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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
THIRD EDUCATION PROJECT

October 29, 1981

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CURRENCY EQUIVALENTS

Currency Unit	=	Pula (P)
US\$1.00	=	P 0.78
P1	=	US\$1.28

ABBREVIATIONS

AFDB	-	African Development Bank
ALDEP	-	Arable Land Development Program
CJSS	-	Community Junior Secondary Schools
EEC	-	European Economic Community
MLGL	-	Ministry of Local Government and Lands
MOE	-	Ministry of Education
MOWC	-	Ministry of Works and Communications
NDPV	-	Fifth National Development Plan, 1979-85
ODA	-	Overseas Development Agency of the United Kingdom
PEIP	-	Primary Education Improvement Project
PIU	-	Project Implementation Unit
PTTC	-	Primary Teacher Training College
RSA	-	Republic of South Africa
SIDA	-	Swedish International Development Agency
TAPU	-	Teaching Aids Production Unit
TGLP	-	Tribal Grazing Land Program
UCB	-	University College of Botswana
USAID	-	United States Agency for International Development

FISCAL YEAR

April 1 - March 31

Republic of Botswana
Third Education Project
Loan and Project Summary

Borrower: Republic of Botswana

Amount: US\$20.0 million

Terms: 17 years repayment, including 4 years of grace,
11.6 percent interest

Project Description: The project would expand access to and improve the the quality and efficiency of primary education in Botswana, particularly in rural areas, through: (a) construction, furnishing and equipping of about 500 classrooms, with ancilliary buildings and facilities; (b) provision of about 200,000 textbooks and teachers' guides; (c) construction of a new 300 student capacity primary teacher training college; and (d) technical assistance to strengthen capacity at ministerial and district government levels for implementing primary school programs and to support the Project Implementation Unit of the Ministry of Education.

The project faces no special risks.

Estimated Project Costs:

	-----US\$ Million-----		
	<u>Local</u>	<u>Foreign</u>	<u>Total</u>
<u>Civil Works, Furniture, Equipment and Textbooks</u>			
Primary Education	5.33	10.35	15.68
Primary Teacher Training	1.45	2.83	4.28
Sub-Total	<u>6.78</u>	<u>13.18</u>	<u>19.96</u>
<u>Technical Assistance</u>	0.06	0.55	0.61
<u>Professional Services</u>	0.13	0.51	0.64
Base Cost	<u>6.97</u>	<u>14.24</u>	<u>21.21</u>
<u>Contingencies</u>			
Physical	0.68	1.22	1.90
Price	2.35	4.54	6.89
Sub-Total	<u>3.03</u>	<u>5.76</u>	<u>8.79</u>
Total Project Cost	<u>10.00</u>	<u>20.00</u>	<u>30.00</u>
of which Taxes	<u>0.80</u>	<u>0.00</u>	<u>0.80</u>
Total Net Project Cost	<u>9.20</u>	<u>20.00</u>	<u>29.20</u>
	=====	=====	=====
<u>Financing Plan</u>			
Bank	-	20.00	20.00
Republic of Botswana	10.00	-	10.00
Total Cost (including taxes)	<u>10.00</u>	<u>20.00</u>	<u>30.00</u>
	=====	=====	=====

Estimated Disbursements:

<u>Bank FY</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
Annual	-	2.80	5.40	5.80	4.50	1.50
Cumulative	-	2.80	8.20	14.00	18.50	20.00

Staff Appraisal Report No.: No. 3549-BT, dated October 1, 1981

Rate of Return: Not Applicable

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 THIRD EDUCATION 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 for a Third Education Project. The loan would have a term of 17 years, including four years of grace, with interest at 11.6 percent per annum.

PART I - THE ECONOMY¹

2. Botswana is a landlocked country in Southern Africa, bordered by the Republic of South Africa (RSA), Namibia, Zambia and Zimbabwe. With an area of 570,000 sq km and an estimated population of 800,000 (1980), it is not densely populated. Over 80 percent of the population is concentrated along the relatively fertile eastern third of the country, however, as two thirds of the country is covered by the Kalahari Desert. Rainfall is erratic and drought frequent.

3. Botswana's economy has historically been centered on the livestock industry, which has been the principal source of income in rural Botswana. Social institutions have guaranteed access to communal grazing lands and established cattle ownership as a symbol of status. Manufacturing is dominated by beef-processing and the use of animal by-products. Although supported by preferential access to the lucrative European Economic Community (EEC) market, the livestock industry has been plagued in recent years by outbreaks of hoof and mouth disease and both livestock and crop farming have been periodically devastated by drought.

4. In the 1970s, diamond, nickel and copper mining became the main spur to economic growth, leading to real increases in GDP of 10 percent a year during the decade. The value of diamond production alone more than quadrupled between 1977 and 1980 and diamonds now account for more than 50 percent of exports. The production of copper/nickel also rose rapidly despite technical difficulties and volatile prices, and exports currently account for about 20

¹The most recent economic memorandum on Botswana (Report No. 1832-BT) was distributed to the Executive Directors on April 20, 1978. This section on the economy incorporates information from an updating mission whose report is scheduled for distribution in December 1981. Country data are given in Annex I.

percent of total exports. The trade and services sectors expanded more rapidly than overall GDP, and government services alone increased in excess of 11 percent a year. However, agricultural value added stagnated, particularly in the second half of the decade. In the arable sector low returns, caused in part by the lack of appropriate technical packages and the availability of cheap food imports from the RSA, resulted in a fall in productivity and output. In the livestock sector, low off-take rates and cattle diseases did not allow for significant increases in production. Nevertheless, as a result of the favorable growth of the overall economy, per capita GNP² rose from US\$110 in 1970 to about US\$720 in 1979.

5. The balance of payments and fiscal situations also improved during the past decade. Increased receipts from the Customs Union,³ direct taxes and mineral royalties caused recurrent revenues to rise nearly 33 percent a year, which was substantially in excess of the growth in recurrent expenditure. Recurrent budgetary surpluses, together with grants, covered nearly half of the steadily growing capital expenditures and the Government became a net creditor of the banking system. Since 1973, the economy has also shown overall surpluses in the balance of payments, due primarily to the rapid rise in exports and to large private capital inflows associated with mining investments. By end December 1980, net international reserves had risen to about US\$261 million, equivalent to more than six months merchandise imports. Inflation was moderate throughout most of the past decade; however, instability in the world economy caused domestic inflation to accelerate in recent years. The pula was revalued on several occasions since 1979 in an effort to reduce the impact on the domestic economy of external price increases.

6. Despite the economy's favorable performance with respect to overall growth and balance of payments and budgetary stability, the mineral led development has only modestly increased the number of employment opportunities for Botswana's labor force. Cattle raising and crop farming have remained the main economic activity for about 80 percent of the population. However, an increasing concentration of cattle ownership has effectively reduced the options for about 50 percent of the population to make under prevailing conditions a reasonable living from farming alone. The major challenge in the present decade is, therefore, to provide employment opportunities for Botswana's labor force, which is growing at over 3 percent a year.⁴ The Government's strategy is to utilize the resources flowing from the mining sector to provide

²Calculated by the Bank Atlas method.

³The Southern Africa Customs Union (SACU), comprising Botswana, Lesotho, Swaziland and RSA, is administered by South Africa. Import duties and excise taxes are levied and collected by South Africa, deposited into a common pool and then distributed to the members based on each country's share in production and trade.

⁴Reductions in employment opportunities for Botswana in RSA may compound the problem.

the infrastructure and services required by the more labor intensive productive sectors. These sectors face formidable constraints, and generating a sufficient number of attractive work opportunities will not be an easy task.

7. One of the most serious constraints on growth of the productive sectors is the severe shortage of skilled technical, managerial and professional manpower, which greatly impairs the country's absorptive capacity, encourages the use of capital intensive technology, raises production costs, and stifles investment. A high proportion of skilled and professional positions are filled by expatriates and many posts in Government and the private sector are inadequately staffed. The manufacturing sector is further constrained by the small domestic market, the country's limited raw materials base and landlocked position, and competition from South Africa and Zimbabwe.

8. It is the agricultural sector that is looked upon as the main source for employment. However, at present productivity in agriculture is very low. Crop farming is circumscribed by the limited availability of suitable land, by sparse and erratic rainfall, by lack of draught power and by low farm-gate prices. Appropriate policy changes should help overcome some of these constraints and enhance production and employment. Nevertheless, the sector's ability to support additional labor may always remain limited, as ecological conditions render most parts of the country more favorable to livestock than crop production. Cattle raising, however, does not require high labor inputs. Moreover, the system of communal grazing, the traditional values associated with cattle and, more recently, the granting of substantial subsidies to cattle owners, have given rise to overstocking and progressive land degradation. If sustained, this trend could further reduce the sector's growth and employment opportunities.

