Working Together

Assessing Public–Private Partnerships in Africa

Peter Farlam

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# Table of Contents

**Executive Summary**  
**Putting Partnerships Together**  
**Case Studies**  
- **Transport**  
  - Case Study 1: N4 Toll Road from South Africa to Mozambique  
  - Case Study 2: Maputo Port  
- **Prisons**  
  - Case Study 3: Prison Contracts in South Africa  
- **Telecommunications**  
  - Case Study 4: Competition in the Ugandan Telecommunications Sector  
- **Water and Sanitation**  
  - Case Study 5: Water Provision in the Dolphin Coast/Ilembe District Municipality  
- **Power**  
  - Case Study 6: Multi-Utility Provision in Gabon  
  - Case Study 7: Graft Taints Power Purchasing Agreement in Tanzania  
- **Eco-tourism**  
  - Case Study 8: Eco-tourism Concession in South Africa’s Kruger National Park  

**Lessons Learned**  
- Politics Matters  
- Pricing is Fundamental  
- Corruption Destroys Partnerships  
- Risk Transfer/Risk Management  
- Providing a Range of Service Options  
- Local Economic Empowerment  
- Regulating the Private Sector, Enforcing Contracts  
- Building the Capacity of the Public and Private Sectors  

**Conclusion**  

**Appendix 1: PPP Project Cycle**
### Selected Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
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<tbody>
<tr>
<td>AIDC</td>
<td>Alternative Information and Development Centre</td>
</tr>
<tr>
<td>APOPS</td>
<td>Asset Procurement and Operating Partnership Systems (South African Department of Public Works)</td>
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<td>BEE</td>
<td>Black Economic Empowerment</td>
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<tr>
<td>BODC</td>
<td>Borough of Dolphin Coast</td>
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<td>BOT</td>
<td>Build-Operate-Transfer</td>
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<tr>
<td>DBSA</td>
<td>Development Bank of Southern Africa</td>
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<td>DCS</td>
<td>Department of Correctional Services (South Africa)</td>
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<td>DFI</td>
<td>Development Finance Institution</td>
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<tr>
<td>IPP</td>
<td>Independent Power Producer</td>
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<td>IPTL</td>
<td>Independent Power Tanzania Limited</td>
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<td>ICT</td>
<td>Information and Communication Technologies</td>
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<tr>
<td>InWent</td>
<td>Capacity Building International, Germany</td>
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<td>MDC</td>
<td>Maputo Development Corridor.</td>
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<tr>
<td>MIIU</td>
<td>Municipal Infrastructure Investment Unit</td>
</tr>
<tr>
<td>MRLGH</td>
<td>Ministry of Regional and Local Government and Housing (Namibia)</td>
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<td>MSP</td>
<td>Municipal Service Partnership</td>
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<tr>
<td>MTEF</td>
<td>Medium-Term Expenditure Framework</td>
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<td>Nepad</td>
<td>New Partnership for Africa’s Development</td>
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<tr>
<td>NIIP</td>
<td>National Institute for Economic Policy</td>
</tr>
<tr>
<td>PDG</td>
<td>Palmer Development Group</td>
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<tr>
<td>PPA</td>
<td>Power Purchasing Agreement</td>
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<td>PPIAF</td>
<td>Public-Private Infrastructure Advisory Facility</td>
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<tr>
<td>PSC</td>
<td>Public Sector Comparator</td>
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<tr>
<td>PSI</td>
<td>Public Services International</td>
</tr>
<tr>
<td>PPP</td>
<td>Public-Private Partnership</td>
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<tr>
<td>SANParks</td>
<td>South African National Parks</td>
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<tr>
<td>SEEG</td>
<td>Société d’Énergie et d’Eau du Gabon</td>
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<tr>
<td>SOE</td>
<td>State-owned enterprise</td>
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<tr>
<td>SWC</td>
<td>Siza Water Company</td>
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<tr>
<td>THA</td>
<td>Tanzania Harbours Authority</td>
</tr>
<tr>
<td>TICTS</td>
<td>Tanzania International Container Terminal</td>
</tr>
<tr>
<td>TRAC</td>
<td>Trans African Concessions</td>
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<tr>
<td>WSS</td>
<td>Water and Sanitation Services</td>
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</table>
Executive Summary

Governments are looking to public-private partnerships (PPPs) to radically improve infrastructure networks in their countries and enhance service delivery to their people. They are hoping that this development finance model — where the state shares risk and responsibility with private firms but ultimately retains control of assets — will improve services, while avoiding some of the pitfalls of privatisation: unemployment, higher prices and corruption.

In theory, PPPs may have the potential to solve sub-Saharan Africa’s profound infrastructure and service backlogs, where nearly 600 million people lack access to electricity, almost 300 million have no access to safe water\(^1\) and there are just eight telephones (either mobile or fixed line) per 100 inhabitants.\(^2\) But as this report shows, the record of PPPs in Africa over the last 15 years is mixed, the process is complex, and governments should not expect PPPs to be a ‘magic bullet’.

PPPs potentially bring the efficiency of business to public service delivery and avoid the politically contentious aspects of full privatisation. PPPs allow governments to retain ownership while contracting the private sector to perform a specific function such as building, maintaining and operating infrastructure like roads and ports, or providing basic services like water and electricity. Both sides stand to benefit from the contractual agreement. Government earns revenue by leasing state-owned assets or alternatively pays the private sector for improved infrastructure and better service delivery. Often the private sector can do the job more efficiently, which can lower prices and improve rollout. The private operator gets reimbursed either by government or consumers for doing its work, at a profit.

But there are several negatives as well. The private sector is not always more efficient and the service provision is often more expensive to the consumer. Big government contracts are complex and demanding and

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\(^2\) International Telecommunication Union website, www.itu.int
prone to abuse by unscrupulous individuals, firms or politicians, unless controlled by disciplined, highly transparent procedures.

This review of PPPs suggests that, above all, governments must fundamentally improve their systems for dealing with the private sector to realise the efficiency and effectiveness gains that these partnerships promise.

The eight case studies in this report (which draw lessons from PPPs in toll roads, ports, prisons, telecommunications, eco-tourism and water and electricity provision) show that those partnerships that have been most successful in Africa have been characterised by thorough planning, good communication, strong commitment from both parties and effective monitoring, regulation and enforcement by government. The issue of pricing is crucial both to avoid political fall-out and to ensure the viability of the contract for business. Leaders need to talk openly with their citizens about their inability to continue to offer free, undervalued or heavily subsidised services, and their plans for holding the private sector accountable for providing these services. PPPs — like full privatisation and other forms of government tendering — are vulnerable to graft and governments need to effectively tackle corruption before they can hope to get such partnerships right. Countries entering into PPPs must recognise that they will require professional contract drafting and monitoring skills. States should first start with small PPPs, such as building and maintaining government offices, as Botswana is doing, to learn and develop the ability to work more effectively with larger PPPs.

The case studies suggest that PPPs are complex, demanding and time-consuming but that under the right conditions, and in the right sectors, they can offer significant benefits to government, the private sector and consumers. They have been generally more successful in sectors such as ports, telecommunications, transport and eco-tourism projects than power and water. But with the correct regulatory framework and strong political commitment, they do offer value for money to governments and good opportunities for investors. A recurring theme is that for PPPs to be successful, governments need to undertake thorough feasibility studies that address the issues of affordability, value for money and risk transfer.
Executive Summary

Recommendations for African governments and the private sector drawn from the case studies and the collective experience of successful and failed PPPs:

- Conduct a thorough *needs analysis* of infrastructure and basic services and consider all the options to meet these needs.
- Carry out a thorough *feasibility study* that:
  - compares public sector provision with private sector provision and that takes into account *affordability*, *value for money* and *risk transfer*;
  - considers the rate of return on equity acceptable to both parties;
  - uses accurate information in its calculations and projections;
  - avoids unnecessarily high design specifications;
  - considers all the financing options before committing to one model;
  - involves all the necessary stakeholders;
  - identifies all the *risks* of a particular project, allocates them to particular parties and devises risk mitigation strategies; and
  - requires treasury approvals at key stages of the project preparation process.
- Work out a *multi-year budget framework* to assess the affordability of projects for specific government institutions.
- Address the issue of *cost recovery* and how infrastructure is to be financed.
- Encourage *competition* to drive innovation and bring down prices.
- Build *effective regulation* by:
  - developing *transparent, credible and effective regulatory agencies* that are adapted to the specific needs of the country; and
  - in the absence of effective regulatory agencies, creating a department within the relevant ministry which is relatively independent and has sufficient resources.
- Provide *political guarantees* to investors where appropriate.
- *Develop capacity* at national, provincial and municipal level by:
Nepad Policy Focus

- sharing expertise and experiences with other governments and government departments;
- creating a PPP Unit in the Ministry of Finance, other relevant ministry or National Treasury to plan, negotiate, implement and monitor PPPs;
- establishing PPP Facilitation Units in national and regional development finance institutions (DFIs); and
- developing good transaction skills (legal, financial, negotiation and industry specific skills) in the relevant government institutions.

• Root out corruption by:
  - Implementing mechanisms to guarantee transparency at all stages in the tendering process. These mechanisms must include setting procurement specifications, open public hearings for major government contracts, and the final selection of contractors; and
  - Involving independent agencies such as Transparency International to oversee the bidding process and commit government institutions and private bidders to an integrity pact.

• Pre-empt public complaint and suspicion by:
  - preparing the ground for private sector participation by making structural reforms and raising tariffs to approach cost recovery levels (where appropriate);
  - communicating decisions around privatisation and PPPs to the public to build consensus and transparency;
  - providing policy clarity in the areas of free basic services in concession areas;
  - considering the extent to which a project or particular bidder will contribute to the local socio-economic environment; and
  - assessing the political commitment to a particular project from government institutions.

• Provide a range of service options by:
  - considering multi-utility provision in areas where cross-subsidisation makes economic sense and will lead to cost savings for consumers;
Executive Summary

– encouraging small-scale operators in underserved areas; and
– providing appropriate, affordable alternatives for poor and underserved consumers.

- Define the investment obligations of the private sector.
- Provide incentives and penalties for network extension (or lack thereof).
- Enter into management contracts with an emphasis on the transfer of skills to local staff.
- Form partnerships with experienced private operators with proven track records.
- Include criteria for partnership with and subcontracting of local firms in evaluating bids.
- Develop an approach for dealing with unsolicited bids.
- Consider all the labour issues and address the opposition from labour unions.
- Conduct country-specific reviews of the institutional and legal environment for PPPs.
Putting Partnerships Together

Peter Farlam

Before examining how the public and private sectors can best collaborate, it is important to define precisely what is meant by public-private partnerships.

South Africa has the greatest cumulative experience of public-private partnerships in Africa, with over 50 such partnerships in development or implementation at national or provincial level, and 300 projects at municipal level, since 1994. The South African National Treasury, the key ministry that approves these deals, has built on almost a decade of PPPs, and has developed a *PPP Manual* and *Standardised PPP Provisions* to guide all projects of this nature. This manual defines a PPP as:

a contract between a public sector institution and a private party, in which the private party assumes substantial financial, technical and operational risk in the design, financing, building and operation of a project.\(^4\)

The *PPP Manual* refers to two specific types of PPPs: where the private party performs a function usually carried out by government, such as providing water or maintaining a road; or where the private party acquires the use of state property for its own commercial purposes; or a hybrid of the two. Payment could involve the institution paying the private party for the delivery of the service; or the private party collecting fees or charges from users of the service; or a combination of these.\(^5\)

This partnership involves locking in long-term collaboration between both parties to share the costs, rewards and risks of projects — all the possibilities that things could go wrong — unlike the once-off transaction involved in public procurement (where government buys goods and services like offices, vehicles and computer maintenance) or full privatisation (where government sells assets to the private sector).

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\(^3\) PETER FARLAM is a researcher at the Nepad and Governance Project at the South African Institute of International Affairs.


