

**PROJECT INFORMATION DOCUMENT (PID)
APPRAISAL STAGE**

Report No.: AB4173

Project Name	Botswana Integrated Transport Project
Region	AFRICA
Sector	Roads and highways (75%); General transportation sector (15%); Railways (10%)
Project ID	P102368
Borrower(s)	GOVERNMENT OF BOTSWANA
Implementing Agency	Ministry of Works and Transport, Botswana 2nd Floor, Room 204 Private Bag 007 Botswana Tel: 267 395 8504 Fax: 267 391 3303
Environment Category	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
Date PID Prepared	January 13, 2009
Date of Appraisal Authorization	December 18, 2008
Date of Board Approval	May 21, 2009

1. Country and Sector Background

A.1 Key development issues in the country context-- economic diversification is the theme

1. Botswana, a landlocked middle-income country (MIC) with 1.8 million populations in an area larger than France, is often cited as an African success story thanks to its prudent management of natural resources (diamonds). It has sustained high economic growth and political stability over a number of decades. The economy has grown at an impressive rate, averaging about 9 percent a year during the last four decades following its Independence in 1966. Its real Gross Domestic Product (GDP) per capita has increased more than ten-fold since its independence – the fastest growth rate in GDP per capita in the world. It reached US\$6,041 per capita in 2007 making Botswana one of only a handful of countries in Sub-Saharan Africa to have reached the upper middle income band. This success has largely been driven by diamond mining, which accounted for about 40 percent of GDP in 2006. Diamond export accounted for 75 percent of total merchandise goods export in 2006. Mineral revenues accounted for about 45-50 percent of total government revenue in the last 10 budget years (1995-2006). Fiscal management of mineral revenues has been exceptionally prudent, with windfall funds channeled into public investment, and recurring expenditures limited to non-mineral revenue sources. Excess revenues have been used to build reserves amounting to about 30 months of imports in 2007, reaching US\$10.3 billion in early 2008. As a result, gross external debt stands at less than 30 percent of GDP, while the gross interest burden is less than 1 percent of revenues. All this has been achieved against a backdrop of political stability and democratic government.

2. However, Botswana still faces a number of development challenges in its continuous progressing forward. The country's relatively narrow economic base in diamond mining has meant that the benefits of development have not yet been broadly shared. Disproportionate to its revenue

contribution, diamond mining represents only a small share (3.4 percent) of total employment. The economy remains heavily dominated by state owned enterprises, which together account for 17 percent of GDP (about 40 percent of all employment in the country). Slow growth in the non-mining private sector has meant that growth in employment opportunities has not been sufficient to absorb labor surplus in rural/agriculture sector. As such, the country's unemployment rate has been persistently high over the past 15 years at above 20 percent. Although the more recent figures show a slight drop to 17.6 percent, unemployment continues to be a serious problem affecting particularly the young. In addition, the rate of HIV/AIDS pandemic was also high at over 23 percent of population in 15-64 age groups. It made Botswana the world's second most severe HIV/AIDS pandemic (after Swaziland), and has wiped out many of the development gains it had so far impressively achieved. All these lead to high incident of poverty and inequality in Botswana. Despite its upper middle-income status, one third of the population is below the internationally recognized poverty line of US\$1 per person per day, a level much worse than many countries of similar economic standing.

3. It is, therefore, essential to diversify the economy, with increasing reliance on the private sector to lead activities in manufacturing agro-processing and services. The "internationally competitive sustainable Economic Diversification" becomes a major policy goal for the government as explicitly spelled out in its current five-year National Development Plan (2003/4 – 2008/9). The government, under the Botswana Institution of Development Policy Analysis, and the Bank had jointly completed a study on "Diversifying Botswana's Export: An Overview" (October 2006). In order to diversifying the economy beyond Botswana's principal export –diamonds, investments in various hard and soft infrastructures to bring about new export opportunities were recommended. These include a review of taxation policies, a comprehensive reform of vocational and educational training, a resolution of work permit issue, reform of utilities, etc. On the transport sector list, it recommends reducing transport cost and improving trade facilitations.