9. The Government is moving ahead with programs to deal with these constraints. The Fifth National Development Plan, 1979-85 (NDP V) accords high priority to education, with emphasis on primary education, as a means of alleviating the country's manpower constraint. Industry is being supported through promotional activities by the Botswana Development Corporation and through the provision of tax breaks, preference in bidding for government contracts, favorable interest rates and seed capital for investors. A Tribal Grazing Lands Program (TGLP), with the primary aim of controlling overstocking and range degradation, while at the same time increasing incomes from cattle raising by improving herd quality, enhancing range management and boosting operating efficiency, has been underway since 1975. An Arable Lands Development Program (ALDEP), a multi-faceted program designed to raise productivity in crop farming, was introduced in 1979. Both ALDEP and TGLP are expected to permit more labor intensive use of the land.

10. Botswana's economic prospects, although bright in macro terms, are clouded by problems of employment and income distribution. Expanding diamond production and exports from the new mine at Jwaneng are expected to continue fueling rapid overall economic growth - likely to average 10 per cent per annum over the 1981-85 period - and to maintain strong balance of payments and public finance positions. Progress is being made in raising the level of skills and broadening the educational base. However, TGLP has not yet been successful in rationalizing government investment and pricing policies in the livestock industry and has focused largely on commercial ranching much to the neglect of improving the productivity of cattle smallholders. The ALDEP

program is just getting started. Efforts to identify labor-intensive investments will have to be redoubled, however, if the country is to avoid serious unemployment and maintain stable growth.

11. Multi- and bilateral agencies have extended substantial assistance to Botswana on highly concessional terms. More recently, however, loans from international organizations have overtaken bilateral loans in Botswana's external debt. The Bank Group has been the main multilateral source, but the EEC, the African Development Bank and OPEC sources have also been active. Bilateral assistance has come from several sources. In 1978, almost two thirds of Botswana's outstanding bilateral debt was converted into grants. At the end of 1980, total external debt outstanding and disbursed amounted to US\$148.5 million, debt service payments were US\$11.8 million and the debt service ratio 1.9 percent. Botswana is expected to continue to receive substantial (but probably declining) assistance from bilateral sources on grant or concessional terms; however, given its favorable economic prospects, an increasing proportion of external financing is expected to come from commercial sources. Botswana is expected to remain creditworthy for the required external borrowing.

PART II - BANK GROUP OPERATIONS IN BOTSWANA

12. To date, Botswana has received 17 Bank Group loans and credits totalling US\$137.4 million (excluding cancellations) comprised of six credits for US\$14.7 million and eleven loans for US\$122.7 million, including US\$3.5 million on third window terms. These loans and credits have financed five road projects, two education projects, two livestock projects, two urban projects, two water supply projects and one development finance corporation project. Three loans, including one for engineering studies, have been for the Shashe mining complex. IFC has had one investment in Botswana, a US\$370,000 equity participation in the Botswana Development Corporation (BDC), which was approved in March 1979. Summary statements of Bank Group operations in Botswana are provided in Annex II.

13. The Bank Group's share of Botswana's external debt (disbursed only) at the end of 1980 was about 44 percent (IBRD - 34 percent, IDA - 10 percent) and its share in debt service was about 84 percent. A large part of debt service payments to the Bank Group are for the Shashe mining infrastructure loans of the early 1970s, which are guaranteed by a consortium of international mining companies.

14. Botswana's performance in planning and executing development projects has been satisfactory. Bank assisted projects have been relatively problem free, with two important exceptions: the Shashe project (Loans 776-1 and 776-2) and the livestock projects (Credit 325 and Loan 1497). Although the infrastructure works for the Shashe mining complex were completed on time, the mining operation has experienced technical and financial problems. The technical problems have been largely resolved; however, despite a second financial restructuring of the mining company, Bamangwato Concessions, Ltd. (BCL), in early 1980, it has continued to experience financial difficulties as a result

of low international copper and nickel prices. The Bank's first livestock project has been completed and the credit closed, but many of the original objectives of the project were not fully achieved. Most of the ranches developed under the project continue to be overstocked and poorly managed, control and use of water resources remains inadequate and the extension services have been unable to alter inefficient traditional stocking patterns. The Bank's second project, while successful in improving livestock marketing systems through upgrading of trek routes, holding areas and railway sidings, has not yet been successful in raising offtake rates and increasing beef production, or in alleviating overstocking and range degradation. The Government is pursuing proposals designed to remedy these problems.

17. Future Bank Group operations in Botswana are expected to include projects in power, urban development, population-health-nutrition, education and possibly agriculture.

PART III - THE EDUCATION SECTOR

Background

18. Since independence in 1966, Botswana has made great strides in expanding and improving its educational system. From an entirely private, missionary operated system at independence, enrolling 71,500 primary and 1,500 secondary students studying mostly art and literature, the system has evolved to one predominantly public with enrollment of 171,000 primary and 21,000 secondary students (1979/80) and with a curriculum placing more emphasis on science and practical subjects. About 94 percent of the 6-12 year age group was enrolled in primary school in 1979/80 and completion rates were nearly 80 percent. Entry into junior secondary school was available for 38 percent of the 1978/79 primary school graduates. Teacher qualification has also improved significantly since independence, education sector infrastructure has expanded considerably and vocational, technical and non-formal education have grown rapidly. These achievements were largely the result of the high priority accorded to education by the Botswana authorities.

17. Despite these advances, education in Botswana is still deficient in many respects. There remains a serious shortage of physical infrastructure, particularly primary school classrooms, many teachers are under-qualified and there is a high dependence on expatriate teachers. In addition, curricula continue unbalanced in favor of literary subjects and access at all education levels requires improvement. Academic performance has deteriorated in recent years as the system has been unable to maintain quality in a period of rapid expansion. Consequently, an increasing proportion of students each year is inadequately prepared for entry into the next educational level, and school leavers continue to be inappropriately trained to play a productive role in Botswana society.

Education Structure and Administration

18. Formal education in Botswana consists of seven years of primary education, three years of junior secondary and two years of senior secondary school, and various degree, diploma and certificate programs in higher education offered by the University College of Botswana (UCB). Vocational and technical education are provided by a number of public and private institutions, the major ones of which are: (a) the Botswana Polytechnic, which offers craft and technical courses, including automobile mechanics, civil and electrical engineering and electronics; (b) the Botswana Institute of Administration and Commerce (BIAC), which offers courses in accounting, administration, supplies management, clerical and secretarial studies and management for civil servants; (c) the Institute of Development Management (IDM), which offers training for senior management personnel in finance, personnel and related subjects; and (d) the Youth Brigades, which combine training at craft and artisan levels with productive activities, essentially for primary school leavers. Non-formal education is provided by a host of government and other agencies. Over the next several years the Government plans to restructure the educational system with the aim of providing nine years of basic education to all Botswana in the 6-15 year age group.

19. Administrative responsibility for primary, secondary, non-formal vocational and higher education (other than UCB) is vested in the Ministry of Education (MOE), which oversees sector development plans, curriculum development, teacher assignment and training and system inspection and supervision. The MOE also ensures private school compliance with government regulations and advises local authorities on the professional aspects of education. Each of the country's nine districts and four townships has an elected local education authority, with responsibilities related to school construction and maintenance, the provision of school equipment and materials, the posting of teachers and other administrative matters. The Rural Extension Coordinating Committee, an inter-ministerial body under the aegis of the Ministry of Finance and Development Planning, coordinates the non-formal education programs of the various ministries and agencies.

Education Objectives, Strategy and Policy

20. Botswana's educational objectives, as formulated by the 1977 National Commission on Education and outlined in NDP V are: (a) to increase educational opportunities and reduce inequities in access to education; (b) to contribute to balanced economic development by seeking to satisfy manpower requirements in all sectors, particularly in rural areas; (c) to promote personal qualities such as respect for national ideals, self-reliance and concern for others, and to encourage full development of individual talents; and (d) to expand the role of schools and colleges in the local communities and vice versa. Within these general objectives, NDP V accords priority to achieving universal primary education, improved and more equitable access to junior secondary education and to qualitative improvement in primary and secondary education. These areas have not been fully addressed in previous years because of the emphasis given to vocational and technical education to meet urgent manpower needs.

