

THE GAMBIA
PUBLIC-PRIVATE PARTNERSHIP PROGRAM
HIGH LEVEL VIABILITY ANALYSIS OF PRIORITY PROJECTS



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MINISTRY OF FINANCE AND ECONOMIC AFFAIRS

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Frequently used abbreviations

AfDB	African Development Bank
CEO	Chief Executive Officer
CPCU	Central Projects Coordination Unit
GCAV	Gambia Commercial Agriculture and Value chain management project
GDP	Gross Domestic Product
GPPA	Gambia Public Procurement Authority
MoFEA	Ministry of Finance and Economic Affairs
IPP	Independent Power Producer
MoICI	Ministry of Information and Communication Infrastructure
NAWEC	National Water and Electricity Company
NDC	National Data Centre
NRA	National Roads Authority
PPA	Public Procurement Act of 2001
PPIAF	Public-Private Infrastructure Advisory Facility
PPP	Public-Private Partnership
PPR	Public Procurement Regulations of 2003
PSP	Private Sector Participation
PURA	Public Utilities Regulatory Authority
VfM	Value for Money

1 Introduction

This report presents the findings of a screening of public investment projects in The Gambia. The objective of the screening is to identify projects that are eligible for implementation in a public private partnership (PPP), and that can be started up in a relatively short term. These “fast track” PPP projects are intended to demonstrate the PPP is feasible in The Gambia, and to serve as an inspiration for the roll-out of PPP projects in other sectors. The experiences with the “fast track” projects (both positive and negative) can be used for the further refinement and optimization of the PPP framework in The Gambia.

The project screening is part of the second mission of the Public-Private Infrastructure Advisory Facility (PPIAF) to develop the PPP framework in The Gambia. It builds on the results of the first exploratory mission which took place at the end of 2012 and in the beginning of 2013.

This report consists of three chapters (the present introductory chapter not included).

- The next chapter discusses the impact of macroeconomic conditions on the opportunities for PPP projects in The Gambia.
- The candidate fast track projects are presented and analysed in Chapter 3. On the basis of the findings of the analysis recommendations are made with respect to the selection of fast track projects and follow-up actions.
- The main conclusions are recapitulated in Chapter **Error! Reference source not found.**

2 Macroeconomic conditions for PPP

The implementation of a PPP program in The Gambia must take account of three macroeconomic conditions.

- High domestic interest rates and crowding-out of private investments

The domestic interest rates are very high. In the first of July 2014 the interest rate on a one-year Treasury bill stood at about 18%¹. Commercial firms are charged interest rates of 25% per annum and more for domestic currency loans.² Given an inflation rate of about 5% to 6% per annum³, the real interest rate is around 20% per annum.

The interest rates are pushed up by the credit demand of the government. In 2013 the fiscal deficit reached 8¾% of GDP as a result of significant overspending compared to budgeted

¹ Website of Central Bank of The Gambia: www.cbg.gm)

² Personal communication of business sector representatives.

³ IMF, Press Release No. 14/156, *Statement at the End of an IMF Staff Visit to The Gambia*, April 4, 2014.

levels. The government debt increased to 80% of GDP. Interest payments on the domestic debt represented 25% of fiscal revenues in 2013.⁴ The public sector is caught in a cycle of fiscal imbalance, which pushes up interest rates, which in turn worsens the fiscal deficit. In the process private investments are crowded out.

- Prevalence of development assistance in the financing of public investments

Capital formation, especially of the public sector, heavily depends on development assistance in the form of grants and concessional loans. Net official development aid received amounted to about 15% of GDP in 2012. This represented about two thirds of total gross capital formation (23% of GDP) and exceeded gross capital formation by the public sector (12% of GDP).⁵

The prevalence of development assistance is also visible at the project level. About 90% of public investment projects implemented or managed by GAMWORKS are financed by donor institutions.⁶ Over the medium term, project grants relative to GDP is projected to peak at 7 percent in 2016 largely due to the Trans-Gambia Bridge project and then gradually decline to 5 percent.⁷

Financing by grants and concessional loans limits the scope of PPP projects. Project grants are usually paid upfront to pay for the investment costs, eliminating the need for private financing through PPP arrangements. The private partners in a PPP are not eligible for concessional loans.

- Limits on external public debt on commercial terms

The government's program supported by the IMF's Extended Credit Facility requires that new external loans and guarantees should meet a minimum grant element of 35 percent, although some non-concessional loans could be allowed (after consultation of IMF staff), provided these loans finance projects that are highly profitable, critical for long-term development, and contribute to reducing poverty. This restriction limits the possibilities for the financing of PPP projects with foreign loans.

The factors described above have an impact on the PPP strategy for The Gambia.

- In the short term, types of **PPP without private financing** should be promoted where relevant. An important category of PPP arrangements without financing are operating and maintenance (O&M) contracts for existing public infrastructure. Proper operations and

⁴ IMF, Press Release No. 14/156, *Statement at the End of an IMF Staff Visit to The Gambia*, April 4, 2014.

⁵ World Bank, *World Development Indicators* (data.worldbank.org).

⁶ GAMWORKS, Annual Report 2012.

⁷ IMF, *The Gambia - First review under the extended credit facility, request for waiver for non-observance of performance criterion, and request for rephasing of reviews—debt sustainability analysis*.

maintenance is a key factor in preventing the degradation of infrastructure. Outsourcing this task to the private sector through an integrated O&M contract with a performance-related remuneration, has proven in many places in the world to be an effective and efficient instrument for keeping infrastructure in good condition to the benefit of users and the economy.