A.2 Key development issues in the transport sector context-- greater regional integration is the theme

4. Efficient and cost effective transport is viewed as one of the vehicles for growth and a necessary condition to increase competitiveness, hence to promote economic diversification. Botswana has been doing well in its transport sector after two decades of self reliance and inward looking development. However, the basic mundane development stage has now reached its maximum benefit. It can no longer afford to rely heavily on its domestic market and limit connection to its giant neighbor, South Africa. The smaller the economy, the more it has to increase its degree of openness and connect to a larger global market. Expanding its economy and enlarging its markets through effective regional collaboration should be seriously considered. Given the large geographical size of the country (10 percent larger than France), with small but good quality pool of human resources, it does not lend itself to be the locality for consumer market, nor effectively competing in the area of labor intensive manufacturing sector. On the contrary it could have competitive edge in the area of high skilled service provider, including transport services.

Box 1: Current situation of various transport modes

Botswana has a relatively well-developed land transport infrastructure, road and railways. However, management of these assets could be improved.

Roads are currently the predominant mode of transport for Botswana as over 90 percent of freight and passenger traffic have been carried by road. When Botswana achieved Independence in 1966 it had 12 kilometers of paved road! Today, after 40 years of continuous development and good governance, it has 6,000km of paved road and 12,000km of unpaved network (national and local government network included). The length of the network had grown rapidly in the 70's - 90's, but significantly slowed down over the last five years, as the competing demand for limited public financial resources between the soft sector (health, education, HIV/AIDS, etc) and the hard sector (infrastructure) has become increasingly prominent. The total asset value of the primary and secondary network is estimated at Pula10 billion, while the average annual maintenance expenditure is about Pula 100 million per annum (a mere 1 percent of the total asset value). Such a level of expenditure is obviously far from adequate to maintain the road infrastructure at an optimal level. As a result, the deterioration of the road network with the increased traffic growth is progressing fast. Hence, the significant number of roads previously in excellent condition needs today various forms of rehabilitation. Moreover, the rapid growth of traffic in the urban and peri-urban area around Gaborone demands a substantial increase in additional road lanes and effective traffic management, while the existing road surface has not been maintained. Botswana's **railways**, a 100 percent government owned parastatal, consist of a single main line of 6,041 kilometers with three short branch lines. This links to South Africa railway to the south and Zimbabwe railway to the northeast. Its major business activities are freight traffic of soda ash – export, and raw material for textile industry – import. However, over the last five years its freight traffic has been very volatile with a generally downward trend. This is due partly to the increasing competition from the road sector and the outdated management options, and partly to the monopolistic power of South African to control the rail freight traffic routing. Market access to the **air transport** is quite restrictive in comparison with road transport. Restriction exists, in particular for scheduled domestic and international air transport services. The bilateral agreement with South Africa has an important influence over the air access, frequencies and prices to Botswana. In addition improved airport facilities, management and operation efficiency become important and urgent issues for air transport sub-sector.

5. Although landlocked Botswana, strategically located at the center of southern region of Africa, can position itself to be an effective land-bridge connecting South Africa, and Namibia to Zambia, Angola and its further hinterland of Angola and Eastern Africa. Proximity to South Africa offers the potential to link Botswana into regional supply chain. Botswana should seize this great advantage from its strategic location and turn the challenge into an opportunity. It should upgrade its transport infrastructure drastically and ready itself to take up further challenge of attracting excess business that are currently queuing at the very congested center in South Africa. The transport sector development vision for Botswana is to “go regional”, i.e. effect a paradigm shift from inward looking and being “at the end of the line” to being outward looking and position itself to be “the center or second hub” of the region. Gaborone city, given its proximity to South Africa (20 km from the Tlolewang border which links Botswana to South Africa, a 45 minutes flight, or a 4-hour drive to Johannesburg), naturally becomes the best candidate to serve as a feeder port to Johannesburg, **if** its capacity to provide such service is enhanced.