21. The Government plans to provide seven years of universal primary education by the mid-1980s, to significantly improve the quality of primary education within that same time-frame, and by 1990, to provide nine years of basic education to all children aged 6-15 under a restructured 6 + 3 + 3 system. This will require the construction of about 2,270 primary school classrooms (400 to 500 per year, plus ancillary facilities) to reach the Government's 1985 target of 80 percent class coverage, which will still leave many classes on double shifts or in the open air. More rapid progress is hampered by the lack of implementation capacity in some districts. An increased supply of qualified teachers and improved qualification for existing teachers would also be required for achievement of the Government's medium term goals.

22. Recent expansions at the three existing primary teacher training colleges (PTTC), together with the new college included under the proposed project, should reduce the deficit of trained teachers from 36 percent in 1979 to 25 percent in 1985. In addition, the expansion of rural education centers providing in-service training, the requirement that PTTC candidates serve a probationary year as teachers prior to entering college and the recruitment of senior secondary graduates to the teacher ranks to fulfill their period of compulsory community service is expected to help alleviate the shortage of teachers and further improve teaching quality, especially in rural areas. The USAID financed Primary Education Improvement Project will provide major institutional assistance to the training of PTTC staff, primary school head teachers and primary school inspectors. A Department of Primary Education will be established at UCB and will provide support to the PTTCs by assisting in updating primary school and PTTC curricula and by improving teaching methods. The MOE will increase the quantity and quality of teaching aids and learning materials available to the schools.

23. Improved organization and administration of primary education will also be required as the Government's plans evolve. The Government also plans to restructure the secondary education system and has instituted programs directed towards improving the quality of private community junior secondary schools and establishing new ones financed jointly by government and local communities. A limited senior secondary school expansion program is underway to meet the increased demand resulting from increased junior secondary enrollment. Overall, an additional 9,000 junior secondary and 900 senior secondary school places will be provided during the NDP V period. These increases will enable 50 percent of primary school graduates to progress to junior secondary, as against the present 38 percent, but given the expected large increase in junior secondary graduates, will reduce the progression rate to senior secondary school from 34 percent to about 29 percent. This policy should, however, substantially strengthen basic education, particularly in mathematics and the sciences, and eventually contribute to better-prepared students entering higher education and to increasingly educated and skilled manpower.

24. Meeting the targets for increased enrollments, better teachers and less reliance on expatriates will require a substantial effort in training secondary school teachers. It is estimated that about 350 new teachers will be needed in the 1979-85 period just to meet increased enrollments, with another 115 Botswana teachers required to reach the Government's goal of

reducing the proportion of expatriates from the present 70 percent to 38 percent by 1985. The degree-level intake at UCB has been increased, the African Development Bank (AfDB) is expected to finance a junior secondary teacher training college and training programs for practical subjects are being developed. The Government also proposes to increase its financial support to the Community Junior Secondary Schools by paying part of the salaries of expatriate teachers and by providing allowances to cover the cost of textbooks and materials. It also plans to provide increased professional and technical services to these schools.

25. The early 1980s will be a period of consolidation for the University of Botswana, with enrollment expected to grow by only seven percent a year, compared with 18 percent in recent years. Plans for this period include introduction of programs to train tutors for the PTTCs and for head teachers and inspectors. The University also expects to introduce a one-year post-graduate course in education and, through its Institute of Adult Education, hopes to stimulate interest in and develop links between adult education and productive activities. With these programs the University is expected to make an important contribution to upgrading the nation's manpower. By 1985 when the joint college arrangements between Botswana and Swaziland are expected to end, UCB will have been upgraded to full university status.

26. Technical and vocational education are being expanded in the NDP V period, but with emphasis on making existing programs more effective in meeting the country's manpower needs rather than on maximizing their growth. Additional expatriate staff will be employed in conjunction with a staff development program that will seek to identify a local counterpart for each expatriate appointment. The role of the Brigades is currently under review by the Government, and it appears that some may be turned into rural trade schools, others may be more heavily subsidized to increase their effectiveness and still others may remain autonomous, though with some assistance from various branches of the Government. Non-formal education programs are expected to stress literacy (with a national campaign aimed at enrolling 15,000 participants annually), district and village level skill training and greater learning opportunities for women.

Education Finance

27. Basic education in Botswana is financed largely from general tax revenues. Primary education is free for all students; however, at the secondary level, fees are charged ranging from P 120 (US\$154 equivalent) per annum per student at public school to P 220 (US\$282 equivalent) per annum per student at private schools.

28. Recurrent expenditures on education programs administered by MOE represented about 20 percent of total Central Government recurrent expenditure in 1979/80, having risen at an annual rate of about 15 percent in real terms since 1976. More than three-fourths of these expenditures were directed towards primary and secondary education. Capital expenditures on education (including those financed by external donors) also increased rapidly during this period and by 1979/80 had reached 15 percent of total Central Government capital spending. Slightly over one-half of these expenditures were

administered by MOE and the remainder by the Ministry of Local Government and Lands, which is responsible for the primary school construction program. Total public expenditures on education and training rose from 5.2 percent of GDP in 1976/77 to an estimated 6.3 percent in 1979/80.

29. Under the NDP V, recurrent expenditure on education is expected to remain at about 20 percent of total Central Government recurrent expenditure, rising by about 10 percent a year in real terms. Even with this rate of expenditure growth, some of the objectives of the Plan, such as localization of teachers and achieving nine years universal basic education, may not be reached within the allotted timeframe. Capital expenditures on education are expected to continue rising sharply through the Plan period, although they may be circumscribed by the country's limited capacity to implement projects.

Bank Experience and Strategy in the Sector

30. The Bank Group has assisted in the development of Botswana's education and training sector with two loans totalling US\$20.5 million equivalent. The first education project (Loan 1274-BT/1275-T-BT, May 1976) provided US\$10.5 million to: (a) increase the number of secondary school places by 30 percent; (b) provide additional secondary school teachers; (c) expand adult education programs; (d) assist in expanding the Youth Brigade programs; and (e) provide a rural multipurpose education center (Matsha Community College) to serve the western Kalahari area. The second project (Loan 1828-BT, April 1980) provided US\$10.0 million for: (a) classrooms and ancillary facilities for about eleven community junior secondary schools; (b) construction of about seven new community junior secondary schools; (c) assistance to about 16 Youth Brigade Centers; (d) additional training facilities at the Botswana Institute of Administration and Commerce and the Institute of Development Management; and (e) technical assistance.

31. Implementation of both these projects is proceeding satisfactorily, although the first project encountered initial delays, particularly with regard to the Matsha Community College. Staff constraints in the Project Implementation Unit and the inability of the Ministry of Works and Communications to provide technical services as planned were the main causes of the delays. There was also a need to strengthen the mechanism for evaluating the Brigades program. These problems were addressed in the second project, and project implementation has improved. The proposed Third Education Project incorporates all of these lessons in its design and provides technical assistance funds to ensure continuous services of a project director and to strengthen the auditing capacity of the MLGL and the District Councils.

32. The Government's policies and priorities for educational development are sound and meet Bank criteria for assistance to the sector. Secondary and vocational/technical education are being addressed in both the First and Second Education Projects, as well as in projects supported by bilateral and other multilateral donors. Botswana's needs in primary education are substantial and critical to the development of an educated and productive manpower supply. By helping to provide additional primary school classroom and ancillary facilities in heretofore educationally disadvantaged areas and by making available facilities for training additional primary school teachers, the Bank is playing a crucial role in assisting Botswana in carrying out its education sector strategy.

PART IV - THE PROJECT

33. The proposed project was identified in November 1980, prepared by the Government with Bank Group assistance in January/February 1981, and appraised in March 1981. Negotiations were held in Washington in September 1981. The Government delegation was led by Mr. O. K. Matambo, Director of Economic Affairs, Ministry of Finance and Development Planning. A Staff Appraisal Report (No. 3549-BT, dated October 1, 1981) is being distributed separately.

Project Description

34. The project would assist the Government in carrying out its five-year educational program as set forth in the education and manpower chapter of NDP V, and would consist of:

- constructing, furnishing and equipping about 500 primary school classrooms and related facilities (including offices, storerooms, cooking and ablution areas and staff houses);
- supplying about 200,000 primary school level textbooks and teachers guides;
- constructing, furnishing and equipping a primary teacher training college for about 300 student places;
- providing of about 14 man-years of specialists services, consisting of a project director/architect (about five man-years) for the PIU and three accountancy specialists (about nine man-years) to assist the Ministry of Local Government and Lands and the Districts.

