposed mining projects for phosphates and bauxite include the construction of rail lines to a proposed new port near Buba. First proposed in the 1940’s, the port was seen as a way to link the isolated southern region to the outside world as well as a route through which the bauxite deposits identified in that region could be shipped. A second major international port would also relieve the pressure on Bissau. Other proposals have centered on a new port at Biombo, which is a deep water location where a new port would avoid many of the problems currently suffered in Bissau itself, but which is at the present time completely undeveloped.

Studies in the early 1980s concluded that economic viability depended on use of the port at Buba for regional trade and not solely mineral exports. Trade originating only in the southern region of Guinea Bissau could not by itself provide enough justification for the project – the port would have to be viewed as a regional hub for neighboring countries in

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4 See, for example, Republica da Guine Bissau – Comissao para o Relancamento e Dinaminazacao do Projecto do Porto Regional de Buba-Boe, “Apresentacao e Proposta de Relancamento do Projecto do Porto Regional de Buba” 2007, and Republica da Guine Bissau, Projet du Port de Buba July 2001
order to generate a sufficient economic return. Among the other countries suggested as potential users of the port are Senegal, Mali, and Guinea-Conakry.

Involving a huge investment in regional rail lines as well as associated infrastructure, the proposed Port of Buba is a project of international scope which would require a high degree of international cooperation and financing. The project also raises serious environmental concerns. Not only would the mines pose threats to the rivers and the fishing industry they support, but both the railway and the port itself are proposed for environmentally sensitive areas that are already demarcated as protected zones. Recently, work on approach roads has been started even though necessary environmental impact studies have not been performed. The railroad is reportedly not contemplated in the immediate future, with shipments from the proposed bauxite mine to be done via road. However, Buba as yet lacks adequate road connections to the rest of the country and will in any case not be complete for at least several more years. Given the urgency of the situation in the Port of Bissau, and the long lead time needed to construct an entirely new port in a location such as Biombo, neither of these can be viewed as an alternative to rehabilitation of the Port of Bissau. Even if either or both of these options provide a long term solution to the problem of direct access to international maritime trade, neither can be depended on to solve the urgent short run need to ensure a functioning port.

Perhaps more important is the fact that there is already a “second port” under construction in that the road to Banjul in the Gambia and Dakar in Senegal will by the end of next year be free of the need to use ferries. With the second EU-funded bridge already under construction the trip from Bissau to Ziguinchor will soon be made in two hours on an all-weather road, and the cities of Banjul and Dakar within a day. There is, therefore, every reason to regard this possibility as a viable alternative to Bissau, and consequently less incentive to construct a second port in Guinea Bissau.

C. River transport

In colonial times river transport was used extensively and most rivers and plantations had docks and associated infrastructure to make use of this mode of travel. Since that time, however, river traffic has all but disappeared apart from artisanal canoes and one ferry which goes to the islands from the mainland.

Various suggestions have been made in recent years to rehabilitate river freight traffic but there has been no investment in the needed infrastructure. Indeed there is reason to question the viability of investments in this area given that virtually the entire fleet of river transport boats is no longer in existence.

However, there is one proposal, estimated at $3.1 million in 2002, which would link the southern region and the islands to Bissau. This proposal would encompass the purchase

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of a 200 ton ship, 4 barges, and the rehabilitation of the necessary docks and landing facilities. It is clear that the transportation options to the islands and to the south of the country are inadequate at the present time. Indeed, the various proposals for development of tourism in the islands will require far better transportation options than are now in existence. However, it is unclear that a project of this size is justifiable given the ongoing efforts to improve road access to the south and the fact that the islands can be adequately served by much smaller vessels. It would also seem that private sector leadership is required if this project is to be sustainable.

Accordingly, it is premature to recommend these investments for priority action. It is very possible that given a suitable private partner, government investment in needed infrastructure could provide an adequate return compared to other options to improve links with the islands and the south of the country. However, the pressing needs in Bissau itself and the high cost of pursuing this project mean that it must depend on a willing private sector partner to be viable.

D. Air Transport

The airport at Bissau is the only international airport in the country. At the present time traffic is far below capacity, with no more than two international flights even on the busiest days and many days with only one flight to Dakar. It is reported that this situation will improve somewhat by the end of the year as TAP moves from a single weekly flight to three flights a week but low traffic volume and little competition lead to high ticket prices.

There have been some recent improvements at the airport with the installation of lights permitting night time landings and training for some staff. However, airport operations are still problematic with reports of lost bags and delayed flights in what is an aging facility in need of some renovation. The government may wish to review its contract with the private sector operator of the airport given that adequate performance on these issues is clearly expected under the contract terms.

There are, therefore, limited opportunities to piggy-back on passenger flights by using their excess cargo space for high-value exports. But even if it did exist, there are few enterprises which could take advantage of such an alternative, and little reason to think that Guinea Bissau could successfully compete with other regional exporters of perishable products with far better facilities and a far wider menu of options in terms of air shipment.

II. Electricity and Water

Guinea Bissau has abundant water, being a country crossed by numerous rivers and with a relatively low lying topography with an accessible water table in most areas. This means that locating decentralized industrial facilities (e.g. cashew shelling plants) is not
constrained on the basis of water availability. However, the urban water supply system in
Bissau is in poor condition. Work is under way to build a new reservoir, distribution
system and public fountains.

The situation in the electricity sector is more of a problem. Only 20% of the population
has access to public electricity, exclusively in major cities and towns and primarily in
Bissau. Even in these areas, the electric company is only able to supply power 70% of
the time. In the interior of the country most areas have no electricity at all though there
have been recent extensions of the grid to seven urban centers.