6. **Regional integration dimension of the project in line with SADC Protocol:** Botswana is one of the 14 member states of the Southern African Development Community (SADC) and has signed the 1994 Transport and Communications Protocol. The Protocol emphasizes the regional integration of the member states through integrated transport development. Member states agreed to

ensure and sustain the development of an adequate roads network in support of regional socio-economic growth by providing, maintaining and improving all roads including primary, secondary, tertiary and urban roads, including those segments which collectively constitute the so called “regional trunk road network”. In addition, the protocol also call for member states to promote economically-viable integrated transport service provision in the region characterized by higher performance standards and consistent levels of efficiency and reliability of all individual component parts of the transport chain. Using the 1994 protocol as a platform for further regional integration collaboration, SADC developed a “Corridor Development Initiative” using transport to facilitate the trade and investment in order to unlock inherent economic potential in specific Southern African locations, with the following underpinning key principles and strategies:

- ⌚ Promote regional economic co-operation and integration in terms of economic policy and strategy;
- ⌚ Focus on existing transportation/development corridors
- ⌚ Greater regional competitiveness via regional integration and collaboration
- ⌚ Greater emphasis on the role of private sector
- ⌚ Institutional collaboration

7. The scope and investment planned under the project is in line with the SADC spirit using transport infrastructure and services as a conduit to achieve greater regional integration.

Box 2: Transport costs, an impediment to trade and export diversification.

Botswana is only four hours by road to Johannesburg, and nine hours to the Port of Durban. However its high transport costs were quoted as a major constraint for the competitiveness of its non-diamond exports (beef, ostrich, textile, copper nickel, tourism). Transportation costs for imports of intermediate and capital

	Average Inland transport cost to Durban Ports (US\$/20 ft container) /1	Air Freight to Europe (US\$/per kg)/2	Sea freight to Europe (US\$/20 ft. container)/2
Botswana	1,149	1,840	2,000
Swaziland	486	n/a	n/a
Zambia	3,200	n/a	n/a
Zimbabwe	2,400	2,220	2,000
South Africa	--	1,170	1,000
Namibia	--	2,330	1,080
Mauritius	--	2,570	1,800
Mozambique	--	2,180	1,500
Kenya	--	1,700	1.400

Source: 1/ Coughlin et al (2001)
2/ Namibian Investors, reproduced in UNCTAD (2002)

inputs and exports from Botswana are high in comparison to international competitors, such as Mauritius and South Africa for tourism and textile, and Argentina or Brazil for beef. It has been a double jeopardy for Botswana as both inland and sea freight transport costs are high with inland transport part constituted nearly 60 percent of total transport costs. The average cost to transport a 40ft container to Durban from

Gaborone is approximately Pula 12,000 (US\$2,460) while the cost of shipping the same container from Durban to Baltimore is US\$2,500. Air passenger costs are also high, which has an impact on tourism and exports of services and high value products.

2. Objectives

8. The Botswana Integrated Transport Project is aligned with the Bank's assistance strategy agreed with GOB. The project closely follows the specific strategies considered under the Country Partnership Strategy (CPS) for 2009-2012 (scheduled to be presented to the Board in April 2009). As indicated in the CPS – Strategic Element I: Infrastructure for Increased Competitiveness – efficient, secure and cost effective infrastructure is key for Botswana's continued economic growth and increased competitiveness. Hence, the Government has called on the Bank to partner in improving Botswana's hard strategic infrastructure, for which transport infrastructure is among them, to benefit from both the Bank's knowledge and financing.

9. Given the country and sector vision, the higher level objective of the project is to assist the Government of Botswana to take the first bold step in revamping/modernizing its entire transport system. It aims to start with enhancing its system efficiency in order to eventually take up the challenge of its ambitious vision by positioning itself to be the feeder hub for South Africa. The proposed project aims to provide the necessary capacity building and the infrastructure improvement which will, over the time, increase its competitive edge required for opening up the opportunity for export diversification. It would open up employment opportunity in non-state sector, balance the income distribution to benefit the disadvantaged group of population, improve the poverty indicators in line with the Millennium Development Goals (MDGs). The primary **development objectives (PDO)** of the project is to enhance the efficiency of the transport system through building modern business capacity in the public administration, improving inter-regional and critical transport infrastructure and empowering private sector participation