- Where useful and feasible, the O&M contract may be supplemented with an investment component aimed at the **rehabilitation and expansion of existing infrastructure**. The costs of rehabilitation and expansion projects are usually substantially lower than the costs of new greenfield infrastructure, or they can be spread out over a longer period so that the maximum financing requirements in any given year can be reduced.
- PPP with full private financing of new infrastructure, on the other hand is only feasible if either of the following conditions are satisfied.
 - The **project is highly profitable**, so that it can be financed at high domestic interest rates, or so that it can be considered for an exemption from the ban on non-concessional external debt.
 - The donor institutions change the method of the provision of development assistance in a way that leaves more opportunities for PPP with private financing. In particular, they should opt for the disbursement of the assistance in the form of **periodical payments** (which can be used to pay availability fees to a PPP contractor) or **guarantees** (to protect the PPP contractor against breach of contract by the contracting authority), instead of upfront grants.
 - A domestic capital market is developed, so that a broader supply of capital (both from domestic and international sources) can be mobilized and made available for investment projects in The Gambia. An initiative to establish a capital market in The Gambia is ongoing and is supported by private and public parties in The Gambia and abroad. If this initiative is successful, the opportunities for private financing of PPP projects will be substantially increased.

3 Selection of fast-track PPP projects

3.1 Overview

During the June and November 2014 missions 10 potential PPP projects were identified and screened. A summary of the screening results is presented in

Table 1: Summary of evaluation of screened PPP projects

	Transport						Port terminal concession	Telecommunications		Agriculture	Electricity	Other projects
	Trans-Gambia bridge O&M	Road maintenance area concessions	Bridge Banjul-Barra	Concession ferry operations	National Data Centre	GAMSWITCH		Development of agricultural value chains	Generation			
Stage of project development												
Inception	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Feasibility study	Ongoing	Not yet undertaken	Not yet undertaken	Not yet undertaken	Ongoing	Not yet undertaken	Not yet undertaken	Probably completed	Project portfolio of CPCU	Draft request for proposals	Not yet undertaken	Not yet undertaken
Procurement	Not started	Not started	Not started	Not started	Not started	Not started	Not started	Yes	Not started	Not started	Not started	Not started
Implementation	Not started	Not started	Not started	Not started	Not started	Not started	Not started	Test phase	Not started	Not started	Not started	Not started
⇒ Degree of readiness	★★	★	★	★	★★	★	★	★★★	★★	★★	★★	★
Expected Value for Money (VfM)												
Potential for VfM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Demonstrated in VfM assessment	No	No	No	No	No	No	No	No	No	No	No	No
Next steps												
	Complete feasibility study; assess VfM and structure PPP	Undertake feasibility study	Undertake feasibility study	Notify project as PPP; undertake feasibility study	Complete feasibility study; assess VfM and structure PPP	Notify project as PPP; undertake feasibility study	Notify project as PPP; undertake feasibility study	Assess need for support by PPP Directorate	Notify projects as PPP; complete feasibility study if needed; assess VfM and structure PPP	Verify financial feasibility; resolve regulatory and institutional issues	Undertake feasibility study	

To select fast track PPP projects two sets of criteria have been applied:

- stage of development of the project;
- expected Value for Money (VfM) of the implementation of the project as a PPP.

The first set of criteria measures the degree of readiness of the project to proceed to procurement and implementation. The second set of criteria measures the suitability of the project for PPP implementation.

Development stage

The development of a PPP project consists of four phases:

- inception: selection of a project for development as a PPP;
- feasibility study: feasibility assessment of the project, including a VfM assessment;
- procurement and contracting: selection of a private partner to realize the project;
- implementation: construction and operation of the project.

An examination of the ten projects shows that only the GAMSWITCH has moved beyond the feasibility assessment phase. For the other projects the feasibility studies are still ongoing, or have not yet been started up. In terms of readiness for implementation the projects can therefore be divided into three groups.

- The first group only comprises the GAMSWITCH project (national clearing system for electronic payments and transactions with Automated Teller Machines).
- The second group includes four projects for which the feasibility studies or other preparations for procurement are ongoing:
 - Trans-Gambia bridge Operations and Maintenance contract;
 - National Data Centre;
 - electricity generation project;
 - development of agricultural value chain.
- For the five remaining projects feasibility studies have not yet been started up. They constitute the third group:
 - road maintenance area concessions;
 - bridge between Banjul and Barra;
 - concession of ferry services;
 - port terminal concession;
 - national conference centre and national theatre.

Value for Money

The VfM assessment is conducted in two stages.

In the inception phase the project is screened to determine whether it is *in principle suitable* for implementation in PPP. The screening can be performed on the basis of a small number of project characteristics and does not require any in-depth analysis. The two key project characteristics are the project type and the project size.

Two broad categories of projects offer potential for Value for Money and are therefore in principle suitable for PPP:

- the construction or purchase of a durable asset in combination with the financing of the investments costs and the maintenance and operation of the asset for a significant fraction of its lifetime;
- the integrated and autonomous (within the constraints set by service level specification) management and operation of a public service unit for a number of years (generally 3-5 years).

Furthermore, the procurement and contracting of a PPP contract requires more effort and costs than a conventional procurement, both for the contracting authority and for the bidders. For the benefits of PPP to outweigh the higher procurement and contracting costs the project must have a sufficiently large value (in the order of millions of US\$).

All ten projects meet the above criteria, and therefore are in principle suitable for PPP.

An assessment of the *actual feasibility and desirability of PPP* for the project requires a detailed analysis on the basis of information from the feasibility study. However, for most of the projects being considered the feasibility study is still ongoing, or has not been started up yet. For one or two projects, one may assume that a feasibility study has been completed, but in those cases the research team has not been able to inspect a copy of the report. Consequently, for none of the ten projects the VfM analysis can proceed beyond the finding that the projects are in principle suitable of for PPP. No conclusions with respect to the actual feasibility and desirability of PPP can be formulated at this point.

Selection of fast-track projects

We explained above that we would use two sets of criteria to select fast-track PPP projects among the list of ten identified project. It appears, however, that the second set of criteria (related to Value for Money) does not allow to rank projects. At this point only the PPP eligibility of the projects can be evaluated, and the score on this criterion is equal for all projects.

Consequently, the selection of fast-track projects can only be based on the degree of readiness for implementation. This results in the distinction between three groups of projects described above. For the projects in the first two groups, less additional time and work is needed before a decision can be taken on whether to start up the procurement and implementation phases. For

the projects in the third group, such a decision is situated farther away in the future. A feasibility study (including a VfM assessment) must be undertaken first to collect the required information.

