ZIMBABWE ECONOMIC POLICY ANALYSIS AND RESEARCH UNIT

ZEPARU

THE SCOPE FOR PUBLIC-PRIVATE PARTNERSHIPS FOR INFRASTRUCTURE DEVELOPMENT IN ZIMBABWE

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Abstract

Zimbabwe has been characterised by a continuous deterioration in existing public infrastructure due to the decade-long economic downturn. Following a period of economic stability under the inclusive government, attention has now shifted to having more investment in growth-enhancing infrastructure in sectors such as power, transport and water sectors. On appreciating its limitations in handling the task, the Government took a stance to adopt public-private sector partnerships (PPP), under which the private sector would be called in to partner Government. This gives rise to some important questions; which is the most appropriate model for each sector? Which are some of the critical issues that need to be addressed in each sector to ensure that the PPP programme can take off smoothly? Looking at a historical perspective, what are some of the lessons that can be drawn from some previous projects involving PPP in Zimbabwe? Given the current economic, political and social environment, what are some of the measures that have to be introduced for the programme to be a success? This paper makes an attempt at addressing these issues by focusing on possibilities for PPP projects in the transport, power, health, education and water reticulation sectors. The paper recommends the adoption of a slightly different PPP model for each sector. In addition, the paper recommends a speedy finalisation of the already initiated policy and institutional framework process to govern PPP, which would also include putting measures in place centred on risk analysis and management during the process, issues on financing and issues on the mobilisation and incentivising of the private sector to participate in the process.

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List of acronyms

PPPs	: Public-private sector partnerships
COMESA	: Common Market for Eastern and Southern Africa
SADC	: Southern Africa Development Community
EAC	: East African Community
BT	: Build-and-Transfer scheme BOT
BOT	: Build-Operate-and-Transfer Scheme
BOOT	: Build-own-operate-and-transfer scheme
RTO	: Rehabilitate-operate and transfer
LDO	: Lease, develop and operate
SPV	: Special Purpose Vehicle
BBR	: Beitbridge Bulawayo Railway (PVT) Limited
NLB	: New Limpopo Bridge
NBP	: Newlands By-Pass
ZINARA	: Zimbabwe National Roads Authority

1. INTRODUCTION

The periods of economic downturn in Zimbabwe saw continued deterioration in existing public infrastructure, which were worsened by the Government's inability to allocate a significant portion of the national budget towards capital projects due to absence of fiscal space. Following the general acknowledgement that for the private sector to become the engine of growth for the economy, there is need for more investment in growth-enhancing sectors such as power, transport and water sectors, there is consensus among all stakeholders that the private sector has to chip in. The Government thus took a stance to adopt public-private sector partnerships (PPPs), under which the private sector would be called in to partner Government, mostly through funding, for the development of infrastructure as well as ensuring the necessary technological transfer.

Public private partnerships involve a contract between a public-sector authority and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project.[1] They can be defined as legally-binding contracts between government and business for the provision of assets and the delivery of services that allocates responsibilities and business risks among the various partners (Partnerships British Colombia, 2003). PPPs are intended to obtain more "value for money" than under traditional public procurement options, and when correctly implemented, they produce reduced life-cycle costs, better risk allocation, faster implementation of public works and services, improved service quality and additional revenue streams (Renda, A and Schrefler, L, 2006).

PPPs are generally mooted for mobilizing funding and expertise for infrastructure that is considered key for economic development, at a time when government has limited resources and the assets involved are considered too critical to be placed wholly in the hands of the private sector. In the process, they produce a win-win situation to both the private sector and government as both parties stand to benefit.

For the government, they result in improvement in service delivery in comparison with the situation where government is operating alone. They also result in improved cost effectiveness, as the private sector comes in with innovative ideas and experience. PPPs also increase investment in public infrastructure (where traditionally the source of funding would be the financially handicapped public sector), such as public hospitals, schools, highways and utility infrastructure. In addition, this reduces public sector risk as it is shared with the private sector and also results in better use of government assets[2].

For the private sector, opportunities also exist, albeit some risks are also present. They gain revenues in the form of fees collected from users (e.g tollgates), fees paid by government, as well as profitability following the use of their innovative approaches and gain in efficiencies making the entity more profitable[3].

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[1] Wikipedia online at http://en.wikipedia.org/wiki/Public%E2%80%93private_partnership accessed on September 9, 2010

[2] See Partnership British Colombia, 2003

[3] Ibid

It is also important to note that while PPPs can indeed be a solution to the current public infrastructure woes in Zimbabwe, from a general theoretical perspective, it could be a fallacy to regard PPPs as a panacea for public infrastructural development challenges. PPPs would become successful if they are structured based on project specific issues rather than on generalisations, given that it is not always correct public sector delivery of goods and services would always be second best to private delivery. However, at a time when the Government is financial handicapped as is the case with Zimbabwe, with a huge public debt to worsen matters, which makes borrowing impossible, there are limited alternatives to PPPs if the current appalling state of public infrastructure is to be corrected. It is thus critical to ensure that PPPs are promoted while measures are being taken to contain any possible challenges.

Given the critical role that the envisaged PPPs are expected to play in resuscitating the economy, it is critical that a detailed focus on the scope for applying PPPs in Zimbabwe be done. In particular, it is important to outline the substantial issues involved in PPPs, particularly the key factors that need to be taken into consideration to ensure that they are successful. It is within this context that this paper is being prepared. While the paper would discuss the general policy and institutional issues for the successful implementation of PPPs, it will not go deeper to focus on the technical issues involved in the actual PPP implementation.

The rest of the paper is organised as follows. Section 2 discusses the general PPP models that have been used across the world, while section 3 focuses on the progress that has been made in operationalising PPPs in Zimbabwe. This is followed by section 4 describing the models Zimbabwe can adopt across the various sectors chosen for PPPs. Section 5 outlines some of the key critical issues that need to be taken into cognisance in operationalising PPPs, before section 6 presents conclusions and recommendations.

2. GENERAL PPP MODELS

There are a couple of PPP schemes that can be adopted, depending on the nature of the infrastructural project in question. These include the following[4]:

2.1 Build-and-Transfer scheme (BT)

Under a BT scheme, the private sector player sources the finance and constructs the infrastructure. Upon completion, the company hands the infrastructure to government or responsible government agency, which then takes over all the roles (ownership and operation roles). In turn, the government would pay the company an agreed sum, together with reasonable returns negotiated beforehand.

2.2 Build-Operate-and-Transfer Scheme (BOT)

Under a BOT model, a private sector player undertakes the construction of the infrastructure; financing the construction as well as the operation maintenance. The company would then operate the facility for a fixed term, during which the private player would be allowed to

[4] See UN ESCAP, (not dated) and see also IMF, 2004.

impose on users of the infrastructure fees or rates, such as user fess, rentals etc. The charges to consumers would be expected to be exactly as captured in the contract and should enable the company to recover its costs as well as earn a reasonable return. At the end of the fixed term contract, the facility is transferred to the government agency or local government unit concerned.

2.3 Build-own-operate-and-transfer scheme (BOOT)

This is a scheme where the private sector company finances, constructs, own and operates the infrastructure for a fixed term. Ownership implies that the company is allowed to make any decisions it sees fit during the ownership tenure, with minimal or no government interference. It also gets the opportunity to recover its total investment, operating costs, etc as well as a reasonable return. This would be done through collecting tolls (e.g for highways), fees, rentals or other charges. At the expiry of the fixed term, the infrastructure is handed over to government, which would then take all responsibilities.

2.4 Build-lease-and-transfer (BLT)

Under a BLT model, the private sector constructs the infrastructure and once complete, it hands the operation issue to the government on a lease arrangement, where the government/government agency would be paying for the lease. The lease payments would give the company an opportunity to recover its costs, and after an agreed term, the government stops paying the lease and assumes ownership and control over the facility (transfer).

2.5 Build-transfer-and operate (BTO)

A BTO scheme entails the private sector company building the infrastructure and upon completion, transfers the infrastructure to the government. However, despite not having ownership, the company is allowed to operate the infrastructure on behalf of the government, with proceeds being distributed as per contract agreement.

2.6 Rehabilitate-operate and transfer (ROT)

This involves a system where the infrastructure that is already in existence but in a sorry state is handed over to the private sector player for refurbishing, maintenance and reconditioning. The private player is allowed to operate the infrastructure for a period, recoup investment costs and get a reasonable return, following which the facility is handed back.

2.7 Lease, develop and operate (LDO)

Under an LDO scheme, the private sector player leases an existing facility from the government, renovates, modernises or expands it before assuming operation rights for a fixed term. In that process, the company gets an opportunity to recover costs, with the government benefiting from the lease payments.

It can be shown that the PPP models discussed above can fall into two categories; those involving greenfield projects (which involving building) and those on existing projects (requiring rehabilitation or developing). With this background, it is now important to look at the possible model to use in the sectors considered for PPPs.

3. PPPS IN ZIMBABWE

3.1 Historical perspective

Although mooted way back in 1998, it was only in 2004 that the Government made the first attempt of a framework on PPP investment in the country. This was in the form of the Public-Private Partnership in Zimbabwe Policy and Guidelines of 2004, which sought to provide the parameters for the development of an appropriate legal and regulatory framework to protect investors and consumers[5]. The Guidelines however never really took off in a significant fashion, even though some PPP projects have been done in the country. Among those that can be found are three projects involving PPPs, namely the Beitbridge Bulawayo Railway (BBR), the New Limpopo Bridge (NLB) and the Newlands By-Pass (NBP) (ZNCC, 2009).