### Table 1: PPPs explained

<table>
<thead>
<tr>
<th>Definition</th>
<th>Public procurement</th>
<th>PPP</th>
<th>Full privatisation</th>
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<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>Supply by the private sector of works, goods or service as defined by the public authority.</td>
<td>PPPs introduce private sector efficiencies into public service by means of a long-term contractual arrangement. They secure all or part of the public service, call upon private funding and private sector know-how.</td>
<td>Privatisation means transferring a public service or facility to the private sector, usually with ownership, for it to be managed in accordance with market forces and within a defined framework.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Main features</th>
<th>Contracting authority establishes clearly what is to be built, how and by what means.</th>
<th>Contracting authority establishes the specifications of a project and leaves to the private sector the responsibility of proposing the best solution, subject to certain requirements.</th>
<th>Privatisation authority prepares the divestment plan.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Invitations to tenders are accompanied by very detailed technical specifications regarding the type of work being procured.</td>
<td>Price is one of the many criteria in the evaluation of bids. A lot of emphasis is on the technical and financial capability of the bidder, financial arrangements proposed, and the reliability of technical solutions used.</td>
<td>Involves transfer of ownership to the private sector.</td>
</tr>
<tr>
<td></td>
<td>Price quote is the single most important criterion in the evaluation of bids.</td>
<td></td>
<td>Is generally a complex transaction with carefully designed contracts and a multi-stage competitive tender process.</td>
</tr>
<tr>
<td></td>
<td>The procurement process is short-term in nature and does not involve long-term occupancy of infrastructure assets, and thus does not lay emphasis on the operational phase of the project.</td>
<td>The long duration of the concession period, emphasis is on the arrangements proposed for the operational phase.</td>
<td>Generally, the public sector withdraws from management of the entity on privatisation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Almost all risks are borne by the private sector.</td>
</tr>
</tbody>
</table>

Source: SADC Banking Association
Table 1, (above) explores the differences between public procurement, PPPs and full privatisation more comprehensively.

As the table illustrates, the criteria used to choose the private partner for PPPs are more complex than just who offers the best price and who conforms to the technical specifications. PPPs emphasise the actual delivery phase of the project, such as the provision of water and sanitation services, or the operation and maintenance of a hospital. Under a simple tender, government bears the responsibility for specifying exactly what is needed. PPPs envision a more open relationship in which business is encouraged to propose alternatives rather than blindly providing what is demanded. The private operator will often need to design the best solution according to the government’s specifications, offer technical expertise and provide viable financial arrangements for the project, and to bear the associated operational risks.

In practice, privatisations of public utilities – particularly monopolies – usually occur within a regulatory environment that can impose detailed service and investment obligations, such as rollout schedules to rural areas or price caps for poor consumers. Many privatisations have run into controversy because governments failed to set up a strong regulator to control prices and to require companies to extend services in poor areas.

In response, many public utility deals are being recast as PPPs with much greater emphasis on defining precisely how prices can be changed and what services companies are required to provide in poor areas. In reality, privatisation and PPPs exist on a continuum defined by the extent of service obligations imposed, and ultimate ownership of assets. Theoretically, a full sale of state assets could achieve the same result as a PPP, if the sale agreement and regulatory rules are set up properly. For the purposes of this report, PPPs refer to those deals with a significant degree of collaboration and transfer of risk and service obligations to the private sector.

Various options transfer different degrees of risk. Table 2 (below) maps the key responsibilities for the public and private sector under the various types of private sector participation and Figure 1 provides a graphic illustration of the structure of a PPP deal.
**Nepad Policy Focus**

### Table 2: Responsibilities for the private and public sectors under forms of private sector participation

<table>
<thead>
<tr>
<th>Option*</th>
<th>Asset ownership</th>
<th>Operations &amp; maintenance</th>
<th>Capital investment</th>
<th>Commercial risk</th>
<th>Typical duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service contract</td>
<td>Public</td>
<td>Public and private</td>
<td>Public</td>
<td>Public</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Management contract</td>
<td>Public</td>
<td>Private</td>
<td>Public</td>
<td>Public</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Lease</td>
<td>Public</td>
<td>Private</td>
<td>Public</td>
<td>Shared</td>
<td>8-15 years</td>
</tr>
<tr>
<td>Concession</td>
<td>Public</td>
<td>Private</td>
<td>Private</td>
<td>Private</td>
<td>25-30 years</td>
</tr>
<tr>
<td>Build Operate Transfer</td>
<td>Public and private</td>
<td>Private</td>
<td>Private</td>
<td>Private</td>
<td>20-30 years</td>
</tr>
<tr>
<td>Divestiture</td>
<td>Private or Public and private</td>
<td>Private</td>
<td>Private</td>
<td>Private</td>
<td>Indefinite (may be limited by licence)</td>
</tr>
</tbody>
</table>

* Under a service contract, a private firm is appointed by government to provide various services and both parties take responsibility for operations and maintenance. Under a management contract, the private operator provides managerial services and bears operational responsibility. A lease contract allows the private operator to use government property for a specified period of time and rent. Under a concession agreement, the government specifies the rules under which the company can operate locally.


Governments choose forms of privatisation for infrastructure and service delivery for four main reasons: the **fiscal benefits** — from the sale or lease of state-owned enterprises (SOEs) including reduced subsidies to these often loss-making entities, or new investments government cannot afford to provide on its own; the **efficiency gains** of the private sector, which can lead to lower prices and improved access by more of the population; the **development of local financial markets**; and **increased private sector development** (which includes broadening local participation in the economy). In addition, privatisation is often an aid conditionality of donor agencies for developing countries.

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But the supposed efficiency gains and the fiscal benefits of public-private partnerships cannot be taken for granted, and must be carefully thought through by governments. Peter Dwyer from the Alternative Information and Development Centre (AIDC) argues that justifications for privatisation worldwide are based on a generalisation of the stereotype of ‘public sector bad, private sector good’:  

Business and government argue that the private sector bristles with dynamism, creativity and in a word, entrepreneurialism, unlike the ‘corrupt’, ‘lazy’, ‘strike prone’ workers in the public sector. ... Moreover, research from the UK, where PPP-PFI [Private Finance Initiative] was devised, shows that cost savings achieved by private companies taking over public services come through cutting the terms and conditions of staff employed in the services.  

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7 Telephonic interview, Peter Dwyer, AIDC, October 2004.
Dwyer says that privatisation ‘puts profits before people’ and is ‘one more way in which basic services are being commodified’. He argues that governments have a social and political obligation to provide basic services and that using the private sector is tantamount to ‘borrowing from a loan shark.’ Similarly, criticism of PPPs by the research unit of Public Services International (PSI), a worldwide confederation of public service trade unions, centres on issues of accountability and transparency, the erosion of workers’ rights, the undermining of the power of trade unions, and a general mistrust of private sector participation.

It is important to note that many such organisations argue that trying to separate PPPs from privatisation creates a distinction without a difference. They argue that the state is transferring responsibility to the private sector which changes previously-agreed-upon levels of service, price or employment.

Nevertheless, the consistent failure of African governments to provide adequate services to their people is well documented and not easily remedied. Governments simply lack the money and resources to maintain and extend existing infrastructure, and they also lack the incentive to do so. Afeikhena Jerome from the Johannesburg-based National Institute for Economic Policy (NIEP) lists a number of reasons that government-owned utilities fail to provide adequate services:

- under-pricing;
- low productivity;
- poor service quality;
- long queues and large portions of the population without access to basic services;
- lack of transparency;
- and damaging political interference in the operations of these infrastructure entities.

Clive Harris, senior Private Sector Development specialist in the Private Sector Advisory Services Department at the World Bank, explains the move to greater private participation in publicly-owned utilities in developing countries by pointing out that these entities had largely ‘failed by the 1990s in their attempts to provide critical infrastructure services to

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9 Interview, Peter Dwyer, AIDC, October 2004
Case Studies

their citizens ... Chronic inefficiency, poor pricing policies, and corruption meant that these companies could not provide adequate services to existing consumers, let alone consider expanding services’.\textsuperscript{11} Part of the problem with public utilities was that governments ‘succumbed to populist pressures to hold prices below costs, notwithstanding that the beneficiaries of these subsidies were usually not the poor’. The inability of governments to meet the basic demands of consumers created ‘black markets for connections, and the opportunity for employees and government officials to solicit bribes to move customers to the head of the queue.’\textsuperscript{12}

A 1993 report on the Nigerian electricity sector noted:\textsuperscript{13}

All of the major, government-owned domestic energy facilities ... are incurring huge financial losses ... causing major losses to the economy as a whole through frequent supply interruptions. At the core of the poor performance of these enterprises are inappropriate investment strategies ... politically motivated interference by the government in enterprise management; grossly inadequate, regulated prices for outputs ...; poor enterprise management; lack of maintenance and poor operational practices; inadequate compensation levels for mid-level staff; and government-mandated, gross over-staffing.

Alternatives to private-sector involvement have been tried. Some countries have tried to ‘corporatise’ public utilities – that is make them behave like private corporations – by ending subsidies, imposing

\begin{footnotesize}
\begin{enumerate}
\item Ibid.
\item Energy Sector Management Assistance Programme (ESMAP) (1993), Harris \textit{op. cit.}
\end{enumerate}
\end{footnotesize}
professional boards and requiring performance contracts and formal performance contracts. These attempts have been ‘largely unsuccessful’, according to Harris, since governments ‘found it difficult to both impose financial discipline on, and give financial autonomy to, public enterprises, and they continued to give multiple policy objectives to managers of these companies.’

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14 Harris *op. cit.*, p.4. ‘Of 12 public enterprises from 6 countries subjected to performance contracts that were studied, only 3 saw improved performance; 3 enterprises actually performed worse than before the contract was introduced, and 6 saw performance unchanged.’
Case Studies

The eight case studies examined are a representative sample of the PPPs implemented in Africa over the last decade, and explore some of the key issues raised by PPPs in various sectors: transport, telecommunications, water and sanitation, power, and eco-tourism.

Transport

In 1996 the governments of post-civil war Mozambique and post-apartheid South Africa developed the concept of the Maputo Development Corridor (MDC) to foster stronger transport and trade links between the two countries.\(^{15}\)

The MDC’s first projects were the N4 toll road from Witbank in South Africa to Maputo in Mozambique; the rehabilitation of Maputo Port; and the Ressano Garcia railway. Mozambique did not have the money to improve and maintain its portion of the N4 highway, or to rehabilitate the port and the railway line, which had been neglected and damaged in the country’s long civil war. The South African government also faced an accrued backlog for road infrastructure in 1997 of R37 billion.\(^{16}\) Both governments were thus in a ‘major quandary in attempting to maintain an efficient and well-maintained road system, particularly within spatial areas designated as potential development corridors’.\(^{17}\) The PPP approach was appealing because both governments faced fiscal constraints and could not finance this critical infrastructure without the private sector.

Case Study 1: N4 Toll Road from South Africa to Mozambique

In 1996 the governments of South Africa and Mozambique signed a 30-year concession for a private consortium, Trans African Concessions

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\(^{15}\) Ogunbiyi C, ‘PPPs: Fad or good for SADC?’, SADC PPP Pathway, SADC Banking Association PPP Capacity Building Programme Newsletter No. 1, July 2004.


\(^{17}\) Taylor I, op. cit., p.4
Nepad Policy Focus

(TRAC), to build and operate the N4 toll road from Witbank, South Africa to Maputo, Mozambique. After the 30-year period, control and management of the road reverts to the governments. The contract was worth R3 billion (at 1996 estimates).

The N4 was financed from 20% equity and 80% debt. The three construction companies who are the sponsors of the project contributed R331 million worth of equity with the rest of the capital provided by the SA Infrastructure Fund; Rand Merchant Bank Asset Management and five other investors. The debt investors include South Africa’s four major banks: ABSA, Nedcor, Standard Bank and First National Bank; the Development Bank of Southern Africa; and the Mine Employees and Officials Pension Funds. The governments of South Africa and Mozambique jointly and severally guarantee the debt of TRAC and, under certain conditions, guarantee the equity as well.

At the time it was the biggest project finance deal in Southern Africa. The N4 faced demand risk – would cars pay to use this road when less well-maintained but free alternative routes existed? Traffic volumes, which were dependent on increased regional trade and economic growth in Mozambique, have not been as high as the financers projected. But TRAC spokesperson Hannes van Wyk says the traffic has been ‘acceptable’ and the latest growth figures show that from 2003 to 2004, the traffic grew in volume by 4.5%. There was also considerable user payment risk in Mozambique as the poor communities were unable and unwilling to pay high toll fees. TRAC cross-subsidised the Mozambican portion of the road with higher revenues from the South African side. It also provided substantial discounts to local users and public transport on both sides of the border.