In fact we prefer not to rank the projects in terms of priority, but to focus on the next steps that need to be taken for each project. As pointed out earlier, all ten projects are in principle suitable for PPP. For nine of the ten projects further development and preparation is required before they can be procured and implemented, with a possible role for the PPP Directorate to assist in the evaluation of the VfM and the structuring of the optimal PPP arrangement. The allocation of the resources of the PPP Directorate must be determined by the government of The Gambia on the basis of its own development priorities.

Summary of screening results

In this paragraph the findings of the high level analysis of the projects are summarized. The projects are presented in the order of their stage of development.

One project has reached the implementation phase.

- According to the information received, the **GAMSWITCH** project is already in an early phase of implementation. A joint venture of the project partners has been established and tests of the system are running. However, the financial resources for a full roll-out of the system are lacking. In December 2014 the AfDB has conducted a project preparation mission to consult the stakeholders and update the project plans. The way forward will be determined on the basis of the findings of this mission.

Four projects are currently in the feasibility study phase.

- One of those four is the proposal to outsource the operation and maintenance of the **Trans-Gambia bridge** through an integrated O&M contract with tolling of the vehicles. The construction on the bridge will start by the end of 2014 and is expected to take three years. The design allows for the installation of toll stations. A study to investigate the feasibility and desirability of a toll-based O&M contract will be started up soon (the procedure to select a feasibility study consultant has been started up). Should this study confirm that a PPP is indeed the preferred option for the operation and maintenance of Trans-Gambia bridge, a competitive procedure for the selection of a private operator can be launched in order to have an operator in place by the expected completion date of the bridge.
- While the scoping of the **National Data Centre** is still ongoing, there is a strong commitment on the part of the public stakeholders to implement the project as PPP. A project preparation group has been set up, in which the PPP Directorate is represented. The completion of the feasibility study is awaited for this project to be fully ready for PPP implementation.
- Electricity supply is tremendously important for national economic development, and PPP projects for the **generation of electricity** (in the form of IPP arrangements) have proven elsewhere to be effective and efficient. A proposal for the tendering of extra generation capacity has been submitted to the Ministry of Finance and Economic Affairs and the Gambia

Investment and Export Promotion Agency (GIEPA). However, it is not clear that the problems with the regulatory and institutional framework, which have contributed to the failing of an existing IPP, have been addressed. These problems need to be resolved before the project can be designated as a fast-track PPP project. The results of the ongoing update of the the energy sector diagnostic review will shed light on this issue.

- **Agriculture** is a key sector of the economy of The Gambia. It represents about 30% of GDP, provides employment for more than 75% of the labour force and is one of the main generators of foreign exchange earnings. The Vision 2016 program aims to achieve food self-sufficiency by 2016. PPP is a key instrument to reach this goal through the development of public infrastructure and facilities in support of agriculture (irrigation systems, public storage facilities, laboratories,...). The Ministry of Agriculture and Natural Resources has established a portfolio of projects, among other in the context of the Commercial Agriculture and Value Chain Management Project funded by the World Bank. The next step is to select from this portfolio suitable projects for further development and implementation as PPPs.

Finally five potential PPP projects have at most reached the inception phase at this point.

- **Area concessions** for the maintenance, and possibly rehabilitation, of roads, are a promising idea. However, the operational and financial feasibility of the concept must still be assessed. Moreover, it is wise to await the progress with the proposed O&M contract for the Trans-Gambia bridge before undertaking new PPP projects in the road sector.
- The government considers a Build-Operate-Transfer contract for the construction of a **bridge between Banjul and Barra** across the Gambia river. The private sector has expressed interest, but the economic and financial feasibility needs to be further investigated.
- Pending the possible construction of the Banjul-Barra bridge, a **concession of the ferry services** can be implemented fairly quickly. In spite of the failure of an earlier attempt in 2011, the concession model has proven to be very successful elsewhere in the world. There is no reason why the model would not function in the Gambia, provided that the concession is properly structured and competitively tendered. There is, however, no concrete intention on the part of the government or the current state-owned operator (Gambia Ports Authority) to organize a concession of the ferry services. This is why the table above marks the project as not yet having reached the inception stage. Consequently, the next step is to verify the willingness of the public sector (in particular GPA) to consider a PPP for the operation of the ferry services and, if the answer is affirmative, to formally notify the project as a PPP.
- The shipping lines calling at the port of Banjul and their terminal operating divisions have, at various times, expressed interest in operating the **container terminal** through a concession agreement. This would allow them to invest directly in the upgrading of the handling equipment (presently a responsibility of the Gambia Ports Authority) and increase the productivity of the terminal. This arrangement would convert the port of Banjul into a landlord port, a model that has proven its effectiveness and efficiency elsewhere in the world. The Gambia Ports Authority has at this point no concrete intention to grant a concession for the operation of the container terminal. This is why the table above marks the

project as not yet having reached the inception stage. Consequently, the next step is to verify the willingness of the public sector (in particular GPA) to consider a PPP for the operation of the container terminal and, if the answer is affirmative, to formally notify the project as a PPP.

- The government of The Gambia has announced its candidacy to host the Islamic Summit in 2019. This requires the construction of a large-capacity **national conference centre**. Such a centre would also be able to meet the own demand of the government for conference facilities, and put The Gambia on the market for international business conferences and meetings. The government considers a public-private partnership to realize the project. The next step is a feasibility study to further define the scope of the project and assess its economic and financial feasibility.

In the exploratory mission of 2012-2013 more potential areas for PPP were identified (for instance in electricity distribution, river transport, airport operations, ...). The conclusion that these areas are eligible for PPP projects remains valid, but the fact that no concrete projects are proposed implies that they are not suitable for the implementation as fast-track PPP projects.

The screened projects listed in the table on the preceding page three projects that were identified as short term priorities in the mission of 2012-2013,⁸ as well as some of the medium-term priorities. The results of the screening exercise are therefore broadly in line with the findings of the first mission.