The Newlands Bypass was completed in 2007 and was done on a BT basis with the constructor handing over to the government upon completion. It consists of a four-lane highway that starts just south of the Newlands shopping centre and then rejoins Enterprise Road at the intersection with Kew Drive and Glenara Avenue North.

The NLB involved the financing and building of a toll bridge over the Limpopo River and was awarded to a private player in 1993 by the Governments of Zimbabwe and South Africa on a BOT basis. The project was the first BOT project of that nature in the African continent. The PPP saw the birth of a new company, the New Limpopo Bridge (Pvt) Ltd., a private company, incorporated and registered in Zimbabwe, and a subsidiary of NLPI Ltd, an investment holding company, whose main investment focus is infrastructure-related projects on the continent of Africa. The construction of the bridge was completed in a record time of thirteen months and was officially commissioned by the Presidents of Zimbabwe and South Africa on 24 November 1995. The company is still operating the bridge, and has managed to computerize its systems to ease procedures for crossing the border and aid the promotion of trade and development.[6]

The BBR is a project also implemented in Zimbabwe on a BOT basis by Beitbridge Bulawayo Railway (PVT) Limited (BBR), a subsidiary of NLPI Ltd, (just like in the NLB), established to implement the project. BBR is a 350km railway line from Beitbridge to Bulawayo, which was also built in record time for such a project, with the construction phase lasting only 18 months. The BBR line links an essential corridor of development in Zimbabwe and also shortened the time of the journey between the South African border and Bulawayo from a matter of days to only nine hours, thus providing seamless rail service from the South African ports to Bulawayo and other destinations along this line[7]. One motivation factor behind the BBR was the transportation of fuel into the southern parts of Zimbabwe from South Africa; hence optimal use of the system depends on availability of funds to source fuel.

[5] See Zimbabwe National Chamber of Commerce (ZNCC), 2009

[6] Information on the New Limpopo Bridge found online at http://en.wikipedia.org/wiki/New_Limpopo_Bridge_Ltd

[7] Information accessed on NLPI website at http://www.nlpi.net/GroupOverview_BBR.html, accessed on16 September 2010

In addition, some aspects of PPP frameworks have already been adopted, for example, the Zimbabwe Investment Authority (ZIA) has already incorporated a Build, Own, Operate and Transfer (BOOT) PPP model (see section 3) where investors get some incentives for entering into PPP scheme, including a five year tax holiday, and a reduced tax rate for the subsequent five years[8]. This is regularised and legalised under the Income Tax Act [Chapter 23:06][9]. However, in general, there has been a low uptake of PPPs from the private sector for which several possible explanations have been given, including the general uncertain political environment and the absence of a sound legal framework to guide implementation of PPP projects.

Under the inclusive Government, a more serious stance to adopt PPPs was adopted. Under the Short Term Emergency Recovery Programme document (STERP), PPPs are provided for, where the private sector is being invited specifically in areas such as air and rail services, power generation, dam construction and national highways[10]. This was also reconfirmed under the Three Year Macroeconomic Policy and Budget Framework (STERP II), which envisages the use of PPPs in the upgrading of road capacity, new construction works and maintenance[11].

As a way towards implementation, there has been some noticeable progress toward the operationalising of PPPs over the past year. Between 2009 and 2010, a series of workshops on PPPs were undertaken in Zimbabwe, focusing on the issues to be addressed for successful PPPs in Zimbabwe, drawing from expertise and best practices gained during the workshops from international experts. One critical recommendation from the workshops was the need to speed up the setting of the policy and institutional framework for PPPs, to allay fears from the private sector as well as introduce transparency into the process.

Following the workshops, the Government, through the office of the Deputy Prime Minister (Professor Mutambara), has made significant strides in laying the groundwork for the take off of PPPs. Critical documents that have already been prepared, which would anchor the future road towards PPPs in Zimbabwe include the Public-Private Partnership Policy, 2010; Public-Private Partnership Guidelines, 2010; Public Private Partnership: Legislative Review for Zimbabwe, 2010; and the Institutional Framework, Public-Private Partnership, 2010. These documents form the basis upon which PPPs would be structured, although they are yet to be adopted.

3.2 Sectors considered for PPPs

In terms of the STERP and STERP II policy documents, the Government is envisaging PPPs in air and rail services, power generation, dam construction and the upgrading of road capacity, new construction works and maintenance. In terms of the Draft PPP Policy document, the Government will lay out priorities in the initial years, focusing on projects that are:

(a) of the appropriate size, recognising transaction costs;

[8] "Incentives Applicable to Investors", available on ZIA website http://www.zia.co.zw
[9] See ZIMRA website http://www.zimra.co.zw
[10] See STERP, page 119
[11] See Three Year Macroeconomic Policy and Budget Framework, page 244

(b) not overly complex and have a fair risk profile;
(c) feasible to implement in terms of private sector capacity; and
(d) visible in meeting immediate end user needs and/or non-controversial in terms of where the public sector has traditionally provided the services[12].

With these in mind, the areas of transport; education facilities; health facilities and power infrastructures have been identified as the primary candidates for early PPPs. Looking at the present needs in Zimbabwe however, it can also be established that one area that needs immediate attention is the area of water and sewer reticulation. At the launch of the National Action Committee on Water and Sanitation in Harare, the Minister of Water Resources Development and Management emphasised the need for investment in the water sector as a solution to the current water supply problems, where challenges include inadequate and aging equipment, as well as shortage of skilled technicians to maintain the equipment[13]. It is thus important that PPPs in the water reticulation sector be given priority as well.

With the sectors outlined, the important issue would then rest on trying to identify the proper model to adopt for each sector, paying particular attention to general PPP models that have been used across the world for the same sectors.

4. CHOOSING APPROPRIATE PPP MODELS FOR ZIMBABWE

4.1 Transport sector

There are three major modes of transport in Zimbabwe; road, rail and air. In the context of PPPs, and in the context of economic resuscitation, there is little scope for PPPs in the air transport sector. It can be established that major PPP projects in the air transport sector across the world were aimed at upgrading airport infrastructure which, although important for the overall strengthening of the Zimbabwe economy, can be considered at a later stage. In addition, PPPs for airports are hamstrung by security concerns, as airports are considered high security zones and governments are often very reluctant to involve the private sector in running them. In addition, the movement of raw materials critical for the turnaround of the economy are mostly through road and railways than air.

The current existing examples of PPP projects in Zimbabwe are all from the transport sector, which should provide valuable lessons for PPPs in Zimbabwe. While The Newlands Bypass provides a good example of a well executed PPP project, there are concerns regarding the high tariffs levied by the NLB and BBR operators (ZNCC, 2009). However, a BT scheme like the case of the NLB requires some funding on the part of Government to be able to pay the private agent, which is currently not available. Thus a BT scheme is not an option at the moment.

[12] Section 3.29 of the Draft PPP Policy for Discussion
[13] As reported in the Herald, 5 October 2010.

4.1.1 Road Infrastructure

The state of the Zimbabwe roads is appalling, a reflection of the lack of significant funding towards road infrastructure repairs and maintenance. In addition, despite many concerns raised on the number of accidents on the major highways, calling for their dualisation, little has been done due to lack of funding. The road infrastructure network is therefore very poor, with some areas, particularly in the rural areas becoming impassable.

Thus there is need for PPPs in the transport sector, particularly in the construction and maintenance of highways, especially construction of dual roads on major highways. The Beitbridge-Harare-Chirundu road, which is not only the busiest in the country, but also contributing most to road accidents, has been mentioned as a priority area. Plans are already at an advanced stage for this to be initiated, with the feasibility study currently being underway. The Harare-Bulawayo road has also been identified as requiring dualisation. In addition, all major roads linking various urban centres are also in a sorry state, requiring some significant repairs, which can also be done using PPPs. The Government is also already involving the private sector in some smaller scale road project PPPs, with a good example being the Plumtree to Mutare road maintenance, which is being done by a private sector player

In 2009, the Government introduced toll gates in major highways of the country. However, a year down the line, there is little that can be seen on the ground in terms of improvements, in line with the toll revenue collected. Among other issues, the toll revenue has to be spread across the whole country, including rural areas not covered by toll gates, resulting in the toll revenue proving to be inadequate to adequately repair and maintain the highways. The experience on toll gates can however be harnessed, particularly since the road users have already adapted to paying for road use. What is only needed is to ensure that the toll payer gets motivated by seeing improvements on the road in line with the toll fees. This can be done by having a private player being given the responsibility under a PPP framework.

Priority for the transport sector should be given to construction of new roads and expansion of existing ones through dualisation, rather than repairing of existing roads, a function which the responsible state agent, ZINARA and the local authorities, can easily do. Thus, significant construction would be involved, which calls for a significant amount of resources. This implies that for the private sector to recoup the losses, it has to be given the opportunity to operate the roads after construction and get revenue through toll fees, given that the Government does not have the capacity to pay the company; hence some ‘operating’ mechanism should be allowed for. At the same time, the public good has to revert back to the state at some point in time, as the private sector can not be allowed to be in charge for ever; hence a transfer mechanism has to be involved.

Thus a BOT framework is called for. While a BOT scheme allows the private player to recoup the costs, a further incentive is called upon to allow the player to go extra miles to ensure that the infrastructure becomes of best quality. Thus temporary ownership can be given to the player, giving the operator freedom to be innovative and engage in new ideas without Government interference. Thus a BOOT scheme might ensure that by the time the Government takes over, the asset would be of best quality possible.

