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The World Bank

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Report No. P-1968b-BT

REPORT AND RECOMMENDATION

OF THE

PRESIDENT OF THE

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

TO THE

EXECUTIVE DIRECTORS

ON A

PROPOSED LOAN

TO THE

REPUBLIC OF BOTSWANA

FOR A

FOURTH ROAD PROJECT

March 29, 1977

CURRENCY EQUIVALENTS

Currency Unit	=	Pula (P)
US$1.155	=	P 1
US$1.00	=	P 0.866
US$1,000	=	P 866
US$1,000,000	=	P 865,800

WEIGHTS AND MEASURES

1 meter (m)	=	3.28 feet (ft)
1 kilometer (km)	=	0.62 miles (mi)
1 metric ton (m ton)	=	2,204 pounds (lb)
1 sq km (km^2)	=	0.386 miles (mi^2)

GLOSSARY OF ABBREVIATIONS

CIDA	-	Canadian International Development Agency
CTO	-	Central Transport Organization
EDF	-	European Development Fund
GDP	-	Gross Domestic Product
GNP	-	Gross National Product
MLGL	-	Ministry of Local Government and Lands
MWC	-	Ministry of Works and Communications
NORAD	-	Norwegian Agency for Development
ODM	-	Overseas Development Ministry (United Kingdom)

GOVERNMENT OF BOTSWANA
FISCAL YEAR

April 1 - March 31

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

REPORT AND RECOMMENDATION OF THE PRESIDENT
TO THE EXECUTIVE DIRECTORS ON A PROPOSED LOAN
TO THE REPUBLIC OF BOTSWANA
FOR A FOURTH ROAD PROJECT

1. I submit the following report and recommendation on a proposed loan to the Republic of Botswana for the equivalent of US$20.0 million to help finance a fourth road project. The loan would have a term of 20 years, including 4-1/2 years of grace, with interest at 8.2 percent per annum.

PART I - THE ECONOMY

2. The most recent economic report entitled "Development Strategy in a Mineral-led Economy" (No. 735-BT) was distributed to the Executive Directors on May 30, 1975. A special mission visited Botswana in September 1976 as part of a study on regional migration in southern Africa. An updating economic mission is scheduled for April 1977. Country data are given in Annex I.

3. Botswana is a landlocked country located at the center of southern Africa. Although it is the size of France, the population in 1975 was only about 700,000, of which about 75 percent was concentrated in the eastern 10 percent of the country. During the early 1970s, GDP grew in real terms at about 20 percent annually and is currently expanding at 8 percent per annum. GNP per capita in 1975 was about US$330.

4. Until the early 1970s, livestock was the country's principal resource. The tradition of cattle rearing dominates the agriculture sector which employs about 83 percent of the population. While less than 10 percent of the land is suitable for crop cultivation, cattle thrive on the savanna type vegetation covering more than half the country. Crops such as sorghum, maize, millet, beans and cowpeas are grown mainly for subsistence consumption. In recent years, minerals have become Botswana's main source of economic growth. Substantial deposits of diamonds, copper, nickel, coal and brine have been discovered and two major mines are in operation, one producing diamonds and the other copper/nickel. In the longer term, it is possible that major coal and soda-ash mines may also be established.

5. Botswana has good potential for development. The main constraints which the country faces are shortages of: (i) water; (ii) infrastructure, including international transport because of the country's landlocked position; and (iii) technical and professional manpower. Rainfall is highly erratic, and the country is prone to frequent droughts. In the eastern region, water comes primarily from boreholes, dams and seasonal rivers, and supplies could become inadequate to meet needs during the late 1980s. Studies are currently being carried out on the underground water resources of this region. The vast Okavango swamp in the northwest, which is separated by large

distances from the main population centers in the east, represents a potential source of future supply. Its complex hydrology and delicate ecology are being intensively studied as part of the Government's long-term plan for water development. Unfortunately, the cost of transporting water to the east appears extremely high, while agriculture potential in the Okavango area is limited by poor soils.

6. Infrastructure is at an early stage of development. With public utilities generally available in the main urban centers, the Government is giving prioritiy to extending these facilities to the rural population. Only about 250 km of the 7,200 km of main, main feeder and secondary roads are bituminous-surfaced; secondary and rural roads are often little more than tracks. Investments are being concentrated in upgrading the vital north/south road axis (about 1050 km) to bituminous standards. Existing airfields cannot yet accommodate jet aircraft but the main fields are being upgraded to international standards. The main railway line is owned and operated by Rhodesia Railways and passes from Rhodesia through eastern Botswana for about 640 km before connecting with the South African railway system. More generally, the Government has kept under constant review the constraints implicit in the country's landlocked position and the potential problem of access to international transport routes. As the Government does not want to be solely dependent on routes through South Africa and Rhodesia, it has accelerated its construction program for a road link with Zambia.

7. Increasingly, the shortage of professional and technical skills is becoming a major constraint to development. At independence in 1966, general levels of education and skills were low, with illiteracy estimated at 75 percent of the adult population; in fact, there was no public system of secondary education. Government plans call for a rapid expansion in education and training at all levels, so as to substitute local staff for expatriates as rapidly as possible in technical and professional positions in both the private and public sectors. However, with the expected growth in the economy, the need for additional skilled manpower will become even more pressing, necessitating an increased reliance on expatriates and a step-up in the level of educational investment.

8. Botswana's development objectives were summarized in 1972 in the five year National Development Plan (1973-78) as follows: (a) rapid economic growth; (b) social justice, defined as achieving a more equitable distribution of income and providing equal opportunities for all Batswana in education and employment; (c) greater economic independence, particularly the diversification of the country's external, economic and trade relations, and the localization of skilled manpower; and (d) sustained livestock production, while conserving the natural environment.

9. The Plan called for an investment program equivalent to 30 percent of GDP and public capital expenditures of P 212 million in 1974 prices over the 1973-78 period. Infrastructure investments were to account for about 60 percent of planned expenditure, while education and social services, particularly in the rural areas, were expected to be progressively expanded and to receive about 13 percent of planned allocations. Given the size and low level of infrastructural development, the acute shortage of skilled manpower

and the need to modernize the traditional sector, these allocations of investments appear to be well directed. So far, the Government has executed its development program satisfactorily. An accelerated rural development program was launched in 1973 with international assistance. On the whole, planning, largely project-oriented, has been effective. The Government's planning machinery is being further strengthened and reoriented toward long-term strategies and more comprehensive economic planning. A new plan (1977-81) is being prepared. It is expected to underscore the basic principles outlined in the last plan and continue the Government's emphasis on infrastructure, education and rural development.

10. The gap between rural and urban incomes has widened in recent years because of the growing demand for skilled individuals, the result of rapid urbanization and mineral development. In addition, a 1974/75 survey indicated a skewed rural income distribution, particularly between incomes of households with and without livestock. Part of this skewness can be accounted for by the uncontrolled use of grazing land, and the effective control by a few of watering points. To counter this, a new land use policy, adopted in July 1975, is currently being implemented. The policy involves a far-reaching program of reform of traditional practices of cattle rearing, which is designed to make grazing control, better range management and increased productivity possible.

11. Together with Lesotho, South Africa and Swaziland, Botswana belongs to the Southern Africa Customs Union, established in 1910, which provides for free movement of goods between member countries. Under this Union, all customs, excise and sales duties are paid into a common revenue pool and allocated to members mainly in relation to the value of their imports and excisable production. The 1969 revision of this agreement has resulted in a four-fold increase in Botswana Government receipts from the pool over the last five years. Up to 1975, these countries also comprised the Rand Monetary Area, but in August 1976 Botswana withdrew after establishing a Central Bank and introducing its own currency, the Pula.