Lessons

• The commercial risk was shared between a range of partners.

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18 The sponsors of the N4 toll road were the construction companies Stocks and Stocks, Bouygues, and Basil Read.

19 A project finance deal shares the financial cost and the project’s risk among various partners through a combination of debt and equity (capital).

20 Telephonic interview, Hannes van Wyk, TRAC, October 2004; telephonic interview, Grant Stock, TRAC, January 2005.
Case Studies

• Cross-subsidisation (from the more affluent South African users) and substantial discounts for regular Mozambican users helped to reduce the user payment risk.
• The road facilitated further private sector investment in Mozambique, which in turn raised traffic volumes.

The N4 toll road showed the viability of PPPs in the road sector where the users are willing and able to pay. The N4 has successfully reduced overloading of heavy vehicles, a major cause of road deterioration.\textsuperscript{21} It has also facilitated the growth of tourism in the region as well as other sectoral investments in Mozambique such as the Mozal aluminium smelter and the natural gas plants at Pande and Temane. CEO of the South African National Road Agency, Nazir Alli, says the road has brought stability and peace to the region through improved infrastructure. ‘If you want to see the impact that it has had, just look at the massive development around Nelspruit in the past decade,’ he says.\textsuperscript{22}

Although the corridor met its objectives of financing needed infrastructure improvements and ensuring ongoing maintenance, it still attracted complaints. Academic Fredrik Söderbaum writes that in the MDC ‘there is hardly any emphasis on a people-centred development path, or how people in the corridor can contribute to development. Instead development is assumed to be created through the crowding in of global capital to mega-projects’.\textsuperscript{23} He says high transport costs along the toll road mean that small-scale traders and informal businesses and hawkers lose out to large-scale and organised traders and businesses, especially from South Africa’s rich industrial province of Gauteng. TRAC spokesperson

\textsuperscript{21} In 2003, ‘only 0.5 to 1% of all heavy vehicles were overloaded [on the N4] compared to the previous estimate of 15 to 20%’, reported Engineering News of 13 February 2004. A three-pronged overloading strategy on the South African portion of the N4 consists of 22-metre long weighbridges, mobile units which can be dispatched to any of 11 laybys on alternative routes, and a network of measuring points with weigh-in-motion equipment.

\textsuperscript{22} Telephonic interview, Nazir Alli, South African National Roads Agency, January 2005.

Hannes van Wyk counters this, saying that the states, the communities and the private sector have all benefited from having 504km of improved road, and local communities have gained through discounts, training and job creation. Some of the training has taken the form of life-skills education rather than job training, but the road itself has facilitated other business investments which have created further jobs.

Such criticisms don’t reflect on PPPs per se, but they underline an important political reality. Even when governments and business are satisfied with a PPP, and the government in question has a popular democratic mandate, PPPs still attract public complaint from some quarters. Private sector operators must be aware that governments tend to deflect public complaints about high fees to the concessionaire, making high prices their responsibility.

In other parts of Africa, private participation in road infrastructure has been more limited to road funds overseen by public-private boards, run independently of government and externally audited. They raise money from vehicle licences and user fees and contract road maintenance jobs out to private developers. Kenya is currently considering toll roads for the Kenyan sections of the Northern Corridor road but this has been beset by attempted corruption. (See ‘Corruption’ section)

Building on the successes of the N4 toll road, the next step in the MDC strategy was rehabilitating Maputo Port.

Case Study 2: Maputo Port

Using the example of the N4 toll road, the Mozambican national ports and rails authority CFM formed a joint venture with a private consortium

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24 The construction work on the road included 56km of new road in Mozambique, the total reconstruction of 120km, widening and rehabilitation of 46km and the rehabilitation of 198km.

25 Telephonic interview, Hannes van Wyk, TRAC, October 2004. The total number of temporary jobs created was 5,677 (worth R136 million) and 14,433 people received training (worth R11.4 million). See the South African National Road Agency’s 2002 Annual Report at www.nra.co.za.

led by the British Mersey Docks and Harbour Company, the UK’s second largest ports operator, for the 15-year concession to finance, rehabilitate, operate and upgrade the Port of Maputo.\textsuperscript{27} The private consortium took control of the port, which consists of the Maputo cargo terminals and the Matola bulk terminals, on 14 April 2003. The consortium, which owns 51\% of the Maputo Port Development Company (MPDC), includes Swedish construction company Skanska, Portuguese terminals operator Lisont and their Mozambican partner Gestores. The other 49\% of MPDC is held by the Mozambican government and CFM. Financiers for the project include Standard Corporate and Merchant Bank, the Development Bank of Southern Africa, the development finance companies of the Netherlands and Sweden as well as the Nordic Development Fund and Finland’s Finnfund.

The MPDC’s long-term objective is ‘to re-establish the ports of Maputo and Matola as key economic growth centres in Mozambique and as competitive transit ports for the vibrant import/export markets of South Africa, and the neighbouring countries of Swaziland, Zimbabwe, Botswana and Zambia’.\textsuperscript{28} Under the agreement, MPDC provides all marine services within the Maputo Bay Port jurisdiction area, including pilotage, tugs, line handling and dredging services. The concession includes the designated port areas for international shipping within Maputo as well as the coal terminal of Matola port. The consortium is investing $70 million as part of the rehabilitation and development of the port — which includes modernising quays and port equipment, supplying new tugs as well as transport connections by road and rail to neighbouring countries.

The concession has increased efficiency and handling volumes at the Maputo harbour from 4.3 million tonnes in 2002 to 5.54 million tonnes in 2004.\textsuperscript{29} MPDC commercial director Dick Moore says they plan to increase the total throughput to 20 million tonnes by year 18 of the concession (2020), and 80\% of this freight, which will be shared between road and rail, will be from South Africa. Paulo Franco, director of the port’s fresh

\textsuperscript{27} The concession is for 15 years, with a 10-year extension option.
\textsuperscript{28} Maputo Port Development Company website, www.portmaputo.com
\textsuperscript{29} The Matola bulk terminal, which handles coal, aluminium, grain and petroleum, currently accounts for 79\% of this total.
Nepad Policy Focus

produce terminal, said rehabilitation work on this terminal had significantly increased fruit export volumes. In October 2004 the fresh produce terminal at Maputo port reported a 25% year-on-year increase in the amount of first class citrus passing through the port.³⁰

A 15-year concession agreement to privatise the railway line from the South African border to the ports of Maputo and Matola was subsequently signed between CFM and a consortium led by New Limpopo Bridge Project Investments and the South African rail operator Spoornet.³¹ The joint venture company, the Ressano Garcia Railway Company, will invest approximately US$10 million to rehabilitate the line.

Lessons

- Defining the investment obligations of the consortium provided clarity for the public and private partners.
- The knowledge of the intricacies and requirements of project finance transactions that the Mozambican government gained in negotiating the port contract meant that it was easier and faster to conclude the rail deal.³²

As with the Port of Maputo, the concessioning of the international container terminal at Dar es Salaam port in Tanzania has seen an increase in profit for the local harbour authority, more efficient service at the port as well as other value for money benefits such as stimulation of the Tanzanian economy.³³ Actual revenue and profits for the first year of the concession exceeded the projections of the Tanzania Harbours Authority (THA) by 206% and 218% respectively.³⁴ The company also performed way above expectations in other areas … and has also introduced much

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³⁴ Tanzania case study, op. cit.
needed technology and upgraded staff capabilities and competencies’. A review by the SADC Banking Association, in a case study of the Tanzania International Container Terminal (TICTS), attributes the success of the container terminal to a range of factors including: Tanzania’s high performing economy; the market’s overall confidence in the operations of the TICTS and the port in general; improved security; investment in equipment of almost $7 million; and good management and well-trained staff.

**Prisons**

**Case Study 3: Prison Contracts in South Africa**

Facing a significant shortage of prison space, South Africa’s departments of Correctional Services and Public Works imported a model of privately-built and operated prisons from the UK and called for bids from the private sector for the design and construction of 11 maximum security prisons. In the course of the procurement, Correctional Services realised it had vastly underestimated the costs involved and revised the number down to four and then to two.

The South African government eventually signed two 25-year concessions for maximum security prisons in Bloemfontein and Louis Trichardt as part of its Department of Public Works’ Asset Procurement and Operating Partnership Systems (APOPS) in 2000. The two winning consortia, both of whom had more than 50% black shareholding and included foreign-based prison management companies among their shareholders, are responsible for designing, building, financing, operating and transferring the prisons. The facilities hold approximately 3,000 inmates each and were fully operational less than two years after contract signature at a cost of R1.7 billion/ $245 million (Bloemfontein) and R1.8 billion/ $259 million (Louis Trichardt) respectively.

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36 Ibid.
A review in 2002 by the National Treasury and the departments of Correctional Services (DCS) and Public Works found that the prisons provided significantly higher quality facilities and levels of service than the public prisons and that the operating costs per prisoner per day were comparable with those of the public sector prisons.\textsuperscript{38}

The review also found that the DCS design and operating specifications were too high and that proper feasibility studies were not conducted to establish the department’s affordability limits prior to procurement. The specifications were based on ideal prisons (in the UK) and included pneumatic doors, 12 hours of out-of-cell time daily for prisoners, extensive rehabilitation and recreation facilities, and high quality meals tailored to prisoners’ religious and health preferences.\textsuperscript{39} The review also found that the high base interest rates at the time of the deals (for the private operator) and ‘higher than normal return on equities, reflecting the perceived risk of early deals’ pushed up the long-term cost of the prisons to government.\textsuperscript{40} The two APOPS prisons alone will take up 5\% of Correctional Services’ entire budget for the next 25 years.\textsuperscript{41}

DCS National Commissioner Linda Mtini told a parliamentary portfolio committee in 2002 that renegotiations with the contractors over time would improve the value for money of the prisons.\textsuperscript{42}

Sue Lund, Senior Transaction Advisor at the South African National Treasury’s PPP Unit,\textsuperscript{43} says that the South African government learned a
great deal from the experience of the prisons contracts about what government needed to do in leveraging private finance for infrastructure projects. The government subsequently adopted a step-by-step process to PPPs, rigorously regulated by the Treasury. This sets out the progression from inception (requiring the appointment of a full time project officer and specialist transaction advisors), a feasibility study (which must obtain treasury approval), procurement (which is the actual negotiation and buy-in phase involving at least three treasury approvals), and contract management (which also entails treasury approvals if there are to be material amendments to the PPP agreement). The tests for the regulator at all phases are: affordability, value for money and appropriate risk transfer.

**Lessons**

- A thorough feasibility study would have clarified the affordability limits of the Department of Correctional Services at the start of the process.
- Experienced private sector operators can provide a better quality service at comparable rates to the public sector.
- Overly high specifications at the planning stage have cost implications.
- High base interest rates could have been avoided in favour of floating interest rates or CPI-linked interest rates.

**Telecommunications**

This sector has seen considerable investment by private companies in infrastructure in the past decade. Between 1990 and 2001, 39 sub-Saharan African countries introduced private participation in telecommunications which resulted in US$15.7 billion in new private investment. This sector has not been characterised by PPPs but rather by full or partial privatisation through the sale of shares, and by the liberalisation of the sector through the licensing of private cellular phone operators. These

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44 Interview, Sue Lund, Senior Transaction Advisor, National Treasury’s PPP Unit, Johannesburg, October 2004.
45 CPI, the Consumer Price Index, is the major indicator of inflation.
46 Jerome op. cit., p.10.
licences have allowed private sector operators into a sector traditionally dominated by one national operator.

In Africa the introduction of competition through the awarding of cellular telephone licences has seen the number of mobile subscribers easily overtake fixed-line subscribers. (At the end of 2003, Africa had 51.8 million mobile and 25.1 million fixed line subscribers; 37 countries had two or more cellular operators and 36 countries had a separate regulator.)

Uganda provides an example of the success of competition as the main means of expanding the rate of access to telephone services.

