Botswana's Macroeconomic Management of Its Mineral-Based Growth:

It Used Mining Revenues for Development and Services but Must Now Broaden the Beneficiaries

By ROBERT L. CURRY, JR.*

ABSTRACT. The economic performance and the *political history* of *Botswana* during 1974–84 contrasted significantly with the experience of virtually every other *African* country. The *South African republic,* immediately north of the *Republic of South Africa,* achieved steady real *economic growth* with improved *social services* and provision for its people's *basic needs.* This was achieved in spite of world *recession* and *drought* because its *mineral* wealth was reserved for the people and *mining companies* had to pay for the privilege of extracting that wealth through a tax program limited to appropriating its surplus, while assuring the *investors* and *entrepreneurs* an adequate long-term return on *capital* and *enterprise.* But sound *macroeconomic policies* failed to provide even reasonably equitable benefits for the majority of the people. Sound *micropolicies* are needed to widen access to *employment* and *earned income* and to *asset accumulation.*

I

Introduction

DURING THE 1974 TO 1984 DECADE, Botswana's economic and political performance contrasted with the experience of virtually every other African country. The economy reflected steady, real economic growth at a rate in excess of 6 percent per annum.[1] Initiatives were undertaken to accelerate rural development.[2] Social services were improved as the Government made strides to meet people's basic needs for food, housing,[3] water and sanitation facilities, education, and training.[4] The polity reflected stability, free and openly contested elections and a constitutional transfer of power upon the untimely death of the founding president, Sir Seretse Khama.[5] The country maintains a strong commitment to majority rule in Southern Africa. Botswana was a Front Line State in the Rhodesia-Zimbabwe conflict, and it is currently a member of the Southern African Development Coordinating Conference (SADCC).

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Botswana's progress took place during a decade wherein the continent experienced a chaotic series of events ranging from economic stagnation and bankruptcy to internal strife, political instability, and inter-regional confrontations. The country's sound economic performance has been threatened by some of the same forces which other African countries faced. The decline in global economic activity during the early 1980s caused demand for Botswana's minerals to decline in world markets. Also, persistent and serious drought has hampered the country's ability to produce food and, as a result, famine threatens remote rural areas. The country weathered the economic crisis of 1981–82 due mainly to excellent macroeconomic management. Government currently is attempting to meet food security needs with the assistance of foreign donors.

While the macroeconomic picture is bright, and the possibility of coping with the drought is real, another important set of socioeconomic problems is emerging. These contradictions are inherent in the pattern of Botswana's economic growth in ways similar to other African situations. They could challenge both Botswana's capacity to maintain economic progress, and to insure open and stable political arrangements. The effort in this study is to trace the history of mineral development in Botswana, to evaluate macroeconomic growth and fiscal measures related to the mining sector, and to note briefly why, and in what form, socioeconomic problems inherent in the growth pattern threaten the factors basic to the country's progress.

II

Mining History in Botswana

THE THREE MAJOR MINING REGIONS in Botswana are in Orapa, Selebi-Phikwe and Jwaneng.[6] Botswana's modern mining era began in 1855 when DeBeers was granted a concession to prospect for diamonds. Four years later, the Rhodesian Selection Trust, eventually to be called the Roan Selection Trust (RST), entered the field. It negotiated successfully an agreement with the Bangawato Tribe, marking the first phase of large-scale prospecting for nickel and copper. Shortly thereafter, a subsidiary of Anglo-American was granted a concession to search for coal deposits.

The first promising finds were of nickel and copper. The agreement to prospect for nickel and copper had been made with the Bangawato because, at that time, tribes had mineral rights to their lands. The agreement was concluded while Botswana was the Bechuanaland Protectorate, an arrangement with Britain. When Botswana gained independence in 1968 the Government revised mineral development policies. It shifted mineral rights ownership from tribes to the Central

Government. Officials were aware that not only nickel and copper, but also diamonds, coal and other minerals would be located, and that the deposits were almost certain to be commercially viable.