In the following sections the screened projects are discussed in more detail by sector.

3.2 Transport infrastructure and services

3.2.1 Trans-Gambia Bridge Operations and Maintenance contract

Analysis

The construction the Trans-Gambia Bridge between Bambatenda and Yellintenda is planned to start by the end of 2014. The National Roads Authority (NRA) is in favour of outsourcing the maintenance of the bridge through an Operations and Maintenance (O&M) contract, funded by a user toll. The design of the bridge already provides for the installation of toll stations. Complementary infrastructure, in particular access roads and weighing bridges could also be included in the contract.

Based on international experience PPP in O&M has a proven ability to improve the durability of the infrastructure. The transfer of the operational and maintenance risk to the private partner

⁸ The only mission short term priority project is the July 22nd Business Park, promoted by GIEPA. Due to the postponement of the PPP Forum on June 19, 2014, the planned meeting with GIEPA in the margin of this forum did not occur.

sharpens the incentives to ensure that maintenance activities are diligently carried out and that overloaded vehicles (the prime cause of wear and tear of road infrastructure) are prevented from using the bridge. As a result the infrastructure is kept in good condition during its planned lifetime and does not suffer from premature deterioration.

No toll studies have yet been carried out to verify the financial viability of private O&M. However, a quick examination of the available information suggests that expected toll revenues will be more than sufficient to cover the maintenance cost of the bridge (see box). This means that a private O&M contract is financially viable and can even, if so desired, be extended to access roads and weighing bridges.⁹

Quick estimate of toll revenues

The project memo of the African Development Fund on the Trans-Gambia corridor presents the following information:¹⁰

- traffic volume: about 500 vehicles per day in 2011 and 3000 vehicles per day in 2046;
- share of trucks: 30%;
- annual maintenance costs of bridge: USD 112.000 (including routine maintenance).¹¹

The current ferry rates per crossing are:

- light vehicle (cars): 150 dalasi;
- truck (tractor-trailer combination of 40 tons with a length of 16,5m): 2.200 dalasi.¹²

Assuming that the toll for use of the bridge equals current ferry tariffs, and given daily traffic levels in 2011 (counting with 300 working days in a year) the annual toll revenues would amount to 115 million dalasi or nearly USD 3 million. This amount exceeds by far the annual maintenance costs.

⁹ If the private operator is made responsible for the maintenance of the bridge at his own risk, one may expect that he will on his own volition install weighing bridges to prevent overcharged vehicles from using the bridge. Overcharged vehicles are almost the exclusive cause of excessive wear.

¹⁰ African Development Fund (2011), *Construction of the Trans-Gambia Bridge and Cross Border Improvement*.

¹¹ A design in reinforced concrete has been selected, resulting in very low maintenance costs.

¹² NRA cited during an interview a willingness to pay of 3000 dalasi per crossing for trucks.

Next steps

The next step is the assessment of the feasibility and desirability of an O&M concession for the Trans-Gambia bridge (with tolling). The NRA has already started the procedure to select a feasibility study consultant. The scope of work of the consultant consists of two components: (i) a full feasibility study (technical, economic, financial, environmental) of the upgrading of the 24 km section of the Trans-Gambia Corridor which runs through the Gambia; and (ii) the development of an optimal institutional model for managing the toll bridge.

If this study shows that an O&M concession is feasible and desirable, then the tender procedure for the selection of a private O&M operator must be started up soon in order to have an operator in place by the date the bridge is completed.

3.2.2 Roads maintenance area concessions

Analysis

The NRA supports the idea of area concessions for the maintenance, rehabilitation and expansion of the existing road network. Under an area concession contract a private contractor becomes responsible for the upkeep of the roads in a circumscribed area. The scope of the area concession can also include the rehabilitation of the roads and the construction of new roads within the area. The contractor will probably be remunerated by a performance-based availability fee paid by the NRA. The average density of the traffic on the road network is too low for tolling to be viable.

A Road Fund has been established, which could be used to fund the availability fee. However, at the moment the Road Fund has very limited resources. To provide adequate funds for the maintenance and expansion of the road network the Road Fund needs additional sources of revenues, for instance an increase of the petrol tax or a revenue surplus from the tolling of the Trans-Gambia Bridge.

As in the case of the Trans-Gambia bridge O&M concession, roads maintenance area concessions can improve maintenance practices, thereby contributing to more durable roads..

Next steps

At this moment area concessions for road maintenance are only a promising concept. The technical and financial viability of the practical implementation of the concept are still to be investigated. A good moment to proceed with the further development of the concept is when the O&M concession of the Trans-Gambia Bridge has been implemented with success (or has been definitely discarded, but that would imply that the O&M concession is not feasible or not desirable, and in that case the same conclusion will probably also apply to area concessions).

3.2.3 Bridge between Banjul and Barra

Analysis

A BOT contract is being considered for the realisation of a bridge between Banjul and Barra to replace the unreliable ferry service. The construction costs are estimated at USD 500 million, and cannot be financed by the public budget. A few banks have expressed interest in financing the bridge, but no feasibility studies have yet been undertaken.

A BOT contract is a commonly used arrangement for the realisation of bridges. Compared to conventional procurement it offers several advantages: use of private financing instead of scarce public funds, optimization of life-cycle costs by the integration of design, construction and operations, stable maintenance practices in order to ensure that the infrastructure remains in good operational condition,...

For PPP to be feasible, however, the technical and financial viability of the project must first be clearly demonstrated. The project is for several reasons challenging. The investments costs are five times larger than those of the Trans-Gambia Bridge, because the river is much wider at this point. These costs must be recovered from the users (toll) and/or the government (grants), taking in account affordability constraints as well as competition from the Trans-Gambia Bridge and the ferry services.

Next steps

If the government decides to proceed with the project, the next steps are:

- formal notification of the project as a candidate PPP project;
- undertaking of a comprehensive feasibility study to demonstrate the technical and financial viability of the project

3.2.4 Concession of ferry services

Analysis

In 2014 the ferry services have shown an improvement of reliability. As a result the sense of urgency to reform the ferry services has lessened. Nevertheless, ferry transport is still very fragile. Currently, only one vessel is operating between Banjul and Barra. If this vessel falls out for repair or maintenance, the crisis situation experienced a few years ago will reappear.