**Case study 4: Competition in the Ugandan Telecommunications Sector**

From 1993, Uganda transformed its telecommunications sector through a process of unbundling, liberalisation, privatisation and regulation. There are three major players in the Uganda telecommunications market — Celtel (granted a cellular licence in 1993), South Africa’s MTN (licensed as Uganda’s Second National Operator in 1998 but which has concentrated on the cellular market) and the Uganda Telecommunications Limited (UTL), which was partially privatised in February 2000 and launched its mobile service in January 2001. While Celtel is licensed to operate in the south-west of the country, MTN and UTL are national operators. The license contracts for MTN and UTL require the companies to provide full country coverage and meet roll-out targets for rural and urban areas (in addition to other criteria such as complying with price caps). Failure to meet expansion targets can result in penalties of up to 10% of gross revenues. In exchange for meeting these obligations, the two national operators have licence exclusivity (except for the services provided before MTN’s licence became effective, in particular Celtel’s mobile service) until July 2005.

In order to promote rural access to telephones, Internet and postal services, the government drew up a Rural Communications Development Policy and established a Rural Communications Development Fund (RCDF), which is financed currently by payment of 1% of gross revenue

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from the three operators. The Policy specifies the provision of ‘basic communication services to all sub-counties with at least 5,000 inhabitants by year 2005’. The regulator, the Uganda Communications Commission (UCC), is attempting to meet this target through the obligations in the licences of the major operators, but also through the licensing of Independent Area Operators in the areas most difficult to serve. These areas were identified in 2001 when MTN and UTL specified 154 sub-counties in the north and east of the country they did not intend to provide telephone service to by July 2002.49 These areas will require subsidy assistance of US$1 for every US$1 of private investment in ICT infrastructure and the World Bank estimated that achieving the UCC’s targets by the end of 2005 will require subsidies of US$5.8 million.50

One of the features of the government’s approach to telecommunications reform was that it allowed MTN to compete with other fixed line or mobile technology, instead of confining the operator to the use of one technology (as has happened in South Africa). The Ugandan government effectively allowed competition to drive the market within a clearly-defined regulatory framework. The competition between the three major operators has been intense since UTL launched its mobile service in 2001. The number of subscribers has grown at an exponential rate from a very low base — in 1998 there were only two subscribers per 1,000 people in Uganda; by 2003, this had increased to 32 per 1,000 inhabitants.51

**Lessons**

- The regulator effectively used financial incentives and competition to drive innovation, expand access and keep down prices.
- The government was able to ‘fill in the gaps’ by providing subsidy support for increased coverage.

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49 Put in perspective, this represents approximately 308 public payphones. MTN was required to roll out 89,600 subscriber lines and 2,000 public payphones and UTL, 100,000 subscriber lines and 3,000 public payphones nationally.


51 International Telecommunications Union, 2004. See the ITU’s ICT Indicators at [www.itu.int](http://www.itu.int). The average for the whole of Africa in 2003 was 86.5 telephones per 1,000 inhabitants.
Water and Sanitation

The involvement of the private sector in providing water, sanitation and electricity has been controversial. Constantine Ogunbiyi, a project finance associate at international legal firm Cadwalader, Wickersham and Taft, says that ‘PPPs have not had much success in Africa’s water sector’.\(^{52}\) Afeikhena Jerome from the Johannesburg-based National Institute for Economic Policy (NIEP) writes:\(^{53}\)

The existing case study evidence on the results of water privatisation presents a mixed picture with some improvements in the reliability and quality of services and population served, but instances of much higher water charges and bouts of public opposition leading to cancelled schemes.

World Bank research shows several cases where more people received basic services following private participation in water and sanitation provision in developing countries.\(^{54}\) One study points to an overall domestic welfare benefit of $23 million in Guinea and $1.4 billion in Buenos Aires, Argentina following private participation in water and sanitation;\(^{55}\) similar studies in Argentina show a drop in child mortality of up to 25% from waterborne diseases in peri-urban areas. A 2004 OECD report on privatisation in sub-Saharan Africa lists 11 water privatisation projects — in Burkina Faso, Central African Republic, Congo (Brazzaville), Côte d’Ivoire, Guinea, Mozambique, Senegal, South Africa and Uganda — and a further eight cancelled projects in Africa between 1988 and 2002.\(^{56}\)

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\(^{52}\) Ogunbiyi C, ‘PPPs: Fad or good for SADC?’, SADC PPP Pathway, SADC Banking Association PPP Capacity Building Programme Newsletter No. 1, July 2004.

\(^{53}\) Jerome op. cit. p.16.

\(^{54}\) Harris, op. cit., p.19.


\(^{56}\) Berthelemy et al., op. cit. The cancelled projects — in Gambia, Ghana, Guinea, Kenya, Mozambique, South Africa and Zimbabwe — were discontinued largely due to strained relations between investors and governments, or because of intense public opposition.
Case Studies

South Africa has had a number of PPPs in water and sanitation at the municipal level. Werner Zybrands, a consultant involved in municipal service partnerships (MSPs) in South Africa, says that while the early schemes in South Africa had ‘certain flaws and pitfalls’, such as a lack of performance guarantees and the absence of a pro-poor approach, they have improved the quality of service. Zybrands says that MSPs in the Eastern Cape, KwaZulu-Natal and Limpopo provinces have been ‘qualified successes’ and that the successful partnerships ‘were based on sound understanding between the contracting parties’ and a positive attitude to solve ‘what were often seen as insurmountable problems’.

Case study 5: Water Provision in the Dolphin Coast/Ilembe District Municipality

In South Africa’s KwaZulu-Natal province, the Borough of Dolphin Coast (BODC) signed a 30-year concession contract in 1999 with Siza Water Company (Siza), which is majority controlled by French multinational SAUR Services. Siza has Metropolitan Life and three local black empowerment partners as minority shareholders. The contract stipulated that Siza would oversee, manage and implement the provision of water and sanitation services (WSS) within the then BODC municipal boundary. As a result of South Africa’s local government demarcation and municipal restructuring process, the BODC municipality has subsequently been absorbed into a much larger structure, the Ilembe District Municipality, which has a population of approximately 560,000 people. The

57 South Africa’s Municipal Finance Management Act of 2003 provides for municipal PPPs, which also require Treasury recommendations on their feasibility. A municipal PPP law becomes effective on 1 March 2005.

58 Zybrands W, Municipal Service Partnerships: A Review of Selected Local Experiences. Paper presented at a IDEAS workshop on ‘PPP Evaluation’ at the DBSA, 18 October 2004. Performance guarantees are techniques and/or methods used to ensure that the contractor completes the job. In Queenstown the township was originally excluded from the terms of the water provision contract.

59 Zybrands, op. cit.

concession area, the former BODC, has a population of approximately 45,000 people and is a mix of extremes of wealth and poverty.

The BODC municipality chose the private sector for WSS provision in 1996 since ‘projections in developmental growth (both in terms of high income and low income residents), combined with the very poor state of existing bulk infrastructure, presented the BODC with a growing investment and management responsibility that it felt could best be met through seeking an alternative model.’\textsuperscript{61} The municipality was short of money to upgrade and expand services and lacked the experience to provide a comprehensive WSS service.

In 2005 the concession entered its sixth year and while WSS targets in the wealthier areas have been achieved, those in the poorer areas have not all been met. A study by the Palmer Development Group (PDG) said that communities have expressed considerable frustration at receiving a lower level of service than they expected. There are two levels of service: level 4 service comprises water-borne sewerage and indoor plumbing while level 2 service consists of ventilated improved latrines and community stand-pipes which operate using pre-paid water cards. Siza initially rolled out level 4 service to many houses, but non-payment by many households led to cut-offs and a reversion to level 2 service.

Siza found itself unable to pay its concession fees in 2001, partly because of a 20% increase in the cost of water charged by the bulk supplier, Umgeni Water. This led to a substantial adjustment to the contract by the municipality, including halving the annual concession fee to be paid to the municipality until 2006, reducing the investment commitments from the concessionaire to R10 million for the first five year period, and increasing prices for consumers.

Prices for level 4 customers have increased by 119\% from pre-concession levels and the volumetric water charge for level 2 users has risen by 80\%.\textsuperscript{62}

The PDG study found that ‘despite the problems encountered, in broad terms a case can be made that delivery is on track in terms of approved

\textsuperscript{61} Ibid., p.10.
\textsuperscript{62} Robbins, op. cit., p.30.
commitments’. The quality of the service has improved with regards to water loss, water purity, total number of leaks, the number of faulty meters and the number of maintenance actions carried out. An important difference between the water services offered by Siza and those of the Ilembe District Municipality is that Siza is obliged to make investments in maintaining and upgrading services while the municipality is only investing in extending services.

While Siza is not making a profit out of the concession, SAUR has apparently been getting a 21% return on its investment from the first year of the concession, which means SAUR appears to have secured better terms for itself than received by its partners in Siza. David Hemson from the Human Sciences Research Council says that small municipalities are no match for multinational corporations when it comes to negotiations. Notwithstanding the improvements in infrastructure and service delivery, there have been a number of criticisms levelled both at the concessionaire and the municipality in regulating it.

- In the first year after Siza took over, there were 140 cases of cholera in the area as a result of people drawing unhygienic water from streams rather than paying for treated water.
- The poor people in the area were not cushioned from the impact of tariff increases.
- In 2001, national government changed policy to give each family 6,000 litres of free water before service charges apply. However, this policy has not been applied to those on level 2 using prepaid meters, arguably the most needy customers; and poor level 4 customers, while getting the 6kl free, must still pay the basic monthly connection fee’.

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64 Telephonic interview, David Hemson, HSRC, November 2004. Hemson’s source was a KPMG regulator. According to Hemson, Siza borrowed R8 million from SAUR in 2001 as a one-off payment to the municipality for use of municipal infrastructure. This was put as an R8 million cost against Siza and the concessionaire is now operating free of service charges.
65 Ibid.
66 Robbins, op. cit., p.31.
The contract did not anticipate changes to municipal boundaries or high non-payment rates. As a result the deal would have collapsed if the municipality had not cushioned the concessionaire from failure.\(^{67}\)

**Lessons:**\(^{68}\)
- There is a need for water and sanitation authority capacity building at the municipal level to ensure better performance.
- More accurate information is required in the feasibility studies which form the basis of the concession, particularly with regard to data used in projections.
- Policy clarity is needed on issues such as free water and allocation of grants in concession areas, and contracts should specify what process should be followed in the event such terms change.
- Greater transparency on the part of the municipality and the private operator would lead to a greater level of trust and acceptance amongst consumers.
- Small water concessions are less commercially viable than larger ones as the private operator is less able to take advantage of economies of scale.
- Given the difficulties with the concession, a management contract with an emphasis on training up local staff to assume management of the water utility might have achieved better results with fewer price hikes to consumers.\(^{69}\)
- Some of SAUR’s initial investment of R7 million\(^{70}\) was used to pay for the black economic empowerment partners, which meant the concession required additional funds in the form of a loan from the DBSA for maintenance and upgrading of services.

This case study illustrates the difficulty of water concessions at the municipal level. David Hemson argues that more research is needed to

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68 See Robbins, pp.39-41 for a more complete list of lessons and recommendations.
69 Hemson says this kind of management contract is already happening in Johannesburg between Johannesburg Water and French water company Lyonnaise.
determine whether governments or private companies provide a better value-for-money service in the water and sanitation sector. Such research would need to do cost effectiveness analyses of alternate forms of delivery of the same service.\textsuperscript{71} For basic infrastructure projects to be a success, he says they need to have ‘good communications between communities and local government, an appropriate technology, effectively functioning councillors, and empowered communities’.\textsuperscript{72}

**Power**

The electricity sector ranked second (behind telecommunications) in investment and third in number of projects with regard to private sector activity in utility-related infrastructure in sub-Saharan Africa between 1990 and 2001.\textsuperscript{73} Twenty-two countries introduced private participation in electricity in that time and these countries awarded 29 stand-alone electricity projects as well as seven multi-utility projects involving water and electricity services.