The Government was correct because, shortly after independence, DeBeers located the first commercially viable diamond pipe at Orapa. The pipe's discovery prompted DeBeers to construct a plant and mining town at a cost of approximately $15 million. In 1971, production from the first pipe commenced, and it yielded over 2 million carats. The pipe proved to be the second-largest known at the time. In 1975, a second pipe was located at Orapa, and production from it commenced in 1976. In that year, another pipe was discovered 40 kilometers to the south, at the village of Letlhakane. The major discovery, however, occurred in 1977 when, far to the south of Orapa, DeBeers made an enormous strike. It discovered a rich pipe near the remote cattle post, Jwaneng. A mining complex was developed by DeBeers at Jwaneng at a cost exceeding $250 million. The complex includes the mining facility and a newly constructed mining town with a highly developed social and physical infrastructure. DeBeers believes that the mine will prove to be commercially viable, even at this cost.

Jwaneng's output exceeded 2 million carats in 1982 when, combined with the yield of Orapa, Letlhakane and Jwaneng, total diamond output exceeded 7.5 million carats. When full productive capacity is reached at Jwaneng, its annual yield could exceed 5 million carats. This could make Botswana the world's most important diamond producer, with an annual yield topping the 10 million-carat mark.

While diamonds are the country's major mineral export, Botswana is also rich in other minerals. As early as 1971, the existence of commercially viable deposits of nickel and copper had been proven in the Selebi-Phikwe area. A set of agreements were signed between government, the Roan Selection Trust owned by Amax, Inc., and the Anglo-American Corporation of South Africa. The resulting company was the Bamangwato Concessions Limited (BCL).

Nickel and copper mining in Botswana has been constrained by numerous problems at the Selebi-Phikwe complex. Alec Campbell has noted them succinctly:

> Technical problems in the early years of mining operations affected production and were compounded by a number of factors including lower than expected metal prices, exchange losses particularly in relation to a Deutschmark loan and also to inflation.
>
> Notwithstanding the improved results—both technical and financial—it was necessary because of losses sustained and the heavy debt and interest burden to restructure the financial and marketing arrangements. The revised arrangements include an agreement for the purchase of all ores on satisfactory commercial terms, a reduction in debt and interest burden and in exposure to further currency losses, and the deferral of royalties and certain loan repayments

> maturing during the four-year period ending 31 December, 1983. The arrangements, whilst also providing for increased royalties to the Botswana government, will enable the company to maintain its approved programme of capital expenditures and retain reasonable working capital.[7]

By 1973, coal was being mined at Morupule Colliery, situated near the town of Palapye. The mine has been operated as a subsidiary of Anglo-American Corporation. About 40 percent of its output is used by the Selebi-Phikwe complex, another 50 percent goes to the Botswana Power Corporation, and the remaining ten percent is marketed in the country's urban centers. Unlike diamonds, nickel and copper, coal is exclusively an import substitute.

Botswana's rapidly growing mineral sector was in nearly full swing with the introduction of the new Jwaneng mine in 1982. During that year, and despite a slump on the demand side, Botswana's diamond output rose by 56 percent over the previous year. A total of 7,768,840 carats, with an estimated value of 407 million Pula, were produced. The Orapa mine recorded 7,751,000 tons and

Table I

Mineral Production in Botswana
1976-1983

	1976	1977	1978	1979	1980	1981	1982	1983
Diamonds (million carats)	2.4	2.7	2.8	4.4	5.1	5.0	7.7	10.9
Nickel-copper (thousand tons)	33	31	40	40	40	47	45	48
Coal Production (thousand tons)	224	292	314	355	371	381	415	395
Index of Mining Production	100	104	123	147	161	169	238	263

Source: Bank of Botswana, Annual Reports: 1983, 1982, 1981, 1979 and 1977 (Gaborone: various years); Republic of Botswana, Statistical Bulletins, Vol. 7 Nos. 3/4 (September/December 1982) and Vol. 8 No. 4 (December 1983); and Department of Mines, Annual Reports: 1982 and 1983 (April 1983 and May 1984).

recovered 4,677,111 carats. The Letlhakane mine recorded its highest yearly diamond recovery—470,086 carats from 2,247,656 treated tons. Jwaneng treated 3,330,700 tons which yielded 2,621,643 carats.[8] With these three mines in full swing, this record was topped in 1983 as the three mines combined to generate 10,987,000 carats.