Ferry services are in principle very suitable to be outsourced under concession agreements. In many places of the world the concession model has proven to be very effective and efficient in this sector. There is no reason why the model would not function in the Gambia, provided that the concession is properly structured and competitively tendered.

One point of attention is the interface between the ferry operations and the condition of the terminals and the navigation channel. Delays in the dredging of the access channels to the landing points and of the extension of the slip yards contributed to the failure of the PPP arrangement in 2011. A potential solution, to be investigated, is to include the maintenance of the access channels and the terminal infrastructure in the concession agreement, so that the private contractor can manage these aspects himself.

At the moment there is no concrete intention on the part of the government or the current state-owned operator (Gambia Ports Authority) to organize a concession of the ferry services. Nevertheless we recommend to reconsider PPP for the organization of the ferry services. Reliable ferry services are important to the economy and the inhabitants of The Gambia, and the concession model is very suitable for this sector and relatively easy to implement.

Next steps

Before the tendering of a concession of the ferry services can be pursued further, the relevant policymakers and public stakeholders (in particular Gambia Ports Authority) must be willing to notify the project formally as a candidate PPP project.

Once the decision to consider a concession contract for the ferry services a feasibility study must be carried out to define the heads of terms of the concession agreement (scope, service specifications, tariff structure,...) and to assess the commercial and financial viability of the concession.

3.2.5 Concession of container terminal

Analysis

In 2011 (the most recent year for which statistics are available) the port of Banjul handled about 1.7 million tonnes of cargo, of which about 2/3 in the form of containers (72,000 TEU). The import of petroleum products is not included in this volume, since it does not fall within the scope of the Gambia Ports Authority (GPA).

The port of Banjul is reputed to be an efficient port, which is why it has attracted a significant transit function for the nearby region. The terminal handling charges are at the low end of the region, and quay productivity is relatively high. The port scores especially high on the speed of custom clearance owing to the close cooperation between the port and customs. However, these advantages are offset by a disadvantage in available freight rates between Europe and West Africa. The Banjul rate, factoring in the limited maritime access and the small volumes, is invariably higher.¹³

¹³ Ocean Shipping Consultants (2009) Africa Infrastructure Country Diagnostic, Beyond the Bottlenecks: Ports in Africa, Country annex, The International Bank for Reconstruction and Development / The World Bank.

The present operational model of the port of Banjul can be halfway between a tool port and a service port. GPA is engaged in three types of port activities:

- it provides the basic infrastructure and manages the port land;
- it makes cargo handling equipment (cranes, forklift trucks,...) available to private stevedoring firms;
- it carries out stevedoring services, in competition with private firms.

The landlord port model is generally regarded as the most efficient model for the organization of port operations, combining high productivity with a balance between public and private interests. In the landlord port model the port authority is the landowner and responsible for the provision of general port infrastructure and the management of the port area. All terminal operations (including supply of handling equipment) are delegated to private operators through concession agreements.

While generally characterized by a good performance the landlord port model is not a necessary condition for well-managed and productive port operations. As pointed out above the efficiency of the port of Banjul is already relatively high.

However, further efficiency gains are needed to preserve the competitive edge of the port of Banjul and to increase its throughput capacity. To achieve these gains substantial investments must be made in the rehabilitation of the port and in the upgrading of the handling equipment. The present operational model of the port slows down the needed investments, because they depend on the limited financing capacity of the GPA. To overcome this bottleneck GPA has approached the shipping lines several times in the last few years for the financing of port investments.

A more structural solution would be to give the container terminal in concession to one or more private operators. This would entail the conversion of GPA to a landlord port. The use of operating concessions would mobilize private financial resources for the rehabilitation of the port and the upgrading of the handling equipment and yield additional efficiency gains (for instance a better coordination between handling equipment and stevedoring labour). The government, through GPA, would still be the owner of the port and retain control through the terms of the concession agreements.

Private sector stakeholders (shipping lines calling at the port of Banjul and their terminal operating divisions) has submitted several proposals to the government of the Gambia to this effect. To date the government has not formally reacted to these proposals.

Next steps

If the government decides to consider a giving the container terminal in concession to one or more private operators, the next steps are:

- formal notification of the project as a candidate PPP project;

- undertaking of a feasibility study to define the heads of terms of the concession agreement (scope, service specifications, tariff structure,...) and to assess the commercial and financial viability of the concession.

3.3 Telecommunications infrastructure

3.3.1 National Data Centre

Analysis

The telecommunications sector in The Gambia is largely private. More than 85% of active telephone subscribers are served by private companies.¹⁴

The state-owned operator GAMTEL is responsible for the fixed line infrastructure, including the backbone network. In the provision of the basic telecommunication infrastructure a first PPP is already operational. The private mobile telephone operators and internet service providers have established a joint venture with the Government of The Gambia and the state-owned operator GAMTEL/GAMCEL to participate in the Africa Coast to Europe (ACE) fiber-cable project. The private sector holds 51% of the shares of the special purpose vehicle that has been established for the project (Gambia Submarine Cable company).

In May 2014 the African Development Bank (AfDB) conducted a scoping mission with respect to the development of a National Data Center (NDC) under a PPP. The findings of the mission are reported in an Aide Memoire.¹⁵

The project involves the development of a tier 3 or 4 data center.¹⁶ It is claimed that there is large demand for managed data services both in the public and private sector. Today these potential users must call upon foreign service providers. The demand from government agencies is expected to represent 40% of the future demand of the data center. The remaining 60% of demand must be found in the private sector. However, no user survey has so far been carried out.

A first phase of the development of the NDC is the establishment of an in-house mini data centre by combining the existing data infrastructure within the government. The mini data centre is intended to for the needs of the public sector and will be funded by the World Bank.

¹⁴ Website of the Public Utilities Regulatory Authority (PURA).