12. Starting from a very low level, economic growth began with substantial mining investments towards the end of the 1960s and continued with the production of diamonds in 1971 and copper/nickel in 1973. The plan targets for annual growth in GDP and employment of 14 percent and 9 percent respectively are likely to be met despite a shortfall in estimated copper/nickel production. The growth of the economy since 1971 has been largely export-propelled. Prior to 1971, the value of minerals in external trade was negligible; in 1974/75 it represented just over half the value of merchandise exports. At the same time, the strong demand for beef, both in the Republic of South Africa and in the United Kingdom, brought an expansion of agricultural output through increased offtake of the national herd. While meat and meat products have now been overtaken by minerals as the country's main commodity, they still represent almost 40 percent of the value of merchandise exports. The bulk of beef exports traditionally went to the United Kingdom, but, during 1974 when the European Economic Community imposed a ban on meat imports, Botswana was able to increase its exports of this commodity to South Africa. Under a temporary waiver of 90 percent of the Community levy on beef

imports, exports to the United Kingdom have been resumed; however, the Government is concerned that the uncertainty over these temporary arrangements could adversely affect long-term investment in the livestock sector, and is negotiating with the Community for a more permanent agreement on beef exports.

13. Between 1970/71 and 1975/76 government revenues increased from P 11 million to P 79 million (about 45 percent a year) mainly as a result of increased proceeds from the Customs Union, direct taxation and mining revenues. Over the same period, government current expenditures expanded from P 15 million to P 50 million, implying an average growth of 27 percent per annum. From 1968/69 to 1975/76, development expenditures increased from P 9 million to P 36 million. Over the first half of the 1970s, the Government has thus been in a position to finance from its revenue surplus an increasing proportion of its development expenditures which hitherto had to be fully financed from external sources.

14. The extraordinary growth in government revenues since 1970/71 is now projected to level off and Botswana will have to demonstrate its ability to adapt to a relatively less buoyant financial situation. Customs receipts, which accounted for almost half of government revenues between 1971/72 and 1974/75, decreased by 20 percent during 1975/76 to about 34 percent of government revenues; however, a recent revision of the revenue formula of the Southern Africa Customs Union Agreement is expected to reverse this downward trend. Revenues from the mining sector, the main source of the recent economic growth, have also been declining, partly due to rising costs in diamond production and partly to the prolonged technical difficulties encountered in the Shashe copper/nickel project. Revenue from direct taxation, however, continues on a strong upward trend. The general prospects for a slowdown in the growth of government revenues appear at a time when the administrative and political machinery is just geared to a continuing expansion in government activities.

15. The country has been well served so far by multilateral and bilateral agencies with substantial assistance on very soft terms. The Bank Group has been the main multilateral source. Bilateral assistance has been well diversified, the main sources being the United Kingdom, Canada, United States, Germany and the Nordic countries. Disbursements amounted to an average of US$33 million per annum over the last three years. Total disbursed public debt amounted to US$143.3 million at December 31, 1975. Service payments on debt during 1975 were US$6.5 million, or about 7.5 percent of current revenue. Assuming 60 percent of external assistance on Bank terms and 40 percent on concessionary terms, projected service payments in the early 1980s would not exceed 10 percent of current revenue. With the establishment of the Central Bank, Botswana has further strengthened the institutions through which the mobilization of resources could be significantly improved and, consequently, domestic borrowing should become a more regular feature of its development financing. However, the country will still need much external assistance, both technical and capital, including loans on concessionary terms in view of its relatively low per capita income and its prospects for slower economic growth.

PART II - BANK GROUP OPERATIONS IN BOTSWANA

16. Bank Group operations began in Botswana with a road project in 1964. To date there have been ten projects, financed by six IDA credits amounting to about US$15 million, and four IBRD loans totalling US$57.8 million (net of cancellations) including US$3.5 million on Third Window terms. The loans and credits have financed three road projects, a water supply project, a livestock project, engineering studies and the infrastructure relating to the Shashe mining complex, an urban project, a development finance company, and an education project. As of December 31, 1975, the Bank Group's share in Botswana's external public debt (disbursed only) was 32 percent (of which the share of IBRD alone was 23 percent), while its share in Botswana's debt service payments in 1975 was 40 percent - a relatively high figure reflecting the predominance of soft funds in Botswana's external debt. Over 90 percent of the debt service payments to the Bank Group were accounted for by the Shashe infrastructure project which is guaranteed by the international mining companies concerned. For 1980, the Bank Group's share in the country's external public debt (disbursed) and its debt service payments is estimated at about 23 and 28 percent respectively. A summary statement of Bank loans and IDA credits to Botswana is given in Annex II, together with notes on the execution of ongoing projects. Botswana is not a member of IFC.

17. Overall, the Botswana Government and its agencies have demonstrated good performance in the planning and execution of development projects. Of particular note is the completion on schedule of the major parts of the large Shashe infrastructure project. The major technical problems that have beset the related Bamangwato Concessions Limited mining scheme appear to have now been rectified. However, under present financial arrangements, the large increase in capital costs of the mining scheme would result in a substantial reduction in the benefits (royalties, taxes and dividends) expected to be received by the Government. The Government is seeking ways to safeguard these benefits and with Bank assistance has reviewed various financial and technical possibilities for improving the project's financial prospects. Discussions between the Government and the private companies have been actively pursued and a final agreement on the financial issues appears at hand.

18. We propose to continue our active support for the Government's development plan. A second livestock project that will encompass major changes in land tenure in tribal areas has recently been appraised, and a second urban project is being prepared that will give some additional help to the Government for meeting the mushrooming urban problem which the country faces. We also hope to continue our support for medium-scale industrial growth through the Botswana Development Corporation.

PART III - TRANSPORT SECTOR

19. Transport facilities in Botswana are limited. The country's transport system consists of a sparse network of roads and tracks, a railway line in the eastern portion of the country, and a considerable number of widely scattered airports or airstrips. A small ferry operates across the Zambezi River between Kazungula in Botswana, and Zambia. As a consequence of settlement patterns, transport development has been concentrated in the eastern region where about 75 percent of the population live.

20. The main railway system extends about 640 km along eastern Botswana and links two large trading partners, South Africa and Rhodesia. It is presently owned, operated and maintained by the Rhodesian Railway Corporation. Various railway spurs totalling 70 km have been built by Botswana to facilitate mineral transport, but these are also maintained and operated by Rhodesian Railways.

21. Botswana's arterial road runs north-south between Lobatse and Kazungula (1050 km) paralleling the railway line for about 640 km of this distance. Most of the 3,900 km of main and main feeder roads are dry-weather gravel and earth; approximately 250 km are bituminous-surfaced, and only about 1,200 km are all-weather, gravel-surfaced. This position, however, represents a substantial improvement since independence in 1966, when there were only about 430 km of all-weather roads in the country. There is a rural network of earth and sand tracks estimated at about 11,300 km, only 3,300 km of which have been inventoried and categorized as secondary roads.

22. Air transport services have been developed to help integrate widely scattered settlements into the life of the country. In 1972, Air Botswana was established as a parastatal corporation to provide domestic and international services by sub-contracting to private operators. Scheduled air services link Botswana with Zambia and the Republic of South Africa.

23. The Bank Group has helped finance three road projects in Botswana and an infrastructure project with a road component. First, US$3.6 million was made available in 1964 (Credit 63-BEC) for: (a) design, construction, and reconstruction of three roads to gravel standards (570 km); (b) selected betterment of the North-South road; and (c) improvement and expansion of the maintenance organization. The project was completed on time in 1968 within cost estimates. However, the audit report showed that economic benefits realized from the project in the six-year period following project completion were somewhat less than those originally expected because a forecast shift from livestock trekking to trucking did not materialize. This resulted from livestock quarantine restrictions, which made it more economic to trek cattle. The economic rate of return estimated at appraisal ranged from 8 to 20 percent for various project components; the 1973 estimated rate of return for one component was negative and ranged between 4 to 16 percent for the other components. The second was co-financed by an IDA credit (Credit 303-BT) of

US$2 million and a SIDA credit of about US$4 million equivalent in 1972. This project consisted of: (a) reconstruction and paving of the 84 km Pioneer Gate-Lobatse-Gaborone-Sebele section of the North-South road; (b) consulting services for the detailed engineering of the road and construction supervision; and (c) technical assistance to the Roads Branch of the Public Works Department. These works were also satisfactorily completed ahead of schedule and within cost estimates. The audit report reconfirmed the project's economic justification although the rate of return was estimated at 13 percent, 6 percent lower than the appraisal estimate because the initial traffic level assumed at the time of appraisal was too high, while the actual traffic growth rates compare reasonably with appraisal assumptions. The Third Road Project, assisted by a US$5.8 million loan (Loan 1174-BT) in 1975, consisted of: (a) construction of the Gaborone-Molepolole road (52 km); (b) consulting services for detailed engineering of the Mahalapye-Serule road, construction supervision and a Road Maintenance Study; (c) implementation of a District Roads Maintenance Pilot Program; and (d) staff training, soils laboratory equipment, loadometers and weighbridges. At present, implementation is about one year behind schedule, primarily due to delays in preparation of acceptable tender documents. Lastly, the Bank loan for the Shashe infrastructure project (Loan 776-BT) included construction of the 52 km Serule-Selebi-Pikwe road to gravel standards. The project encountered some problems over construction defects that were subsequently resolved. Additional funds for bituminizing the road were included in a supplementary loan which brought the total cost of road construction to US$3.5 million. Completion of this road is expected in April 1977.