Throughout 1982 Selebi-Phikwe continued to have production problems, and on the demand side, depressed metal prices made it necessary that the company arrange with its creditors the restructuring of company debts. This was successfully accomplished in June, 1982. Company operating losses also required further commitments from the Government and principal shareholders to provide emergency funding to extend through 1983.

Copper and nickel production reached a high in 1982—again despite a demand-side slowdown. The BLC milled 2,460,566 tons of ore from which 45,685 tons of high grade matte were produced. The contained-metal in the matte was nickel, 17,756 tons, and copper, 18,375 tons, along with 254 tons of cobalt, a newcomer to Botswana's mineral output.[9] This record was topped in 1983 when 48,087 tons were produced at the BLC operation.

In 1982, coal production from the Morupule Colliery increased by 9 percent, or from 380,698 to 414,778 tons, over the previous year. Production declined in 1983 to 395,089 tons. However, a further expansion in mine capacity is being negotiated to meet the needs of a new coal-fired generating station being built by Botswana Power Corporation. In addition, a joint venture agreement was signed between the Government of Botswana and Shell Coal Botswana. The agreement sets conditions and terms under which coal mines would be developed in Kgaswe, in Botswana's central district. As well, if a feasibility study now in progress confirms the project's economic viability, new coal mines will be developed for the export market, with the Government acquiring an equity position in the joint venture.[10]

In summary, then, from 1976 to 1983, mineral production increased by 23 percent on an annual average, as shown in Table I. The growth featured diamond mining, but copper and nickel production also contributed, despite the many problems which plagued BCL's operation at Selebi-Phikwe. This mineral wealth, drawn from Botswana's rich lands, has been the key to the country's ability to experience economic expansion at the macro level.

The continued expanse in output and supply partially offset the slump in demand which resulted in price declines for all mineral exports over the calendar years 1981 and 1982. This was clearly important because of mining's critical importance to Botswana's growth and development.

III

Mining and Economic Growth

MINERALS HAVE TRANSFORMED Botswana from one of the world's least developed countries—one based upon cattle and marginal farming—to a high-growth Third World mineral exporter. Prior to independence, several economic survey missions were sent to Botswana to assess development prospects and requirements. Each concluded that the chances of achieving a rapid rate of growth and development were negligible. It was thought that growth would be agriculturally based, and that Botswana would continue to be counted among the world's poorest countries.[11] The early pessimism was clearly unfounded, but it is understandable in retrospect. No economic analyst could have envisioned the wealth contained beneath Botswana's vast, underdeveloped, and then largely unprospected lands.[12]

At the time of independence, the United Nations World Bank and bilateral aid donors listed Botswana in various "least-developed categories." With the discovery and careful exploitation of its natural, land-based mineral wealth, however, the country outgrew its "least-developed" tag. In fact, Botswana grew so rapidly that its per capita income made it ineligible for highly concessional assistance from the International Development Association of the World Bank. From the fiscal year 1976/77—the advent of large-scale mining in the country—to 1982/83, the level of real economic activity as measured by Gross Domestic Product (GDP) more than doubled—clearly the most impressive real growth performance.

Table II shows the rising dominance of the mineral sector as a contributor to GDP and aggregate employment. The table's data note that mining now

Table II

The Mineral Sector's Contribution
to GDP and Aggregate Employment
1976/77 to 1982/83
(Millions of Pula at 1979/80 Prices)

	1976/77	1977/78	1978/79	1979/80	1980/81	1981/82	1982/83[a]
GDP (1979/80 Pula)	408	541	602	689	768	806	840
Mining Sector Product	103	172	169	217	286	300	330
Mining/GDP	.25	.22	.28	.32	.37	.37	.40
Total Employment	50	63	73	83	97	110	120
Mining Sector Employment	5	6	7	7	8	7	8
Mining/Employment	.10	.10	.10	.09	.09	.06	.06

Source: Bank of Botswana, Annual Reports: 1977, 1979 1981 1982 and 1983 (Gaborone: various years).

a. Estimated.

accounts for about 40 percent of the country's gross domestic product, although only 7 percent of Botswana employment. Revenue generated from the mineral sector has lead the country's growth both in income and employment. Currently, revenue collected from mining finances much of the employment of government workers—indeed, some 27,000 of them make up fully one-fourth of the country's employed workforce.