35. Primary School Classrooms - The primary school classrooms and related furnishings and facilities provided under the proposed project would represent about 22 percent of the number required to enable the Government to reach its target of meeting 80 percent of assessed needs by 1985. Sites for these classrooms would be selected on the basis of agreed guidelines, which ensure equity within and between Districts. Most of the classrooms would be sited in rural areas. Modest staff housing would also be provided under the project, since a critical shortage of housing exists in rural Botswana and it is unlikely that teachers could be recruited and maintained in the schools without housing.

36. Primary School Textbooks - The project would assist in financing an initial supply of elementary level math, English, Setswana and social studies textbooks in support of the new primary school curriculum being developed by the MOE with the assistance of USAID and other donor agencies.

37. Primary Teacher Training College (PTTC) - To assist the Government meet the need for trained primary school teachers until year 1990, the proposed project provides for a new PTTC to be located at Tlokweg, a rural area near Gaborone. The proposed PTTC would provide for 300 places, raising total capacity for primary teacher training in Botswana by one-third, to 1,200 places, and increase annual output of trained teachers by 150, to 600. This is consistent with primary school enrollment projections and with plans for upgrading under-qualified primary school teachers. Moreover, the new PTTC would be an integral component of a comprehensive plan to provide trained teachers, incorporating the efforts of the various departments of UCB, including the Departments of Primary and Special Education and the Primary School Laboratory. The Department of Primary Education at UCB is being assisted by a USAID grant for a primary education improvement project that will train the necessary tutors for this PTTC. The site selected for the new college is close to the UCB and adjacent to an eleven classroom primary school that would provide opportunities for teaching and in-classroom training for the PTTC's students.

38. Technical Assistance and Professional Services - Five man-years of technical assistance to provide for continuation of the PIU's project director are included in the project. This will enable the PIU, which is administering the First and Second Education Projects, to maintain its effectiveness until completion of the proposed Third Education Project. In addition, nine man-years of assistance is included to provide the services of three specialists in accounting to help strengthen bookkeeping and cost control within the District Councils and the MLGL. Each specialist would be assigned a local counterpart, who would be trained to carry on the work after the specialist's departure. About 100 man-months of architectural and engineering services would also be provided. The qualifications, experience and terms and conditions of these specialists would be satisfactory to the Bank (Section 3.03, draft Loan Agreement), and they and their counterparts would be appointed and in place as a condition of disbursement of the primary school classroom component (Schedule 1, paragraph 4, draft Loan Agreement).

Female Participation in the Education System

39. In 1980, 55 percent of the total enrollment in primary education was female; in secondary education 56 percent of enrollment was female; and in higher education 33 percent of those enrolled were women. Higher female participation rates in primary and secondary school are attributed to the custom of young males herding cattle during school hours. The proposed project would improve educational opportunities for all students.

Project Cost and Financing

40. Total project cost is estimated at US\$30.0 million equivalent, including taxes estimated at US\$0.8 million equivalent. The proposed loan of US\$20.0 million equivalent would cover the foreign exchange component, representing 68 percent of total project costs net of taxes. The balance of the total project cost, US\$10.0 million equivalent, including taxes, would be financed by the Government.

41. Cost estimates for the civil works, furniture and equipment were derived from a review by Bank staff of data provided by (a) the Ministry of Works and Communications, from its activities in the building industry; (b) the PIU, based on its experience in recent contract awards under the First and Second Education Projects, and (c) MLGL, based on its experience in supervising primary classroom construction in the districts to be involved in the proposed project. The average unit base cost (October 1981 prices) of constructing the primary classroom facilities is US\$200/m² equivalent, with costs ranging from about US\$159/m² to US\$278/m² equivalent, depending on the remoteness of location. These costs compare favorably with those experienced recently in other African countries: Lesotho (1981) US\$214/m², Swaziland (1979) US\$160/m², Kenya (1979) US\$190/m², Mauritius (1978) US\$273/m². The classroom facilities, furniture, etc. are austere in design and would make maximum use of local materials and simple building techniques.

42. The cost estimates for textbooks were prepared in conjunction with MOE and the Government Printing Agency, and the cost of the technical assistance component, about 168 man-months of specialists services, estimated at about US\$3,600 per man-month is based on past and on-going experience. Professional services in architecture and engineering, about 100 man-months, are estimated to cost about US\$6,400 per man-month, including salary, overhead and fees, which is in line with recent experience. For physical contingencies, 10 percent has been added to the base costs of civil works and professional services and 5 percent to the base costs of furniture, equipment and textbooks. Price contingencies have been applied from the base date (October 1981) at the following annual rates:

	<u>1981</u>	<u>1982</u>	<u>1983-87</u>
Foreign/Local	12.0%	11.0%	10.0%

These contingency allowances are based on Bank experience in similar projects for physical works and on the Bank's projections, agreed to by Government, of inflation rates in Botswana and South Africa for prices. As most of Botswana's imports originate in South Africa and inflation rates have been very similar in the two countries, foreign and local price increases during the project implementation period are expected to be the same.

Project Implementation

43. The project would be implemented over five years. The project Implementation Unit established in the MOE to implement the First and Second Education Projects would undertake the administrative functions for the proposed project. It would also be responsible for coordination of the various ministries and departments involved in the project, including the MLGL. Incremental operating costs for the Unit are provided for through 1985 under the Second Education Project. The PIU is operating well and its key staff have the necessary capabilities and experience. Any appointments to the positions of project director, architect and procurement manager would be satisfactory to the Bank (Section 3.02, draft Loan Agreement).

44. The MLGL would be responsible for administration of the construction of the primary school facilities; however, it would delegate actual implementation of this component to the nine district councils. Administrative arrangements and procedures to carry out this work are well established and have been used successfully in the past for similar type operations. The MLGL would review work plans and cost estimates provided by the districts and, after approval, allocate the necessary funds to the districts. The MLGL would provide the Bank through the PIU: (i) before the beginning of each of Botswana's fiscal years, a work plan and budget satisfactory to the Bank for the construction of primary school facilities, and (ii) an annual report comparing actual work completed with that planned (Section 3.06, draft Loan Agreement). Detailed supervision of construction contracts would be the responsibility of the districts, for which both MLGL and MOWC would provide assistance as required. The Councils would be financially accountable to MLGL, which maintains an audit department to ensure adequate control over the use of funds. Since there is a shortage of qualified financial staff in the MLGL and the Districts, the project includes nine man-years of technical assistance for three accountants to ensure that proper accounts are maintained and to train MLGL and District personnel (para. 38).

Reporting and Evaluation

45. Semi-annual reports on project implementation would be submitted to the Bank for review no later than two months after the close of each period (Section 3.08(b) iii, draft Loan Agreement). Within five months after the loan closing date, the PIU, with the assistance of the MLGL and MOE, would provide the Bank with an evaluation report covering all aspects of the project execution, including lessons learned during implementation (Section 3.08 (d), draft Loan Agreement)

Procurement

46. Contracts for civil works, furniture and equipment are expected to total US\$27.9 million. About US\$15.7 million of this will be procured through international competitive bidding under World Bank guidelines. Many of the classroom construction, furniture and equipment tenders will likely to be too small to attract international suppliers, however, though these will be grouped to encourage their participation. It has, therefore, been agreed with the Government that civil works contracts for classrooms and ancillary facilities below US\$250,000 (about US\$11 million with contingencies) and for furniture and equipment below US\$50,000 (US\$1.2 million with contingencies) may be awarded by competitive bidding advertised locally and in accordance with procedures satisfactory to the Bank (Schedule 4, Section C, draft Loan Agreement). It was also agreed that textbook contracts, totalling US\$500,000 including contingencies, will be negotiated directly with the Teaching Aids Production Unit, the Government Printing Department and local textbook firms.

47. Sketch designs, draft tender documents and master lists of furniture, equipment and textbooks indicating proposed grouping and cost estimates would be reviewed by the Bank. Again, items would be grouped to the extent practicable to encourage competitive bidding and permit bulk procurement. Review of tender evaluation documents prior to award would be required for

textbooks contracts and contracts above US\$250,000 for civil works and US\$50,000 for furniture and equipment (Schedule 4, Section D, draft Loan Agreement). With ICB domestic manufacturers of furniture and equipment would be given a preference of 15 percent or the existing applicable rate of import duties, whichever is lower, over the c.i.f. price of competing foreign suppliers.