**Case study 6: Multi-Utility Provision in Gabon**

In July 1997 Societe d’Energie et d’Eau du Gabon (SEEG), which is majority-owned by French multinational Vivendi Water, signed a 20-year concession contract with the government of Gabon for the provision of both water and electricity services. SEEG grew out of private municipal companies that provided water and electricity services in the two main urban centres, Libreville and Port-Gentil, which together have half the country’s total population of just over a million people. A report commissioned by the Public-Private Infrastructure Advisory Facility (PPIAF), a multi-donor technical assistance facility aimed at helping developing countries privatise their infrastructure, found that the


\textsuperscript{72} *Ibid.*

\textsuperscript{73} Jerome *op. cit.*, p.10.
concession has been a relative success and that this can be mainly attributed to strong political commitment on the part of the government.\textsuperscript{74}

The contract, which obligates SEEG to invest a minimum of $135 million in rehabilitation (60% in water), includes coverage targets for expanding service to previously unconnected rural areas. SEEG’s electricity business, particularly electricity revenues from the two main towns, cross-subsidise the less developed water business. Ten years of groundwork before the concession was signed saw tariffs increasing to levels reflecting costs, as well as staff reductions and the definition of a legal framework. Vivendi won the tender on the basis of a proposed 17.25% price reduction for water and electricity services. The PPIAF report says that the private operator has, in the first five years, ‘performed well in its existing service areas, often exceeding targets, but less progress has made in more isolated areas’. SEEG has ‘posted good profits since the start of its operations’, paying shareholders a 20% dividend per share in 2000. The coverage targets, with penalties for non-achievement, have ‘provided effective incentives for quickly increasing network density in newly-served areas’. The multi-utility service provision has allowed cost reduction through sharing of resources, particularly at headquarter level. Cross-subsidisation has also been effective in getting 60% of investments into the water sector, which only accounts for 15% of SEEG’s turnover.

\textit{Lessons:}\textsuperscript{75}

- There are benefits to a long process of preparation which includes major structural reforms.
- Transparency in the process is a major benefit.
- A transition period in the concession allows time for negotiating parts of the contract (but realistic deadlines are necessary and safeguards should be in place to allow contract regulation in the absence of a comprehensive agreement).
- Multi-utility provision allows cross-subsidisation of less profitable areas.

\textsuperscript{74} ‘Emerging Lessons in Private Provision of Infrastructure Services in Rural Areas: Water and Electricity Services in Gabon’, September 2002, report produced by Environmental Resources Management, London, for the World Bank/PPIAF.

\textsuperscript{75} Ibid., pp.56ff.
• A combined structure for water and electricity (in small systems) allows for efficiency in investment planning, operations and commercial activities through the sharing of offices and resources, and economies of scale.

• Granting exclusivity to the main operator may exclude small-scale operators who can contribute in terms of service expansion in specific areas.

• Defining investment obligations helps to limit the investment risk of the private operator.

• Regional coverage obligations with significant penalties can help to extend services in remote areas (but should not be too restrictive or complicated to assess).

• As the PPIAF report points out: ‘In small countries, a Ministerial department can adequately perform regulatory functions, provided it is shielded from political interference and has sufficient financial and human resources.’

Many developing countries are fundamentally reforming their power sectors by unbundling government utilities responsible for generating, transmitting and distributing electricity into separate entities or subsidiaries of generation, transmission, distribution and retailers. Such reforms in sub-Saharan Africa have been limited to the concessioning of utility management to private operators and the introduction of one or more independent power producers (IPP). While such projects have registered some encouraging results, too much emphasis has been placed on generation and too little on transmission and distribution problems.

Case study 7 illustrates this problem, as well as that of corruption, and the project has been labelled ‘public-private partnership at its worst’.

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76 Ibid., p.63.
77 Jerome op. cit., p.20.
78 Ibid. An independent power producer operates a generation plant and sells power to the government-owned utility. There were 19 major IPP projects in 9 sub-Saharan African countries as of August 2000.
79 Ibid.
Case Study 7: Graft Taints Power Purchasing Agreement in Tanzania

In 1995 the Tanzanian government’s state-owned electricity company Tanesco signed a power purchasing agreement with Independent Power Tanzania Limited (IPTL), a joint venture between a Malaysian company and a local investor for the purchase of 100MW of power from diesel generators for 20 years. The project has turned out to be a huge burden on the country’s economy. As Brian Cooksey from the Tanzanian chapter of Transparency International writes:

The deal was hotly contested by donors and consultants on the grounds of cost, the choice of technology, and the projected demand for power. After local and international legal wrangling the project was finally commissioned on January 15, 2002. During its first year of operation, IPTL has cost $40 million in capacity payments alone, and has functioned at less than 10% capacity. There has been a public outcry and hot parliamentary debates over IPTL, with evidence of corrupt payments to government officials.

What makes IPTL such a bad example of a PPP is not just the alleged corruption and high cost of electricity, but also that is was approved by two or three government officials without a proper feasibility study and without consulting the necessary stakeholders. If Tanesco had followed proper procedures, government would have found that the problem was not insufficient generating capacity but rather a lack of gridlines. Tanesco had already put into place strategies to ensure that there was enough electricity but is now being forced to buy electricity that it doesn’t need at a price that is too high. Consumers in Tanzania pay between seven and nine US cents per unit of electricity supplied by Tanesco but the electricity bought from IPTL is said to cost the state company over 12 US cents per unit. This is in addition to the $3 million in statutory costs a month that IPTL charges Tanesco.

81 ‘Capacity payments’ refer to the payments that an electricity generator (such as IPTL) receives based on how many MW of electricity they make available (whether they are used or not).
82 Ibid.
Lessons

- A proper feasibility study would have questioned the need for the Independent Power Producer (IPP) on the grounds of cost, value for money, technology and power demand.
- All the necessary stakeholders were not consulted and the necessary approvals obtained.
- IPP deals are vulnerable to corruption, especially in the absence of a proper bidding process.
- Getting out of bad PPP deals can be prohibitively expensive for government, with the result that they are forced to implement them.

Eco-tourism

Case Study 8: Eco-tourism Concession in South Africa’s Kruger National Park

PPPs in the eco-tourism sector\textsuperscript{84} are still relatively new. South Africa has several projects in development or operations\textsuperscript{85} and has a number of other PPPs at the feasibility and procurement stages\textsuperscript{86}. In 2001, South African National Parks (SANParks) signed a build-operate-transfer (BOT) concession with Nature’s Group, a consortium formed to outsource management of 11 restaurants, two shops and three picnic sites in the Kruger National Park game reserve for just under 10 years. The consortium, which is made up of a technical partner, a financial partner and an empowerment partner, has the right to operate the facilities (including the right to use, design and construct) according to parameters provided by SANParks. In return, Nature’s Group pays a monthly concession fee equivalent to approximately 13\% of its turnover.

\textsuperscript{84} Eco-tourism is tourism based on the natural environment and conducted in an ecologically sustainable manner.

\textsuperscript{85} These include 11 PPPs in four national parks under the auspices of SANParks; and PPPs in North West (Madikwe), Limpopo (Manyeleti), and Gauteng (Cradle of Humankind Interpretation Centre Complex).  

\textsuperscript{86} Eco-tourism projects listed on the National Treasury website include nature reserves in Limpopo and the Western Cape, business sites in the Northern Cape, Greater St Lucia Wetlands Authority, Mpumalanga and the Western Cape. See www.treasury.gov.za/organisation/ppp/default.htm
A review of the PPP commissioned by the National Business Initiative and InWent (a German capacity building foundation) at the start of 2004 highlighted a number of positive and negative impacts of the concession. Positive effects included a significant increase in SANParks’ profit, the upgrading of restaurants and shops, and an eventual improvement in service and quality. On the negative side, there was initial staff resistance and although none of the staff lost their jobs in the changeover, they were initially unhappy about the new conditions of service which emphasised improved performance and strict control of stock. The technical partner in the consortium, Machachos, also lacked sufficient experience to operate effectively in the Kruger Park, which resulted in poor customer service in the first year. This led to SANParks exercising the breach of contract clause since ‘the management of Nature’s Group was not confirming to the concession agreement, operational standards, and service and product levels’. SANParks drew up a 12-point intervention programme which Nature’s Group had to address. This included finding a new technical partner, drawing up an operations manual, improving skills development and implementing an incentives programme for staff. The outcome of this process was that ‘the Managing Director of Nature’s Group was replaced along with principal shareholders. Targets for rectifying the situation were set, many of which have already been met’.

**Lessons**

- Successful PPPs require good transaction skills on the part of the public sector partner (including legal, financial, negotiation and industry specific skills) as well as an experienced service provider from the private sector.

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87 The National Business Initiative is a non-profit organisation committed to the advancement of commercial and industrial enterprise in South Africa. Its particular focus is on the Small to Medium Enterprise (SME) sector, with emphasis on Black Economic Empowerment (BEE).


89 Eco-tourism case study op. cit., p.9.

90 Ibid.
Case Studies

- The project was attractive to the private operator since it represented a good business opportunity.
- Shifting the restaurants from a state to a private monopoly limited the impact competition could have had on prices and quality of service.
- A proper skills assessment of the staff prior to the contract, as well as knowledge of the ‘culture of stock theft’ amongst the staff would have alerted the private operator to increased operating risks.
- Strong commitment from SANParks, in the form of an intervention plan, saved the concession from potential failure.
Lessons Learned

Politically, the notion of public-private partnership has been touted in some government circles as a magic formula that will fix a country’s infrastructure blockages and services backlog, minimise the problems of privatisation – rising prices, job losses, corruption and the sale of public assets – while maximising the benefits to society.

However, experience in Africa shows that PPPs suffer many of the same ills that afflict privatisation and public tendering.

Privatisation was meant to sell off underperforming assets owned by government to private businesses, to generate revenue, improve service delivery and reduce the managerial burden on the state. In some cases in Africa, the process has been so corrupt that promises remain unfulfilled and services have dramatically deteriorated. Contracts have been badly written and economic assumptions poorly investigated, sparking both public and worker protest.

Public procurement processes the world over — where government departments call for tenders — have frequently lacked transparency and promoted cronyism and graft. Well-connected relatives and friends of politicians are routinely awarded lucrative supply contracts despite having inferior bids, high prices and poor expertise.

The case studies have shown that public-private partnerships entered into hastily pose many similar challenges to African governments. PPPs are complex, and they will continue to be fraught with problems unless governments learn from the failures of privatisation, tendering systems, and past relations between business and government. This chapter draws on the experience of tendering, privatisation and PPPs to elaborate on the key issues facing governments contemplating or implementing PPPs.

Politics Matters

Government and the private sector often underestimate the extent and effect of political opposition to privatisation initiatives, particularly in the water sector. Conversely, protest is minimised when governments work hard to explain the need for PPPs and publicly discuss options well before deals are signed.
Harris acknowledges that ‘introducing the private provision of infrastructure is clearly politically challenging’. There are often price increases, ‘overstaffing of public enterprises may imply substantial job losses, and the companies may be taken over by foreign multinationals’. In addition to these concerns, the potential profits lead to suspicions of corruption. In order for governments to succeed, they need to manage the politics of reform by ‘building consensus for reforms through public education and consultative mechanisms’ and by ensuring transparency in awards and the oversight of private infrastructure schemes.

By placing licences and concession contracts in the public domain, governments can allow consumers to see how prices and quality of service will be affected, the quality of service they can expect and understand their rights and obligations.

Private companies engaging in PPPs also need to heed the advice that politics matters. The experience of Northern Electricity in Namibia is a case in point. Contracted by the Namibian Ministry of Regional and Local Government and Housing (MRLGH) in 1996 to operate a set of state-owned (and state-financed) assets in the more densely populated northern region of Namibia, Northern Electricity provided a reliable and profitable service in a rural area where the local authorities had been losing approximately N$10 million (US$1 million) annually. A 2002 study sponsored by the Public-Private Infrastructure Advisory Facility (PPIAF) of the World Bank found that Northern Electricity was able ‘to understand, anticipate and respond to the needs of its (commercial) customers’ very well but that they would have done better to understand, anticipate and respond to the needs of the Town Councils who ultimately determined their fate. Despite Northern Electricity’s success in managing the

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91 Northern Electricity Distribution Service in Northern Namibia: A case study in the private provision of rural infrastructure, July 2002, California: Econ One Research Inc.