A concern has been raised on the ability of the contractor to recoup costs in the Zimbabwe roads, given the volume of traffic, which has been argued to be too low for profitable levels. Traffic risk is a serious consideration, and it is also difficult to get an accurate estimate of anticipated traffic on a particular road without extensive modelling exercises. However, experience from PPPs in Europe and Central Asia[14] has shown that for a successful PPP in roads, the risk is reduced if the project is not too big; hence for big road it is better to split the project into smaller units, to be done in phases. This could involve constructing a two lane road, and later expanding it into a four lane, or constructing and operating some length of road, before increasing it. An example is the A2 Toll Motorway in Poland, which was considered too big and risky and was implemented in two phases, the first being only for 90km which was completed in 2004, before the second phase (62km) begun, which is expected to be completed in 2010 (Cuttaree V *et al*, 2009).

Thus the Beitbridge-Harare-Chirundu and the Harare-Bulawayo highway projects for example, are projects that are too big for the private sector to significantly recoup costs; hence they have to be broken down into smaller units for the private sector to see any potential. The broken down units can be given over to several agents to implement, given the time involved in having one operator implementing the projects in phases. However, there are still other critical issues that have to be taken into cognisance for the road project BOOT PPPs to succeed in Zimbabwe. This is in addition to others general factors for successful PPPs discussed in section 5.

First, forecasting of traffic should be done on a pessimistic basis, given that the contractor can easily be negatively impacted if the volume of traffic is overstated. Examples can be cited from Europe where PPP road projects failed or did not take off due to lower than expected or absence of traffic projections. These include the Czech Republic Motorway in 1993; the M1/M15 Toll Road in Hungary; the Pitesti-Bucharest-Constanza Motorway in Romania and the A4 Zagreb-Gorican Motorway in Croatia (Cuttaree V *et al*, 2009).

Second, the toll fee which users would pay should not bee too high, as this discourages traffic but also results in alternative routes being used. It is important that the toll fee should not be indexed to inflation, particularly in developing countries, as this can make roads expensive to use. This happened in Hungary, where the tolls for the M1/M15 highway were indexed to inflation, which rose to 35% in 1992, resulting in users trying to find alternative routes to avoid paying (Cuttaree V *et al*, 2009). In Zimbabwe, the public has already accepted the current toll fees, and any significant deviation from the current charges is likely to result in users' unwillingness to pay.

Third, PPPs in the transport sector require a strong sector policy and complementary regulations for its sustainability. For example, success in investor attraction is highly sensitive to policies discouraging the use of come cars or controlling the transport fares. The regulations banning the import of some type of cars in Zimbabwe could have an anticipated effect of reducing the flow of cars in the roads and could therefore negatively affect attractiveness of PPPs.

[14] See Cuttaree V *et al* (2009).

Fourth, road projects under PPPs should undergo competitive bidding to decide the winner. Uncompetitive or non-transparent processes can result in public opposition to the PPP project, and can also result in poor performance by the concessionaire, thereby increasing the ultimate price paid by Government. Box 1 gives an example of three projects that failed or performed dismally due to absence of a competitive bidding process in road projects.

Box 1: Road projects failing due to uncompetitive bidding processes

(a) Trakia Motorway Project (Bulgaria)

This was a PPP project involving the financing, rehabilitation, construction, tolling and operating of the
Kalotina-Sofia Ring Road-Orizovo-Stara Zagora-Nova Zagora-Yambol-Karnobat-Burgas (A1) motorway, which was awarded by the Bulgarian Government in 2004 without resorting to a competitive bidding. The lack of transparency, large government contribution and high construction cost were the basis upon which the opposition parties attacked the project for. Transparency International Bulgaria approached the Bulgarian Commission on Protection of Competition to complain about this, resulting in the concessionaire asking to increase construction costs due to legal obstacles causing substantial delays.
It also did not want to assume the risk of lower-than-expected traffic. As a result, the talks with the concessionaire collapsed in November 2006.

(b) Belgrade-Novi Sad semi-motorway (Serbia)

In 2000, the Serbian Government signed a concession contract without competitive procurement for the operation and toll collection of the 70.4 km semi-motorway section of the Belgrade-Novi Sad route. This was a split project, with the second phase being promised to be the second carriageway within 23 months from the signature of contract. Earthworks started slowly with poor execution and only 10-15 percent of the originally planned contract had been done by July 2002 when there was a change of government, which saw the concession contract being terminated without compensation to the concessionaire who had failed to comply with its duties and obligations. However, toll revenue collected by the concessionaire during these two years was not recovered.

(c) **Zagreb-Gorican Motorway (Croatia)**

In the late 1990s, the Croatian Government negotiated a concession agreement directly with the Italian company Astaldi. The project consisted of a 97 km motorway (A4) from Zagreb to Gorican (Hungarian border) as part of the Pan-European Transport Corridor linking Central and Eastern Europe and the Croatian seaports on the Adriatic coast. The procurement was non-transparent with limited competition. A 32-year BROT (build-rehabilitate-operate-transfer) concession was granted to an Italian constructor (Astaldi SpA) led consortium.

Based on this agreement, a mixed concession company (with 49% Government shares and 51 percent Astaldi) Transeuropska Autocesta was founded, a 32-year concession was granted to it and a concession agreement was signed in August 1998. Total project costs were estimated at $

460 million. The company committed temporary financing to the project in 1998, and intended to close the final financing plan. The Italian partner Astaldi withdrew as a concessionaire and the main builder of the motorway in December 1999. When renegotiations of the project agreements collapsed, the company Transeuropska Autocesta asked for international arbitration in order to protect the project in the interest of all participants, claiming around € 40 million. The financing and construction of the motorway was eventually taken over by state-owned Croatian Motorways Ltd, which managed to fully complete it in 2003.

Source: Cuttaree V *et al,* 2009

Thus, a BOOT scheme can work for the dualisation of the roads, if the above factors are taken into cognisance.

4.1.2 Railway Infrastructure

The rail track in Zimbabwe is owned by the Government through the National Railways of Zimbabwe (NRZ), which owns and operates a 2 760km line with an estimated capacity to move 18 million tonnes of goods per year, with a significant proportion of this capacity no longer available. This is shown in Table 1, which shows how capacity utilisation has fallen over the years.

Table 1: Capacity utilisation in the railway sector in Zimbabwe

Tonnage (Millions)	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Design capacity	18	18	18	18	18	18	18	18	18	18
Tonnage moved	9.5	8.9	8.1	6.3	4.9	3.7	5.4	5.0	3.7	2.7
Capacity utilisation	53%	49%	45%	35%	27%	21%	30%	28%	21%	15%

Source: National Railways of Zimbabwe

In a press interview, NRZ General Manager Air Commodore Mike Karakadzai disclosed that NRZ's capacity to move bulk cargo deteriorated drastically during the last decade. This is at a time when about 42% of NRZ's infrastructure is used to transports energy and mining cargo, followed by agriculture that uses 33%, industry using16% and transit goods at 9%. However about 17% of the country's railway network is marred with restrictions or cautions, which limit the speed at which goods are moved. In addition, about 32% of NRZ's locomotives are in service and about 46% of the wagons (which are close to 9 000 in all) are also in service[15]. This is shown in Table 2, showing how functional NRZ assets have declined.

Table 2: NRZ Assets

Asset	Total Number	Functional Assets	Percentage

[15] This was disclosed during an interview between the General Manager and the Newsday, reported on its issue of 16 September 2010

Locomotives	168	55	33
Wagons	8,682	4,646	54
Coaches	315	117	37

Source: National railways of Zimbabwe

In a follow up interview with ZEPARU, NRZ disclosed that PPPs were mostly needed in locomotives and wagon refurbishment, as currently they were not enough to allow NRZ to perform its role in economic stabilisation. In addition, the private sector could also come in for the upgrading and modernisation of signalling and telecommunications systems, where PPPs were needed mostly to repair the existing infrastructure, with replacement mostly needed where the equipment were vandalised. However, NRZ cautioned that the nature of PPPs in the railways sector in Zimbabwe have to be carefully structured for them to be effective. Firstly, NRZ only need financing from the private sector as it has the necessary expertise, and under PPPs, it would still continue to be in control of all operations.

It was pointed out that the private player would not be having a direct relationship with clients; the private player would channel funds as a form of loan to the NRZ towards a specific objective, e.g. construction or refurbishment of wagons. NRZ and the financer would then come up with a repayment arrangement which is beneficial to both parties. This model has already been tried and proved very successful; NRZ has similar arrangements with users, such as some mining companies like ZIMASCO, the fuel industry and the sugar industry in Chiredzi. These companies have rehabilitated some NRZ equipment as a form of loan, and rather than getting cash payment from NRZ, the loan is adjusted against the improved and guaranteed service as well as having some refurbished wagons dedicated to them. These successful arrangements show that the industry is willing to pay for improved railways system as long as they are assured of improved service; hence the demand risk is reduced for railway sector PPPs.

The railway sector already has a good case study in the form of the successfully completed Beitbridge Bulawayo Railway line, done under a BOT framework. However, this was a small project as just like roads, a very big project involving railway becomes unviable given that the company might have problems in recouping costs without resorting to high rates, which can have an inflationary impact in the whole economy after being factored in the raw material costs. In addition, this project involved the construction of a railway line, which is not considered a key pre-requisite for sustaining the economy at the moment, as the focus is on resuscitating the existing infrastructure.

Generally, the railway does not attract much private sector investment in construction due its complexity. Among the various PPP projects in Europe and central Asia it was discovered that despite the need for massive investment, railways were not attracting much investment, with only 3% of total investment in the transport being to railways. It was also established that 95% of the 3% was from one project, the Estonian Railway Project of 2001 (Cuttaree V *et al*, 2009). Thus by and large, the sector failed to attract PPP interest across the continents.

