

OVERVIEW OF BREAK-OUT SESSION 4 ON RISKS AND CHALLENGES ASSOCIATED WITH THE CONTRACTING, PROCUREMENT AND PROJECT PREPARATION

TIME	SESSION	PROPOSED
		PARTICIPANTS
08:45 -	World Café Style Infrastructure Case Studies	
10:30	Case Study 1: The Bumbuna Hydroelectric Project	Session guided by:
	Objective: to reflect on the challenges with which decision	Neil Cole
	makers are confronted when appraising, financing,	Peter Jonath
	implementing and monitoring infrastructure projects	Adil Ababou
	Case Study 2: The Maputo Port Concession	
	Objective: highlight challenges that affected decisions in the	
	areas of appraisal, financing, implementation and monitoring	
	over the life of the projects	
	Schedule:	
	Introduction: 15 minutes	
	Case Study 1: 30 minutes	
	Case Study 2: 30 minutes	
	Report back and Conclusion: 30 minutes	
	Total: 105 minutes	



Session 2: World Café Style Infrastructure Case Studies

Introduction (15 minutes to layout the case studies and approach):

In this session, you will be discussing two country case studies on infrastructure financing and implementation. You will be required to reflect on the challenges faced for two projects in Sierra Leone and Mozambique. These are real African country case-studies based on extensive documentation. The two case studies are:

- The Bumbuna Hydroelectric Project
- The Maputo Port Concession

The case-studies are about 2 pages long and are easy to read.

Process:

- The discussion will take place in a World Café style. This entails that you will be provided 10 minutes to read the of the first case-study that has been placed on your table and then for 20 minutes to discuss with your group. Each group will then be asked to rotate to another table for a different case-study.
- The World café will end after two case-study sessions of 30 minutes each have been completed.
- A facilitator has already been assigned to each table to guide the discussion as well as recording the key areas of discussion. The facilitator will remain at the assigned table to guide the next group.
- The groups will be split into English and French language groups.
- A report back session of 30 minutes is planned. The facilitators will take notes and post the findings on the walls.
- Time-keeper will indicate when it's time to move onto the next case study.



Support and Guidance - English Group

Neil Cole

Peter John Jonath

Alta Folscher

Support and Guidance - French Group

Adil Ababou

Ludovic Froget



CASE STUDY 1: The Bumbuna Hydroelectric Project, Sierra Leone¹

Background:

The Bumbuna Hydroelectric project involved the construction of a 50 mega-watt hydropower station on the Seli river at Bumbuna, 200km north east of Sierra Leone capital city, Freetown. The project also includes the building of a dam and a transmission line.

Low electricity production is one of the main impediments to growth in Sierra Leone and it was estimated that, in 2005, only 5percent of the country's population had access to electricity.

An initial feasibility study was carried out in 1972-73. A further feasibility study was conducted in 1978 by a Consortium led by Studio Pietrangeli, and was completed and endorsed by the Government of Sierra Leone (GoSL) and the World Bank (WB) in 1980. In 1983, documentation for a WB-funded tender process was prepared. The project entailed several contracts:

- A0: the construction of the permanent and resident engineers camp
- A1: preliminary works.
- A2: Civil works.
- B: Hydraulic steel structures
- C: Electromechanical equipment
- D: Transmission line and sub-station.

In the meantime, Salini, an Italian construction firm, brokered a separate deal between GoSL and the Italian government making it the head contractor of the project. The Italian government provided a US\$20 million loan to the GoSL for contracts A0 and A1 through a sole source contract. This led some donors to withdraw their support for the project.

Even after asking for a scaled down version of the project from Studio Petrangeli, the WB declared in 1985 that, owing to the poor economic conditions, the entire project should be abandoned. Nevertheless, the project continued under Italian funding with Salini (contracts A0 to A2) and, in 1988, the Italian government ratified a financing agreement for US\$112 million, subject to funding

¹ This case is largely inspired from the December 2009 CABRI Dialogue "Ensuring Value for Money in Infrastructure Projects" case 6 written by Matthew Smith for CABRI.



being found for contract C.