24. The Ministry of Works and Communications (MWC) is responsible for the gazetted road network consisting of main, main feeder and secondary roads. It is also responsible for air transport, and has a section dealing with railways. The organization is basically satisfactory. Within the Ministry, a Planning Unit was established in 1972 to prepare and continuously update the national transport plan, and to assist the Ministry of Finance and Development Planning, which is responsible for overall sector planning and coordination. The Roads Department in the Ministry has four major branches: Data and Planning, Development, Maintenance, and Rural Roads. Senior posts in the Department are filled by expatriates provided under bilateral assistance. Due to a shortage of skilled technical staff, the Maintenance Branch presently has only enough capacity to carry out minimal road maintenance. While the Bank Group has provided assistance for road maintenance under the previous road projects, further strengthening of the Maintenance Branch is required to enable it to meet the demands imposed by the rapid expansion and upgrading of the main road network. The Development Branch's design capacity is basically limited to small-scale projects. Its capacity is unlikely to increase significantly until the present shortage of skilled technicians, surveyors, and soils technicians is rectified. The Department does not have any capacity for road construction. It therefore has to contract the work to international firms since there are presently no Botswana road contractors, again because of a general lack of trained engineers, technicians and managers. However, a program assisted by the Swedish International Development Authority (SIDA) for developing building contractors is underway, and the Government intends to

explore the possibilities of further developing these building contractors into road contractors. In view of the present constraints of the Roads Department, an important focus of the proposed project will be to build upon the assistance provided under the Third Road Project for strengthening the Department by providing additional equipment for the Department's training school (para. 32).

25. The District Councils, under the Ministry of Local Government and Lands (MLGL), are responsible for the estimated 8,000 km of district roads. The Councils presently have few or no facilities for road maintenance, and the condition of these roads, which is poor, continues to deteriorate. Under an ongoing project with assistance from the Norwegian Agency for Development (NORAD), about 900 km of the network are to be reconstructed or improved. Also, the Third Road Project included a pilot maintenance program for the Central District. This program would be expanded under the proposed project (para. 32).

26. The Central Transport Organization (CTO), under the Ministry of Works and Communications, provides and maintains all road maintenance equipment and vehicles used by ministries and government agencies. The CTO's inadequate facilities and weak management procedures have resulted in low vehicle and equipment availability rates (as low as 30 percent for the Roads Department) and consequent inefficient road maintenance operations. The Government has recently prepared, with assistance from the Canadian International Development Agency (CIDA), a program to improve CTO's organization and operations. The program is currently being implemented with CIDA's assistance and has had some success to date in improving the vehicle availability rate; efforts are now focusing on equipment availability.

27. The current national transport plan is an integral part of the National Development Plan, in which transport development is given high priority, and provides an adequate basis for development programs. In October 1977, the Government will undertake the preparation of a long-term, national transport plan with assistance from the British Overseas Development Ministry (ODM). In 1974, the Government enacted legislation concerning entry into the road transport industry and vehicle licensing, weights and dimensions. This legislation was timely, because increased mining activity is beginning to generate heavy vehicle loads. In addition, the Government introduced in January 1977 a new system of transit vehicle licenses which foreign registered vehicles are required to purchase for permission to travel through the country. The annual revenue received by the Government from taxes and duties levied in the Customs Union on vehicles, fuel, lubricants and spare parts, and through license and registration fees is projected to be more than sufficient to cover the annual costs of maintaining the country's road network over the next decade.

28. Botswana's present transport policy has two general aims: to meet current demands by more efficient use of existing transport resources; and to expand these resources to meet future demands. Rapid growth in mineral exploitation, together with new industrial and agricultural developments, has put pressure on the present road system. The Government recognizes that the railway will continue to play a significant role and hopes eventually to take over the internal operation of the railway.

29. The Government's road development plans give high priority to completing the arterial North-South road to all-weather standards. The North-South road links up with Zambia in the north and South Africa in the south, as well as Rhodesia to the east, and connects the two largest centers in the country, Gaborone in the south and Francistown in the north. The Government has made a concerted effort to obtain external financing for this road, and all sections are either improved, under construction, or planned for construction. Although this seems to be an ambitious undertaking (estimated cost is about US$75 million), the necessary financial assistance has been forthcoming from a number of agencies.

PART IV - THE PROJECT

30. A report entitled "Botswana - Appraisal of a Fourth Road Project" No. 1389b-BT, dated March 23, 1977 is being distributed separately. A loan and project summary is provided as Annex III.

31. The proposed project was identified by a Bank mission that visited Botswana in September/October 1973 to review Botswana's road development plans and priorities. A specific Government request for Bank Group assistance was received in January 1974 for a Third Road Project. Subsequently, in view of the substantial differences in time required for the preparation of the various components proposed, the Government requested that the components be allocated to two separate projects. The Third Road Project was then appraised in January 1975 and included the detailed engineering for a Fourth Road Project. This project was appraised in the field in September 1976 and negotiations were held in Washington from February 22 to 25, 1977. The Botswana delegation was led by Mr. O. K. Matambo, Acting Principal Planning Officer, Ministry of Finance and Development Planning.

Objectives and Description of the Project

32. The objectives of the proposed project are to assist the Borrower in completing the improvement of the arterial North-South road to all-weather standards; in implementing effective maintenance programs for gazetted (main, main feeder, and secondary) and district roads; and in strengthening the Roads Department Training School.

The project will consist of the following:

(a) Construction of the Mahalapye-Serule road (150 km) to two-lane bituminous standards. This road is part of the North-South artery and will be the last section to be constructed to all-weather standards. It will replace an existing earth road which is sometimes closed to traffic during the rainy season. Satisfactory detailed engineering was carried out under the Third Road Project.

(b) Consulting services to:

  (i) assist the Borrower in bid evaluation and supervise construction of the Mahalapye-Serule road; and

  (ii) assist the Borrower in the identification and preparation of a feeder road construction program which would become part of a larger rural development program now in the initial stage of identification.

(c) Assistance for road maintenance for:

  (i) gazetted roads. Under the Third Road Project, a Road Maintenance Study, scheduled to be completed in December 1977, is reviewing all aspects of road maintenance and drawing up a five-year maintenance program for the gazetted network. In order to assist Government in carrying out the agreed program, US$1.15 million has been allocated for this purpose in the proposed project.

  (ii) district roads. Under the Third Road Project, a District Roads Maintenance Pilot Program is scheduled to begin in mid-1978 in the Central District. The Pilot Program will establish organizational and operational procedures for the betterment, rehabilitation, and maintenance of these roads and will be oriented towards labor-intensive methods. The initial results of the Pilot Program will be reviewed by the Government and the Bank, and two more districts will be selected for inclusion in an extension of this program. US$1.15 million has been allocated for this purpose in the proposed project.

(d) Provision of training equipment and construction of new classrooms and office space for the Roads Department Training School. The school provides training for surveyors, road section officers, draftsmen, soils technicians, road foremen, and equipment operators.

Cost Estimates and Financing

33. The total cost of the project is estimated at US$26.3 million equivalent, excluding taxes and duties amounting to US$1.7 million equivalent. The foreign exchange component is estimated at US$21.6 million, or 82 percent of the total project cost. A detailed breakdown of costs is given in Annex III. The cost estimate for the road construction is based on recent bids for the Serule-Francistown road, which is similar to the project road. Estimates for consulting services are based on similar services provided in the recent past. The proposed loan of US$20.0 million would finance about 92 percent of the foreign costs, and about 76 percent of total project costs, net of taxes and duties. The balance of US$6.3 million equivalent, including US$1.6 million in foreign exchange, would be financed by the Borrower.