Disbursement

48. Disbursements would be on the basis of: (a) 63 percent of expenditures for civil works; (b) 100 percent of foreign expenditures for directly imported furniture, equipment and textbooks; (c) 90 percent of local expenditures for locally manufactured furniture, equipment and textbooks; (d) 90 percent of expenditures for technical assistance; and (e) 80 percent of expenditures for imported but locally procured furniture, equipment, textbooks and professional services. All disbursements would be fully documented.

49. Retroactive financing not exceeding US\$150,000 for approved expenditures incurred after November 1, 1981 and prior to loan signing would be allowed for architectural services and civil works for the PTTC (Schedule 1, 4(a), draft Loan Agreement).

Auditing

50. All project expenditures would be audited yearly by auditors acceptable to the Bank. The accountancy specialists provided under the technical assistance component (para. 39) would assist in preparation of the MLGL and district accounts. The PIU would be responsible for the remaining accounts. With respect to the primary school components, unaudited financial statements would be submitted to the Bank not later than six months after the end of each fiscal year, followed with audited statements within twelve months after the year ending March 1983, within nine months after the year ending March 1984 and within six months after subsequent years. Audit reports for the remainder of the project would be submitted to the Bank within six months of the end of the Borrower's fiscal year (Section 4.02(b), draft Loan Agreement).

Benefits and Risks

51. The proposed project would support the Government's priorities of expanding educational opportunities and improving the quality of primary education, particularly in rural areas.

52. No special risks are foreseen. Technical assistance will strengthen the accounting practices of the MLGL and the districts and train counterparts to ensure continuing sound accounting practices. Three of the nine districts may have difficulty in implementing their primary school construction programs within the proposed time schedule. However, SIDA assistance is expected to strengthen administration in these districts. In any case, the matter would be closely monitored during project supervision.

PART V - LEGAL INSTRUMENTS AND AUTHORITY

53. The draft Loan Agreement between the Government of Botswana and the Bank and the Report of the Committee provided for in Article III, Section 4 (iii) of the Articles of Agreement are being distributed to the Executive Directors separately.

54. Special conditions of the project are listed in Section III of Annex III.

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

PART VI - RECOMMENDATION

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

A. W. Clausen
President

Washington, D.C.
October 29, 1981

TABLE 3A
BOTSWANA - SOCIAL INDICATORS DATA SHEET

LAND AREA (THOUSAND SQ. KM.)	BOTSWANA			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) ^{/a}	
	1960	/b	1970	/b	ESTIMATE /b
TOTAL	370.0				
AGRICULTURAL	453.6				
GNP PER CAPITA (US\$)	80.0	160.0	720.0	794.2	1616.2
ENERGY CONSUMPTION PER CAPITA (KILOGRAMS OF COAL EQUIVALENT)	..	..	426.9	707.5	1324.1
POPULATION AND VITAL STATISTICS					
POPULATION, MID-YEAR (THOUSANDS)	524.0	634.0	773.0	.	.
URBAN POPULATION (PERCENT OF TOTAL)	1.8	8.4	26.6	27.7	64.2
POPULATION PROJECTIONS					
POPULATION IN YEAR 2000 (MILLIONS)			1.5	.	.
STATIONARY POPULATION (MILLIONS)			..	.	.
YEAR STATIONARY POPULATION IS REACHED			..	.	.
POPULATION DENSITY					
PER SQ. KM.	0.9	1.1	1.3	55.0	34.3
PER SQ. KM. AGRICULTURAL LAND	1.2	1.4	1.6	130.7	94.5
POPULATION AGE STRUCTURE (PERCENT)					
0-14 YRS.	45.9	48.7	49.9	46.0	40.7
15-64 YRS.	51.4	48.5	47.4	51.2	55.3
65 YRS. AND ABOVE	2.7	2.8	2.7	2.8	4.0
POPULATION GROWTH RATE (PERCENT)					
TOTAL	1.7	1.9	2.8	2.8	2.4
URBAN	17.9	17.6	15.0	5.1	3.7
CRUDE BIRTH RATE (PER THOUSAND)	49.9	50.6	50.9	46.9	31.4
CRUDE DEATH RATE (PER THOUSAND)	24.1	20.1	16.7	15.8	8.4
GROSS REPRODUCTION RATE	3.2	3.2	3.2	3.2	2.3
FAMILY PLANNING					
ACCEPTORS, ANNUAL (THOUSANDS)	..	..	11.3	.	.
USERS (PERCENT OF MARRIED WOMEN)	..	..	..	..	..
FOOD AND NUTRITION					
INDEX OF FOOD PRODUCTION PER CAPITA (1969=71=100)	91.0	96.0	91.0	89.9	108.3
PER CAPITA SUPPLY OF					
CALORIES (PERCENT OF REQUIREMENTS)	86.0	87.0	94.0	92.3	107.6
PROTEINS (GRAMS PER DAY)	70.0	71.0	74.2	52.8	65.8
OF WHICH ANIMAL AND PULSE	32.0	35.0	36.4	16.1	34.0
CHILD (AGES 1-4) MORTALITY RATE	36.1	28.4	21.9	20.2	7.6
HEALTH					
LIFE EXPECTANCY AT BIRTH (YEARS)	39.9	44.9	49.2	50.8	64.1
INFANT MORTALITY RATE (PER THOUSAND)	..	97.0	..	..	70.9
ACCESS TO SAFE WATER (PERCENT OF POPULATION)					
TOTAL	..	29.0	45.0	27.4	65.7
URBAN	..	71.0	95.0	74.3	79.7
RURAL	..	26.0	39.0	12.6	43.9
ACCESS TO EXCRETA DISPOSAL (PERCENT OF POPULATION)					
TOTAL	..	..	..	..	59.9
URBAN	..	..	..	..	75.7
RURAL	..	..	..	..	30.4
POPULATION PER PHYSICIAN	26200.0	15463.4	9597.0	13844.1	1728.2
POPULATION PER NURSING PERSON	2380.0/c	1250.5	1270.0	2898.6	1288.2
POPULATION PER HOSPITAL BED					
TOTAL	514.2	381.9	331.8	1028.4	471.2
URBAN	..	..	76.5	423.0	558.0
RURAL	..	..	3815.4	3543.2	..
ADMISSIONS PER HOSPITAL BED	..	15.3	27.0	..	..
HOUSING					
AVERAGE SIZE OF HOUSEHOLD					
TOTAL	..	..	5.0	..	..
URBAN	..	..	4.8	..	..
RURAL	..	..	5.0	..	..
AVERAGE NUMBER OF PERSONS PER ROOM					
TOTAL	..	..	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..
ACCESS TO ELECTRICITY (PERCENT OF DWELLINGS)					
TOTAL	..	9.0	..	..	..
URBAN	..	..	..	..	..
RURAL	..	..	..	..	..