Drawing from the BBR experience, where a very big international player was engaged to construct and manage only a 350km long, it can be argued that for shorter distances,

construction of new railways under a PPP framework can work. The proposed Harare-Chitungwiza railway line, and other envisioned areas needing railway connection, can therefore be considered for PPPs under a BOT framework. However, there is little scope to recoup the costs since there is not much business traffic between Harare and Chitungwiza to recover costs, except commuters.

Thus the needs of the Zimbabwe railways at the moment go beyond railway construction, but the need for rehabilitation and maintenance of existing infrastructure. New wagons and locomotives are also called for. However, although the general poor status of the existing NRZ infrastructure calls for either a ROT or an LDO PPP model which would see an improvement in the use of the existing infrastructure even without construction of new one, the inability of the investor to assume control (that is the 'operate' part) makes this not possible. This leaves the BT schemes or rehabilitate-transfer (RT) schemes as only feasible at the moment. Given the finance challenges facing NRZ and Government, only those industry players with an intensive need for railway services should take part in the PPP initiatives, so that payments would have to be in form of free and guaranteed service until the total investment is recouped. The success of the models depends on the adherence to other general PPP critical issues discussed in section 5.

It is also important to note that the road and rail infrastructure PPPs also have to be structured in line with regional integration developments with a bearing on infrastructure. A good example is the North–South Corridor Infrastructure project, an initiative being undertaken in the form of a Tripartite process, involving three regional organisations of the Common Market for Eastern and Southern Africa (COMESA), the East African Community (EAC) and Southern African Development Community (SADC). This was based on the need to reduce costs of cross-border trade by reducing transport costs within these three regions. The North South Corridor programme has a number of projects that are inter-related which address, among other things, road and rail infrastructure facilitation and transport among the countries falling under the three regional groupings. If the project kicks off successfully, it can also have an impact on the government and other participants in the PPP process; hence the need to keep cognisance of this initiative in the PPP discourse[16].

4.2 Power sector

Zimbabwe is struggling to meet its energy requirements, at a time when industrial demand for electricity for the resuscitation of the economy has increased. Aging infrastructure and lack of spares have been given as the reasons for the incessant outages and blackouts, while limited generation capacity is cited as the reason for the extensive load shedding programme, a reaction to excess demand over supply. There has been no significant heavy investment in internal electricity generation in Zimbabwe since 1984, at a time when the demand for electricity has been increasing, estimated to be at an average annual rate of 2.5% (Batidzirai B, 2002). In 2009, it was estimated that about US$3.6 billion is needed to invest in electricity generation projects needed for adequate supplies of electricity, which exceeded the 2009

[16] For more information on the North-South Corridor, see Trade Mark Southern Africa (2010), 'North-South Corridor Infrastructure Progress Report', November, 2010

National Budget by almost three times (ZNCC, 2009). This lack of capacity for the government to invest in the sector points to the need for PPPs in the sector.

In Zimbabwe, electricity is internally generated and is mostly of two types; hydro and thermal. Hydro electricity comes from the power plant at Kariba, while thermal power plants are at Hwange and other small plants at Bulawayo, Munyati and Harare. In addition, imports from Zambia, DRC, Mozambique and South Africa augments electricity supply in Zimbabwe. However, none of the power plants in Zimbabwe is being operated at installed capacity, which would have helped in meeting excess demand. Table 3 shows the gap between installed capacity and current capacity utilisation.

Table 3: Installed and available electricity capacity in Zimbabwe

Power Plant	Installed capacity (MW)	Available Capacity (MW)	Capacity utilisation (%)
Kariba	750	620	83
Hwange	920	252	27.4
Harare	100	0	0
Bulawayo	90	0	0
Munyati	100	30	30
Total	**1960**	**902**	**46**

Source: ZESA on its website, accessed on 12 October, 2010

It is thus critical that before the construction of any new plants, the focus should be on ensuring that the existing plants operate at full capacity, which can be done through PPPs. It can also be established further that even if all existing plants were to operate at full capacity, available electricity would still fall short of demand. Total installed capacity, as shown in Table 1, is about 1960MW, at a time when national demand is estimated at about 2200MW (ZESA, 2010). Thus additional capacity has to be sourced through construction of additional plants, which is where PPPs come in.

However, operating the small thermal power stations like Munyati and Harare is a costly affair. In an interview with ZEPARU, ZESA pointed out that small thermal power plants are expensive to run at an average tariff of 13USc/kWh, compared to about 5.6USc/kWh for Hwange Power Station. With the existing tariffs of about 7USc/kWh, investors would be discouraged as they would be operating at a loss. Mechanisms would be thus needed to get around the problem, especially through tariff adjustments.

Feasibility studies have already been done on some possible projects for generating electricity, which is where PPPs could be undertaken, and these include the following:[17]

- *Kariba South Expansion*

This would be an extension to the Kariba Station by addition of two generating units of 150MW. This would need to be complemented by the commissioning of the Batoka reservoir

[17] See Dube *et al*, 2007

for the plant to add significant amount of electricity into the economy, since the conjunctive operation of Kariba and Batoka reservoirs would add an additional industrial energy of about 1000GWh. The studies on the viability of the project have already been carried out and the project is considered viable.

- *Hwange power Station expansion*

The project has been on the cards for a long time and feasibility studies have recommended that this should consist of two units of a capacity of 300 MW each.

- *Batoka Gorge Hydro Power Plant*

This would involve the construction of a dam together with the hydro power plant on the Zambezi River, 54km downstream of the Victoria Falls. It is estimated that the project would have a capacity of 1600MW, to be shared between Zimbabwe and Zambia, and for Zimbabwe this would be covered by constructing four units of 200MW each.

- *Gokwe North Project*

This involves the construction of a 1400MW coal-fired power station on the Sengwa coalfield, about 200km North West of Kwekwe. This was marked for PPPs since it was envisaged, with a BOO model involving an independent power producer. Feasibility studies have shown that the project is viable.

Across the world, it can be established that one common form of PPPs in the power sector is the power purchase agreement model (PPA) in power projects. Under this model, private investors would build a power generation plant and generate electricity, which they then sell to the public company. However, during the interview, ZESA indicated that it would not be able to purchase power from the investor. It was also pointed out that any PPP scheme that is based on some financial contribution from the Government would not be feasible due to financial challenges. Thus other forms of payment have to be used if PPA models are to succeed in the electricity sector. ZESA for example can strategise a PPA scheme in a way similar to the one used by NRZ, where major power consumers can be called in to build generation plants and for payment, they get uninterrupted supplies and highly reduced (or even free) electricity for a period long enough to recover costs. This is likely to succeed, if the current arrangement with independent power producers (IPPs) is anything to go by.

Currently, ZESA has managed to successfully coexist with independent power producers in the IPP schemes. IPP schemes are basically cogeneration schemes between ZESA and an independent power producer. One example of an IPP scheme is the cogeneration plant by the Hippo Valley Estates in Chiredzi, which generates both steam and power for the company's sugar factory's requirements, leaving an excess of about 66GWh, which could be sold to the ZESA national grid. In addition, the generated power would also be transferred to the factory using ZESA's transmission lines. Although the IPP scheme is not a part of a PPP model, its success also demonstrates the extent to which users of electricity are willing to partner ZESA in generating electricity; hence PPPs are possible in the sector.

In addition, other PPP schemes can also work for the power sector besides a PPA scheme. ZESA indicated that the current infrastructure can be shared by licensed producers without problems, given that the Electricity Act has already laid the framework for independent power producers using the current network. Just like any other independent producer, ZESA also has to apply for a license to operate the infrastructure from the Zimbabwe Electricity Regulatory Commission; hence it can not have problems in co-existing with others. However, means for recovering costs have to be found for non-users, and this can only be possible if the investor also gets a share of tariff revenue. In the interview, ZESA pointed out that unless there is a change in the current tariff structure, it would be difficult to attract the private sector players as they would operating at a loss.

Thus for PPPs to be feasible, ZESA and the investor have to work out mechanisms to have tariff charges paid by users going to the investor until investment costs have been recovered; which call for some variations of a BOT or BOOT scheme. However, given that electricity transmission is a natural monopoly, the transmission infrastructure for the generated electricity would be belonging to the Government, hence access to the national grid and its infrastructure to households and industry would form part of ZESA's financial contribution. In addition to ceding access to the investor, the Government would also allow the investor to share tariff proceeds with ZESA. Thus a BOOT scheme, where the investor would build, own and operate the plant, and then use the existing network to get the electricity to users before getting a share of proceeds for a period long enough to recover costs and earn a return before transferring ownership of the infrastructure to ZESA would be appropriate. This can also equally work for refurbishment of existing plants.

4.3 Education

The education system in Zimbabwe was severely affected by the decade-long economic decline for which significant investments are needed to restore the system to normal. Public financing of the sector dwindled to very low levels, which also affected the tertiary education sector, with all major State Universities failing to open for the first semester of 2008/20009 academic year. Public schools are struggling, lacking access to even the most basic resources like pens and paper. The infrastructure in most institutions has become dilapidated; with water and sanitation facilities being inadequate. Following Government's land reform and resettlement programme, several new schools were opened, whose infrastructure is so poor that some lessons are conducted under trees. With Government's purse remaining empty, PPPs can play a meaningful role in turning around the education sector.