Project Execution

34. The Department of Roads will be responsible for executing road construction, securing consulting services, implementing the recommendations of the Road Maintenance Study and procuring training equipment. The Ministry of Local Government and Lands, through the District Councils, will be responsible for executing the District Roads Maintenance Program.

35. The road construction contract is expected to be awarded in August 1977 and the work completed by mid-1981. Contracting delays similar to those experienced under the Third Road Project (para. 23) are not expected in this project, since the previous delays were due to the Government's decision to revise its general conditions of contract before soliciting bids. The revision has been completed and draft tender documents for the Mahalapye-Serule road have already been prepared. No problems in acquiring land for the right-of-way are expected. The Road Maintenance Study is expected to be completed in December 1977. Assurances have been obtained that the Borrower will review the results and recommendations of the study with the Bank and subsequently, by July 1, 1978, submit a road maintenance program to the Bank for its approval (Section 3.07 (a), draft Loan Agreement). Since the District Roads Maintenance Pilot Program (financed under the Third Road Project) is scheduled to start in mid-1978 in the Central District, the extension of the program under the proposed project into two more districts should begin once the initial results of the Pilot Program are known, about late 1979. Assurances have been obtained that the Borrower will review the results of the Pilot Program with the Bank and furnish to the Bank for its approval a plan of action for the extension of the District Roads Maintenance Program to two additional districts (Section 3.07 (b), draft Loan Agreement). In addition, assurances have been obtained that the Borrower will discuss with the Bank on an annual basis its budgetary estimates and expenditures for road maintenance (Section 4.03 (b), draft Loan Agreement).

36. As discussed in paragraph 26, the Government has prepared a program to improve CTO's organization and operations. Consequently, the Government has agreed to take all action necessary to strengthen the organizational and operational efficiency of the CTO to enable it to achieve an availability rate of vehicles and equipment for use by the Roads Department of not less than 60 percent (Section 4.06, draft Loan Agreement). The Bank will not disburse against road maintenance equipment for the Roads Department until this availability rate has been reached (Schedule 1, draft Loan Agreement).

Procurement and Disbursement

37. The road construction contract will be awarded and the road maintenance equipment procured after international competitive bidding, in accordance with Bank Group procurement guidelines. To permit greater competition in the bidding, the construction contract will be divided into two parts and prospective contractors will be allowed to submit tenders on one or both parts following pre-qualification. A number of independent items, which are not suitable for bulk procurement, and which comprise mainly vehicles and equipment for the training school, will be procured under standard Government procurement procedures. These procedures have been reviewed by the Bank and found to be satisfactory. The total cost of these items is estimated to be not more than US$350,000 equivalent. In addition, the Borrower may construct the new classrooms and office space for the training school, estimated to cost about US$75,000 equivalent, through the use of force account. The Road Maintenance Study will identify the equipment and technical assistance to be financed by the proposed loan for maintenance of both the gazetted road network and the district roads. Assurances have been obtained that any equipment financed by the proposed loan for either the regular roads maintenance program or the District Roads Maintenance Program will be subject to the approval of the Bank (Schedule 4, draft Loan Agreement). Assurances have also been obtained that the Borrower will employ consultants whose qualifications, experience, and terms and conditions of employment are satisfactory to the Bank (Section 3.02, draft Loan Agreement).

38. The Bank would disburse against 68 percent of the total cost of civil works, 80 percent of the total cost of consulting services, and 100 percent of the foreign cost of equipment and technical assistance.

Benefits and Risks

39. When completed in 1981, the Mahalapye-Serule road will be the last section of the arterial North-South road to be constructed to all-weather standards. At present the rest of the road, except for the southernmost section, Ramathlabama-Lobatse (45 km), has been upgraded or is under construction. The European Development Fund (EDF) will finance improvement of the Ramathlabama-Lobatse road with completion expected in 1980. The rapid increase in traffic due to the mineral development at Orapa and Shashe, the expected growth in trade with Zambia, the growth of the regional centers in the eastern corridor, and the potential mineral, industrial and agricultural prospects in the northeast and northwest make the improvement of the North-South road of high importance. In addition, should events in southern Africa lead to a disruption of rail service, this road would become even more vital.

40. The Mahalapye-Serule road directly serves about 4,000 km^2 and 100,000 persons, and indirectly serves a population of about 240,000 people. In the immediate influence area of the road, limited agricultural development is taking place through the formation of Farmers' Brigades and the establishment of experimental farms and training centers. In addition, new cattle trekking routes and fattening and demonstration ranches, which are part of the Government's livestock development program, are being established within the area of influence of the project road. Also close by is the large Shashe copper-nickel mining complex at Selebi-Pikwe, and the coal mining colliery at Morupule. While industrial activity in the immediate influence area is negligible at present, small-scale enterprises are being developed by the Youth Brigades, which provide skill training for primary school leavers, particularly near Serowe where engineering, electrical, textile, carpenters' and printers' brigades have been formed. The construction of the road which represents about 82 percent of total project costs, is expected to yield a 15 percent economic return. The road has a first-year return of about 9 percent when a 10 percent discount rate is used. If unquantified benefits are taken into account, such as road user time savings, first-year benefits would be higher than estimated. Sensitivity analyses have been carried out, assuming an economic life of 20 years, showing that in the event of unfavorable variations in construction costs, traffic growth or vehicle operating costs, the economic return on the project road would not fall below 11 percent. As a result of the Bank Group's past road project experience in Botswana, estimates of the initial traffic levels on the project road were arrived at after careful and detailed examination of the available data. The main beneficiaries will be the direct road users. The benefits of the project's road maintenance and training equipment components have not been quantified; however, it is expected that they will be considerable.

41. The economic return of the Mahalapye-Serule road could be affected by the construction of a road, now under consideration by the Government, from Selebi-Pikwe to the village of Zanzibar on the South African border. Should this road be constructed, it might divert some traffic away from the Mahalapye-Serule road, since the distance to South Africa via Zanzibar is shorter for vehicles coming from north of Serule, or from Serule and Selebi-Pikwe, than the alternative route through Martin's Drift. Nevertheless, the construction of the Mahalapye-Serule road would still be expected to yield a satisfactory 14.5 percent economic return.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

42. The draft Loan Agreement between the Republic of Botswana and the Bank, the Report of the Committee provided for in Article III, Section 4(iii) of the Articles of Agreement, and the text of a draft Resolution approving the proposed loan, are being distributed to the Executive Directors separately.

43. Features of the Loan Agreement of special interest are referred to in Section III of Annex IV to this report.

44. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Bank.

PART VI - RECOMMENDATION

45. I recommend that the Executive Directors approve the proposed loan.

Robert S. McNamara
President

Attachments
March 29, 1977

TABLE 3A
BOTSWANA - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOU KM2)