From 1976 to 1983, the value of exports from Botswana—mainly minerals drawn from the land—increased by more than 30 percent on an annual average, a performance lead by a remarkable twelve-fold expansion in sales of diamonds. The exceptional 50 percent increase in Botswana's exports from 1982 to 1983 was due to a virtual doubling in the value of diamond sales over that twelve-month period. The country enjoyed both a dramatic increase in output and favorable price movements (see Table III).

Sales abroad permitted Botswana to increase its imports four-fold in real terms from 1976 to 1983. The imports have been growth-generating and, despite their rapid increase and persistent merchandise trade deficit, the country's total external reserves have increased nearly five-fold over the period, *e.g.*, from 4.3-month to 7.4-month import bill. This occurred while Africa's foreign exchange holdings, as a whole, deteriorated and fell below the two-month mark. The reasons for the success in reserve accumulations and a modest—indeed insignificant—externally held official debt, concurrent with import expansion, have been (a) willingness on the part of private investors to operate in Botswana, (b) an interest in Botswana by bilateral and multilateral donors, and (c) inflows of foreign exchange (South African Rand) from Botswana's participation in the Southern African Customs Union (SACU)—see Table IV.

IV

Mining and Public Revenues

THE GOVERNMENT'S MAIN OBJECTIVE in mineral development has been to negotiate fiscal arrangements which would yield public revenue in values sufficient to

Table III

Value and Composition of Exports
1976 to 1983
(Millions of Pula)

	1976	1977	1978	1979	1980	1981	1982	1983
Diamonds	37	47	76	184	237	136	246	462
Nickel-Copper	52	40	50	61	80	80	64	68
Cattle-Meat	46	45	30	74	36	73	94	98
Total	153	152	183	357	390	334	471	707

Source: Bank of Botswana, Annual Reports: 1977, 1979, 1981 1982 and 1983 (Gaborone: various years).

cover a major portion of annual recurrent and capital outlays.[13] Negotiations on fiscal arrangements have been conducted within a bargaining framework wherein both the Government and the companies have sought to extract maximum financial benefits without pushing the other to a point of abandoning proposed projects. Initial bargaining strength tended to favor the companies, particularly in diamond mining, but this balance shifted toward the Government because of two factors. First, as progressively greater investments were made—particularly by DeBeers—the companies became less able to abandon projects into which investments had been made. Second, the vastness of the country's mineral wealth has surpassed the Government's and the companies' expectations. This has induced DeBeers to commit to longer time frames than originally envisioned.

When they began their bargaining, neither DeBeers nor the Government imagined that Botswana would become what it is today—the second-largest country producer of diamonds, and it is the largest producer of diamond gems in the world. However, this isn't all: recent prospecting and aerial surveying indicate strongly the possibility of other commercially viable diamond pipes existing under the Kalahari Desert's enormous expanse. The desert covers four-fifths of Botswana—a country larger than France. In addition, there is evidence of other non-fuel and possibly fuel minerals.[14]

In effect, heavy commitments for long time periods have reduced bargaining flexibility and lost bargaining advantages for the companies. However, the Government of Botswana has always been a competent bargaining agent. The prospects are that it will become even more successful in future negotiations. The first evidence of the Government's ability to bargain occurred in 1970, only four years after independence. The National Assembly approved the Orapa agreement, which provided that a tax would be placed on company profits. In addition, a royalty would be paid to the Government based upon production. The Government also received a 15 percent free equity share in the Orapa mining operation.

Table IV

Botswana's External Economic Performance
1976-1983
(Millions of Pula: 1979/1980 prices)

	1976	1977	1978	1979	1980	1981	1982[b]	1983
International Reserves[a]	65	83	125	210	255	223	310	457
I.M.F. Quota (in Pula)	5	5	10	10	13	13	15	27
S.D.R. Exchange Rate per Pula	.99	.99	.93	.96	1.06	.98	1.02	1.00
Total External Debt	NA	NA	55	88	99	132	191	200
Exports (FOB adjusted)	153	152	183	357	390	334	471	707
Imports (CIF included)	181	232	291	428	537	633	706	803

Source: Bank of Botswana, Annual Reports: 1983, 1983, 1981, 1979, and 1977 (Gaborone: various years).

a. As of 31 December of each year.
b. As of 31 March 1982, reserves had fallen to four-year low of 197.9 million Pula. However, by year's end, they had rebounded to the 311 million Pula mark.