TABLE 3A
BOTSWANA - SOCIAL INDICATORS DATA SHEET

	BOTSWANA			REFERENCE GROUPS (WEIGHTED AVERAGES - MOST RECENT ESTIMATE) ^{/a}		
	1960 ^{/b}	MOST RECENT		MIDDLE INCOME	MIDDLE INCOME	
		1970 ^{/b}	ESTIMATE	^{/b}	AFRICA SOUTH OF SAHARA	LATIN AMERICA & CARIBBEAN
EDUCATION						
ADJUSTED ENROLLMENT RATIOS						
PRIMARY:	TOTAL	42.0	66.0	94.0	73.7	101.7
	MALE	35.0	62.0	80.0	96.8	103.0
	FEMALE	48.0	70.0	98.0	79.0	101.5
SECONDARY:	TOTAL	1.0	7.0	20.0	16.2	35.3
	MALE	1.0	8.0	19.0	25.3	34.9
	FEMALE	1.0	6.0	21.0	14.8	35.6
VOCATIONAL ENROL. (% OF SECONDARY)		4.0	19.0	12.0	5.3	30.1
PUPIL-TEACHER RATIO						
PRIMARY		31.0	36.0	31.0	36.2	29.6
SECONDARY		12.0	15.0	17.0	23.6	15.7
ADULT LITERACY RATE (PERCENT)		20.0 ^{/d}	..	35.0	..	80.0
CONSUMPTION						
PASSENGER CARS PER THOUSAND						
POPULATION		2.0	2.8	4.7	32.3	42.6
RADIO RECEIVERS PER THOUSAND						
POPULATION		4.0	31.5	86.5	69.0	215.0
TV RECEIVERS PER THOUSAND						
POPULATION		..	..	..	8.0	89.0
NEWSPAPER ("DAILY GENERAL INTEREST") CIRCULATION PER THOUSAND POPULATION		..	20.5	24.0	20.2	62.8
CINEMA ANNUAL ATTENDANCE PER CAPITA		..	0.1	0.2	0.7	3.2
LABOR FORCE						
TOTAL LABOR FORCE (THOUSANDS)		266.9	296.3	338.1	..	..
FEMALE (PERCENT)		49.9	52.7	53.0	36.7	22.6
AGRICULTURE (PERCENT)		92.0	86.7	83.0	56.6	35.0
INDUSTRY (PERCENT)		2.7	3.7	5.0	17.5	23.2
PARTICIPATION RATE (PERCENT)						
TOTAL		50.9	46.7	43.7	37.2	31.8
MALE		53.2	47.7	44.5	47.1	49.0
FEMALE		48.9	45.9	43.1	27.5	14.6
ECONOMIC DEPENDENCY RATIO		1.0	1.1	1.2	1.3	1.4
INCOME DISTRIBUTION						
PERCENT OF PRIVATE INCOME RECEIVED BY						
HIGHEST 5 PERCENT OF HOUSEHOLDS		..	28.1 ^{/e}	..	..	..
HIGHEST 20 PERCENT OF HOUSEHOLDS		..	60.3 ^{/e}	..	..	..
LOWEST 20 PERCENT OF HOUSEHOLDS		..	1.6 ^{/e}	..	..	..
LOWEST 40 PERCENT OF HOUSEHOLDS		..	7.6 ^{/e}	..	..	..
POVERTY TARGET GROUPS						
ESTIMATED ABSOLUTE POVERTY INCOME LEVEL (US\$ PER CAPITA)						
URBAN		..	..	294.0	381.2	..
RURAL		..	..	217.0	156.2	187.6
ESTIMATED RELATIVE POVERTY INCOME LEVEL (US\$ PER CAPITA)						
URBAN		..	..	245.0	334.3	513.9
RURAL		..	..	245.0	137.6	362.2
ESTIMATED POPULATION BELOW ABSOLUTE POVERTY INCOME LEVEL (PERCENT)						
URBAN		..	..	40.0	..	..
RURAL		..	..	55.0	..	..

.. Not available
 . Not applicable.

NOTES

^{/a} The group averages for each indicator are population-weighted arithmetic means. Coverage of countries among the indicators depends on availability of data and is not uniform.

^{/b} Unless otherwise noted, data for 1960 refer to any year between 1959 and 1961; for 1970, between 1969 and 1971; and for Most Recent Estimate, between 1976 and 1979.

^{/c} 1962; ^{/d} Prior to 1965; ^{/e} 1971-72 economically active population.

DEFINITIONS OF SOCIAL INDICATORS

Notes: Although the data are drawn from sources generally judged the most authoritative and reliable, it should also be noted that they may not be internationally comparable because of the lack of standardized definitions and concepts used by different countries in collecting the data. The data are, nonetheless, useful to describe orders of magnitude, indicate trends, and characterize certain major differences between countries.

The reference groups are (1) the same country group of the subject country and (2) a country group with somewhat higher average income than the country group of the subject country (except for "Capital Surplus Oil Exporters" group where "Middle Income North Africa and Middle East" is chosen because of stronger socio-cultural affinities). In the reference group data the averages are population weighted arithmetic means for each indicator and shown only when majority of the countries in a group has data for that indicator. Since the coverage of countries among the indicators depends on the availability of data and is not uniform, caution must be exercised in relating averages of one indicator to another. These averages are only useful in comparing the value of one indicator at a time among the country and reference groups.

LAND AREA (thousand sq.km.)

Total - Total surface area comprising land area and inland waters.
Agricultural - Estimate of agricultural area used temporarily or permanently for crops, pastures, market and kitchen gardens or to lie fallow; 1978 data.

GNP PER CAPITA (US\$) - GNP per capita estimates at current market prices, calculated by same conversion method as World Bank Atlas (1977-79 basis); 1960, 1970, and 1979 data.

ENERGY CONSUMPTION PER CAPITA - Annual consumption of commercial energy (coal and lignite, petroleum, natural gas and hydro-, nuclear and geothermal electricity) in kilograms of coal equivalent per capita; 1960, 1970, and 1979 data.

POPULATION AND VITAL STATISTICS

Total Population, Mid-Year (thousands) - As of July 1; 1960, 1970, and 1979 data.

Urban Population (percent of total) - Ratio of urban to total population; different definitions of urban areas may affect comparability of data among countries; 1960, 1970, and 1979 data.

Population Projections

Population in year 2000 - Current population projections are based on 1980 total population by age and sex and their mortality and fertility rates. Projection parameters for mortality rates comprise of three levels assuming life expectancy at birth increasing with country's per capita income level, and female life expectancy stabilizing at 77.5 years. The parameters for fertility rate also have three levels assuming decline in fertility according to income level and past family planning performance. Each country is then assigned one of these nine combinations of mortality and fertility trends for projection purposes.

Stationary population - In a stationary population there is no growth since the birth rate is equal to the death rate, and also the age structure remains constant. This is achieved only after fertility rates decline to the replacement level of unit net reproduction rate, when each generation of women replaces itself exactly. The stationary population size was estimated on the basis of the projected characteristics of the population in the year 2000, and the rate of decline of fertility rate to replacement level.

Year stationary population is reached - The year when stationary population size has been reached.

Population Density

Per sq. km. - Mid-year population per square kilometer (100 hectares) of total area; 1960, 1970 and 1979 data.
Per sq. km. agricultural land - Computed as above for agricultural land only; 1960, 1970 and 1978 data.

Population Age Structure (percent) - Children (0-14 years), working-age (15-64 years), and retired (65 years and over) as percentages of mid-year population; 1960, 1970, and 1979 data.

Population Growth Rate (percent) - Annual growth rates of total mid-year populations for 1950-60, 1960-70, and 1970-79.

Population Growth Rate (percent) - urban - Annual growth rates of urban populations for 1950-60, 1960-70, and 1970-79.

Crude Birth Rate (per thousand) - Annual live births per thousand of mid-year population; 1960, 1970, and 1979 data.

Crude Death Rate (per thousand) - Annual deaths per thousands of mid-year population; 1960, 1970, and 1979 data.

Gross Reproduction Rate - Average number of 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 1979.

Family Planning - Acceptors, Annual (thousands) - Annual number of acceptors of birth-control devices under auspices of national family planning program.
Family Planning - Users (percent of married women) - Percentage of married women of child-bearing age (15-44 years) who use birth-control devices to all married women in same age group.

FOOD AND NUTRITION

Index of Food Production per Capita (1969-71=100) - Index of per capita annual production of all food commodities excluding animal feed and feed and is on calendar year basis. Commodities cover primary goods (e.g. sugarcane instead of sugar) which are edible and contain nutrients (e.g. coffee and tea are excluded). Aggregate production of each country is based on national average producer price weights; 1961-65, 1970, and 1979 data.
Per capita supply of calories (percent 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 distribution of population, and allowing 10 percent for waste at household level; 1961-65, 1970, and 1977 data.

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 provide for 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; 1961-65, 1970 and 1977 data.

Per capita protein supply from animal and pulse - Protein supply of food derived from animals and pulses in grams per day; 1961-65, 1970 and 1977 data.
Child Mortality Rate (per thousand) - Annual deaths per thousand in age group 1-4 years, to children in this age group; for most developing countries data derived from life tables; 1960, 1970 and 1979 data.

HEALTH

Life Expectancy at Birth (years) - Average number of years of life remaining at birth; 1960, 1970 and 1979 data.

Infant Mortality Rate (per thousand) - Annual deaths of infants under one year of age per thousand live births.

Access to Safe Water (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) with reasonable access to safe water supply (includes treated surface waters or untreated but uncontaminated water such as that from protected boreholes, springs, and sanitary wells) as percentages of their respective populations. In an urban area a public fountain or standpost located not more than 200 meters from a house may be considered as being within reasonable access of that house. In rural areas reasonable access would imply that the housewife or members of the household do not have to spend a disproportionate part of the day in fetching the family's water needs.

Access to Excreta Disposal (percent of population) - total, urban, and rural - Number of people (total, urban, and rural) served by excreta disposal as percentages of their respective populations. Excreta disposal may include the collection and disposal, with or without treatment, of human excreta and waste-water by water-borne systems or the use of pit privies and similar installations.

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, practical nurses, and assistant nurses.