10. The achievement of the **PDO** will be monitored using the following performance indicators:

(i) On the knowledge component:

- The Regional Integration Vision of Botswana is prepared focusing on the role and contribution of transport sector with an action plan and policy direction for its implementation.
- The National Intermodal Transport Master Plan including that of Greater Gaborone City is completed with an action plan and investment identification, providing better division among various modes of transport, thus providing better service for its users.
- The capacity of the Road Department is enhanced to effectively manage the complex road investment projects, particularly the output and performance -based long term contracts (OPRC) which will reduce significantly the number of contract transactions over a project life, introduce effective management and monitoring systems and provide for "value for money" aspect of related facilities. The OPRC also involves private sector involvement through an affective PPP operation, freeing up fiscal space to the country budget as it attracts private capital on activities with traditionally public investment, besides providing a new method of asset preservation and management to be piloted under the project

(ii) On the physical investment component:

- The OPRC for the 800km pilot program has a positive fiscal implication to the road sector that will result in extending the service life of road with less budget allocation.

- The intervention in the Urban road improvement in Gaborone city lead to effective relieve of congestion resulting in travel time saving by 20 percent and average vehicle operating cost savings by 10 percent

3. Rationale for Bank Involvement

11. Development demand and economic growth for Botswana in the next decade is to focus on diversification and to achieve greater regional integration. The call for development funding will require involving private capital. Also, the increasing sophistication of its development agenda makes the introduction of international development experiences more critical than ever before. Botswana is mindful that given the critical juncture at which the country stands in relation to its infrastructure development vision and privatization program, it is important to draw the lessons from the substantial body of global and African experience and best practice.

12. In the above context the Government of Botswana (GOB) views the Bank as a development partner not only in the area of resource transfer, but also (and more importantly) as a conduit for transferring knowledge and international experience from the global community. The breath and depth of the next level of development aiming to position Botswana to be the second regional transport hub of southern Africa would require a sophisticated intermodal Transport Master Plan development for which the Bank has the needed and proven expertise that would bring added value to the client. The knowledge and analytical advice would also be followed by a physical investment. On the Bank's side the proposed intervention would present an opportunity to deepen the Bank's understanding and support to Botswana's ambitious and well balanced program of investment covering both institutional building through a well coordinated pilot technical assistance program, blended with the physical investment activities for selected high valued assets.

13. Botswana, having developed its road network significantly in the past, has recently a major problem in maintaining its Pula 10 billion (about US\$2 billion equivalent) worth of road assets. Therefore it needs a sustainable and optimized management systems that will preserve the assets value, develop and introduce a modern monitoring system to ensure that the investment is maintained and sustained in the optimal and real time manner, providing the "value for money" principle. The Bank has a distinguished and leading role in bringing in the private sector to achieve sustainable results in the road sector through the multi-year performance and output based road and management contracts in other parts of the world. The Bank had first introduced such contracts in Argentina, Brazil and Uruguay in the early 90s and is currently scaling up its usage in Africa, and Asia. Many examples exist, such as in Chad, Uganda, Tanzania, Cape Verde, Burkina Faso, Zambia, and Madagascar in Africa; Punjab State in India, and Philippines where the Bank helps the governments developing similar schemes, based on the Bank's OPRC sample document. It is, therefore, well qualified and experienced to support the government's reform efforts, drawing from its extensive involvement in similar reform programs. Under this project it will introduced as a pilot operation the modern asset management method using the Output based Performance Road Contracting (OPRC) to Kanye, one of the most traveled district in Botswana. After proven to be successful, it will be replicate on the remaining parts of the road network in the country.

14. Involvement from multilateral and bilateral institutions in the past decades include those of the African Development Bank (AfDB), OPEC, and China-Exim Bank, most of which are relatively less substantive so far. Botswana now requires substantial support in the road sector and increasing Bank's engagement would not only help to prepare the ground for a new sustainable initiative but

also help to restore investors' confidence. With the Bank taking the role of a financier and facilitator of best practice, Botswana is expected to promote institutional reforms, optimize its shrinking civil service, including a possibility for establishment of an autonomous Roads Authority and introduce the use of long term performance and output based contracts to manage all national roads network. This will not only attract large investors in the road sector, but will also result in increased competition, reduced prices for road construction and ultimately lower road user costs.