Besides that, an important clause was incorporated into the agreement. It called for the renegotiation of any aspect of the agreement if the operation experienced "abnormal circumstances."[15] The clause was invoked in 1974 and, with its invocation, the Government established firmly its willingness and ability to conduct tough and, indeed, acrimonious bargaining. The situation occurred primarily because,

> The Government began to realize just how profitable the Orapa mine was, so when DeBeers approached the Government in 1974 for a lease to mine the two further diamond pipes which had been discovered near Letlhakane, the Government used the "abnormal circumstances" clause to reopen the original agreement. The second round of negotiations was much tougher and was characterized by hard and acrimonious bargaining. Encouraged by international trends in the negotiations of mineral concessions, the Government expected that a greater proportion of the financial benefits of mining should flow to the public sector rather than to private capital. Further prospecting had also shown that the Orapa mine was not an isolated deposit, rather that Botswana was an important diamond province.[16]

The clause's implementation had an immediate impact on the distribution of gross profits less retained earnings during the early years of DeBeer's operation in Botswana. The Government's share in the operation was less than one-third during the 1971 to 1973 period, but from 1974 to 1976, it approached 60 percent (see Table V).

Not only has the Government bargained effectively on how economic benefits would be shared with mining companies, it has also been effective in having the burden of economic failure fall more heavily on companies. This resulted from the nature of the revised agreement with DeBeer's Orapa operation. The agreement became effective in 1977, and under its provisions, the Government receives a royalty payment in exchange for mineral exploitation rights; it receives a dividend share of the operation's net profits after taxes; and it places a tax on gross profits. By acquiring royalty and dividend revenues, government has a more direct access to gross revenues.

Table V

Early Operations of DeBeers Botswana
1971-1976
(Millions of Pula)

	1971	1972	1973	1974	1975	1976
Distribution of gross profits						
Tax			3.3	7.3	5.8	7.0
Royalty	0.1	0.9	1.1	1.5	1.4	3.4
Dividends	0.8	12.9	12.1	5.7	15.9	10.5
Retained profits	0.6	0.7	1.3	9.0	-2.8	3.3
Of gross profit less retained profit						
Accruals to Botswana Government	0.2	2.8	6.2	9.7	18.2	15.6
Accruals to DeBeers	0.7	11.0	10.3	4.8	4.9	5.2

Sources: Annual Reports of DeBeers Botswana Mining Company (Proprietary) Limited (Debswana, 1972-1977); Annual Statements of Accounts (RB, 1972-1977).

The Government owns 50 percent in Debswana, as does DeBeers. This means that Botswana's officials have something to say about what gross profits will be, *e.g.* as a 50 percent owner, government can police transfer-pricing and other intercorporate policies which would serve to reduce gross and net profits. The royalty and dividend parts of the tax structure served to cushion against revenue declines from even heavier losses due to company losses during 1981 and 1982. During that time, downturns in diamond prices squeezed unit profits and, consequently, the profit base on which taxes were partly levied. Not only, then, has the Government negotiated in ways that insure that Botswana would share in mining sector profits during good times, but it also has bargained to shift some of the burden of a downturn to the companies.

The economic downturn of the early 1980s would have hurt the economy even more severely had government not taken such steps. For example, declining metal prices during 1982, coupled with production line problems at Selebi-

Phikwe during the late 1970s-early 1980s, would have caused the burden to fall more heavily on Botswana had less care been taken in bargaining over financial arrangements. Selebi-Phikwe experienced a revenue decline from 77 million Pula in 1981 to 61 million in 1982. The result was an operating loss exceeding 20 million Pula. The Government *and* the principal shareholders contributed to the Emergency Funding arrangement, a contractual obligation which will carry the project through 1983 when it was expected to show a late-year operating surplus.[17]

Calendar year 1982 opened with a continuing price slump in diamond sales, and this constituted a severe brake on export performance. The resulting imbalances in external payments and the budget were judged to be unsustainable. The Government responded by drawing up and implementing a package of

Table VI

Public Revenue Collections in Botswana
1980/81-1984/85
(Millions of Pula:Current Prices)