92 Ibid. A combination of three factors worked against the private supplier: (i) the local authorities were unhappy from the beginning about ceding their operating rights to Northern Electricity; (ii) a law passed in 2000 extended and strengthened the devolution of power to local governments, and gave them in particular increased responsibility for electricity provision; and (iii) the leadership and ideology (on the point of devolution of power to the local authorities) of the
Lessons Learned

business of electricity provision, their management contract was not renewed by the newly created Electricity Control Board and the contract was awarded instead to a joint venture between the national utility company NamPower and several local and regional governments. The study concluded that when ‘politics is understood as characterising a particular allocation of benefits among competing interest groups, then private companies are advised to pay attention’.\(^9\)

Having a political champion can make the difference between success and failure for a PPP. Juliet Kairuki, PPP project manager at the SADC Banking Association, notes:\(^9\)

Most of the successful PPP projects [in Africa] are the result of very strong political commitment. That has been the underlying factor of success of all these projects ... especially in countries where there has been an absence of regulatory and legal frameworks to govern these projects. The private sector has needed some guarantee or commitment from a senior political body to ensure that they are going to get a good return on their investment.

Examples of PPPs in Africa that have benefited from having a political champion include the N4 toll road, which was promoted by the then Mpumalanga premier, Mathews Phosa; water and electricity provision in Gabon; the concession for Maputo port and the container terminals at Dar es Salaam port.

However, strong political backing without equally open and transparent processes often arouses suspicion of corruption. In 2003, South Africa’s former transport minister, Mac Maharaj, resigned as a director of banking group FirstRand following an inquiry into allegations that he accepted gifts and payments of more than R500,000 from former ANC fundraiser Schabir Shaik whose company was part of the winning N3 toll road consortium.\(^9\)

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\(^9\) MRLGH changed. This effectively meant that the political climate for the continuation of Northern Electricity’s contract had changed by 2002.

\(^9\) Ibid., p.36.

\(^9\) Interview, Juliet Kairuki, Johannesburg, October 2004.

\(^9\) West E, ‘FirstRand won’t duck Maharaj report’, 1 August 2003, Business Report. At the time of Maharaj’s resignation, however, FirstRand issued a statement saying
Pricing is Fundamental

The politics and viability of PPPs are both deeply affected by pricing. Many governments turn to PPPs or privatisation when they cannot afford to continue to provide free or inexpensive services, or the capital expenditure required to extend services. While business can bring efficiency and needed investment, it can’t work miracles. Allowing companies to raise prices rapidly on formerly cheap public services can spark a political storm. But ignoring market forces and suppressing price hikes entirely can force businesses to back out of PPP deals.

Managing the transition from an era of state-subsidised service to more market-based pricing is critical.

Harris points out that subsidies in essential services in developing countries meant that governments were only recovering 60% and 30% of the costs of electricity and water respectively in the early 1990s. These sectors have needed the greatest price adjustments with the introduction of private operators, with the result that they ‘have seen the most problems and also attracted the largest amount of criticism, including from international NGOs’.  

Public utilities have also not been pressured to collect bills for services delivered, which further undermines cost-recovery. In South Africa for example, at the end of July 2004 the debt citizens owed for unpaid municipal services was R32 billion, up by R6 billion from March. 

This does not mean that PPPs at the municipal level are unaffordable but it does point to the difficulty of getting poor people to pay for services.

A way of overcoming this problem is to create ‘buy-in’ from local communities by building consensus and transparency. Governments can also provide political cover or insurance for ‘non-payment’ and subsidies to bring down the cost of basic services or extend networks in high-cost areas. In Peru and Guatemala for example, governments have provided subsidies that are dependent on the private sector expanding services to

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96 Harris op. cit., p.9.
Lessons Learned

thinly-populated rural areas. (In Peru the subsidy was linked to payphones; in Guatemala the output was the expansion of the country’s electricity network.) A policy of subsidisation, says the OECD’s 2004 report, ‘would require clear and enforceable concession contracts that commit the concessionaire to supply services for the poor in exchange for an explicit or implicit subsidy’. An enforceable regulatory framework would be required to make this work, as well as transparency in the privatisation process.

The privatisation of infrastructure services also does not always lead to price increases. This depends on three factors — the extent to which the private sector can introduce efficiency improvements, how far prices were below cost recovery levels, and whether the higher cost of private finance requires price increases.

Some of these price adjustments have happened before the introduction of the private sector, such as in Uganda, Zambia and Zimbabwe, where governments raised tariffs in water and electricity ‘before the actual privatisation in order to reduce the companies’ financing gap and to attract strategic buyers’. Gabon’s 10 year restructuring of its water and electricity sectors prior to privatisation meant that the French company Vivendi was actually able to lower prices when it started providing water and electricity. (See Case Study 7.)

African governments are constrained when it comes to pricing policy because the regulator often does not have accurate information on the costs of suppliers, and translating fixed costs into per unit charges requires complex assumptions and accounting analysis. Regulators tend to permit price increases because they are either weak or poorly staffed, sympathetic to the state firm, or the company provides poor or misleading information. In such a situation it is easier for a private company to push through price increases to ensure that it retains a comfortable return on equity.

South Africa’s PPP Unit learned the importance of pricing and affordability through the APOPS prison deals. Part of the problem was that

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98 Harris, op. cit., p.32.
99 OECD, op. cit., p.124.
100 Harris, op. cit., p.24.
101 OECD, op. cit., p.123.
the department had not calculated what it could afford in terms of its Medium-Term Budget Framework and the high specifications also affected the costs.

Prices are also influenced by the high costs of doing business in Africa. As the World Bank’s *World Development Report 2005* points out, government policies and behaviours influence the investment climate through impacting on costs, risks and barriers to competition facing firms. Governments need to pay attention to all three in order to improve the investment climate and increase the range of investment opportunities that might be profitable. The report says that ‘the costs of contract enforcement difficulties, inadequate infrastructure, crime, corruption, and regulation can amount to over 25% of sales — or more than three times what firms typically pay in taxes’.  

**Corruption Destroys Partnerships**

Historically, corruption has been an enormous problem affecting public procurement in Africa. Even with simple tenders, officials have found myriad ways to direct contracts to favoured bidders. Because PPPs deal with far more complex services and thus the choice of companies cannot be reduced to the single variable of price, PPPs offer far greater latitude for manipulations by foreign or local firms or government officials that are hard for the public and anti-corruption systems to spot. While officials hope that the involvement of independent transaction advisors will reduce corruption since they are being paid a set amount and have no incentive to manipulate the process, it is too early to tell whether this will be effective. Harris says that privatisation does ‘present the possibility of having lucrative companies taken over by cronies or relatives of those in government. It also opens up the possibility of bribes related to the award of concessions or leases.’

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103 For example, 12 multinational companies were found to have bribed the former head of the Lesotho Highlands Water Project and, according to the Lesotho prosecuting authorities, were the prime movers in initiating the bribes. One of these companies, Acres International, was debarred by the World Bank from its contracts for three years in July 2004.

104 Harris, *op. cit.*
Lessons Learned

In Kenya for example, government’s planned 25-year concessions for sections of its road network that form part of the Northern Corridor received a setback following evidence of attempted diversion of funds. In September 2004 the Kenyan government instituted an investigation and suspended three top officials at the ministry of Roads and Public Works following allegations in the *East African Standard* that staff at the ministry were planning to divert KSh100 million (about US$1.23 million) meant for the project to their private account.

In Tanzania, a power purchasing agreement (PPA) signed between the government and an independent power producer in 1995 has been described as ‘public-private partnership at its worst’. (See Case Study 7). When such projects are initiated by companies, ‘it is unclear that any kind of tender procedure is followed’ and the awarding of the contracts is ‘less than transparent’ or tender specifications are written after the initial offer to justify choice of firm.

Harris writes that ‘corruption possibilities in equipment supply and construction contracts are probably as large as those related to the award of concessions’. Other forms of corruption documented in public utilities include jobs based on political connections or payments and ‘widespread graft by public employees who exact informal payments from customers in exchange for reduced utility bills or shorter waits for scarce connections’. He argues that the private sector generally has more incentive to minimise costs and reduce leakages from corruption than the public sector.

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105 The Northern Corridor is the transport corridor linking the Great Lakes countries of Burundi, the Democratic Republic of Congo, Rwanda and Uganda to the Kenyan seaport of Mombasa. The Northern Corridor main roads network, which radiates around the main Mombasa-Nairobi-Kampala-Kigali-Bujumbura axis, totals nearly 7,000km, of which 60% is tarred.

106 The *East African Standard* reported that ‘the cash was consultancy fees for the Northern Corridor Road (Nakuru–Timboroa section) apparently proposed for concessioning’. Agina B, ‘Donor fury over Sh100 million theft bid in Raila ministry’, *The East African Standard*, 9 September 2004.


108 Harris, *op. cit.*, p.29.
Kairuki says that standardising contracting provisions helps transparency and promotes trust between the public and private sector and can significantly reduce corruption.\textsuperscript{109} ‘Robust institutional and regulatory frameworks for governing PPPs’ are equally important, she says.

Transparency International has developed a tool called the ‘integrity pact’ (IP) to enhance the transparency and quality of public contracting. The pact consists of an agreement between the government or government department and all bidders for a public sector contract that they will abstain from bribery both during the selection process and the implementation of the contract. Bidders agree to disclose all commissions and similar expenses paid by them to anybody in connection with the contract; and the pact indicates that sanctions will apply when violations occur. Such sanctions ‘range from loss or denial of contract, forfeiture of the bid or performance bond and liability for damages, to blacklisting for future contracts on the side of the bidders, and criminal or disciplinary action against employees of the government’.\textsuperscript{110} Peter Eigen, head of Transparency International, says that such an agreement is necessary because ‘within industries, companies say they want to stop bribing but dare not because their competitors continue to do so.’\textsuperscript{111} Bringing all the companies together to adopt a common standard on non-bribery thus reduces the pressure for corruption.

Two African countries have formally implemented the principles contained in the IP. For example, in 1999 Benin introduced a ‘code of ethics’ which requires government officials involved in the administration of public procurement and bidders to submit formal commitments to abstain from corrupt practices during the bidding process and the implementation of the contract.\textsuperscript{112} Nigeria has also applied the IP in some form in several projects.

\textsuperscript{109} Interview, Juliet Kairuki, Johannesburg, October 2004.
\textsuperscript{110} See www.transparency.org/integrity_pact/index.htm
\textsuperscript{111} Peter Eigen gave a talk at SAIJA on corruption in March 2004.
\textsuperscript{112} Wiehen M, ‘The Integrity Pact. The Concept, the model and the present application. A status report as of November 1, 1999’, www.transparency.org/iacc/9th_iacc
Lessons Learned

Risk Transfer/Risk Management

Any sizeable deal carries with it a raft of things that can go wrong, or risks. If it had its way, government would prefer a PPP where business would bear all the costs and risks associated with less than anticipated demand, regulation and currency fluctuation, for a negligible price and profit. The company would be unlikely to accept that deal. From the business perspective, the ideal PPP would involve very fat profits, no risk, government subsidies and monopoly control. Again, government would decline. In reality, crafting a PPP means bridging these extremes fairly to mitigate the risks that each side fears. Table 3 lists a typology of risks.