4. Description

15. The project seeks to achieve the above mentioned development objectives through investment in the following three major groups of components. The overall estimated cost of the project is US\$331.70 million (net of taxes, inclusive of 15 percent for price and physical contingencies), out of which US\$177.06 million will be financed by the World Bank, US\$20 million by the OPEC Fund for International Development (OFID), and the remaining amount of US\$134.64 million by GOB. Taxes and levies are estimated at US\$55.30 million all of which will be funded by GOB, making the total project cost inclusive of taxes to be US\$387.00 million. Table 1 below summarized the agreed scope of investment and the components of the project:

Component A: Capacity Building, Institutional Strengthening and Training, estimated at US\$14.70 million, inclusive of 15 percent for price and physical contingencies - proposed to be financed as follows:

- ***Component A1:*** pre-investment activities estimated at US\$4.65 million; of which US\$2.14 million will be financed by GOB, and the remaining amount will be financed by the World Bank under a retroactive financing arrangement; and
- ***Component A2:*** Capacity building, knowledge transfer and institutional strengthening and training investment planned during project implementation phase, estimated to cost US\$10.05 million. This will be financed 100 percent by the World Bank

Component B: Roads Sector Investment, estimated at US\$236.0 million, inclusive of 15 percent for price and physical contingencies, out of which US\$122.0 million proposed to be financed by the Bank and US\$114.0 million by the GOB. The total cost split for this component is US\$227.80 for civil works (to be financed 50 percent by the Bank and 50 percent by GOB) and US\$8.20 million for construction monitoring/supervision (to be financed 100 percent by the Bank); and

Component C: Urban Roads Infrastructure Investment, estimated to cost US\$81.0 million, inclusive of 15 percent for price and physical contingencies, out of which US\$42.50 million financed by the Bank and US\$38.50 million by the GOB. The total cost split for this component is US\$77.0 million for civil works (to be financed 50 percent by the Bank and 50 percent by GOB) and US\$4.0 million for construction supervision services, to be financed 100 percent by the Bank.

Table 1: Project Scope, Components and Cost Estimates
(net of taxes and inclusive of 15% for price and physical contingencies)