PPPs in the education sector have been defined to include any scheme where the public sector and the private sector work together to improve education. Examples include where the Government buys or subsidises private schools to enroll students from poor background. In general, some PPP schemes in the education sector include the following (Education International, 2009):

(i) Private operation of public schools, where public schools are operated by private firms under contract to a public agency, with the schools remaining publicly owned though managed by a private sector operator for a management fee;
(ii) Outsourcing of educational services, where the Government contracts the private sector for the provision of education related services, e.g curriculum development and delivery, administration of examinations; supply of text books and other learning materials in return for payment;
(iii) Outsourcing of non-educational support services, which include canteen, transport, health care, cleaning services etc;
(iv) Voucher schemes, where the government provides vouchers to students, enabling them to attend private schools. This can also involve giving direct subsidies to the private schools to make fees for private schools affordable.
(v) Private sector charity initiatives, which basically involve grants to the Government from the private sector, which are also classified as PPPs, e.g the Bill and Melinda Gates Foundation (LaRocque N, 2008)

It is however the school infrastructure PPPs which are of more relevance to the Zimbabwe situation given the inability of Government to pay the private sector. Such infrastructure PPPs in educations can be structured in a variety of ways, and the most common is the BOT scheme with the following characteristics:

- The private sector partners invest in school building and maintenance;
- Government retains responsibility for the delivery of core services such as teaching;
- Arrangements would be governed by a long term contract- usually 25-30 years, with the contracts specifying the services and standards that must be met;
- The private sector operates the infrastructure until the end of the contract period, with the Government and the private player working out payment mechanisms (LaRocque N, 2008).

In developing countries, infrastructure PPPs in the education sector are difficult to sustain in the short term, as the private sector has to recover costs. Unless this is done through fees and levies, the Government might be financially handicapped to pay up. Examples of such PPPs that can be drawn from countries such as UK, Australia, Egypt, Canada and the Netherlands[18] all show that the PPPs were successful because the Government was paying the private sector player to allow the player to recover costs, rather than through fees and levies. If such capacity is not available, just like Zimbabwe, this could be difficult.

The option for infrastructure PPPs in Zimbabwe then is to allow BOOT schemes where the private player charges fees and levies that are necessary to recover costs during the project period, which would then go down once the Government takes over the school. The fee structure would be agreed to before the project, so that the Government is given an opportunity to put safeguard measures against exploitation of students through the fee structure. The biggest challenge, which needs to be addressed before commencement of the project, is the state at which the infrastructure would be handed over to the Government as the private sector

[18] See LaRocque N, 2008 for descriptions of the PPPs

exits the market. There is always a risk that the infrastructure could have deteriorated extensively by the time the Government takes over.

PPPs would however only assist in urban areas where such schools would easily find students, and would not work for rural schools which are also in poor infrastructure needs. For such schools, infrastructure PPPs would not be able to succeed, and other options have to be pursued. Thus the Government has to continue to engage development partners to fund existing caveats in the system, particularly for basic needs such as books and school furniture, among other initiatives that are already being pursued by the relevant education Ministries.

4.4 Water reticulation

The need for funding in the water and sewer reticulation in Zimbabwe became glaring during the 2008-2009 period, when the advent of a cholera epidemic claimed thousands of lives. The pandemic was attributed to the sorry state of the water and sewer reticulation infrastructure under the control of local authorities, which saw the public resorting to the use of unclean water sources. Even at times when the major dams, which are the sources of water for domestic use, are reasonably full, water supply in urban areas has remained not only erratic but also of a quality leaving a lot to be desired. This has been attributed to a host of problems, which include limited capacity to replace and repair water pumps, to source enough chemicals to purify water as well as the inability to replace the dilapidated water supply network, which has seen a significant amount of the little available water being lost through leakages, for example, Harare is estimated to be losing 40% of treated water through leakages (ZNCC, 2009).

Thus although increasing the availability of water through construction of more dams, which is also envisaged to be done under PPPs[19] would improve water availability, the prime objective should be to ensure that the current systems allow the efficient use of the water; hence the primary challenge is to improve the water and sewer reticulation. This makes PPPs more relevant.

In an interview with ZINWA, it was pointed out that although feasible, PPPs in the water sector have to be strategically constructed to succeed. Water is regarded as a basic right and seen as unviable by the private sector. For PPPs to succeed, then the water tariff system needs to be disaggregated, e.g commercial and domestic use should be charged differently, which is what countries like South Africa are doing. It would then be possible to recover costs on the commercial tariff rates. Even among domestic consumers, PPPs can succeed if they are further disaggregation for example, a PPP can be successful if done for low density suburbs such as Glen Lorne, Mhandara etc, but will not work for Budiriro and Glen view residents as far as recouping costs are concerned. An arrangement taking place in Christon Bank, where an individual company is distributing water to residents at rates that are far above the municipality rates is a good example. A concern has however been raised, following some petitions which some residents filed with the responsible Ministry, complaining about the rates being charged by the private supplier. This points the need for care in giving the investor a free rein over tariffs.

[19] The Tokwe Mukosi and Kunzvi Dams are good examples. In addition, the Zambezi water project, expected to see water being drawn from the Zambezi River to Bulawayo, has also been on the cards for a long time. However, even if dams are constructed, water availability will not improve with the existing infrastructure.

In terms of infrastructure and water purification, PPPs can also succeed if heavy industrial water users, such as Delta and chemical manufacturing firms, are identified and arrangements are made so that they finance water reticulation in exchange of uninterrupted supplies of water and payment holidays until they have recovered their costs. It was pointed out that companies such as hotels and other tourist resort areas of Victoria Falls for example, have expressed willingness to pay higher rates for water if that is to ensure that it is reliably available. Thus for specific arrangements with users, a ROT or BOT model could work. However, to increase the incentive for the private sector, the water purification plant should be separate from the public one like Morton Jeffrey plant where domestic users would be seen as benefitting, as this would reduce the incentive and make it more costly.

Case studies of PPPs in water reticulation are few, with the challenge being largely on recovering costs in the face of water infrastructure that also exhibit natural monopoly characteristics, e.g. a private player can not construct own water pipes to residential areas parallel to the ones currently used by municipalities. Thus, just like the electricity sector, a scheme involving a private player rehabilitating and building water reticulation infrastructure and then getting a share of the water tariff revenues with municipalities contributing in form of access to existing networks to users could also suffice. Thus a BOT scheme can work well if the frameworks are properly designed.

One possible area for PPPs in water reticulation can be drawn from the 5-year WRP Pty Ltd-*Metsi-a-Lekoa* Public Private Partnership for the supply of potable water to residents. This is given in Box 2. An interesting feature is the similarity with the Harare water problem, particularly the extent which leakages contribute to the water problem. Such a PPP scheme can be successfully aped in Zimbabwe.

Box 2: The WRP-Metsi-a-Lekoa 'Sebokeng-Evaton Leakage Reduction' PPP Project

The project

This was a project covering largely the residential areas of Sebokeng and Evaton, in South Africa with approximately 70,000 household water connections. Metsi-a-Lekoa is the water services unit of Emfuleni Local Municipality in South Africa, which was established to manage the supply of portable water to residents of the municipality. The project was necessitated by a general deterioration of the internal plumbing fittings over a period of many years, which caused high levels of water leakage. This was at a time when Metis-a-Lekoa did not have the financial capacity to correct the situation. It is estimated that the wastage was about 80% of the water supplied to the area, representing an annual water bill of about ZAR120 million per year.

In 2004, WRP Pty Ltd, in a joint venture with DMM Ltd, was appointed by the municipality to design one of the largest advanced pressure management installations in the world to reduce leakages, which would also reduce pumping energy costs. The project was commissioned in 2005 and was completed in 2010.

The municipality did not contribute any financial input, including the initial capital costs, which were borne in total by the project team, which consisted of WRP/DMM with additional specialist support provided by various sub-consultants (the project involved not less than twelve key role players),

including Platinum Consultants and Coplan. In addition, Wide Bay waters of Australia, through its CEO, acted as specialist reviewer.

Benefits of the project

The total costs for the project were about ZAR10 million to construct and operate over the five year period. During the period, the project achieved audited water savings of 50 million m^3, which represent over ZAR150 million reduced water purchases by the municipality from the bulk water provider. In addition, the project achieved energy savings due to reduced pumping by the bulk water provider of more than 13,000 tonnes of carbon dioxide per annum. Other benefits included the following:

- Upgrading of infrastructure
- Identification of bottlenecks in the system and problem infrastructure
- Identification of bulk meter errors

Source: Extracted from "What water loss reduction can mean for South Africa", 25 Degrees in Africa Journal, Volume 5, September/October 2010.

4.5 Health

In Zimbabwe, the public health system has been traditionally the largest provider of health-care services, with Mission hospitals and health care delivered by non-governmental organisations (NGOs) playing a complementary role. The infrastructure in the public health institution was also well managed and maintained. However, years of economic decline, have resulted in almost a reversal of this pattern, with the public sector failing to perform its leading role. The health system infrastructure in Zimbabwe found itself in a sorry state as a result of underfunding and a lack of maintenance. This affected even the basic hospital equipment such as laundry machines, kitchen equipment and boilers. The period 2008-2009 saw public hospitals more or less closing doors to patients as the lack of supplies took its toll, with those who could not afford private medical facilities being left vulnerable. Lack of supplies for health facilities also extended to laboratory equipment and laboratory reagents.

While this was happening, the privately run health institutions managed to soldier on, and they more or less managed to carry the burden placed upon them by the public sector failure, but only for those who could afford their service charges. This drives home the important role that a combination of the public and private sector can play in bringing back normalcy in the sector, which is where PPPs can come in.

What is of paramount importance in the health sector is to make the existing public institutions operate at full capacity before any plans are made to build new institutions, especially the major referral hospitals, Parirenyatwa in Harare and Mpilo in Bulawayo. Thus PPPs can play a more significant role whose impact can be immediately felt in the upgrading and rehabilitation of existing infrastructure in the existing public institutions than building new ones. This would also involve building or buying new equipment where the extant is dilapidated. ROT schemes are recommended for the sector to achieve this purpose. The private player can be given an opportunity to operate public hospitals in partnership the government, with roles and territories being however different. This recommendation stems from a similar arrangement that is proving successful in South Africa which is explained in Box 3.