<table>
<thead>
<tr>
<th>Risk</th>
<th>Explanation</th>
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<tbody>
<tr>
<td>Completion risk</td>
<td>The possibility that a project’s construction or installation will be delayed, with additional cost or other implications.</td>
</tr>
<tr>
<td>Cost overrun risk</td>
<td>The possibility that during the design and construction phase, the actual project costs will exceed projected costs.</td>
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<tr>
<td>Design risk</td>
<td>The possibility that the private party’s design may not achieve the required specifications.</td>
</tr>
<tr>
<td>Exchange rate/forex risk</td>
<td>The possibility that exchange rate fluctuations will impact on the costs of imported inputs or the project’s debt or equity.</td>
</tr>
<tr>
<td>Force majeure</td>
<td>The occurrence of certain unexpected events that are beyond the control of the parties, whether natural or man-made, that affects the project.</td>
</tr>
<tr>
<td>Interest rate</td>
<td>Fluctuations in the rate at which the project borrows money.</td>
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<tr>
<td>Market/demand risk</td>
<td>The demand for the services generated may be less than projected.</td>
</tr>
<tr>
<td>Operating risk</td>
<td>Factors other than Force Majeure such as projected operating expenditure, skills requirements, labour disputes, employee fraud.</td>
</tr>
<tr>
<td>Political risk</td>
<td>Unforeseeable conduct by a government institution that materially and adversely affects the expected return on equity, debt service or costs of the project. This includes expropriation and nationalisation.</td>
</tr>
<tr>
<td>Regulatory risk</td>
<td>Consents required from government authorities or an independent regulatory agency are not obtained or result in additional costs.</td>
</tr>
<tr>
<td>Utilities risk</td>
<td>The utilities (water, electricity, gas) for the project are not available.</td>
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With conventional public procurement, governments have tended not to take risks into account adequately. As the South African Treasury’s *PPP Manual* points out\textsuperscript{113}

Budgets for major procurement projects have been prone to optimism bias — a tendency to budget for the best possible (often lowest cost) outcome rather than the most likely. This has led to frequent cost overruns.

A major risk to both the public and private sectors is demand risk. This is the possibility that consumers will not buy the product or service at sufficient volume to make the PPP viable at established prices. Using the example of a toll road, in cases where feasibility studies show insufficient traffic demand but the road is an important one, as with the scenic Chapman’s Peak toll road in Cape Town, South Africa, provincial government will provide a subsidy upfront and a ‘patronage guarantee’ should road usage fall below an agreed amount. Similarly in relation to an important rail system such as South Africa’s proposed Gautrain,\textsuperscript{114} demand risk needs to be shared between the parties since it is difficult to predict whether users will be prepared to shift from motor vehicle to rail transport.

Risk mitigation strategies are effectively financial strategies. The important issue in terms of planning is the level of detail required in a thorough feasibility study. Before the South African Treasury gives its first (of three approvals) in the PPP project preparation phase, the institution must undertake a feasibility study that ‘explains the strategic and operational benefits of the PPP’ and also sets out ‘the proposed allocation of financial, technical and operational risks between the institution and the private party’.\textsuperscript{115}

Part of the feasibility study involves drawing up a Public Sector Comparator (PSC) model, which compares the cost of the government

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\textsuperscript{113} *PPP Manual*, op. cit., p.23.

\textsuperscript{114} *Ibid.* The Gautrain will be a rapid rail link in South Africa’s Gauteng province connecting Johannesburg, Johannesburg International Airport and Pretoria. It is expected to be operational by 2009. Provincial and national government regard the rail link as a priority for reasons which include: relieving traffic congestion on the country’s busiest road, the development of Johannesburg/Pretoria as a world class centre; and the reduction of motor vehicle emissions.

\textsuperscript{115} *PPP Manual*, op. cit., Module 4: p.iii.
Lessons Learned

providing a particular service with private provision of the same service. The institution will assign costs for all the risks associated with undertaking the project, and thereby derive a risk-adjusted PSC model. The *PPP Manual* sets out the steps for the risk-adjusted PSC model as follows:

Step 1: Identify the risks.

Step 2: Identify the impacts of each risk.

Step 3: Estimate the likelihood of the risks occurring.

Step 4: Estimate the cost of each risk (by multiplying the cost and the likelihood of it occurring).

Step 5: Identify the strategies for risk mitigation.

Step 6: Allocate risk (identify risks to be borne by the private party and those to be shared).

Step 7: Construct a risk matrix (which consolidates all identified project risks, their impacts and their associated costs).

Step 8: Construct the risk-adjusted PSC model.

Step 9: Conduct a preliminary analysis of test affordability.

Comparing the risk-adjusted PSC model with the institution’s budget will give an indication of the PPP’s affordability.

Various financing instruments have been developed to manage the risks in infrastructure projects. One of the more serious of these risks is currency mismatch, which arises when funding is denominated in a foreign currency but the infrastructure is to be paid in local currency, which is prone to devaluation.

Currency risk is not specific to private projects — governments and public enterprises borrow in foreign currencies as well. The long-term solution to the currency mismatch problem is to develop local currency markets so that long-term local currency financing and hedging options are available. There has been an increase in the use of local currency bonds for infrastructure financing in Latin America and Asia, as well as in Africa. Alastair Campbell, a senior manager at Standard Bank Corporate and Investment Banking, says:  

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116 Interview, Alistair Campbell, Johannesburg, September 2004.
There is a growing trend towards the use of local capital markets for the issuance of local currency bonds to mitigate foreign exchange rate fluctuations. These are usually guaranteed by European AAA-rated development finance institutions (DFIs) such as the European Bank for Reconstruction and Development, which in recent years have indicated increasing appetite to provide a developmental angle to projects through the provision of such financing instruments.

Another problem with financing infrastructure projects is the tenure or length of the investment. While DFIs can lend for 10 to 15 years, commercial banks typically only have appetite to lend for five to 10 years in sub-Saharan countries (South Africa being the exception to this rule).^{117}

Campbell says that many power projects are ‘just not bankable’ because the tenure of debt required to make the deals work is too long for commercial banks to be comfortable with. The role of DFIs such as the International Finance Corporation is therefore important in attracting commercial lenders to projects through the use of instruments such as partial risk guarantees and hybrid financing instruments^{118} which combine grant funding with DFI financing and commercial bank debt.

Development Bank of Southern Africa (DBSA) policy analyst Ted Stillwell says DFIs such as the DBSA provide comfort for commercial investors since they are able to use their higher credit ratings to take on a higher level of risk than commercial lenders are comfortable with. DFIs have a range of financial instruments which they use to ‘address the capital market inefficiencies where private capital is unwilling or unable to bear the risk of providing capital to countries, projects or clients that are not considered creditworthy’.^{119}

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^{117} Interview, Alistair Campbell.

^{118} A hybrid financial instrument is a combination of two or more different financial instruments and generally has both debt and equity characteristics.

Providing a Range of Service Options

In privatising basic services, governments in developing countries have often set high quality standards and imported engineering approaches used in developed countries.\textsuperscript{120} This has often meant that the services are too costly for the poor. Harris advises governments to help poorer or unserved consumers by introducing a range of service alternatives, for example in water and electricity. This applies both to the type of service offered – for example indoor running water versus external standpipes – and to the service providers. Although indoor plumbing may be the ideal, refusal to consider cheaper solutions can guarantee that rural areas never receive service.

In the Philippines for example, the government has allowed the private water operators in Manila to meet their expansion targets by using alternative providers within the concession zone. The two main water companies supply water in bulk to local firms, who then supply their customers through plastic hoses and small pipes. The two companies have also reduced expansion costs in poorer neighbourhoods by using cheaper and smaller diameter pipes.\textsuperscript{121}

Providing a range of service options is not limited to the private sector, however. Some sections of the public sector in South Africa are making progress in providing more appropriate alternatives to poor consumers. For example, from 2001 the Ethekwini municipality has been expanding the provision of basic water and sanitation services to semi-rural districts outside Durban’s waterborne sewerage line through a partnership with the national Department of Water Affairs and Forestry and the Consolidated Municipal Infrastructure Programme. The initial target is 21,000 households out of a total of 63,000 (at a cost of R94 million or $15.1 million). The municipality uses a refinement of the dry-toilet model,\textsuperscript{122} provides a 200-litre ground tank next to each dwelling and 200 litres of water free daily. Households pay a connection fee of R300 or, if they are unable to pay this, are able to contribute their labour in lieu of payment.

\textsuperscript{120} Harris, \textit{op. cit.}
\textsuperscript{121} \textit{Ibid.}, p.33.
\textsuperscript{122} Also known as the urine-diversion toilet, a dry toilet is much more hygienic than a pit latrine and is relatively easy to empty once it is full.
One of the successes of the project, according to the Impumelelo Innovations Award Trust, which rewards ‘exceptional models of public service delivery’ in South Africa,\textsuperscript{123} has been the level of consultation to inform and educate residents about the service.

In the electricity sector, small independent service providers in unserved areas can boost electricity coverage. In Cambodia for example, ‘around 600 entrepreneurs run small systems powered by diesel generators and supply 5% of national electricity consumption.’\textsuperscript{124}

In telecommunications, alternative service options for the poor have included smaller prepaid denominations and single prepaid recharge vouchers that can be used by several people to recharge multiple cellphone accounts.\textsuperscript{125}

**Local Economic Empowerment**

PPPs offer opportunities for the transfer of economic power to the local population through greater participation in and ownership of businesses. PPPs can be good for local empowerment in a number of ways:

- the long-term nature of contracts allows the growth of local equity and management over time;
- risks are clearly identified in PPPs, ‘clearly costed and appropriately allocated, so black participants know in advance what they are committing to’; and
- the utilisation of a range of large, medium and small enterprises, through subcontracting and procurement, can bring tangible local economic development benefits to targeted groups.\textsuperscript{126}

Privatisation has been identified as a way to ‘promote the development of capital markets and stock exchanges through the flotation of former state-owned companies’.\textsuperscript{127} The development of national private sectors

\textsuperscript{123} Impumelelo: exceptional models of public service delivery, 2003, Cape Town: New Media Publishing on behalf of Impumelelo Innovations Award Trust.

\textsuperscript{124} Ibid.

\textsuperscript{125} An example of this is Vodacom’s ‘Yebo 5’ pre-paid option in South Africa where R60 worth of airtime can be shared among five people.

\textsuperscript{126} See the South African government’s PPP Manual, Module 2, p.7.

\textsuperscript{127} OECD report, op. cit., p.107.
and the participation of local investors, often referred to as the ‘indigenisation process’, is still under-developed in sub-Saharan Africa. An exception is South Africa, which is actively pursuing the goals of broad-based black economic empowerment (BEE).

The South African government has identified BEE as a way in which PPP projects can achieve ‘optimal value for money in government’s delivery of infrastructure and services’.\textsuperscript{128} BEE, generally regarded as a social (and political) imperative to redress the economic legacy of apartheid, provides for the creation of wealth and opportunities for previously disadvantaged communities and individuals. However, when local expertise is thin or absent and empowerment firms have little capital of their own, PPPs may make less financial sense than leaving management in the hands of government.

In 2004, the South African National Treasury issued a code of good practice for empowerment in public-private partnerships which must be applied at all stages of the partnership project cycle.\textsuperscript{129} Government institutions at national and provincial level are required to apply the code in the inception, feasibility and procurement phases of the project and must produce a ‘BEE Balanced Scorecard’\textsuperscript{130} for each project to evaluate prospective bids. A bid must achieve a minimum threshold of 50 out of 100 BEE points to be evaluated further, and the BEE component in turn constitutes 10% of the bid evaluation weighting with the other 90% going to price and technical components.

The drawbacks of involving explicit empowerment criteria in PPPs include the extra time needed to make bids compliant and the extra costs involved, both for government in ensuring that they consider these criteria at all stages of the planning and implementation process, and also for the private parties, particularly where local partners need to borrow money to invest as capital in the project. Sue Lund says that the South African

\textsuperscript{128} PPP Manual, \textit{op. cit.}, Module 2, p.5.
\textsuperscript{130} The BEE Balanced Scorecard measures four aspects of BEE — private party equity, private party management and employment, subcontracting and local socio-economic impact.
treasury initially found that there were few black businesses in the PPP market, and little black capital in South Africa. Now there are a lot more black companies, which makes the process easier and lowers the cost of BEE. ‘We’re finding that there are a lot of competitive bids and that there is a strong incentive to bring the costs down,’ she says.\(^{131}\)

While government is providing facilities to expand black equity, in projects where this equity is borrowed at commercial rates, it will add to the cost of infrastructure and service provision.

Other African countries have not formalised local empowerment quotas to the same extent as South Africa but have included terms in PPP contracts for the employment of local staff at management level. The 10-year lease agreement at the container terminal at Dar es Salaam port in Tanzania for example includes a provision for the reduction of expatriate staff by 50% within the first five years.\(^{132}\) Where a foreign company also includes a capable local partner in a consortium (such as happened with the Tanzanian container terminal), this also strengthens the consortium’s credibility in the country and leads to a more accurate assessment of local business conditions and requirements.