¹⁵ African Development Bank, *Development of Metro Datacenter Infrastructure under PPP and the establishment of a National ICT Agency*, Aide Memoire of African Development Bank Identification Mission, May 25-30, 2014.

¹⁶ Tier 3 and 4 refers to the level of redundancy and operational efficiency.

The AfDB has agreed to fund the preparatory studies of the NDC. An action plan is presented in the Aide Memoire. The action plan will be managed by a project preparation group consisting of representatives of the Ministry of Information and Communication Infrastructure (MoICI) and the Ministry of Finance and Economic Affairs (MoFEA). The first step is the engagement of a consultant for the execution of a feasibility study, which is expected to be completed in the first quarter of 2015. The PPP structure will be determined in consultation by the PPP Directorate and other key stakeholders. MoICI is currently waiting for guidelines from AfDB on the set-up of the project preparation group (initially planned for June 2014, but delayed).

The scoping mission also identified a number of potential projects that can be built upon the NDC. They include among other:

- E-immigration;
- GAMSWITCH;
- Connectivity of Basic Schools and Secondary Schools;
- Connectivity of hospitals and health centers;
- Science and Technology Innovation Park;
- SME Technology Adoption and Business Incubation project.

In principle PPP is a suitable instrument for the implementation of the NDC. The private sector can more easily mobilize the required technical and commercial expertise, and a large share of the demand is expected to come from private users. However, the latter assumption has not yet been verified by a user survey.

Next steps

An action plan for the development of the NDC has been set up. The action plan includes the development of a PPP structure to finance and implement the project. MoFEA and the PPP Directorate have been explicitly invited to participate in the project preparation group. Whether this process will result in the actual launching of a PPP project will depend on the outcome of the feasibility studies.

The next step in the development of the NDC as a PPP is the establishment of the project preparation group. MoFEA and PPP Directorate must appoint representatives to this group.

3.3.2 GAMSWITCH

Analysis

The GAMSWITCH project aims to develop a switch for the clearing of electronic payments and transactions with Automated Teller Machines. Once implemented it will allow a full exchange between bank card accounts and mobile phone credits.

The GAMSWITCH project has in fact already been started up, but its progress has stopped due to funding problems. The project partners have already formed a joint venture owned by the

Central Bank (40%), commercial banks (20%), telecom operator (20%) and Interswitch (specialized, Nigerian company) (20%). A test system is running in three banks, but the funding for a full roll-out of the system is lacking.

In response to these problems the AfDB has conducted in December 2014 a project preparation mission to consult the stakeholders and update the project plans. The way forward will be determined on the basis of the findings of this mission.

Next steps

On the basis of the findings of project preparation the PPP Directorate must decide how it can support the implementation of the GAMSWITCH project.

3.4 Agriculture

one of the main generators of foreign exchange earnings. The Vision 2016 program aims to achieve food self-sufficiency by 2016. PPP is a key instrument to reach this goal through the development of public infrastructure and facilities in support of agriculture (irrigation systems, public storage facilities, laboratories,...). The Ministry of Agriculture and Natural Resources has established a portfolio of projects, among other in the context of the Commercial Agriculture and Value Chain Management Project funded by the World Bank. The next step is to select from this portfolio suitable projects for further development and implementation as PPPs.

Analysis

Agriculture is a key sector of the economy of The Gambia. It represents about 30% of GDP, provides employment for more than 75% of the labour force and is one of the main generators of foreign exchange earnings.

Since 2010 the development of the agricultural sector has been governed by the Gambia National Agricultural Investment Plan (GNAIP) 2011 – 2015.

The government has recently launched a new strategic program for the development of the agricultural sector. The Vision 2016 aims at the realisation by 2016 of:

- self-sufficiency in rice;
- fourfold increase of the area of cultivated land (from 66.000 to 280.000 ha);
- diversification of the agricultural sector and development of downstream activities.

The goals of Vision 2016 are to be pursued by the development of large-scale agriculture. Only large-scale agriculture, it is said in the Vision, is able to achieve the required productivity gains and commercial skills allowing to generate an exportable surplus.

The Commercial Agriculture and Value Chain Management Project (GCAV), funded by the World Bank has similar objectives. In particular, the project aims to:

- (i) rehabilitate irrigation infrastructure to enhance the resilience of agricultural production systems to climate change-induced weather shocks;
- (ii) rehabilitate and build commercial post-harvest infrastructure to facilitate processing and marketing of agricultural products;
- (iii) strengthen technical, institutional, managerial and marketing capacities of smallholders and their organizations, as well as other stakeholders involved in agricultural production and value chains, to more effectively operate in a market-driven environment;
- (iv) improve the governance of the GNAIP.¹⁷

The GCAV project will focus on the value chains of rice and horticulture (vegetables).

The central managing institution for all these plans is the Central Projects Coordination Unit (CPCU) of the Ministry of Agriculture and Natural Resources.

Given the limited resources of the government, more private investments in the agricultural sector are sought. In this context it is useful to make a distinction between PPP and the broader concept of Private Sector Participation (PSP). PPP is a form of PSP. However PSP also includes forms of private involvement in agriculture where the private sector is acting autonomously (possibly with the support of the public sector, but without close contractual ties as in a PPP).

PPP is an instrument for the procurement of public infrastructure. It has proven elsewhere in the world to be an efficient and effective approach to build and operate public infrastructure and facilities that serve the agricultural sector, for instance: public irrigation systems, local roads, common storage facilities, laboratories for the testing and certifying of inputs and products, provision of education and training in cultivation methods,...

In addition to implementing PPP projects, the private sector can undertake investments in commercial agricultural activities, such as plantations, processing plants,... These investments will often take place with the support of the government (granting of land leases and permits, financial incentives,...), but this type of cooperation falls short of a PPP as this term is commonly understood. Agriculture is in first instance an economic activity that must be left as much as possible to the private sector.

In the context of the GNAIP and the GCAV project the CPCU has studied and prepared a large number of project plans in the last years. Many of these projects are in principle suitable for PPP, but so far no concrete projects have explicitly been put forward as candidate PPP projects.