The EAGB (Empresa Publica de Electricidade e Aguas da Guine Bissau) has major
financial constraints as well as problems with adequately trained personnel and
availability of spare parts. In particular it has had difficulty in collecting bills though
there has been recent improvement in this area.

Lack of electricity is a major constraint to the development of manufacturing and other
activities which require power. Cashew processing is perhaps the only major
counterexample since it is not dependent on electricity supply but can itself provide
surplus electricity through the burning of shells. This has already been done in some
installations, notably SICAJU, and should be considered as an important benefit when
evaluating the economic viability of cashew transformation projects.

At the present time virtually all electricity generation is diesel with an installed capacity
of 11MW. The recent increases in the prices of oil products has made energy production
extremely expensive, prohibitively so for some uses.

Accordingly, a strategic vision is needed for electricity development that can support
growth in both urban and rural areas in the future. The following points are taken from
the most recent investment program in the sector, prepared by the government:

In the short run
- Restore generation capacity to internationally acceptable levels of service in the
city of Bissau;
- Address technical problems with generation and the operational capacity of
EAGB;
- Increase collection rates for electricity supply charges from 40% to 80% to restore
EAGB to a viable financial footing;
- Revise the tariff structure to allow differential pricing for alternative types of
energy demand, e.g. industrial vs. residential, high voltage vs. low, off peak vs.
peak;
- Identify future energy sources to mobilize needed investments, particularly in
rural areas where decentralized sources and private suppliers can play a greater
role.

In the longer term:
Wherever possible and financially viable, combine cashew transformation projects with electricity supply in order to allow more remote areas to be served;

Pursue regional initiatives which can allow Guinea Bissau access to much cheaper hydroelectricity through an interconnected regional grid. The OMVG project studied by the African Development Bank is an example of one such possibility.\(^6\)

III. Communications

Telecommunications is an area which has experienced probably the greatest growth and transformation over recent years, and is a testament to the ability of reform and conducive regulatory structures to allow and promote private sector investment.

Two private sector cell phone operators are now competing with the previous government run system and have created a competitive market that provides an excellent product. Indeed, sales of cell phones and associated cards and accessories are a major industry in virtually all parts of Bissau as well as major regional towns.

Perhaps the most important remaining task is for the government to sell its stake in Guine-Telecom and Guinetel given the obvious comparative advantage of private operators in this area. This, together with new regulation promoting interconnection between different systems and a more flexible access to public fixed networks, can go far toward completing the transformation of this sector.

However, there is still a gap in that the fixed telephone network, which is essential to highspeed data transmission, is still in very poor condition. Indeed, the migration of many households to the mobile network has reduced the revenue base substantially. Proposals to add fiberoptic capacity between cities in Guinea Bissau to the existing line to Dakar could help spur the needed development, but substantial investment is needed to bring this network up to a level that can be considered adequate. Given the lack of resources available to the government (and to its state run phone company) this is an area where private investment can and should be promoted.

\(^6\) OMVG is the Office pour la Mise en Valeur du fleuve Gambie, or the Gambia River Valley Development Organisation.
Table 1: Road Network

<table>
<thead>
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<th></th>
<th>Paved Roads</th>
<th>Unpaved Roads</th>
<th>Total Network</th>
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<tbody>
<tr>
<td></td>
<td>Dirt</td>
<td>Graded Dirt</td>
<td>New Branch Road</td>
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<td>National Routes</td>
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<td>Regional Routes</td>
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<td>Local Roads</td>
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<td>Total</td>
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Table 2: Road Maintenance Costs

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<tr>
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<th>Annual Maintenance</th>
<th>Periodic Maintenance</th>
<th>Rehabilitation</th>
<th>Construction</th>
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<tr>
<td></td>
<td>1000 CFA/KM</td>
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<tr>
<td>Paved</td>
<td>980</td>
<td>30,000</td>
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<tr>
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<td>200</td>
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### Table 3: Passenger and Freight Vehicles Registered

<table>
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<th>Registered Vehicles</th>
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<tr>
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<tr>
<td>Collective Taxi/Vans</td>
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<tr>
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<td>Urban Passenger Transports</td>
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<tr>
<td>Mixed Passenger/Freight Interurban Transports</td>
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<td>Inter-urban Passenger Transports</td>
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<td>Light Trucks</td>
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<tr>
<td>Trucks</td>
<td>87</td>
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<tr>
<td>International Transports</td>
<td>21</td>
</tr>
</tbody>
</table>


### Table 4: Freight Costs in Guinea Bissau* (CFA / 30 MT load)

**Typical Charges for Transport within Guinea Bissau**

- Bissau – Buba: CFA 230 – 300,000
- Bissau – Gabu: 300,000

**Typical Charges for International Routes**

- Dakar – Bissau: 950,000
- Banjul – Bissau: 950,000
- Conakry – Gabu: 1,200,000

Source: Interview with Associacao de Transportadores. Rates based on 30MT truck
Table 5: Comparison of West African Port Costs

<table>
<thead>
<tr>
<th></th>
<th>20 ft. container US$/ton</th>
<th>Average Freight Cost</th>
<th>Port Cost</th>
<th>Tax</th>
<th>Total</th>
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</thead>
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<tr>
<td>Guinea Bissau</td>
<td>95-120</td>
<td>107.5</td>
<td>57</td>
<td>82.5</td>
<td>247</td>
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<tr>
<td>Nigeria</td>
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<td>40</td>
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<td>87.5</td>
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Source: African Cashew Alliance
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