However, due to the exhaustion of funds, contracts A2 and B were suspended until a further \$US23.5 million funding from the African Development Bank (AfDB) was found. This allowed the work to resume and contract C to start. Construction continued until 1997 when the project was 85 percent complete and most of the plant equipment was on site.

The civil war put a stop to the project from 1997 to 2002 and the installation suffered from damage, including stolen cables and vandalized pylons. It was not until 2005 that Salini was re-mobilized after a new contract addendum was issued to allow them to complete the works under contracts A2, B and C.

In 2006, good progress was made on Contracts A2, B and C. Following additional funding from OPEC in 2006 for US\$ 10 million, Contract D was signed in December of that year with Sae Powerlines who repaired and replaced the transmission lines. This work was completed in April 2009.

However, financing started to dry up for Salini in 2007 which suspended its work on contracts A2, B and C. In fact, Salini argued that the Sierra Leone Government owed them US\$38 million in unpaid invoices plus US\$6 million interest that stemmed from work completed in the 1990s. Yet, Salini considered taking a \$US38 million loan from a commercial Italian bank with a partial guarantee from the World Bank. However, the deal fell through due to the high-level interest rates charged by the bank.

After the election of a new government in Sierra Leone in September 2007, donors agreed to pledge US\$35 million, in loans and grants, to the Sierra Leonese Government which allowed work to resume on the project and, in September 2009, electricity was first generated resulting in the project being commissioned in November 2009.

To operate the plant the Bumbuna Hydro Power Agency (BHPA) needed to rely on an external operator. After issuing a tender, Salini was the only company to submit an expression of interest. In this situation, there seemed to be little option for another operator.

The Case:

You are the officer looking after infrastructure financing in the Ministry of Finance. You have been



asked at several points in the three decade-long history of the Bumbuna Hydroelectric Project by the Minister of Finance to provide advice on the project financing, appraisal and implementation. Key questions have been:

- 1. Should the GoSL have accepted a bilateral arrangement with the government of Italy if this meant that an Italian company would probably be chosen as the head contractor to undertake the works? And as such cause other donors to became reluctant to get involved? What type of risk was faced by the project in this instance and how could it have been avoided?
- 2. Can an infrastructure project start without all the required financing in place prior to commencement? What were the risks the GoSL faced when they went ahead with the project in the 1980s and how could they have been mitigated against these risks?
- 3. What are the advantages and disadvantages of the government contracting the main constructor of the project to also operate the plant going forward? Given the specific circumstances, what are the risks it faces and how can it now manage these risks?



CASE STUDY 2: The Maputo Port Concession², Mozambique³

Background:

Improvement of transport infrastructure is of vital importance for the economic development of the Southern African Development Community (SADC) where many countries are landlocked and would benefit from linkages with ports in Mozambique and South Africa. Ports in SADC are linked by the Regional Trunk Road Network and the Inter-Regional Railway Network. These networks were integrated into "development corridors" which recognized the interdependence of transports in the region.

The Maputo Development Corridor (MDC) links the Port of Maputo with South Africa and comprises road, rail, border posts, port and terminal facilities. It is considered a success story. Further infrastructure projects associated with the MDC were identified, including the upgrading of the Maputo Port.

Currently no Public Private Partnership PPP legislation exists in Mozambique. Under the current legislation, there is nothing obliging the conceding authority or concessionaire to fulfil their commitment – such provision should be covered in each concession agreement. Additionally, a principle underpinning the approach for 'development corridors' is that private sector resources should be mobilized as much as possible, especially where there is an expected commercial return.

The port authority responsibilities are with the state-owned entity Ports e Caminhos de Ferros de Mozambique (CFM). CFM was restructured in the 1990s and adopted a shareholder structure that includes the private sector, which portions the risks and costs of the enterprise, as well as the profits.