TOTAL 600.4
AGRIC. 415.9

	BOTSWANA 1960	BOTSWANA 1970	BOTSWANA MOST RECENT ESTIMATE	REFERENCE COUNTRIES (1970) MOROCCO	ZAMBIA	TRINIDAD AND TOBAGO **
GNP PER CAPITA (US$)	90.0	190.0	330.0	300.0	410.0	1180.0
POPULATION AND VITAL STATISTICS						
POPULATION (MID-YR, MILLION)	0.5	0.6	0.7	14.8	4.3	1.0
POPULATION DENSITY						
PER SQUARE KM.	1.0	1.0	1.0	33.0	6.0	200.0
PER SQ. KM. AGRICULTURAL LAND	1.0	1.0	2.0	..	..	..
VITAL STATISTICS						
CRUDE BIRTH RATE (/THOU, AV)	46.6	46.1	45.6	49.2	49.7	32.5
CRUDE DEATH RATE (/THOU,AV)	28.2	25.4	23.0	18.5	20.9	7.1
INFANT MORTALITY RATE (/THOU)	..	..	126.0 /a	..	..	34.0
LIFE EXPECTANCY AT BIRTH (YRS)	35.9	41.0	43.5	50.4	43.5	67.8
GROSS REPRODUCTION RATE	..	2.9	2.9	3.4	3.3	2.2
POPULATION GROWTH RATE (%)						
TOTAL	2.0	1.9	1.9	2.4 /a	2.9	2.1 /a
URBAN	..	16.9 /a	16.1	4.0	13.6 /a	..
URBAN POPULATION (% OF TOTAL)	3.2 /a	7.3	12.3	32.3	30.0	12.0
AGE STRUCTURE (PERCENT)						
0 TO 14 YEARS	43.7 /a	..	46.1 /a	46.4	46.0	41.2
15 TO 64 YEARS	51.7 /a	..	48.5 /a	51.1	51.0	54.8
65 YEARS AND OVER	4.6 /a	..	5.4 /a	2.5	3.0	4.0
AGE DEPENDENCY RATIO	0.9 /a	..	1.1 /a	1.0	1.0	0.8
ECONOMIC DEPENDENCY RATIO	1.0 /a,b	..	1.1 /b	..	1.8	1.3
FAMILY PLANNING						
ACCEPTORS (CUMULATIVE, THOU)	..	..	8.3	68.1	..	35.4
USERS (% OF MARRIED WOMEN)	..	..	..	3.0	..	..
EMPLOYMENT						
TOTAL LABOR FORCE (THOUSAND)	250.0 /a,c	..	310.0	..	..	350.0 /b
LABOR FORCE IN AGRICULTURE (%)	91.0 /a,g	..	83.0	..	..	22.0
UNEMPLOYED (% OF LABOR FORCE)	..	..	..	..	10.0 /b	12.5
INCOME DISTRIBUTION						
% OF PRIVATE INCOME REC'D BY-						
HIGHEST 5% OF HOUSEHOLDS	..	..	28.1 /c	..	..	..
HIGHEST 20% OF HOUSEHOLDS	..	..	60.3 /c	..	..	..
LOWEST 20% OF HOUSEHOLDS	..	..	1.6 /c	..	..	..
LOWEST 40% OF HOUSEHOLDS	..	..	7.6 /c	..	..	..
DISTRIBUTION OF LAND OWNERSHIP						
% OWNED BY TOP 10% OF OWNERS	..	..	..	..	..	..
% OWNED BY SMALLEST 10% OWNERS	..	..	..	..	..	..
HEALTH AND NUTRITION						
POPULATION PER PHYSICIAN	20870.0 /d	14780.0	15060.0 /a	12650.0	13500.0	2320.0
POPULATION PER NURSING PERSON	2380.0 /d	1200.0	1220.0 /a	..	2920.0	360.0 /c
POPULATION PER HOSPITAL BED	430.0 /d	370.0	..	660.0 /b	310.0	230.0
PER CAPITA SUPPLY OF -						
CALORIES (% OF REQUIREMENTS)	85.0	87.0	87.0 /d	99.0	88.0	97.0
PROTEIN (GRAMS PER DAY)	64.0	65.0	65.0 /d	64.0	64.0	64.0
-OF WHICH ANIMAL AND PULSE	..	33.0	..	14.0 /c	25.0 /c	34.0 /d
DEATH RATE (/THOU) AGES 1-4	..	..	..	..	..	1.8
EDUCATION						
ADJUSTED ENROLLMENT RATIO						
PRIMARY SCHOOL	36.0	66.0	71.0	55.0	70.0	110.0
SECONDARY SCHOOL	1.0	8.0	12.0	12.0	12.0	40.0
YEARS OF SCHOOLING PROVIDED (FIRST AND SECOND LEVEL)	12.0	12.0	12.0	12.0	12.0	15.0
VOCATIONAL ENROLLMENT (% OF SECONDARY)	4.0	19.0	19.0	2.0	3.0	8.0 /e
ADULT LITERACY RATE (%)	20.0 /e	..	..	21.0	17.0	88.0
HOUSING						
PERSONS PER ROOM (URBAN)	..	..	..	..	2.6 /d	..
OCCUPIED DWELLINGS WITHOUT PIPED WATER (%)	..	..	..	..	88.0	68.0 /f,g
ACCESS TO ELECTRICITY (% OF ALL DWELLINGS)	..	9.0	..	..	..	66.0 /f
RURAL DWELLINGS CONNECTED TO ELECTRICITY (%)	..	..	..	..	..	..
CONSUMPTION						
RADIO RECEIVERS (PER THOU POP)	6.0	13.0	17.0 /a	60.0	18.0	276.0
PASSENGER CARS (PER THOU POP)	2.0 /f	3.0	5.0	15.0	14.0	75.0
ELECTRICITY (KWH/YR PER CAP)	..	..	82.0 /e	128.0	957.0	1173.0
NEWSPRINT (KG/YR PER CAP)	..	..	..	0.2	0.5	5.5

SEE NOTES AND DEFINITIONS ON REVERSE

NOTES

Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961, for 1970 between 1968 and 1970, and for Most Recent Estimate between 1973 and 1975.

** Trinidad and Tobago has been selected as an objective country because in terms of population, per capita income, and fast growth in GDP due to mineral resources, Botswana may be similar in 1985 to Trinidad and Tobago today.

BOTSWANA
1960 /a 1964, /b Ratio of population under 15 and 65 and over to total labor force over the age of 10 years; /c Economically active resident population over the age of 10 years, excluding housewives, subsistence hunters and gatherers; /d 1962; /e Prior to 1965; /f 1963; /g Excluding nomads and workers abroad.

1970 /a 1964-70.

MOST RECENT ESTIMATE: /a 1971; /b Ratio of population under 15 and 65 and over to total labor force, /c 1971-72, economically active population; /d 1969-71 average, /e 1972.

MOROCCO
1970 /a Due to emigration, population growth rate is lower than rate of natural increase; /b Government hospitals only; /c 1964-66.

ZAMBIA
1970 /a 1965-69; /b Persons seeking work; /c 1964-66; /d Total, urban and rural.

TRINIDAD AND TOBAGO
1970 /a Due to emigration, population growth rate is lower than rate of natural increase; /b 15-64 years of age; /c Including midwives; /d 1964-66; /e Government maintained and aided schools only, /f 1966; /g Inside only.

R5, January 13, 1977

DEFINITIONS OF SOCIAL INDICATORS

Land Area (thou km²)
Total - Total surface area comprising land area and inland waters.
Agric. - Most recent estimate of agricultural area used temporarily or permanently for crops, pastures, market & kitchen gardens or to lie fallow.

GNP per capita (US$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1973-75 basis), 1960, 1970 and 1975 data.

Population and vital statistics
Population (mid-yr. million) - As of July first if not available, average of two end-year estimates; 1960, 1970 and 1975 data.

Population density - per square km - Mid-year population per square kilometer (100 hectares) of total area.
Population density - per square km of agric. land - Computed as above for agricultural land only.

Vital statistics
Crude birth rate per thousand, average - Annual live births per thousand of mid-year population; ten-year arithmetic averages ending in 1960 and 1970, and five-year average ending in 1975 for most recent estimate.
Crude death rate per thousand, average - Annual deaths per thousand of mid-year population, ten-year arithmetic averages ending in 1960 and 1970 and five-year average ending in 1975 for most recent estimate.
Infant mortality rate (/thou) - Annual deaths of infants under one year of age per thousand live births.
Life expectancy at birth (yrs) - Average number of years of life remaining at birth; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.
Gross reproduction rate - Average number of live daughters a woman will bear in her normal reproductive period if she experiences present age-specific fertility rates; usually five-year averages ending in 1960, 1970 and 1975 for developing countries.
Population growth rate (%) - total - Compound annual growth rates of mid-year population for 1950-60, 1960-70 and 1970-75.
Population growth rate (%) - urban - Computed like growth rate of total population; different definitions of urban areas may affect comparability of data among countries.
Urban population (% of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries.
Age structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population.
Age dependency ratio - Ratio of population under 15 and 65 and over to those of ages 15 through 64.
Economic dependency ratio - Ratio of population under 15 and 65 and over to the labor force in age group of 15-64 years.
Family planning - acceptors (cumulative, thou) - Cumulative number of acceptors of birth-control devices under auspices of national family planning program since inception.
Family planning - users (% of married women) - Percentages of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

Employment
Total labor force (thousand) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., definitions in various countries are not comparable.
Labor force in agriculture (%) - Agricultural labor force (in farming, forestry, hunting and fishing) as percentage of total labor force.
Unemployed (% of labor force) - Unemployed are usually defined as persons who are able and willing to take a job, out of a job on a given day, remained out of a job, and seeking work for a specified minimum period not exceeding one week, may not be comparable between countries due to different definitions of unemployed and source of data, e.g., employment office statistics, sample surveys, compulsory unemployment insurance.