<p>A. Capacity Building & Institutional strengthening (US\$14.70 million):</p> <p>A1: Pre-investment activities (US\$4.65 million) of which US\$2.14 million will be financed by GOB and the remaining by WB under a retroactive or regular financing arrangement:</p> <ul style="list-style-type: none"> ⌚ Regional Integration Vision of Botswana: <ul style="list-style-type: none"> ③ Regional Integration and A1 Road-Rail Corridor Study (US\$620,000) -- retroactive financing from WB ③ Pre-feasibility Study for Mmamabula- Ellisras and Moseitse – Kazungula Railway Lines (US\$440,000) -- retroactive financing from WB ⌚ Conceptual design for OPRC and Feasibility study for Gaborone City traffic improvement <ul style="list-style-type: none"> ③ Conceptual design for road asset management contracts-OPRC (US\$1,200,000) – GOB funding ③ Greater Gaborone Transport Multimodal study (traffic improvements study), including F/S for major intersections (US\$770,000) – GOB funding ③ <i>Environment, Social and Resettlement Frameworks for OPRC</i> (US\$70,000) – GOB funding ⌚ Capacity building and training prior to investment: <ul style="list-style-type: none"> ③ Training for project implementation team in relevant area of contract management, procurement, financial management, etc. (US\$100,000) – GOB funding ③ Three specialists for 2 years on Contract Management, Engineering/procurement and Transport Planning (US\$1,450,000) -- retroactive financing from WB <p>A2: Capacity Building during the project period (US\$10.05 million) --100% financing by the World Bank:</p> <ul style="list-style-type: none"> ⌚ Multimodal transport planning: <ul style="list-style-type: none"> ③ National inter-modal Transport Master Plan, including Gaborone City (US\$1,800,000) ⌚ Knowledge Transfer and institutional strengthening <ul style="list-style-type: none"> ③ Training of various government institutions (US\$1,000,000) ③ Technology and logistic upgrade of MWT (US\$2,000,000) ③ Detailed Designs and Bidding Documents for selected city intersections/bypasses (US\$3,000,000) ③ Technical monitoring and audits of project implementation (US\$1,250,000) /* ⌚ National consulting and contracting industry development (US\$1,000,000) 	<p>B. Road Sector Investment (US\$236 million, out of which US\$122.0 million financed by the Bank, US\$20 million by OFID, and US\$94 million by GOB):</p> <ul style="list-style-type: none"> ⌚ Road Asset Management (OPRC- Civil Works, US\$227.7 million.); and ⌚ Contracts supervision and construction monitoring /supervision (estimated at 3.5% of total contract value-US\$8.2 million. <p>C. Urban Road Infrastructure Investment (US\$81.0 million, out of which US\$42.5 million financed by the Bank):</p> <ul style="list-style-type: none"> ⌚ Gaborone City Urban Roads Improvement Program (major intersections civil works-US\$ 77.0 million.); and ⌚ supervision contracts (estimated at 5.5% of total contract value-US\$4.0 million)
<p>/* Operation related technical monitoring and audit for Components B and C</p> <p>TOTAL ESTIMATED COST OF THE PROJECT (net of taxes) is US\$331.70 million , including 15 % for price and physical contingencies, out of which US\$177.06 million to be financed by the WORLD BANK, US\$20 million by OFID, and US\$134.64 million by GOB</p>	

5. Financing

	Estimated Cost of Project (net of taxes and duties)	Taxes, duties, and other civil works related fees	Gross Cost of Project
GOB:	US\$134.64	US\$55.30	US\$ 189.94 million
IBRD:	US\$177.06	--	US\$ 177.06 million
OFID:	US\$ 20.00	--	US\$ 20.00 million
TOTAL:	US\$ 331.70	US\$55.30	US\$ 387.00 million

6. Implementation

16. Project preparation has taken place in coordination and partnership with a broad spectrum of agencies involved in the transport sector in Botswana, including the Ministry of Works and Transport, the Road Department, the Transportation and Road Safety Department, the Gaborone City Council, the Department for Town and Regional Planning, the Department of Environmental Assessment, the Ministry of Local Government, The Ministry of Land and Tourism, PEEPA, PPADB, etc. The partnership will be maintained during project implementation through continued involvement of these agencies in the consultations and supervision of project implementation. In addition, at a later stage of the project preparation the OPEC Fund for International Development (OFID) expressed interest in participating in the investment of the project and had sent a representative to join the World Bank pre-appraisal / appraisal mission. The investment participation from OFID in the form of parallel financing was secured and a tri-parties partnership will be maintained throughout the project implementation

17. Since the project is of multidisciplinary nature, it requires constant and extensive consultation with various stake holders as to achieve creation of a high level of synergy:

- (i) At the higher policy decision level, it involves an active Reference Group (RG) to steer and guide the operation aiming to forge forward a full synergy creation for this multi-

Transport Sector Reference Group (RG) , chaired by PS/MWT with representatives from stake holders which include:	
⌚ MFDP	⌚ Planning Department
⌚ MLG	⌚ of MWT
⌚ GCC	⌚ DR
⌚ DTRP	⌚ BR
⌚ BEDIA	⌚ DRTS
	⌚ DCA/CAA

disciplinary investment. The Permanent Secretary of MWT chairs on a monthly, or on “as need” basis the RG, with members

from MFDP, MLG, the Department of Town and Regional Planning (DTRP), the Gaborone City Council (GCC), the Botswana Railway (BR), the Department of Civil Aviation (DCA), and the PPADB.