¹⁷ Source: World Bank, Commercial Agriculture and Value Chain Management Project, *Project Information Document* (2014) and *Implementation Status & Results* report (October 2014).

Next steps

The next steps are:

- selection of agricultural development projects sector that will be pursued as PPPs;
- undertaking of a feasibility study.

In the selection step the PPP eligibility of the candidate projects must be verified.¹⁸ A distinction must be made between PPP and non-PPP PSP projects as explained above.

The objective of the feasibility study is to complete the feasibility assessment already performed by the CPCU (if any) and to address specific PPP issues (VfM assessment, structuring of PPP and development of the heads of terms of the PPP agreement).

3.5 Electricity generation

Analysis

In 2014 the power sector in The Gambia experienced some important changes.

- The import of fuel has been liberalized in May 2014. The fuel import monopoly of Gam Petroleum has been terminated. This has eliminated one of the risks for potential private investors or operators of generation plants based on diesel fuel. They are now able to set up their own supply network, and are not dependent on the supply of fuel by Gam Petroleum.
- Independent Power Producer (IPP) Global Electric Group (GEG) has handed Brikama Power Station over to the National Water and Electricity Company (NAWEC), apparently without a transfer price. This means that NAWEC is now the sole generator of electricity in The Gambia, apart from a few, small wind power projects run by independent producers (the Tanji Wind Park of GAMWINDS and the Batakunku Wind Energy Project).

These developments have not changed, however, the key problems and challenges of the electricity sector in The Gambia. The findings of the first mission in 2012-2013 remain valid.

- Effective generation capacity is far below demand, resulting in frequent load shedding. In the Greater Banjul Area (GBA) power outages averaged 4-5 hours a day in 2013 and 2014. The first half of 2014 saw a worsening performance, with power failures reaching an average of more than 7 hours a day in June.
- Only half about of installed capacity is effectively available. The rest of the capacity is shut down for maintenance or out of order due to mechanical problems.

¹⁸ For instance by using the PPP screening tool in the PPP Operational Guidelines that have been drafted in the course of the present assignment..

- Most of the generation capacity consists of small diesel generators (3-10 MW) running on heavy fuel oil. Such units have many moving parts and are vulnerable to breakdowns.
- NAWEC's revenues are running structurally below costs. This problem is exacerbated by the payment arrears by customers (mainly large customers, as small consumers are increasingly connected by pre-paid meters). As a result the company has accumulated a large debt, and has insufficient financial resources to fund repair and maintenance costs.

There are different opinions on the causes and remedies of the problems of the electricity sector in The Gambia.

The management of **NAWEC** regards the generation gap (which they estimate at 20-25 MW) as the key problem. NAWEC therefore proposes to organize a tender for the installation and operation of generation capacity of 30-35 MW by an IPP. The company claims that there is substantial interest from the private sector for such a project. It has submitted a proposal for the organization of such a tender to the Ministry of Finance and GIEPA.

NAWEC asserts that the grid is capable of accommodating an extra load of 60% compared to the present, and is therefore capable of absorbing the additional capacity. The further rehabilitation and expansion of the distribution system should be accomplished with the help of grants, while PPP financing must be directed to generation.

The financial viability of an IPP is impeded by the large revenue risks (such as payment arrears, incomplete pass-through of fuel costs in electricity prices,...). NAWEC is therefore prepared to consider the possibility of direct sales by the IPP to blue-chip customers, so that the revenue risks of the IPP are reduced. However, given the large importance of blue-chip customers (in number they only represent 5% of the customers, but they generate 60% of revenues) they would only accept direct sales in case of a large-scale greenfield project (50-60 MW of new capacity).

The Public Utilities Regulatory Authority (**PURA**) has a different view. The staff of PURA points out that in recent years the electricity tariffs have been increased substantially (recently by 26%), but that the production volume has nevertheless declined. PURA identifies the following two key problems of both the low reliability of electricity supply and the bad financial situation of NAWEC:

- payment arrears (especially by a number of large customers, since small consumers increasingly buy electricity with pre-paid meters);
- very low availability of the generation capacity, which PURA ascribes to bad operational management.¹⁹

¹⁹ A poignant example is Brikama Power Station II, consisting of a 9MW diesel generator. The purchase costs of US\$15 million was financed by a loan from the Islamic Development Bank (IDB) for the Brikama Power Supply Plant Project. The unit was commissioned in 2011, but only three years later it had to be put out of service due to damages. In the meantime the interests and repayments on the loan must be met, while the unit does not earn any revenues.

PURA proposes the following remedies:

- outsourcing of the generation activities through Operations and Management Contracts (covering the rehabilitation and operation of existing capacity);
- privatization of retail activities;
- focus of NAWEC on transmission and distribution;
- split of electricity, water and waste services within NAWEC in separate companies or autonomous units, which can be managed more efficiently.

According to PURA no additional capacity is needed at this moment. The installed capacity is sufficient to cover the present generation deficit, provided it is rehabilitated and properly run and maintained. PURA also perceives no motivation for further rate increases before the problems of low availability and arrear payments are addressed.

With more than 3000 hours sunshine per year²⁰ the climate in The Gambia is excellent for the production of solar energy. Hotels increasingly invest in solar boilers (for the production of hot water) and photovoltaic panels.²¹ The investment costs need to be recovered mainly from the savings in electricity taken from the grid or produced by on-site generators (in case of power failure). Photovoltaic panels can be connected to the grid on a net metering system. However, due to the frequent grid failures (on average more 4 hours a day, especially during the daytime) the revenues from the net metering system are much lower than the theoretical maximum. The storage of excess solar electricity in batteries is presently not financially viable. The cost of batteries is too high and the lifespan of batteries is much reduced by the hot climate. In a meeting with the Gambia Chamber of Commerce and Industry (GCCCI) a project proposal by private companies for the construction of a 20 MW solar farm was mentioned. However, no further details were provided.