Income distribution - Percentage of private income (both in cash and kind) received by richest 5%, richest 20%, poorest 20%, and poorest 40% of households.

Distribution of land ownership - Percentages of land owned by wealthiest 10% and poorest 10% of land owners.

Health and Nutrition
Population per physician - Population divided by number of practicing physicians qualified from a medical school at university level.
Population per nursing person - Population divided by number of practicing male and female graduate nurses, "trained" or "certified" nurses, and auxiliary personnel with training or experience.
Population per hospital bed - Population divided by number of hospital beds available in public and private general and specialized hospital and rehabilitation centers, excludes nursing homes and establishments for custodial and preventive care.
Per capita supply of calories (% of requirements) - Computed from energy equivalent of net food supplies available in country per capita per day, available supplies comprise domestic production, imports less exports, and changes in stock; net supplies exclude animal feed, seeds, quantities used in food processing and losses in distribution, requirements were estimated by FAO based on physiological needs for normal activity and health considering environmental temperature, body weights, age and sex distributions of population, and allowing 10% for waste at household level.
Per capita supply of protein (grams per day) - Protein content of per capita net supply of food per day, net supply of food is defined as above; requirements for all countries established by USDA Economic Research Services provide for a minimum allowance of 60 grams of total protein per day, and 20 grams of animal and pulse protein, of which 10 grams should be animal protein; these standards are lower than those of 75 grams of total protein and 23 grams of animal protein as an average for the world, proposed by FAO in the Third World Food Survey.
Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day.
Death rate (/thou) ages 1-4 - Annual deaths per thousand in age group 1-4 years, to children in this age group, suggested as an indicator of malnutrition

Education
Adjusted enrollment ratio - primary school - Enrollment of all ages as percentage of primary school-age population; includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education, enrollment may exceed 100% since some pupils are below or above the official school age.
Adjusted enrollment ratio - secondary school - Computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational or teacher training instructions for pupils of 12 to 17 years of age, correspondence courses are generally excluded.
Years of schooling provided (first and second levels) - Total years of schooling; at secondary level, vocational instruction may be partially or completely excluded.
Vocational enrollment (% of secondary) - Vocational institutions include technical, industrial or other programs which operate independently or as departments of secondary institutions.
Adult literacy rate (%) - Literate adults (able to read and write) as percentage of total adult population aged 15 years and over.

Housing
Persons per room (urban) - Average number of persons per room in occupied conventional dwellings in urban areas, dwellings exclude non-permanent structures and unoccupied parts.
Occupied dwellings without piped water (%) - Occupied conventional dwellings in urban and rural areas without inside or outside piped water facilities as percentage of all occupied dwellings.
Access to electricity (% of all dwellings) - Conventional dwellings with electricity in living quarters as percent of total dwellings in urban and rural areas.
Rural dwellings connected to electricity (%) - Computed as above for rural dwellings only.

Consumption
Radio receivers (per thou pop) - All types of receivers for radio broadcasts to general public per thousand of population, excludes unlicensed receivers in countries and in years when registration of radio sets was in effect, data for recent years may not be comparable since most countries abolished licensing.
Passenger cars (per thou pop) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.
Electricity (kwh/yr per cap) - Annual consumption of industrial, commercial, public and private electricity in kilowatt hours per capita, generally based on production data, without allowance for losses in grids but allowing for imports and exports of electricity.
Newsprint (kg/yr per cap) - Per capita annual consumption in kilograms estimated from domestic production plus net imports of newsprint.

ECONOMIC INDICATORS

GROSS NATIONAL PRODUCT IN 1973/74 — ANNUAL RATE OF GROWTH (%, constant prices)

	US$ Mln.	%	1962/63-67/68	1968/69-73/74	1974/75 1/
GNP at Market Prices	250.3	100.0	..	12.0	8.0
Gross Domestic Investment	135.0	53.9	..	40.0	..
Gross National Saving	58.8	23.5	..	..	..
Current Account Balance	-76.2	-30.4	.	.	.
Exports of Goods	100.7	40.2	..	..	..
Imports of Goods	159.6	63.8	..	17.5	..

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1973/74

	Value Added		Labor Force 2/		V. A. Per Worker	
	US$ Mln.	%	Mln.	%	US $	%
Agriculture	89.2	34.6	.256	83.2	348	42
Industry	73.6	28.6	.014	4.5	5,257	628
Services	94.8	36.8	.038	12.3	2,495	298
Unallocated	.	.	.	.	.	.
Total/Average	257.6	100.0	.308	100.0	836	100.0

GOVERNMENT FINANCE

	General Government (Mln.)	General Government % of GDP		Central Government (Pula Mln.)	Central Government % of GDP	
	197	197	196 -7	1975/76	1975/76	1973/74-75/76
Current Receipts				72.8	31.0	27.3
Current Expenditure				45.2	19.3	17.3
Current Surplus				27.6	11.7	10.0
Capital Expenditures				35.8	15.2	15.7
External Assistance (net)				17.6	7.5	10.3

MONEY, CREDIT and PRICES

MONEY, CREDIT and PRICES	1970	1971	1972	1973	1974	1975
	(Million Pula outstanding end period)					
Money and Quasi Money	.	.	.	.	.	.
Bank credit to Public Sector	3.0	1.7	1.9	2.5	3.5	6.0
Bank credit to Private Sector	9.8	10.5	13.7	21.9	37.4	53.3
	(Percentages or Index Numbers)					
Money and Quasi Money as % of GDP	.	.	.	.	.	.
General Price Index (1969 = 100) 3/	100.9	104.9	113.2	132.6	125.5	141.3
Annual percentage changes in:						
General Price Index	..	4.0	7.9	17.1	..	12.6
Bank credit to Public Sector	..	-43.3	11.8	31.6	40.0	71.4
Bank credit to Private Sector	..	7.1	30.5	59.9	70.8	42.5

NOTE: All conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

1/ Provisional.

2/ Labor force is defined as persons 10 years and over engaged either in family agriculture or in cash employment. Migrant workers in South Africa are excluded.

3/ No general price index is available; relates to Index of Food Prices for Gaborone only. Data from 1974 relates to a new Index with June 1973 = 100.

.. not available
. not applicable

March 15, 1977

TRADE PAYMENTS AND CAPITAL FLOWS

BALANCE OF PAYMENTS

	1973	1974	1975
	(Millions US $)		
Exports of Goods	92.0	109.4	126.6
Imports of Goods	136.7	182.4	218.9
Trade Balance	-44.7	-73.0	-92.3
Non-factor Services (net)	19.6	19.3	20.9
Investment Income (net)	-37.5	-18.5	7.6
Other Services (net)	-25.4	-24.3	-18.6
Net Transfers	20.7	11.5	12.8
Balance on Current Account	-67.3	-85.0	-69.6
Direct Foreign Investment	53.0	44.6	37.0
Net MLT Borrowing			
Disbursements	..	..	..
Amortization	..	..	..
Subtotal	36.2	50.3	47.1
Capital Grants	..	..	..
Other Capital (net)	-13.1	2.9	19.5
Other items n.e.i.	13.0	-0.6	-19.0
Increase in Reserves (+)	21.8	12.2	15.0
Gross Reserves (end year)	..	..	..
Net Reserves (end year)	..	..	..
Fuel and Related Materials			
Imports	7.4	19.9	20.8
of which: Petroleum	..	..	..
Exports			
of which: Petroleum	-	-	-

RATE OF EXCHANGE

	1971	1972	1973	1974	1975	1976
US$1.00 = R	0.715	0.768	0.693	0.679	0.732	0.870
R1.00 = US$	1.398	1.302	1.444	1.472	1.366	1.150

MERCHANDISE EXPORTS (AVERAGE 1973-75)

	US $ Mln	%
Meat and Meat Products	47.0	39.0
Diamonds	40.4	33.5
Copper/Nickel	14.5	12.0
All other commodities	18.6	15.5
Total	120.5	100.0

EXTERNAL DEBT, DECEMBER 31, 1975

	US $ Mln
Public Debt, incl. guaranteed	143.3
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..