South African empowerment deals have been affected by ‘fronting’ — where companies appoint nominal black directors or shareholders to win contracts but are in fact managed and owned by white people or foreign firms. The government’s code of good practice for empowerment in PPPs hopes to avoid this issue by requiring a thorough selection process and promoting broad-based economic empowerment. It emphasises active equity (where black people and/or enterprises participate directly in the day-to-day management and operations of the project). There are four other criteria: the private party’s management and employment are assessed according to the percentage of black people in management; the percentage of black women in management; compliance with the Employment Equity Act; and skills development expenditure as a proportion of the private party’s payroll.\(^{133}\)

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\(^{131}\) Telephonic interview, Sue Lund, November 2004.

\(^{132}\) *Tanzania: A case study on PPPs — Tanzania Container Terminal*, 2004, Johannesburg: SADC Banking Association PPP Capacity Building Programme.

\(^{133}\) *PPP Manual*, Module 2, p.12.
Regulating the Private Sector, Enforcing Contracts

Governments need to regulate and monitor PPPs to ensure compliance with agreed performance targets. Most infrastructure services are natural monopolies, whether in public or private hands. Jerome points out that ‘private monopolists may seek to levy prices significantly above marginal costs or public monopolies may allow costs to rise above efficient levels or offer services of inferior quality’. Other problems include consumers not being able to access information to assess the quality of the service they get and issues of environmental standards, public health and safety.

Governments are generally bad at regulating themselves since there is an inherent conflict of interest when government both provides a service and sets the rules governing it. African countries have tended to lack regulatory agencies or vest the regulatory function with the ministry or parastatal concerned with the project (such as in Gabon with water and electricity, Mozambique for the port concession or Tanzania for the container terminals). African governments have thus tended to use their early PPPs as opportunities to develop their regulatory capacity. As long as the department concerned has sufficient technical capacity and political independence, it can perform the same function as an independent regulator. However, independent regulators (if properly set up and adequately funded) are preferable. Problems with regulatory fairness have arisen, for example, when governments licence private firms to compete against state owned utility firms but do not create a truly impartial regulatory body. Governments across Africa have established or are establishing such regulatory agencies for utilities but these have largely been modelled on those in developed countries and have had limited success. Jerome says:

… these models were rarely adapted to the political and institutional features prevalent in these economies including lack of checks and balances, limited technical expertise, weak auditing, accounting and tax systems, and widespread corruption and regulatory capture.

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134 Harris, op. cit., explains that economies of scale lead to natural monopolies for most basic services.
135 Jerome, op. cit.
136 Laffont (1996) cited in Jerome, op. cit. Regulatory capture is where the regulatory agency is unduly influenced by a company that is being regulated.
The absence of regulatory frameworks has led to highly specific contracts that provide comfort to investors that they will be paid and that they will make certain returns on their investment. The disadvantages of these are significant transaction costs and hefty penalties for contract changes and cancellations.

An increasing concern for regulators in developing countries is how to protect the interests of poor consumers, who represent a large portion of the population. A recent conference organised by the PPIAF and the Asian Development Bank highlighted the challenges of pro-poor regulation. Such regulation requires a thorough understanding of these customers, specific skills for gathering and analysing information and dedicated human and financial resources.¹³⁷

Jerome highlights a number of challenges African countries face in designing effective regulatory instruments. These include:

- developing and applying the expertise required to address challenging issues in highly complex and increasingly dynamic industries (particularly in fields where technology is advancing rapidly);
- resisting undue pressure or influences from political authorities, who are often interested in short-term gains (political capture);
- resisting unreasonable demands from regulated firms who want to tilt the balance between consumers and producers in their favour (regulatory capture);
- obtaining information from regulated firms;
- exercising their responsibilities in a way that builds public support for their role and decisions, thus helping to sustain reforms; and
- introducing unpopular tariff increases at a time when privatisation remains contentious and consumers have unrealistic expectations about the timing of social improvements.¹³⁸

¹³⁸ Jerome, op. cit., pp.30-31. For a list of African utility regulators and the challenges they face see Appendix 1 of Jerome’s paper.
Building the Capacity of the Public and Private Sectors

Capacity is a serious constraint for African governments to conduct successful partnerships with the private sector. African countries need to develop their capacity to plan, negotiate, implement and monitor successful PPP projects. While the argument can be made that PPPs are too complex for governments lacking adequate capacity, starting with smaller projects and developing such capacity gradually will help to overcome this problem.

The SADC Banking Association’s PPP Capacity Building Programme has carried out training in PPPs in Mozambique, Botswana, Tanzania and Mauritius. It also reviewed the institutional and regulatory environments with regards to PPPs in those countries. Juliet Kairuki, manager of the programme, says that capacity development is needed in both the public and private sectors. The lack of a robust private sector in many countries means that governments are unable to solicit the expertise needed to develop projects, which means that raising money for PPPs is more difficult.

The programme does not suggest that a PPP is the most suitable procurement option for all infrastructure projects; instead it advocates for the utilisation of principles that underlie PPPs, namely affordability, value for money and risk transfer. She says:¹³⁹

 Governments need to have some understanding of what their medium-term expenditure framework (MTEF) looks like. Their public finance management procedures need to give confidence to the private sector investor.

Kairuki stresses that value for money tests, which include constructing the Public Sector Comparator model, are crucial to understanding and evaluating what options are most appropriate for a particular kind of infrastructure project. Her advice to African governments is:¹⁴⁰

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¹³⁹ Interview, Juliet Kairuki, Johannesburg, October 2004.
¹⁴⁰ Interview, Juliet Kairuki. The SADC Banking Association’s PPP capacity building programme, in conjunction with the South African National Treasury, is also facilitating the placement of SADC member states’ PPP personnel as observer members to appropriate South African PPP project teams. To date, three personnel
Amongst other things, evaluate your options, understand what your MTEF looks like, understand what kinds of skills you have, dedicate yourself to ongoing capacity building, learn from the experiences of other countries, participate in information sharing processes with the general public and private sector and then determine which projects are commercially viable to become PPPs.

Rosalind Thomas from the SADC Development Finance Resource Centre (DFRC) in Gaborone says that Development Finance Institutes (DFIs) such as development banks and national investment centres have an important role to play to ‘develop the capacity of public partners to understand, take ownership of and justify PPP deals’. The DFRC is currently looking to establish PPP Facilitation Units in select DFIs in SADC countries (such as the Tanzanian National Development Corporation and the Botswana National Development Bank) to ‘assist with deal conceptualisation; advise on consultant procurement; advise on project packaging; and assist in the evaluation of proposals and the negotiation of contracts’.

As part of South Africa’s capacity building in PPPs at national and provincial level, National Treasury’s PPP Manual and Standardised Provisions provide clear and rigorous guidelines on how to conduct PPPs, including a checklist of the steps in the process and the stages at which Treasury approval is required. Sue Lund says that despite the problems of capacity in African countries, governments should get involved with one or two projects to start with. Botswana for example is involved in a PPP for building and maintaining government offices, which entails no

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141 Thomas R, talk delivered at the IDEAS workshop on ‘Evaluating PPPs’, 18 October 2004, DBSA.

142 See appendix 1 for a diagram of the PPP process as set out in the manual.
demand risk for the private sector. She says that experience from the UK and also South Africa has shown that once project managers have gone through one or two projects, then deals flow more quickly and managers adopt a more systematic approach to such projects.
Conclusion

The issues discussed in this report all raise significant challenges to African governments wishing to conduct successful public-private partnerships. The complexity of such arrangements and the high costs involved should cause African governments to take a careful approach to PPPs. They should also recognise that PPPs pose many of the same problems inherent in procurement or privatisation and are not a panacea for development. But whether or not African governments decide ultimately to follow the PPP route for any or all sectors of infrastructure and service provision, the principles that underlie PPPs such as affordability, cost effectiveness, value for money, transparency and risk management should form part of the way that they approach service delivery in general. Such partnerships are a means towards the goal of better service delivery and improved infrastructure.

As Kairuki points out:

Governments should not slow down in their efforts to utilise various forms of private sector participation in the development of infrastructure and the improvement of service delivery just because they don't know all the answers. Instead they should seek to learn from their mistakes and share their lessons learnt with the intention of improving on their performance. This is the only way that governments who are really constrained in terms of their fiscus will be able to effectively and innovatively continue to provide service to the public.

Institutions such as the SADC Banking Association and the regional and national development finance institutions as well as the donor community and non-governmental organisations have an important role to play in building government (and private sector) capacity. Governments can also share their expertise and experiences and build up their own capacity by starting with smaller and less risky projects, and thus developing the experience to tackle more costly and ambitious partnerships.

Nepad also has a role to play in identifying blockages in the regulatory and legal environments in African countries. The African Peer Review Mechanism can highlight, on a country-by-country basis, the government structures, laws and capacities that need to be changed, reformed and developed. By creating a better investment climate for local and foreign
companies, governments will then be able to forge partnerships that combine the best of the private and public sectors.

Recommendations for African governments and the private sector drawn from the case studies and the collective experience of successful and failed PPPs:

- Conduct a thorough needs analysis of infrastructure and basic services and consider all the options to meet these needs.
- Carry out a thorough feasibility study that:
  - compares public sector provision with private sector provision and that takes into account affordability, value for money and risk transfer;
  - considers the rate of return on equity acceptable to both parties;
  - uses accurate information in its calculations and projections;
  - avoids unnecessarily high design specifications;
  - considers all the financing options before committing to one model;
  - involves all the necessary stakeholders;
  - identifies all the risks of a particular project, allocates them to particular parties and devises risk mitigation strategies; and
  - requires treasury approvals at key stages of the project preparation process.
- Work out a multi-year budget framework to assess the affordability of projects for specific government institutions.
- Address the issue of cost recovery and how infrastructure is to be financed.
- Encourage competition to drive innovation and bring down prices.
- Build effective regulation by:
  - developing transparent, credible and effective regulatory agencies that are adapted to the specific needs of the country; and
  - in the absence of effective regulatory agencies, creating a department within the relevant ministry which is relatively independent and has sufficient resources.
- Provide political guarantees to investors where appropriate.
Conclusion

• **Develop capacity** at national, provincial and municipal level by:
  - sharing expertise and experiences with other governments and government departments;
  - creating a PPP Unit in the Ministry of Finance, other relevant ministry or National Treasury to plan, negotiate, implement and monitor PPPs;
  - establishing PPP Facilitation Units in national and regional development finance institutions (DFIs); and
  - developing good transaction skills (legal, financial, negotiation and industry specific skills) in the relevant government institutions.

• **Root out corruption** by:
  - Implementing mechanisms to guarantee transparency at all stages in the tendering process. These mechanisms must include setting procurement specifications, open public hearings for major government contracts, and the final selection of contractors; and
  - Involving independent agencies such as Transparency International to oversee the bidding process and commit government institutions and private bidders to an integrity pact.

• **Pre-empt public complaint and suspicion** by:
  - preparing the ground for private sector participation by making structural reforms and raising tariffs to approach cost recovery levels (where appropriate);
  - communicating decisions around privatisation and PPPs to the public to build consensus and transparency;
  - providing policy clarity in the areas of free basic services in concession areas;
  - considering the extent to which a project or particular bidder will contribute to the local socio-economic environment; and
  - assessing the political commitment to a particular project from government institutions.

• **Provide a range of service options** by:
Nepad Policy Focus

- considering *multi-utility provision* in areas where cross-subsidisation makes economic sense and will lead to cost savings for consumers;
- encouraging small-scale operators in underserved areas; and
- providing appropriate, affordable alternatives for poor and underserved consumers.

- Define the *investment obligations* of the private sector.
- Provide *incentives and penalties* for network extension (or lack thereof).
- Enter into *management contracts* with an emphasis on the transfer of skills to local staff.
- Form partnerships with *experienced private operators* with proven track records.
- Include criteria for partnership with and subcontracting of *local firms* in evaluating bids.
- Develop an approach for dealing with *unsolicited bids*.
- Consider all the *labour issues* and address the opposition from labour unions.
- Conduct country-specific reviews of the *institutional and legal environment* for PPWS.
Appendix 1: PPP Project Cycle

Source: South African National Treasury