Mozambique is a pioneer in PPP arrangements and the Maputo Port Concession (MPC) is the first port project of its type in Africa based on a PPP model. Nevertheless, the Mozambican government always remain a significant shareholder in all its concessions.

² A concession is defined as the right to use a property for a specified purpose, granted by a government, company, or other controlling body.

³ This case is largely inspired from the December 2009 CABRI Dialogue "Ensuring Value for Money in Infrastructure Projects" case 5 written by Clara Picanyol for CABRI.



The MPC partnership agreement grants a concession to finance, rehabilitate, operate, and upgrade the ports of Maputo and Matola, with the option to extend for another 10 years. The capital value of the project was estimated at US\$70 million.

The government launched an international bidding process in 1997. Whereas three consortiums passed the technical threshold, the one led by Merseyside Docks obtained the highest technical score. Negotiation involving the Ministry of finance concluded in 2000 and financial closure was reached in 2003. When operations started, the consortium controlled 51percent of the shares. The concession agreement set out certain conditions that needed to be met at given dates ensuring that all parties met their obligations – including upgrading the railway line. The agreement also gave the concessionaire leeway to formulate the port tariffs based on the market, investment needs and future port developments.

The consortium faced challenges early on as the performance of the MPC depended heavily on the development of complementary roads and railways infrastructure, which failed to materialize. Therefore, the MPC was not able to pay rental fees and failed to declare dividends because of the slow progress in completion of the railway refurbishment. As part of the concession agreement, "fixed fees" were postponed for a period. MPC was making losses in 2006.

Because of these difficulties, negotiations for new shareholders started in December 2007 and the transition period lasted three months, when Grindrod (South Africa), Dubai Ports World (DPW) and Mozambique Gestores entered as new shareholders. Management continued as before.

The Case:

It is now six years since the MDC started its operations in 2003. In this period, there has been a change of private shareholders in the consortium after a difficult start. While the concession is currently on track, the Mozambican government is eager to learn from the project and avoid problems in future.

You have just been appointed jointly by the Ministry of Finance and the Ministry of Transport and Communication to assess the implementation of the concession. The two ministries would your advice on how the problems encountered in the project could have been avoided and what were



the key issues that should be monitored going forward. The key questions are:

- 1. What are some measure that the government could have done to reduce the risk associated with the difficulties encountered in the negotiations of the financial closure of the agreement? Issues you may want to consider are:
 - a. What part of the project cycle is to blame for the problems, project identification and development, appraisal, project financing and contracting or were the problems inherently part of poor implementation arrangements? What are the implications for future concessions?
 - b. Was the government's approach to single out one consortium at the time it did for negotiation and closure the right one? How else could it have been approached?
- 2. What are the main implementation risk factors and implications in the current management? How are they being mitigated? Annex 1 contains a checklist of risks involved in port reforms and development to assist you in your assessment. Note that all the risks listed do not apply to project implementation. You need to identify the risks that apply and with whom they rest in the current arrangement. How can government's risks be mitigated?



Annex 1: RISK CHECKLIST⁴

PRINCIPAL RISKS IN A PORT PROJECT

I. COUNTRY RISK

Government / administration

- Stability
- Reputation (negotiations, administrative inefficiency)
- Links established
- Concessioning authority
- => Political risk: low, medium, high

Currency

- Revenue in foreign currency?
- Revenue in local currency?
- Stability of local currency over last few years
- Convertibility of local currency
- => Exchange risk: low, medium, high

Social

- Does the operation induce a major reduction in personnel?
- If so, is a redundancy scheme planned?, funded?, by whom?
- Must a proportion of local personnel be taken on?
- Qualification of local labour?
- => Social risk: low, medium, high