Population per Hospital Bed - total, urban, and rural - Population (total, urban, and rural) divided by their respective number of hospital beds available in public and private general and specialized hospital and rehabilitation centers. Hospitals are establishments permanently staffed by at least one physician. Establishments providing principally custodial care are not included. Rural hospitals, however, include health and medical centers not permanently staffed by a physician (but by a medical assistant, nurse, midwife, etc.) which offer in-patient accommodation and provide a limited range of medical facilities. For statistical purposes urban hospitals include 400s principal/general hospitals, and rural hospitals local or rural hospitals and medical and maternity centers. Specialized hospitals are included only under total.

Admissions per Hospital Bed - Total number of admissions to or discharges from hospitals divided by the number of beds.

HOUSING

Average Size of Household (persons per household) - total, urban, and rural - A household consists of a group of individuals who share living quarters and their main meals. A boarder or lodger may or may not be included in the household for statistical purposes.

Average number of persons per room - total, urban, and rural - Average number of persons per room in all urban, and rural occupied conventional dwellings, respectively. Dwellings exclude non-permanent structures and unoccupied parts.

Access to Electricity (percent of dwellings) - total, urban, and rural - Conventional dwellings with electricity in living quarters as percentage of total, urban, and rural dwellings respectively.

EDUCATION

Adjusted Enrollment Ratios

Primary school - total, male and female - Cross total, male and female enrollment of all ages at the primary level as percentages of respective primary school-age populations; normally includes children aged 6-11 years but adjusted for different lengths of primary education; for countries with universal education enrollment may exceed 100 percent since some pupils are below or above the official school age.

Secondary school - total, male and female - computed as above; secondary education requires at least four years of approved primary instruction; provides general, vocational, or teacher training instructions for pupils usually of 12 to 17 years of age; correspondence courses are generally excluded.

Vocational enrollment (percent of secondary) - Vocational institutions include technical, industrial, or other programs which operate independently or as departments of secondary institutions.

Pupil-teacher ratio - primary, and secondary - Total students enrolled in primary and secondary levels divided by numbers of teachers in the corresponding levels.

Adult literacy rate (percent) - Literate adults (able to read and write) as a percentage of total adult population aged 15 years and over.

CONSUMPTION

Passenger Cars (per thousand population) - Passenger cars comprise motor cars seating less than eight persons; excludes ambulances, hearses and military vehicles.

Radio Receivers (per thousand population) - 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.

TV Receivers (per thousand population) - TV receivers for broadcast to general public per thousand population; excludes unlicensed TV receivers in countries and in years when registration of TV sets was in effect.

Newspaper Circulation (per thousand population) - Shows the average circulation of "daily general interest newspaper", defined as a periodical publication devoted primarily to recording general news. It is considered to be "daily" if it appears at least four times a week.

Cinema Annual Attendance per Capita per Year - Based on the number of tickets sold during the year, including admissions to drive-in cinemas and mobile units.

LABOR FORCE

Total Labor Force (thousands) - Economically active persons, including armed forces and unemployed but excluding housewives, students, etc., covering population of all ages. Definitions in various countries are not comparable; 1960, 1970 and 1979 data.

Female (percent) - Female labor force as percentage of total labor force.

Agriculture (percent) - Labor force in farming, forestry, hunting and fishing as percentage of total labor force; 1960, 1970 and 1979 data.

Industry (percent) - Labor force in mining, construction, manufacturing and electricity, water and gas as percentage of total labor force; 1960, 1970 and 1979 data.

Participation Rate (percent) - total, male, and female - Participation or activity rates are computed as total, male, and female labor force as percentages of total, male and female population of all ages respectively; 1960, 1970, and 1979 data. These are based on ILO's participation rates reflecting age-sex structure of the population, and long time trend. A few estimates are from national sources.

Economic Dependency Ratio - Ratio of population under 15 and 65 and over to the total labor force.

INCOME DISTRIBUTION

Percentage of Private Income (both in cash and kind) - Received by richest 5 percent, richest 20 percent, poorest 20 percent, and poorest 40 percent of households.

POVERTY TARGET GROUPS

The following estimates are very approximate measures of poverty levels, and should be interpreted with considerable caution.

Estimated Absolute Poverty Income Level (US\$ per capita) - urban and rural - Absolute poverty income level is that income level below which a minimal nutritionally adequate diet plus essential non-food requirements is not affordable.

Estimated Relative Poverty Income Level (US\$ per capita) - urban and rural - Rural relative poverty income level is one-third of average per capita personal income of the country. Urban level is derived from the rural level with adjustment for higher cost of living in urban areas.

Estimated Population Below Absolute Poverty Income Level (percent) - urban and rural - Percent of population (urban and rural) who are "absolute poor".

ECONOMIC INDICATORS

GROSS NATIONAL PRODUCT IN 1978/79

ANNUAL RATE OF GROWTH (% constant prices)

	<u>US\$ Min.</u>	<u>%</u>	<u>1978/79</u>
GNP at Market Prices	569.9	100.0	24.9
Gross Domestic Investment	245.8	43.3	24.2
Gross National Saving	187.5	32.9	81.7
Current Account Balance	-58.3	-10.4	..
Exports of Goods, NFS	370.2	65.0	31.5
Imports of Goods, NFS	434.7	76.3	17.3

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1978/79

	<u>Value Added</u>		<u>Labor Force 1/</u>		<u>V.A. Per Worker</u>	
	<u>US\$ Min.</u>	<u>%</u>	<u>Min.</u>	<u>%</u>	<u>US\$</u>	<u>% of Ave.</u>
Agriculture	95.5	15.5	0.291	82.4	328.2	18.8
Industry	237.7	38.6	0.019	5.4	12,510.0	717.4
Services	282.4	45.9	0.043	12.2	6,567.4	376.6
Unallocated	.	.	.	.	.	.
Total/Average	615.6	100.0	0.353	100.0	1,743.9	100.0

GOVERNMENT FINANCE

	<u>Central Government</u>		
	<u>(P. Min.)</u>	<u>% of GDP</u>	
	<u>1978/79</u>	<u>1978/79</u>	<u>1975/76 - 1978/79</u>
Current Receipts	136.8	27.2	27.4
Current Expenditures	99.1	19.7	20.2
Current Surplus	37.7	7.5	7.1
Capital Expenditures	79.0	15.7	13.9
External Assistance (net)	45.9	9.1	8.8

MONEY, CREDIT and PRICES

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
	(Million P Outstanding End Period)						
Money and Quasi Money	..	..	..	83.4	88.1	172.7	219.7
Bank Credit to Public Sector 2/	1.5	2.9	3.1	2.6	1.9	1.3	0.7
Bank Credit to Private Sector	36.2	52.6	65.1	69.7	74.5	78.0	91.3

(Percentage or Index Numbers)

Money and Quasi Money as % of GDP	..	..	..	25.8	20.7	..	..
General Price Index (March 1980=100)	..	56.2	64.3	72.5	78.4	89.8	100.0
Annual percentage changes in:							
Bank Credit to Public Sector		93.3	6.9	-16.1	-26.9	-31.6	-46.2
Bank Credit to Private Sector		45.3	23.8	7.1	6.9	4.7	17.1

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

2/ Excludes parastatals.

TRADE PAYMENTS AND CAPITAL FLOWS

BALANCE OF PAYMENTS

	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980 1/</u>
	(Millions US \$)			
Exports of Goods <u>2/</u>	194.9	223.5	425.8	578.8
Imports of Goods <u>3/</u>	<u>239.3</u>	<u>288.7</u>	<u>418.3</u>	<u>619.0</u>
Balance of Trade (deficit= -)	-44.4	-65.2	7.5	-40.2
Non-factor Services (net)	-19.3	-23.0	-28.5	-46.4
Factor Services (net)	- 6.0	-37.4	-64.4	-74.4
Net Transfers	<u>53.2</u>	<u>80.9</u>	<u>82.9</u>	<u>132.1</u>
Balance on Current Account	-16.5	-44.7	- 2.5	-28.9
Direct Foreign Investment	18.1	53.2	112.7	119.2
Net MLT Borrowing	10.0	3.2	6.6	6.6
Disbursements	15.8	11.4	15.7	18.4
Amortization	5.8	8.2	9.1	11.8
Capital Grants	41.9	- 0.2	-37.0	- 3.1
Other Capital (net))				
Other Items n.e.i.)	-33.0	39.5	28.0	-156.6
Increase in Reserves (-)	-20.5	-51.0	-107.8	62.8
Net Reserves (end year)	99.3	129.4	249.6	352.0
Fuel and Related Materials				
Imports <u>5/</u>	299.1	389.5	573.1	..
of which: Petroleum	31.5	34.3	77.1	..
Exports <u>5/</u>	195.6	244.3	480.2	..
of which: Petroleum	-	-	-	..