- (ii) At a day-to-day project administration level, a project implementation team headed by a dedicated Project Manager and composed of qualified staff from MWT, RD, GCC, recruited Technical Support Group specialists in key area of needed expertise and relevant stake holders, is set up to coordinate and prepare the pre-investment activities required to start the investment. The same team will be expanded and totally dedicated to the project with capacities strengthen to handle the physical and financial

implementation of this US\$330 million worth of investment when the preparation is ready to roll out the investment activities.

7. Sustainability

18. Two strategic approaches, complementary with each other, have been introduced when design of the project. These approaches will provide a solid basis for the overall sustainability of the project. The first approach, related to the capacity building and knowledge component, is based on: (i) strong and solid capacity building regarding modern planning and strategic decision in order to enhance the stability in the delivery and management of transport modes in general and of road sub-sector in specifics, as well as to lead to the institutionalization of road asset management; and (ii) longer term vision of the country in using transport as a vehicle of growth and a platform for economic diversification and development. The second complementary strategic approach pertaining to the physical component is based on: (i) increasing involvement of private sector in the transport business so as to ensure greater efficiency, cost effectiveness, innovation and competitiveness; and (ii) the strong commitment from the GOB (MFDP, MWT, and Gaborone City Council) to give its priority attention to the alleviation of the traffic congestion, and improving the road safety condition in Gaborone city, thus ensuring the sustainability of urban traffic improvement activities.

19. In addition, the overall project's sustainability will be enhanced by: (i) the continued institutional strengthening activities within MWT in the overall regional integration vision of Botswana, and within RD in the modern methods of road asset management; and (ii) the commitment of MFDP to adhere to the best "value for money" principle when investing in the sector. This is important to ensure the highest level of efficiency expected from the sector if it is to play an effective infrastructure role in being a major platform to sustain the continued economic success story of the country.

8. Lessons Learned from Past Operations in the Country/Sector

20. The Bank hasn't been operating in Botswana for almost two decades; therefore there is not a distinguished lesson from the previous Bank's operation in the country. However, as the economic situation, which in the past depended heavily on diamond production, is changing fast, the need for reforms and adjusting the way of doing business becomes evident in all sectors especially in transport. It is increasingly calling for massive involvement of private sector through PPP, for scaling up regional integration, for a balanced use of different modes of transport, and for better utilization of resources emphasizing the "value for money" principle, etc. All of these demand the change in the openness of the country and its exposure to the international markets. The country presently involves actively in creating an international transport hub environment, considers the use of various cost recovery methods (tolls, shadow rates, etc) and improving the management and monitoring systems for its public asset management. However, tying physical interventions to successful implementation of reform measures bears the risk of getting into a gridlock situation and further decay improving road assets. Instead, capital investments and reform measures have to be pursued simultaneously with reasonable implementation linkages to one another. At the same time, genuine and broad-based commitment of key political decision has to prevail if fundamental reforms of road management and financing are to be achieved.

21. Given the above, the Bank and the GOB have designed this project with great attention placed on specific strategy supported by physical interventions. The project proposes to facilitate

engagement in private sector participation through implementation of long term, performance and output based road contracts (OPRCs) at a time when support from key decision makers for private sector participation is strong and road users' demand for better and safer transport is mounting. In addition, the project support sophisticated traffic management options inclusive of implementation of multilevel interchanges and other options to facilitate the already unbearable traffic conditions on the major Gaborone city streets.

22. While pursuing the physical interventions, the Integrated Transport Project (ITP) will at the same time focus on capacity building and institutional arrangements by introducing professional planning methods leading to safer, modern, and optimized road asset management, through introduction of Transport Multimodal Planning, traffic improvements, and development of various cost recovery options on the major transport facilities. Neither of these efforts will be conditional on the other, but both will go hand in hand and will be closely coordinated. For instance, well-functioning OPRC arrangements require lean, competent government counterpart units to manage and enforce them. Road department special unit in charge of the project is expected to be such counterpart units and their establishment and operation is being supported by the project.