Taxation

- Level of knowledge
- Profits tax?
- Sales tax?
- Withholding on dividends or intra-group transactions?
- Stability of fiscal system
- ⇒ Tax risk: low, medium, high

II.TRAFFIC RISK

A. MARKET

Activity

- Traffic established?: stable; sharp fluctuations; steady growth
- New traffic

Growth factor

- General economic activity
- Sector/domain activity
- Acquisition of market share

Previous quality of service

- Non-existent

⁴ World Bank, 2007. Port Reform Toolkit



- Poor/fair/good
- => Prediction reliability: poor/fair/good

Customers

- Identified major customers
- "Atomised" market
- Competition/captive traffic
- Present situation
- Competitor terminal in port?
- Competitor terminal in country?
- Competitor corridors?
- Traffic volatile or stable?
- Future situation
- Contractual guarantee of exclusivity?
- Entry barriers?
- => Risk of changes: low/medium/high
- => Risk of competition: low/medium/high

B. OBLIGATIONS

Public service obligations

- Technical
- Minimum capacity
- Performance standards

Tariffs

- Free rates
- Price cap
- Escalation formulas
- Exemptions?

Fee payable to concessioning authority

- Up-front fee?
- Fixed annual part: fixed amount; judgement criterion?
- Variable annual part: fixed amount; judgement criterion?
- Concessioning authority subsidy
- Investment
- Fixed annual part: fixed amount? judgement criterion?
- Variable annual part?
- Guaranteed traffic? cost + fee?

C.GUARANTEES

Extra-franchise port services

- What port services do customers require?
- Who is in charge? (the concessionaire, public or private Port Authority, potential problem)
- Level of service guaranteed?
- Level of service satisfactory?



- Price levels satisfactory?
- Operating hours for services
- Degree of sensitivity to inspection customs veterinary and phyto sanitary other

Vessel waiting time

Priorities granted

Land transport

- What modes of transport are used for traffic?
- For each mode:
 - capacity of operators
 - quality of service of operator(s) (time taken, security, etc.)
 - obstacles to the work of these operators (regulatory, political, etc.)

III. PROJECT RISKS

- Investment Amount
- Dredging
- Infrastructures
- Buildings
- Facilities
- Missions
- Design
- Construction /installation
- Rehabilitation / repair
- Maintenance (infra, super, dredging)
- Operation
- Security
- Obligations relating to investments
- Functional specifications
- Technical specifications
- Functional specifications related to a threshold (future subject)
- Information supplied and technical specifications imposed
- Investigation campaigns
- Contractual information?
- Preliminary Design
- Detailed Design
- Work and supply contracts
- Concessionaire-employer
- Approval of concessioning authority required?
- Call for tenders obligatory? Thresholds?
- Maintenance standards imposed?
- Construction period/Commissioning date
- Under-estimated
- Penalty level



- Operation
- Public suppliers (water, electricity, etc.)
- Safety rules
- Sub-contracting authorized/approval

IV. CONTRACTUAL RISKS

- Status of project company
- State or concessioning authority has blocking minority interest?
- Proportion of capital reserved for local investors?
- Contracts with third parties
- What contracts taken over by concessionaire?
- Concessioning authority's approval required for signature of new contracts?

Bonds

- Nature of bonds
- Amount
- Call conditions

Consequences of legislative regulatory changes

- Borne by concessioning authority
- Borne by concessionaire or not specified
- Possibilities for recourse

Contract revision

- Instigation of concessioning authority
- Instigation of concessionaire
- No provision

Force majeure

- Causes
- Procedures

Early termination

- Concessioning authority's request: causes; procedures.
- Concessionaire's request: causes; procedures.

Disputes

- Possibilities for claim
- Contract law
- Arbitration clause

V. FINANCIAL ASPECTS

- Franchise period
- Project IRR over this period
- Payback period

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VI.TENDER ASSESSMENT CRITERIA

- Preselection
- Technical assessment
- Financial assessment