MERCHANDISE EXPORTS 5/
(AVERAGE 1977-79)

	<u>US\$ Min.</u>	<u>%</u>
Meat and meat products	58.5	19.1
Diamonds	136.3	44.4
Copper/nickel	66.7	21.8
All other commodities	<u>45.2</u>	<u>14.7</u>
Total	306.7	100.0

EXTERNAL DEBT, DEC. 31, 1980

	<u>US\$ Min.</u>
Public Debt, incl. guaranteed	148.5
Non-Guaranteed Private Debt	..
Total Outstanding & Disbursed	148.5

DEBT SERVICE RATIO FOR 1980 4/

	<u>%</u>
Public Debt, incl. guaranteed	1.9
Non-Guaranteed Private Debt	..
Total Outstanding & Disbursed	1.9

IBRD/IDA LENDING (Dec. 31, 1980)
(Million US\$)

	<u>IBRD</u>	<u>IDA</u>
Outstanding & Disbursed	50.0	15.6
Undisbursed	41.9	0.1
Outstanding incl.		
Undisbursed	91.9	15.7

RATE OF EXCHANGE 6/

	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
US\$1.00 = P	0.689	0.869	0.869	0.828	0.828	0.789	0.742
P 1.00 = US\$	1.450	1.150	1.150	1.208	1.208	1.268	1.348

1/ Provisional

2/ Recorded customs statistics adjusted for timing and coverage.

3/ Recorded customs statistics adjusted for valuation (exclusive of duties, insurance and freight) and coverage.

4/ Ratio of Debt Service to Exports of Goods and Non-factor Services.

5/ Unadjusted trade figures.

6/ Annual averages.

.. Not available

. Not applicable

STATUS OF BANK GROUP OPERATIONS IN BOTSWANA

A. STATEMENT OF BANK LOANS AND IDA CREDITS
(July 31, 1981)

<u>Number</u>	<u>Year</u>	<u>Borrower</u>	<u>Purpose</u>	Amount (less Cancellations)		
				-----US\$ Million-----		
				<u>Bank</u>	<u>IDA</u>	<u>Undisbursed</u>
Two loans and six credits fully disbursed				36.5	14.7	
1019	1974	Botswana Development Corporation	Development Finance Company Project	4.0		1.4
1174	1975	Botswana	Third Road Project	5.8		1.3
1274	1976	Botswana	First Education Project	10.5		1.8
1408	1977	Botswana	Fourth Road Project	20.0		6.6
1497	1977	Botswana	Second Livestock Project	6.5		5.6
1584	1978	Botswana	Second Urban Project	8.0		6.0
1763	1979	Botswana	Second Water Supply Project	4.4		4.2
1828	1980	Botswana	Second Education Project	10.0		10.0
1941	1981	Botswana	Fifth Road Project	<u>17.0</u>		<u>17.0</u>
Total				122.7	14.7	
of which has been repaid				<u>14.6</u>	<u>0.3</u>	
Total now outstanding				108.1	14.4	
Amounts sold				10.0		
of which has been repaid				<u>7.5</u>	<u>7.5</u>	<u>-</u>
Total now held by Bank/IDA <u>1/</u>				<u>100.6</u>	<u>14.4</u>	
of which is undisbursed				<u>53.9</u>	<u>-</u>	<u>53.9</u>
				=====	=====	=====

1/ Prior to exchange adjustments.

B. STATEMENT OF IFC INVESTMENT
(July 31, 1981)

<u>Investment Number</u>	<u>Year</u>	<u>Borrower</u>	<u>Type of Business</u>	<u>US\$ Million Equivalent</u>		
				<u>Loan</u>	<u>Equity</u>	<u>Total</u>
448-BT	1979	Botswana Development Corporation	Development Finance Company	-	0.37	0.37
Total Gross Investments				-	0.37	0.37
Less cancellations, terminations, repayment and sales				-	-	-
Total now held by IFC				-	0.37	0.37
					====	====

C. STATUS OF PROJECTS IN EXECUTION
AS OF SEPTEMBER 1, 1981

Loan No. 1019-BT Botswana Development Corporation Project; US\$4.0 Million
Loan of June 27, 1974; Effectiveness Date: December 9,
1974; Closing Date: December 31, 1981

The Line of Credit to Botswana Development Corporation was fully committed in June of this year.

Loan No. 1174-BT Third Road Project, US\$5.8 Million Loan of November 21,
1975; Effectiveness Date: January 12, 1976;
Closing Date: March 31, 1982

The project was amended in 1978 to include additional components to utilize surplus funds. The Gaborone-Molepolole Road was completed satisfactorily in 1979 and only implementation of the District Roads Maintenance Pilot Program remains to be finished. Project completion is expected to be one year behind schedule because of a delay in recruiting technical assistance staff with appropriate expertise to implement the pilot program.

Loans No. 1274-BT
and 1275-T-BT Education Project; US\$10.5 Million (US\$7.0 Million Bank
and US\$3.5 Million TW) of May 28, 1976; Effectiveness
Date: September 10, 1976; Closing Date: March 31, 1982

Implementation, after initial delays in completing building designs, is proceeding satisfactorily and all components are expected to be completed by the March 31, 1982 closing date. Project objectives are expected to be achieved.

Loan No. 1408-BT Fourth Road Project; US\$420.0 Million Loan of May 20,
1977; Effectiveness Date: August 18, 1977;
Closing Date: December 31, 1981

The project was amended in 1978 to use savings to pave an additional 17 km of roadway. The construction and studies components are proceeding on schedule.

Loan No. 1497-BT Second Livestock Project; US\$6.5 Million Loan of December 30, 1977; Effectiveness Date: November 27, 1978; Closing Date: June 30, 1983

The project is being intensively reviewed by the Bank and Government in the light of poor performance in increasing cattle production and offtake and reversing overgrazing trends through the establishment of commercial ranches and communal grazing areas. Preliminary findings suggest that the project was based on insufficient understanding of the economic and social implications of the Government's Tribal Grazing Lands Policy, which it was designed to support. Measures to improve livestock marketing by upgrading trek routes, railway sidings and holding areas are, however, proceeding extremely well.

Loan No. 1584-BT Second Urban Project; US\$8.0 Million Loan of September 11, 1978; Effectiveness Date: June 20, 1979; Closing Date: December 31, 1982

Implementation is proceeding satisfactorily. Site improvements have begun while legislation enabling town councils to recover service levies is improving the cost recovery picture.

Loan No. 1763-BT Second Water Supply Project; US\$4.4 Million of January 9, 1980; Effectiveness Date: September 18, 1980; Closing Date: December 31, 1982

Implementation is proceeding satisfactorily.

Loan No. 1828-BT Second Education Project; US\$10.0 Million of April 16, 1980; Effectiveness Date: June 13, 1980; Closing Date: June 30, 1985

Implementation is proceeding satisfactorily.

Loan No. 1941-BT Fifth Road Project; US\$17.0 Million of February 1981; Effectiveness Date: May 4, 1981; Closing Date: October 1, 1984

This project became effective in May of this year and is proceeding satisfactorily.

D. EXISTING IFC INVESTMENT

Botswana Development Corporation, 448-BT

IFC has subscribed to preference shares in the Botswana Development Corporation and is providing technical assistance to its management by being represented on the Board of Directors.

BOTSWANA
THIRD EDUCATION PROJECT
SUPPLEMENTARY PROJECT DATA SHEET

I. Timetable of Key Events

- | | | |
|-----|---|---------------------------|
| (a) | Time taken to prepare | 4 months |
| (b) | Prepared by | Government and Bank Staff |
| (c) | Initial discussions and
identification mission | October/November 1980 |
| (d) | Appraisal mission departure | March 1981 |
| (e) | Negotiations | September 1981 |
| (f) | Planned date of effectiveness | March 1982 |

II. Special IBRD Implementation Actions

None

III. Special Conditions

- (a) Agreed guidelines would be used in determining the location of primary schools to be assisted under the Project (para. 36).
- (b) The MLGL would provide the Bank through the PIU: (i) before the beginning of each of Botswana's fiscal years, a work plan and budget satisfactory to the Bank for the construction of primary school facilities, and (ii) an annual report comparing actual work completed with that planned.
- (c) As a condition of disbursement against the primary classrooms component, the three accounting specialists and their local counterparts would be appointed and in place (para. 39).