Box 3: The Peloni-Universitas Hospital Co-location PPP Project, South Africa

The Free State Department of Health (FSDoH) embarked on a restructuring exercise of the three Bloemfontein hospitals, namely National, Universitas and Pelonomi Hospitals, in an effort to correct the inherited apartheid era legacy of duplication, inefficiency and inequity. This saw National Hospital being transformed into a district hospital, Pelonomi Hospital into a regional level hospital while Universitas Hospital became a tertiary level hospital for the Free State province. The process created excess infrastructure and excess capacity, which presented problems as well as opportunities for contracting with the private sector. A 1997 national health facilities audit revealed that the Free State required ZAR825 million to address its facility backlog, with Pelonomi Hospital facility backlog alone estimated at ZAR100 million. The FSDoH could not afford this given its limited capital budget.

This saw the FSDoH initiating a scheme to make underutilised public hospitals in the Free State accessible to the private sector, which was in line with the South African Government's realisation of the need to structure deals with the private sector to improve service delivery. In 2003, the FSDoH entered into a 20 year concession agreement with a private player, Community Hospital Management (Pty) Ltd (CHM), for a project which became known as the Pelomoni-Universitas Hospital Co-location PPP. CHM was given an empty ward at Universitas to operate a private hospital, which became known as Universitas Private Hospital. Under the PPP, CHM injected a capital of ZAR20 million towards the upgrading of a public medical ward, theatre and ICU blocks at Pelonomi. The public sector was required to inject a capital investment of about ZAR11 million to upgrade facilities. In addition, the public sector would receive a percentage of the turnover generated by the private hospital with the State retaining ownership of all buildings after the concession period (20 years).

The total capital investment by the private sector partner was ZAR70.9 million, for which ZAR41.6 was allocated for renovations of the private ward, purchase of equipment and building a medical centre at Universitas Private Hospital. The balance of ZAR29.3 million was utilised for renovations and upgrading of public wards at Pelonomi, as well as building of Pelonomi Private Hospital (part of the deal as well). Thus the ZAR70.9 million worth of investment, together with the goodwill would be reverting to the public sector after the concession period.

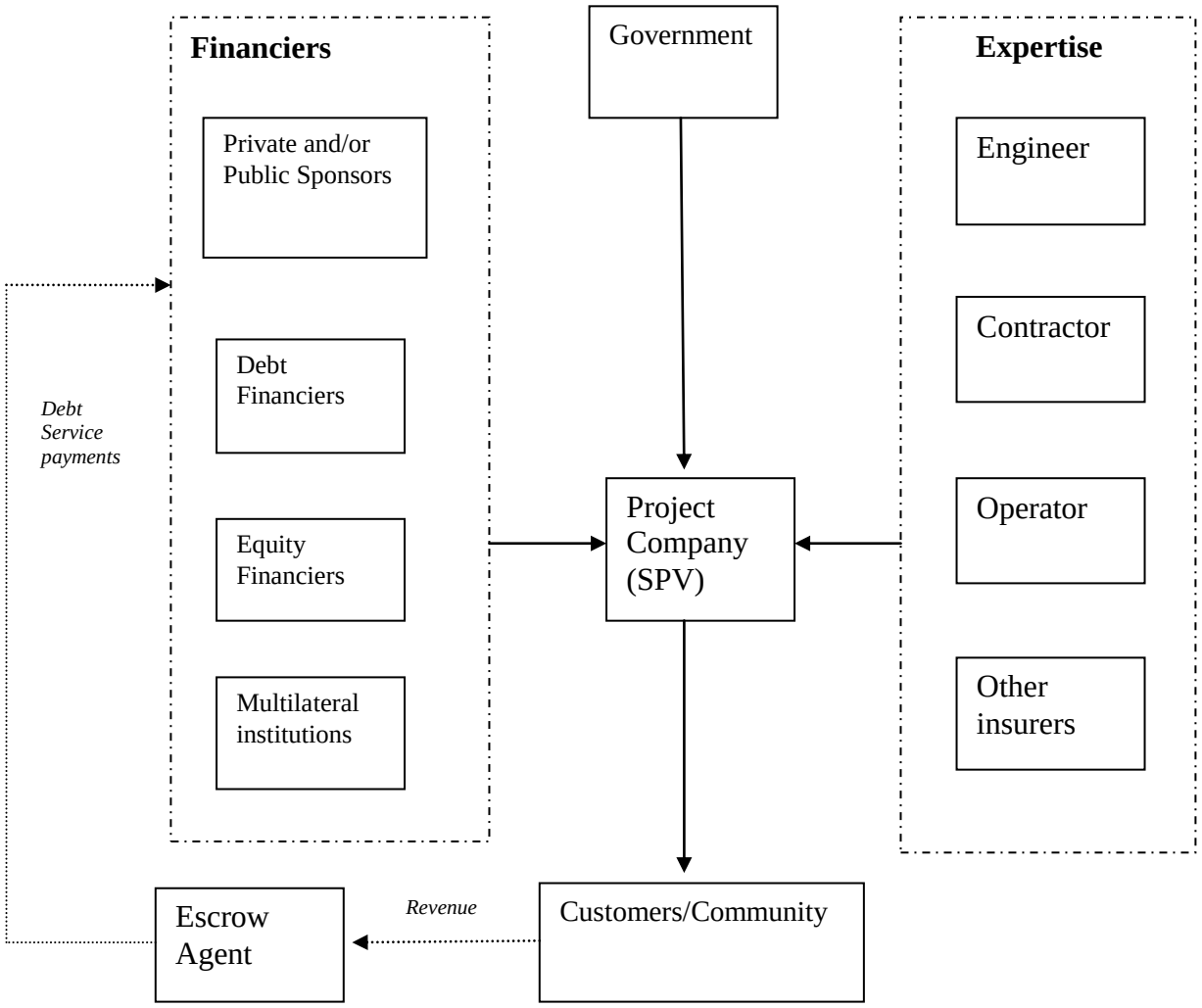
Source: Shuping S and Kabane S (not dated), 'Public-Private Partnerships- A Case Study of the Pelonomi and Universitas Hospital Co-Location Project' accessed online

Thus similar co-location PPPs can be used to ensure that the major public hospitals in Zimbabwe become fully operational. It can be established that such schemes are already being implemented on a small scale at Parirenyatwa Hospital for example, where some wards are already being operated by private doctors, although a concern has been raised on the possibility for the doctors to try to lure patients from the public system.

5. KEY ISSUES TO ADDRESS FOR PPPS IN ZIMBABWE

PPPs involve complex technical issues and their success is dependent on the congenial interaction of multiple stakeholders. Figure 1 gives an overview of some of the key players involved in PPPs and how they interact. In that regard, there are key issues that need to be addressed to facilitate the interaction of the stakeholders for successful designing and construction of PPPs.

Figure 1: Possible PPP stakeholders and their interaction



Source: United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) (not dated).

5.1 Financing

It is important that financing mechanisms for the PPP schemes be regularised. While it is largely the private sector that brings in the finance, the manner in which the funds would be channelled towards the infrastructure needs regularisation. Project financing by the financiers is mostly done via a special purpose vehicle (SPV). As shown in Figure 1, the SPV is the most critical component of the PPP, as it shoulders the project. A SPV is a legal entity enabling the coming together of the different stakeholders, which facilitates the allocation and diversification of risk and financing requirements to more than one party. Thus, it is the SPV that undertakes the project and therefore all contractual agreements between the various parties will be negotiated between themselves and the SPV (UN ESCAP, (not dated)). It is usually set

up by the sponsors who agree to lead and contribute the long-term equity capital in exchange for ownership shares in the SPV. The sponsors can also include the Government.

The project can be financed via debt and equity, with financing mostly provided using project financing rather than traditional lending, i.e. financing would be based on the financial strength of the project with little or no recourse to the sponsors. This implies that the specific risks of that project remain separate from the existing business of the sponsors, as the SPV borrows the funds and the debt is paid back using the cash flow generated from the project (UN ESCAP). For easy access to capital, the SPV would mostly be headed by a consortium of financiers, who include different stakeholders as shown in Figure 1. Even if Government has equity in it, the SPV has to be seen to be relatively independent, with government control being absent or minimal, as there is a risk that the SPV would be construed as a veil behind which the government would control a PPP, particularly if public finance institutions are involved (IMF, 2004). Financiers sometimes also request the setting up of an escrow account, managed by an escrow agent, to safeguard project revenues for the purpose of insuring that debt service obligations are met. The account can also be used to hold a deposit in trust until certain specified conditions have been met.

Thus, before any PPP is initiated, it is important that special attention is made towards ensuring that SPVs for PPPs can be successfully constructed for the ease of finance mobilisation. This also needs to be supported by the laying of the basic policy and institutional framework for PPPs, whose discussion ensues.

5.2 Policy and institutional framework

Political commitment is one of the key elements for success of PPPs. One measure of political commitment is the policy and institutional framework for PPPs. This includes institutions governing the manner in which PPPs are going to be conducted, as well as the legislative framework governing the manner in which PPPs are going to operate. Legislation acts as both insurance and assurance to investors that the government will honour the contract.

It is important that a policy framework on PPPs be developed, which would guide the PPP process. In addition, a public institution to oversee the whole process also needs to be developed. The institution would also play an active role in developing the legislative framework for PPPs. The existence of these three issues (policy framework, legislation and PPP institution) plays the most critical role in making PPPs successful. The Nepal PPP approach can be used to indicate the importance of policy and legislative frameworks for PPPs.