DEBT SERVICE RATIO for 1975 1/

	%
Public Debt, incl. guaranteed	5.1
Non-Guaranteed Private Debt	..
Total outstanding & Disbursed	..

IBRD/IDA LENDING, (JANUARY 31, 1977) (Million US$):

	IBRD	IDA
Outstanding & Disbursed	36.2	12.9
Undisbursed	20.4	1.9
Outstanding incl. Undisbursed	56.6	14.8

1/ Ratio of Debt Service to Exports of Goods.

. . not available

. not applicable

March 15, 1977

A. STATEMENT OF BANK LOANS AND IDA CREDITS IN BOTSWANA AS AT JANUARY 31, 1977

No.	Year	Borrower	Purpose	Bank	IDA	Undisbursed
				Amount (less cancellations) (US$ million)		
63	1964	Bechuanaland	Road Project		3.6	-
172	1970	Botswana	Engineering Design & Preliminary Works for the Shashe Project		1.6	-
233	1971	Botswana	Gaborone-Lobatse Water Supply Project		3.0	0.1
776-1	1971	Botswana	Shashe Infrastructure Project	32.0		-
776-2	1974	Botswana	Shashe Supplementary Loan	5.5		2.6
303	1972	Botswana	Second Road Project		2.0	-
325	1972	Botswana	Livestock Development Project		1.7	0.5
471	1974	Botswana	Francistown Urban Development Project		3.0	1.3
1019	1974	Botswana Development Corporation	Development Finance Company Project	4.0		1.7
1174	1975	Botswana	Third Road Project	5.8		5.6
1274) 1275T)	1976	Botswana	Education	10.5		10.5
		Total		57.8	14.9	
		of which has been repaid		1.2	0.1	
		Total now held by Bank and IDA 1/		56.6	14.8	
		Total undisbursed		20.4	1.9	22.3

1/ Prior to exchange adjustments.

B. PROJECTS IN EXECUTION 1/

Loan No. 776

Shashe Infrastructure Project: US$32.0 million loan of June 29, 1971: Effectiveness Date: March 7, 1972; Closing Date: September 30, 1978; US$5.5 million supplemental loan of June 7, 1974; Effectiveness Date: July 17, 1974

Work on the infrastructure project as originally envisaged was completed on schedule and the project is operational. A later decision to bituminize the Serule-Selebi-Pikwe road has delayed project completion. Work on the road is now nearing completion, and the loan of US$37.5 million is expected to be fully disbursed around mid-1977.

The technical problems with the surface treatment plant that have beset the associated Bamangwato Concession Limited mining project have resulted in serious cost overruns and loss of production. However, under present financial arrangements, the large increase in capital costs of the mining project could result in a substantial reduction in the benefits to be received by the Government (in the form of royalties, taxes and dividends). Discussions between the Government and the private companies have been actively pursued and a final agreement on the financial issues appears at hand.

1/ These notes are designed to inform the Executive Directors regarding the progress of projects in execution, and in particular to report any problems which are being encountered and action being taken to remedy them. They should be read in this sense, and with the understanding that they do not purport to present a balanced evaluation of strengths and weaknesses in project execution.

Credit No. 325

Livestock Development Project: US$1.65 million credit of June 30, 1972; Effectiveness Date: April 10, 1973; Closing Date: June 30, 1977

Project implementation has been very slow. Ranch development was delayed by many difficulties, notably with borehole siting and fencing; overall management was poor and financial records inadequate. However, the Project Manager recently moved to Ghanzi, which is closer to the ranches than Gaborone, in order to supervise more closely development and operations. Borehole drilling, water distribution and fencing contracts are now progressing satisfactorily. Tenants have been selected for about 16 ranches, although no leases or loan agreements have yet been signed, and these ranchers are forming a company to provide joint services and assist with management.

The Botswana Livestock Development Corporation (BLDC) is still operating at a loss, although there has been some improvement in its cattle marketing activities. The Government is currently reviewing the company's future, and a change in its statutes is likely. This will be reviewed during the next supervision mission.

Credit No. 471

Francistown Urban Development Project: US$3.0 million credit of May 9, 1974; Effectiveness Date: October 1, 1974; Closing Date: December 31, 1978

Project implementation is progressing satisfactorily. Civil works are completed and handed over to the Francistown Town Council. Community facilities and electrical works are progressing satisfactorily. Most of the residential plots have been allocated and housing construction is progressing well. The houses are of much better quality than usual in site and services areas. Additional works, using surplus funds created from the devaluation of the Rand, are being designed and are expected to be completed by early 1979. Therefore the closing date will have to be extended from December 1978 to December 1979.

Loan No. 1019

Botswana Development Corporation Project: US$4.0 million loan of June 27, 1974; Effectiveness Date: December 9, 1974; Closing Date: June 30, 1979

About 60 percent of the loan is now committed. However, it is possible that BDC may not be able to fully commit the loan by June 30, 1977, the present terminal date for commitments to be financed by the loan, since some of the major projects in BDC's pipeline may not materialize. The commitment period may therefore need to be extended. After its rapid expansion of the past four years, BDC is now entering a phase of consolidation.

Loan No. 1174

Third Road Project: US$5.8 million loan of November 21, 1975; Effectiveness Date: January 1976; Closing Date: December 31, 1978

Satisfactory progress is now being made on all project components although implementation is approximately one year behind schedule, primarily due to delays in finalizing contract documents. Tenders for the road construction contract are being analyzed; and orders are being placed for soils, laboratory equipment, loadometers and weighbridges. The Road Maintenance Study is underway and is expected to be completed in December 1977.

Loan Nos. 1274 and 1275-T

Education Project: US$10.5 million loan (US$7.0 million IBRD and US$3.5 million Third Window) of May 28, 1976; Effectiveness Date: September 10, 1976; Closing Date: March 31, 1982

Implementation of the project, which is in the early stage, is proceeding satisfactorily. Completion of one secondary school and one university hostel is expected about May 1977. Contracts have been let on other project components. Good progress has been made in the preparation of furniture and equipment lists.

BOTSWANA

Fourth Road Project

Loan and Project Summary

Borrower: Republic of Botswana

Amount: US$20.0 million equivalent

Terms: Repayable in 20 years including 4-1/2 years of grace, at 8.2 percent interest per annum.

Project Description: The project will consist of:

a) construction of the Mahalapye-Serule road (150 km) to two-lane bituminous standards;

b) consulting services to:

   i) assist the Borrower in bid evaluation and supervise construction of the Mahalapye-Serule road;

   ii) assist the Borrower in the identification and preparation of a rural feeder road construction program;

c) assistance for road maintenance for:

   i) gazetted roads. The recommendations of the Road Maintenance Study being carried out under the Third Road Project will be implemented; and

   ii) district roads. The District Roads Maintenance Program, initiated under the Third Road Project, will be extended to two additional districts; and

d) provision of training equipment and construction of new classrooms and office space for the Roads Department Training School.

Estimated Cost:

Item	US$ Million Local	US$ Million Foreign	US$ Million Total	Foreign as a % of Total
A. Construction of Mahalapye-Serule Road	4.04	12.13	16.17	75
B. Consulting Services	0.24	0.92	1.16	80
C. Road Maintenance	0.22	2.08	2.30	90
D. Strengthening of Roads Department Training School	0.02	0.33	0.35	95
Sub-total	4.52	15.46	19.98	
E. Contingencies:				
Physical	0.45	1.55	2.00	
Price	1.42	4.63	6.05	
Sub-total	1.87	6.18	8.05	
Total Project Cost	6.39	21.64	28.03	77
Total Project Cost (Net of Taxes)	4.75	21.64	26.35	82

Financing Plan:

Bank: US$20.0 million equivalent
Borrower: US$6.3 million equivalent

Estimated Disbursements: US$ million; IBRD Fiscal Year

	1978	1979	1980	1981	Total
Annual	4.9	5.5	5.8	3.8	20.0
Cumulative	4.9	10.4	16.2	20.0	20.0

The proposed Bank loan would be disbursed against 68 percent of the total cost of civil works, 80 percent of the total costs of consulting services and 100 percent of the foreign costs of equipment and technical assistance.