Next steps

All segments of the electricity sector (generation, transmission and distribution and retail) are in principle eligible for PPP. During the mission only a number of generation projects have been identified and discussed, in particular:

- installation of new generation capacity of 30-35 MW under an IPP arrangement;
- solar farm of 20 MW;
- transfer of existing power stations run by NAWEC (Kotu, Brikama I and II) to a private operator, for instance under an O&M contract (which would also include the rehabilitation of the existing plant).

²⁰ www.gambia.co.uk/weather

²¹ Since hotels generate foreign currency revenues, they are presumably able to finance these investments with dollar or euro denominated loans at much lower interest rates than are charged for loans in dalasi.

The most concrete opportunity is the installation of new generation capacity, for which NAWEC has submitted a proposal to the Ministry of Finance and GIEPA. The team has not been able to review this proposal and cannot testify whether it offers a sufficiently solid base for the set-up of a fast-track PPP project. Before the launching of this project the following points need to be confirmed:

- the project offers the most cost-effective solution to increase generation capacity;
- the project is financially viable on the basis of user revenues, both for the IPP and for NAWEC (which will buy and distribute the electricity).

A first step is the examination of the proposal for the tender of new generation capacity under an IPP arrangement. If it can be confirmed that the project is based on realistic assumptions, and does not depend on conditions that are presently not satisfied (such as guarantees or a tariff reform), it can be put forward as a fast-track PPP project.

If, on the other hand, the viability of the project cannot be confirmed, then it is not possible at this time to select a fast-track PPP project in the electricity sector. Before the launching of new projects the main stakeholders (Ministry of Energy, NAWEC and PURA) must agree on a realistic and rational energy strategy, to be submitted to the Government for approval and confirmation. After the adoption of this strategy by the Government, the appropriate actions must be taken to create the framework for implementing the strategy. Only when this framework is in place, new investment projects - consistent with the framework - can be considered. Project initiatives like the solar farm would also be promoted by the presence of such a framework.

3.6 National Conference Centre

Analysis

The government of The Gambia has announced its candidacy to host the Islamic Summit in 2019. This requires the construction of a large-capacity national conference centre. Such a centre would generate additional benefits. It would be able to meet the own demand of the government for conference facilities so that the costs of renting private facilities can be avoided. It would also allow the Gambia to compete on the market for international business conferences and meetings as a diversification and extension of its tourism activities.

The government considers a public-private partnership to realize the project. In principle PPP is a suitable procurement method for a conference facility. The private sector is better able to mobilize the required expertise for the running of a conference centre, and to commercialise the facilities when they are not needed for government functions.

For PPP to be feasible, however, the commercial and financial viability of the project must first be clearly demonstrated.

Next step

The next step is a feasibility study to further define the scope of the project and assess its economic, commercial and financial feasibility. The feasibility study must examine, among other:

- the potential revenues from hosting the Islamic summit;
- the global market for large conference facilities;
- the costs and benefits for the government to own and operate its own conference facilities (compared to renting conference facilities on the private market).²²

²² In spite of the apparently high costs of the rent of conference facilities, the construction and operation of an own conference centre may turn out to be even more expensive, even if the facilities can be rented to private users when not needed for government purposes. A better alternative to reduce the costs of conference facilities is the joint (i.e. bundled requirements of all government entities) procurement of conference facilities through a competitive tender.

4 Conclusions

During the June and November 2014 missions of the research team ten potential PPP projects were identified and screened.

For most of these projects the feasibility study is still ongoing, or has not been started up yet. For one or two projects, one may assume that a feasibility study has been completed, but in those cases the research team has not been able to inspect a copy of the report. Consequently, for none of the ten projects the VfM analysis can proceed beyond the finding that the projects are in principle suitable for PPP. No conclusions with respect to the actual feasibility and desirability of PPP can be formulated at this point.

In addition, for none of the potential PPP projects that have been identified sufficient demand and cost information is available for a preliminary financial feasibility analysis on the basis of a financial model. Only for one project (O&M concession of the Trans-Gambia Bridge) a quick assessment on the basis of the available data nevertheless allows to conclude that implementation as a PPP is very likely to be viable.

Consequently, there is insufficient information to rank the projects in order of priority on the basis of their technical and financial feasibility and Value for Money. Only a ranking on the stage of project development is possible. This results in a distinction between three groups of projects (see below).

In fact we prefer not to rank the projects in terms of priority, but to focus on the next steps that need to be taken for each project. As pointed out earlier, all ten projects are in principle suitable for PPP. For nine of the ten projects further development and preparation is required before they can be procured and implemented, with a possible role for the PPP Directorate to assist in the evaluation of the VfM and the structuring of the optimal PPP arrangement. The allocation of the resources of the PPP Directorate must be determined by the government of The Gambia on the basis of its own development priorities.

In terms of development stage and readiness for implementation the projects can be divided into the following three groups.

Group 1: Implementation phase

The first group only comprises the GAMSWITCH project (national clearing system for electronic payments and transactions with Automated Teller Machines). A joint venture of the project partners has been established and tests of the system are running. However, the financial resources for a full roll-out of the system are lacking. In December 2014 the AfDB has conducted a project preparation mission to consult the stakeholders and update the project plans. The way forward will be determined on the basis of the findings of this mission.

Group 2: Feasibility study ongoing

The second group includes four projects for which the feasibility studies or other preparations for procurement are ongoing:

- Trans-Gambia bridge Operations and Maintenance contract;
- National Data Centre;
- electricity generation project;
- development of agricultural value chain.

In these projects the next step is the structuring of the PPP on the basis of the findings of the feasibility study (provided that PPP is concluded to be feasible and advantageous).

Group 3: Inception phase

For five projects feasibility studies have not yet been started up. They constitute the third group:

- road maintenance area concessions;
- bridge between Banjul and Barra;
- concession of ferry services;
- port terminal concession;
- national conference centre and national theatre.

For these projects the next steps are:

- formal decision to notify the project as a candidate PPP project;
- undertaking of a comprehensive feasibility study to demonstrate the technical and financial viability of the project and to assess the Value for Money of implementation as a PPP.



Republic Of The Gambia