First, the PPP concept was incorporated into Nepal's Development Plan (Eighth Development Plan 1992-1997). The Tenth Development Plan (2002-2007) laid the groundwork, mentioning the PPP schemes to be used (BOT and BOOT) and saw necessary policy and legal reforms to promote private sector participation in construction of road network. However, it was noted in the Three-Year Interim Plan (2007/08-2009/10) that, despite the BOOT policy adopted for promoting private sector investment in infrastructure, the private sector investment could not rise as expected. This called for a simpler and practical legislation to govern the process.

An 'Act Relating to Private Sector Investment in the Construction and Operation of the Infrastructure', which started as on Ordinance on 22 August 2003 before being ratified as an Act on 14 December 2006 was thus established. The Act laid the basic institutional legislative framework for operationalising PPPs, which made it easier for the private sector to feel secure[20].

In South Africa, although an institution governing PPPs had been put in place[21], it became apparent that a regulatory framework was needed for PPPs at the national and provincial level; particularly the pre-procurement, procurement, and implementation process. This saw the development of Regulation 16 to establish the mechanism for national and provincial departments to procure PPPs. Regulation 16 was enacted in May 2000 and served as a comprehensive guide to PPP implementation. In addition, the National Treasury PPP Manual and the Standardized PPP Agreement Provisions were also developed to complete Regulation 16 and these were presented to the public on August 23, 2004. This proved very successful, for it is reported that since passage of Regulation 16, twelve PPPs have been completed, with project values in the hundreds of millions of rand (USAID, South Africa, 2005).

Zimbabwe has made some strides towards laying the basic policy and institutional framework. A Draft PPP Policy and Draft Guidelines have already been completed, which is currently being reviewed by stakeholders for finalisation. In addition, the PPP Legislative Review for Zimbabwe, which is a general review of legislations in Zimbabwe which have a bearing on investment and business environment, has also been done. It is important to also consider enactment of a PPP specific legislation in addition to the legislative review and necessary amendments to lay the legislative groundwork for PPPs. A comprehensive legislation has to govern PPPs.

Legislation governing PPPs

There are two possible approaches towards the establishment of enabling legislations for PPPs. The first is to ensure that the existing pieces of legislation, which one way or another have a bearing on PPPs, are all reviewed and amended to make them PPP compliant. This would be so since the pieces of legislation were enacted before PPPs were envisaged, and would thus either possess some conflicting provisions with PPPs, or might involve a parallel process to PPPs. Thus a legislative review would eliminate legislative barriers to PPPs. Alternatively, a stand alone specific PPP legislation would be enacted. The advantage of a specific legislation is that it would give policymakers an opportunity to harmonise and legalise all issues to do with PPPs, ranging from the institutional framework to the specific conducts.

According to the UN Legislative Guidelines on Privately Financed Infrastructure Projects, a good PPP law should incorporate the following:

[20] From Nepal PPP Policy, Performance and Proposals, UNESCAP, 2007 accessed online at website http://www.unescap.org/TTDW/ppp/PPP2007/mm_nepal.pdf accessed on 19 October 2010

[21] This was the PPP Unit established under the Ministry of Finance, which had been seen necessary after a general policy orientation towards private sector participation in public service areas and legislations such as the Water Services Act, 1997 and the Public Finance Management Act, 1999 had laid the necessary groundwork.

- The law should provide the scope of authority to award PPP projects (identification of authorities, eligible sectors and geographical subdivision of regional PPP projects);
- The law should describe an institutional framework that enables sound administrative coordination;
- No unnecessary limitations should be placed on the allocation of risks;
- The law should clearly state the provisions for providing financial or economic support to the project;
- The law should provide transparent, competitive procedures for selection of bidders, requesting proposals up to negotiation and contract award;
- The law should describe exceptional circumstances for exemption of competitive procedures;
- The law should address how to deal with unsolicited proposals;
- The law should enable the private party to collect tariffs or user fees, subject to regulation; and
- Standard agreements and other guidance materials should be available.

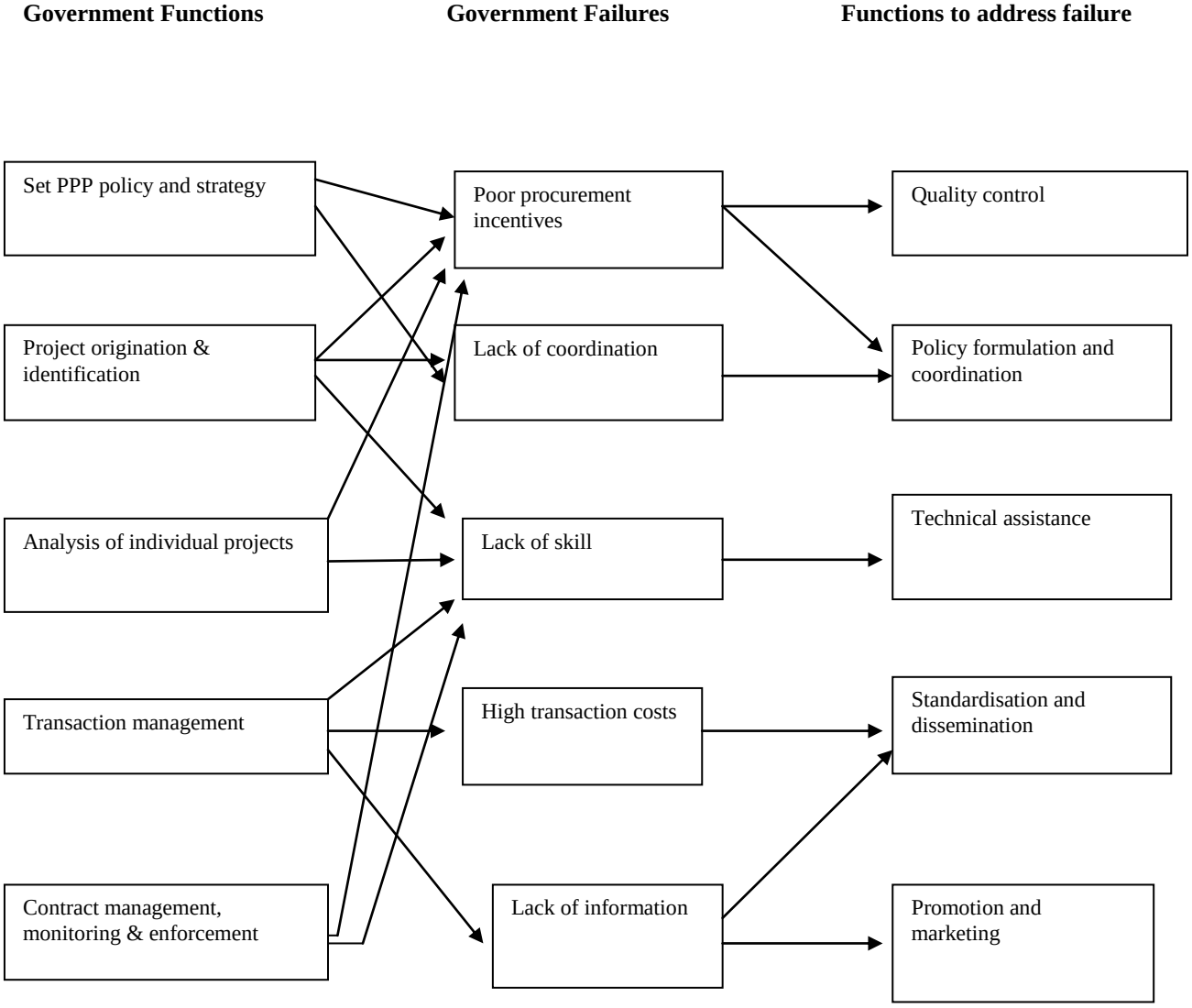
It is quite easier for these issues to be adequately dealt with under one piece of legislation rather than several pieces. This approach has been taken by many countries, and these include Poland (The PPP Act, 2005), Mauritius (PPP Act, 2004) and the Czech Republic (Act on Concession Contract and Procedure No. 139/2006 Coll.(2006)) which have comprehensive PPP legislations in place.

Examples can be found where PPPs failed due to absence or weak legislative frameworks. For example, in Poland, the need for specific laws or regulations was not considered until a highly advanced stage. Due to the absence of the legislative framework, it took almost seven years between the selection of the concessionaire and the signature of the concession agreement in the case of the A1 Toll Motorway Project in Poland. This was after it was later identified that the procurement legislation was not good enough, and a decision was made during procurement to amend a piece of legislation (Toll Motorway Act) to define the legal framework for PPP in the road sector. The lengthy legislative process was costly as the benefits were delayed (Cuttaree V *et al*, 2009).

Institutional Framework

The success of the PPP process also hinges on the presence of an institution to oversee the PPP process. Such an institution across many countries is referred to as a PPP Unit. It is thus important that such a Unit be established in Zimbabwe. Although a PPP Unit only plays a supporting role, it helps in project preparation; helps in the selection and management of specific advisors; ensures that the project fits into the overall PPP policy and also plays a role in project approval and quality assurance. Figure 2 summarises the functions of a PPP Unit, as well as describing the various measures that a PPP Unit can take to address various aspects of government failure.

Figure 2: Roles of PPP Units in addressing government failures in PPP programs



Source: Sanghi A *et al*, 2007

A review of case studies on PPP Units by Sanghi A *et al*, 2007 showed a *prima facie* positive correlation between the use of PPP Units and successful PPP programmes. Some of the important lessons that could be drawn from the case studies include the following:

(i) Even with well designed PPPs, governments characterised by lack of political commitment to advance PPP programmes, lack of transparency and coordination within government agencies will reduce the chances of a successful PPP Unit. It was found out that the least effective Units were in those countries whose governments were relatively less effective.