23. **OPRC experience.** The Bank has been involved in promoting output and performance based contracts in a number of countries in Latin America (Argentina, Brazil, Uruguay), South Asia (India), and Africa (Chad, Zambia) and the lessons drawn from such experience which are relevant in the context of Botswana have been appropriately incorporated in the project design:

- Rehabilitation and maintenance works are combined under one model and implementation strategy, thus easy to monitor and measure;
- The project has to define all risks involved, quantify them, and propose mitigation measures for each of the risks involved, proportioning them to the party best fit to mitigate it
- Rehabilitation and maintenance works must comply with the designed level of pavement deflection, roughness, rut depth, cracking, or raveling and minimum level of skid resistance and other elements spelt out in agreed level of service (from the road users' point of view);
- Regular monthly visual inspections of maintenance activities must focus on facility conditions, roadside environment and other road inventory;
- For the entire financed works, the payment model will cover the rehabilitation/improvement works as well as maintenance works, making sure that the contractor has all incentive to carry out the maintenance works after completion of rehabilitation works;
- The rehabilitation solutions need to be closer to the economically optimum strategy recommended by life cycle cost analysis, such as by using the World Bank's HDM model or equivalent;
- The period during which rehabilitation works are to be executed should be dependent on the design of contractor who undertakes the risks involved before achieving the payment terms upon full compliance with the design level of service.
- Adjustments for inflation should be made throughout the contract period, on a monthly basis starting one year after bid submission date;
- A corridor management approach should be adopted whereby the service provider is also required to manage road safety, axle load control, roadside user facilities, Right-of-Way encroachment and traffic flow;

- There should be increased consistency in the rehabilitation and maintenance activities through long term network management rather than short term road by road section interventions;
- Success in the implementation of OPRCs is highly dependant on (i) good management of the programs at the road authority level and (ii) governments' capacity to meet with their financial obligations, thus regularly honoring the payments due to the contractors;
- Longer duration of performance based contracts (7-10 years) are prescribed to allow the contractor to spread his risks and provide for justifiable periodic maintenance cycles – and where OPRCs are being tried for the first time, it is necessary that the Bank remains involved throughout the contract period.

9. Safeguard Policies (including public consultation)

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment (OP/BP 4.01)	[x]	[]
Natural Habitats (OP/BP 4.04)	[]	[x]
Pest Management (OP 4.09)	[]	[x]
Physical Cultural Resources (OP/BP 4.11)	[]	[x]
Involuntary Resettlement (OP/BP 4.12)	[x]	[]
Indigenous Peoples (OP/BP 4.10)	[]	[x]
Forests (OP/BP 4.36)	[]	[x]
Safety of Dams (OP/BP 4.37)	[]	[x]
Projects in Disputed Areas (OP/BP 7.60)*	[]	[x]
Projects on International Waterways (OP/BP 7.50)	[]	[x]

10. List of Factual Technical Documents

1. Inception Report - Consultancy Service for the Preparation of the Environmental and Social Management Framework (ESMF) and a Resettlement Policy Framework (RPF) by Arid Environmental Consultancy (Pty) Ltd, May 30, 2008
2. Prefeasibility Study of Three New Rail Links – Trans-Kalahari Railway, Mmamabula–Ellisras, and Mosetse–Livingstone
3. Request for Proposal for Consultancy Services for the Greater Gaborone Multimodal Transportation Study, October 2007
4. Multinational Botswana/Zambia: The SADC North-South Transport Corridor Improvement Study
5. Request for Proposals for Consulting Services for Preparation and Design of a Pilot Project for Area Wide Output- and Performance-based Road Contracts (OPRC), April 2007

* By supporting the proposed project, the Bank does not intend to prejudice the final determination of the parties' claims on the disputed areas

6. Request for Proposals for the Study on Regional Integration of Botswana's Transport Sector

11. Contact point

Contact: Supee Teravaninthorn

Title: Lead Transport Economist

Tel: 34981

Fax:

Email: steravaninthorn@worldbank.org

Location: Washington, DC

12. For more information contact:

The InfoShop

The World Bank

1818 H Street, NW

Washington, D.C. 20433

Telephone: (202) 458-4500

Fax: (202) 522-1500

Email: pic@worldbank.org

Web: <http://www.worldbank.org/infoshop>