Procurement: Award of the road construction contract and the procurement of road maintenance equipment will be on the basis of international competitive bidding in accordance with Bank guidelines. Relatively minor items, such as vehicles and training equipment, will be procured under standard Government procedures.

Consultants: Consultants will be retained by the Ministry of Works and Communications for assistance to the Ministry in bid evaluation and for the supervision of construction of the Mahalapye-Serule road (about 200 man-months). In addition, consultants and/or technical assistance experts will be retained by the Ministry to assist in the preparation of a feeder road construction program (about 40 man-months).

Economic Return: The construction of the Mahalapye-Serule road, representing about 82 percent of total project costs, is estimated to have an economic return of 15 percent.

Appraisal Report: Report No. 1389b-BT, dated March 23, 1977.

Supplementary Project Data Sheet

I. Timetable of Key Events

(a) Time taken to prepare project: Eighteen months.

(b) Preparation by: Government of Botswana with the assistance of engineering consultants.

(c) Initial discussions with Bank: September 1973

(d) First Bank mission to consider project: January 1975

(e) Appraisal mission departure: September 10, 1976

(f) Negotiations: February 22 to 25, 1977

(g) Planned date of effectiveness: August 1, 1977

II. Special Bank Implementation Actions

None.

III. Special Conditions

(a) The Borrower will take all action necessary to strengthen the organizational and operational efficiency of the Central Transport Organization to enable it to achieve an availability rate of vehicles and equipment for use by the Roads Department of not less than 60 percent. Further, loan proceeds will not be disbursed for road maintenance equipment until this availability rate has been reached (para. 36);

(b) The Borrower will review the results and recommendations of the road maintenance study with the Bank and submit to the Bank, by July 1, 1978, a road maintenance program for its approval (para. 35);

(c) The Borrower will review the results of the District Roads Maintenance Pilot Program with the Bank and furnish to the Bank for its approval a plan of action for the extension of the program for two additional districts (para. 35);

(d) The Borrower will discuss with the Bank on an annual basis its budgetary estimates and expenditures for road maintenance (para. 35); and

(e) Any maintenance equipment procured for either the five-year maintenance program or the extension of the District Roads Maintenance Program will be subject to the approval of the Bank (para. 37).

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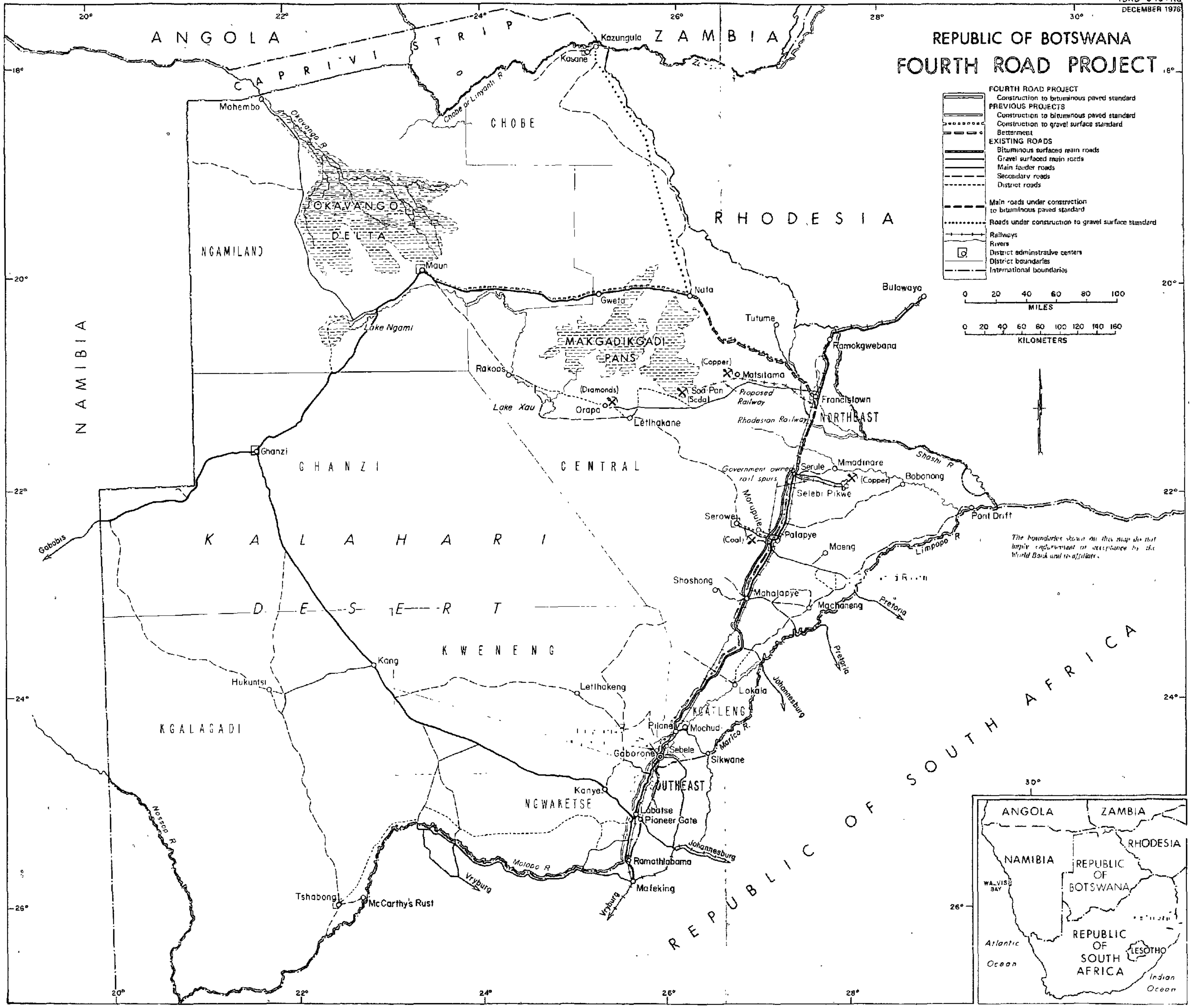
DECEMBER 1976
REPUBLIC OF BOTSWANA
FOURTH ROAD PROJECT
FOURTH ROAD PROJECT
Construction to bituminous paved standard
PREVIOUS PROJECTS
Construction to bituminous paved standard
Construction to gravel surface standard
Betterment
EXISTING ROADS
Bituminous surfaced main roads
Gravel surfaced main roads
Main feeder roads
Secondary roads
District roads
Main roads under construction to bituminous paved standard
Roads under construction to gravel surface standard
Railways
Rivers
District administrative centers
District boundaries
International boundaries
MILES
KILOMETERS
ANGOLA
ZAMBIA
CAPRIVI STRIP
RHODESIA
NAMIBIA
REPUBLIC OF SOUTH AFRICA
CHOBE
NGAMILAND
OKAVANGO DELTA
MAKGADIKGADI PANS
GHANZI
CENTRAL
NORTHEAST
KALAHARI DESERT
KWENENG
KGALAGADI
KGATLENG
SOUTHEAST
NGWAKETSE
Kazungula
Kasane
Mohembo
Maun
Gweta
Nata
Lake Ngami
Rakops
Lake Xau
Orapa
Letlhakane
Matsitama
Soa Pan
Tutume
Bulawayo
Ramokgwebana
Francistown
Proposed Railway
Rhodesian Railway
Ghanzi
Serule
Mmadinare
Selebi Pikwe
Bobonong
Serowe
Palapye
Moruptile
Government owned rail spurs
Pont Drift
Maeng
Shoshong
Mahalapye
Machaneng
Pretoria
Gobabis
Kang
Hukuntsi
Letlhakeng
Lokala
Johannesburg
Pilane
Mochudi
Gaborone
Sebele
Sikwane
Kanye
Lobatse
Pioneer Gate
Ramathlabama
Mafeking
Vryburg
Tshabong
McCarthy's Rust
Nossop R.
Molopo R.
Marico R.
Limpopo R.
Shashi R.
Okavango R.
Chobe or Linyanti R.
(Copper)
(Diamonds)
(Soda)
(Coal)
The boundaries shown on this map do not imply endorsement or acceptance by the World Bank and its affiliates.
REPUBLIC OF BOTSWANA
LESOTHO
WALVIS BAY
Atlantic Ocean
Indian Ocean