(ii) Without high level political support for the PPP program, a PPP Unit will most likely fail in its mandate.

(iii) Relatively successful PPP Units directly target government failures, thus focusing clearly on responding to specific government failures is essential in ensuring the success of the institutional solution chosen.

(iv) The PPP Unit should have enough authority to match its expectations from stakeholders, particularly in providing quality control.

(v) The location of the PPP Unit in the government is also central for its success, especially for coordination and political support. In a parliamentary system of government, a PPP Unit is most likely to be effective if located in the Ministry of Finance or Treasury, for ease of fund coordination. In addition, a country with a strong planning and policy coordination arm can also have the PPP Unit housed under that arm of government. In Zimbabwe, a PPP Unit could serve its purpose well is housed under the Ministry of Finance, to make it easier for the Government to play its financing roles effectively if called upon.

However, under emergency conditions it is still possible to initiate PPP projects before the PPP Unit is fully established. Some examples can be found where countries established PPP Units after PPP project. The Government of Victoria in Australia, for example implemented a tram and suburban train transport in Melbourne and a major toll road before establishing Partnership Victoria Unit. The same is also true for Hungary, which created a PPP unit ten years after its first PPP projects in transport (Cuttaree V *et al*, 2009). However, these are only rare cases, as it is the PPP Unit that has to drive the process forward.

It is however important to note that political commitment for any government is not measured by only the policy and institutional framework, although these are key in demonstrating it. Having these institutions will not be a sufficient condition for the take off of PPP projects, given that policies and laws can exist on paper without any implementation, or with implementation being characterised by some hurdles. Other issues which matter in the Zimbabwean context include the general competitiveness of the country as an investment destination, which warrant attention from respective Ministries in order to attract investment. It is thus critical that the country's overall investment climate be improved, together with other rankings that are normally used as yardsticks, such as the ease of doing business.

5.3 Risk Analysis

Due to their long term nature, PPPs create several elements of uncertainties about future outcomes. Risk analysis involves the assessment of the possible uncertain environment concerns, measuring them and strategising on managing them. PPP projects are designed based on time, budget, operating revenues and expenses, forecasted targets and expected quality. However due to unexpected events, such as failure to perform as expected, insolvency and external factors such as political uncertainties etc, the project can be prevented from meeting

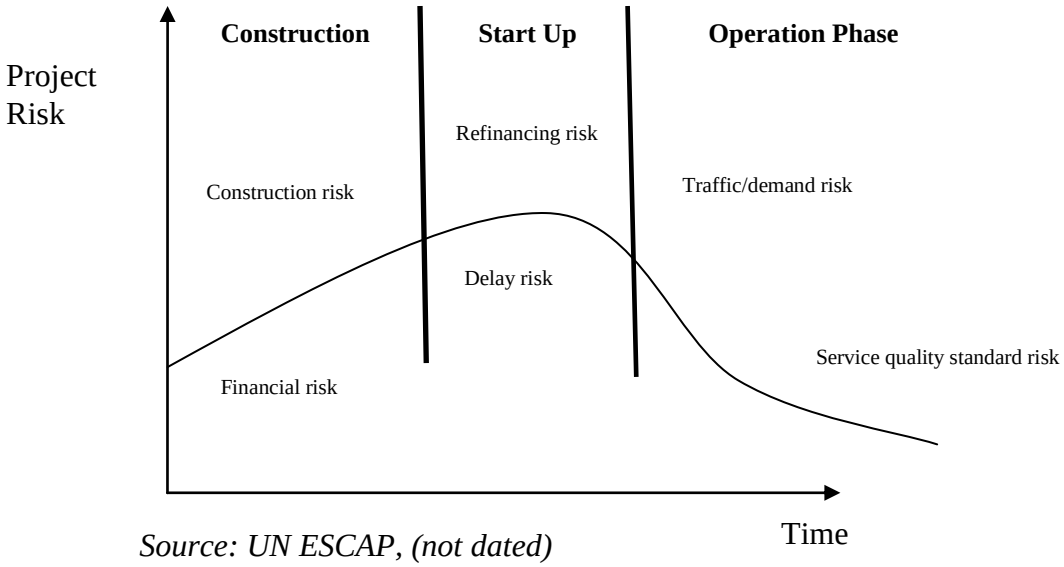
the expectations. Thus success of a PPP project thus hinges largely on transferring risk to a party that is best suited to manage or minimise it (UNESCAP, undated).

Before the initiation of PPPs, strategies must be put in place to manage and minimise risk, as inadequate risk management can easily result in the project being derailed. The types of risk in PPPs that need to be taken heed of include the following[22]:

- Construction risk, which arises from infrastructure design problems, cost overruns in construction and other delays in project implementation;
- Financial risks, which arises due to the long term nature of the projects in the face of volatilities in interest rates, exchange rates etc;
- Performance risk, which is a risk that the performance of the entities could compromise availability and provision of quality services;
- Demand/traffic risk, where there is a risk that the need of the service would not be adequate to compensate construction expenditure or that the demand would fall after completion; and
- Residual value risk, which can arise due to inability to correctly capture and estimate the future market price of the assets.

The risks occur at different stages during the PPP project. Figure 3 shows the stages at which such risks can emanate in a project life.

Figure 2: Risks in PPP projects



Source: UN ESCAP, (not dated)

In the Zimbabwean context, it is largely the financial, construction and traffic risks that can pose a threat towards PPP sustainability. It is therefore critical to pay special attention to such

[22] See IMF, 2004

risks in project design. However, the fact that the private sector has been found to be willing and ready to invest in related projects, particularly if they stand to directly benefit shows that the financial risk is surmountable. In addition, construction risk, particularly arising from the capacity of the private sector to live up to expectation in terms of expertise needed for PPPs also needs to be assessed. This warrants some discussion on the issue of availability of expertise in the country, which follows.

5.4 Expertise for PPPs

It is important that the necessary expertise and capacity to deliver PPP project objectives be available in Zimbabwe. This is expected to emanate mostly from the private sector. As shown in Figure 1, the experts needed for PPPs include engineers, operators and contractors. Such expertise has to be available for PPPs to be feasible in Zimbabwe. In an interview with ZEPARU, the Zimbabwe Institute of Engineers indicated that availability of expertise in Zimbabwe would not be a problem. While it is true that many engineers left the country during the economic downturn, it is largely due to lack of demand for such skills that Zimbabweans are not coming back. If PPP projects were to be initiated, if the locally available capacity is felt to be inadequate, engineers and technicians in neighbouring countries would be willing to fill in the vacuum. At the moment, engineers who left the country have registered intentions to come back, and such projects would give them an opportunity to do so. An example was also given where the International Office for Migration has come to the help of the University of Zimbabwe, Faculty of Engineering by sourcing for experts outside the country to assist. Thus, the issue of expertise can not be used as a basis for delaying the initiation of PPPs in Zimbabwe.

Government commitment is also reflected in the manner in which expertise on PPPs is developed in government, through strategic training that is meant to ensure that the basic range of skills needed to manage a PPP program exists among public sector employees. Such training should also be planned upon before the initiation of PPPs.

5.5 Inculcating a culture of maintaining infrastructure

It is also important that the rehabilitation of public infrastructure be preceded by a deliberate policy on the part of the Government to ensure that there is a culture of maintaining the infrastructure. The Department of Public Works, for example, should ensure that it has in place a programme to ensure that all public infrastructure are adequately maintained to avoid them deteriorating again once the private sector exits the market. If this is not addressed, it would be a matter of time before the infrastructure would call for more resources for rehabilitation again.

6. CONCLUSIONS AND RECOMMENDATIONS

The study has demonstrated that the recently adopted decision to implement PPPs is a noble idea as PPPs can indeed help in bringing investment into the areas traditionally reserved for the public sector, especially at a time like now where the Government is financially handicapped. However, there are a lot of areas that still need to be done to create the necessary ground for the take off of PPP projects. These issues include the finalisation of the policy and institutional framework, which has already been initiated by the Government. In addition to the policy and institutional framework, there are also some critical issues that have to be taken heed of for

PPPs to succeed. These issues generally centre on risk analysis and management, financing and issues on the mobilisation and incentivising of the private sector to participate in the process.

Taking into cognisance the sectors that have been targeted for PPPs by the Government, the study has also demonstrated that although PPPs are indeed feasible in those sectors, they are possible if different PPP models and strategies are applied across sectors. The study therefore recommends the following approaches and models for each sector:

- Applying a BOOT scheme for road infrastructure. This should however be preceded by disaggregation of the project into smaller units for feasibility and viability purposes;
- Applying a BT or RT scheme for the railways infrastructure. However chances for success of the models would be enhanced if the private sector players involved are the bulk users of the railway services for feasibility purposes;
- A BOOT scheme for the construction of electricity generating plants, for which the public sector contribution would largely be the access to the national grid and transmission networks. Success would also be enhanced if bulk users of electricity are the ones taken on board;
- A BOOT scheme for infrastructure projects for the education sector. However this would have to be complemented by the availability of development partners as fees and levies charged by private operators would be beyond the reach of many during the ownership by the private sector;
- A BOT or ROT scheme for the water reticulation sector. However, access to the existing network to users would be part of the public sector contribution for feasibility. In addition, chances for success are enhanced if the private players involved are bulk consumers of water to avoid excessive pricing to recoup costs;
- ROT schemes for the health sector. This stands a bigger chance for success if co-sharing of infrastructure in existing public health facilities for an agreed time is adopted, which would also form part of the public sector contribution.

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