	1980/81	1981/82	1982/83	1983/84[a]	1984/85[b]
Mineral Revenues	101	77	114	188	243
Customs and Excise Revenues	102	104	100	158	180
Other Revenues[a]	104	142	170	—	—
Total Revenue	307	323	394	517	649
GDP	771	819	901	NA	NA
Total Public Revenue/GDP	.40	.39	.41	NA	NA
Mineral Revenue/GDP	.13	.09	.11	NA	NA
Customs-Excise/GDP	.13	.13	.12	NA	NA

a. The major sources are remittances by miners working in South Africa, and common pool transfers from Botswana's participation in the Southern Africa Customs Union.
b. Data for 1983/84 and 1984/85 are estimated by the Bank of Botswana.

Source: Department of Mines, Annual Report: 1982 (Gaborone: April 1983), p. 15; Bank of Botswana, Annual Reports: 1983 and 1982 (Gaborone: March 1983), pp. 14-19; and Hon. P. S. Mmusi, Budget Speech (National Assembly, Gaborone: February 1983), pp. 203.

adjustments. The seriousness with which the deterioration was viewed was shown by the introduction of three previously unused emergency measures: devaluation of the Pula, mandatory ceiling on lending, and a wage and salary freeze. The combination of adjustments and external financing had a positive effect on the economy at the turn of the year. Prices quickly improved and by the end of the year the overall balance of payments surplus was 56 million Pula. This compared well with a deficit of 61 million Pula in 1981.[18]

The severity of the recent economic downturn indicates that had the Government not followed the prudent budgetary policy of building up cash balances during good years as an insurance against bad ones, the adjustment measures would have been inevitably more severe and disruptive. There would have been little choice but to cut government expenditures drastically, impose painful credit restrictions and devalue substantially. This action would have forced the other non-mineral and non-agricultural sectors into a major recession. But, as it turned out, the reserves accumulated earlier made possible a much more moderate policy response by the Government that did not bring economic development to a halt. The Government's policy of accumulating cash balances and foreign exchange reserves in financially good times to protect against bad times thus demonstrated its worth in the early 1980s and is an accepted cornerstone of government fiscal policy.[19] This policy varied markedly from that of other similarly situated mineral exporting countries in Africa. The absence of this type of long-term view towards lessening the impact of volatile mineral markets within the world trading system is endemic in Africa. Countries such as Liberia (iron ore) and Zambia and Zaire have seen their governments either unwilling or unable to develop a sound, long-term approach to macroeconomic management.

In effect, then, Botswana's problems came about because the world economy remained firmly in the grip of a recession during 1981 and 1982. The depth of the recession was almost entirely unexpected. Production within the group of twenty-four countries belonging to the Organization for Economic Cooperation and Development (OECD) is estimated to have fallen by 0.5 percent in real terms. This resulted in a decline in the volume of world trade of 2.0 percent (the first decline since the Second World War). For developing countries such as Botswana, the world recession was felt more acutely in commodity markets. Prices fell sharply, and the squeeze on export revenues and company profits—a base for taxation—contributed in varying degrees to the balance of payments and budgetary problems.

Diamond sales by the London-based Central Selling Organization (CSO) amounted to $1.26 billion in 1982. This represented a fall of about 14 percent from sales of $1.47 billion in the previous year. There was little doubt that the diamond market had difficulty shaking off the slump into which it had sunk. CSO sales during the second half of 1982 were only 20 percent above the depressed level of the corresponding 1981 period. Despite the sluggish diamond recovery, the CSO announced an overall price increase of 2.5 percent at the end of September 1982.

Quota restrictions on Botswana's sales to the CSO remained in force during 1982. However, the commencement of production at the new diamond mine at Jwaneng made possible a large increase in Botswana's quota. Thus, its sales to the CSO increased from $139 million in 1981 to $232 million in 1982—this because the country's export volume via the CSO increased while unit values remained depressed.

After falling through 1981, nickel prices held up well during the first half of 1982, despite the recession in the Western industrial countries. In December, 1982, the New York dealer price had fallen to one-half of the average price prevailing in 1980. At the December price of $1.68 per pound, even the most efficient mines were unable to cover their costs of production. Nickel and copper price developments during 1982 tended to undermine the local nickel-copper mine's ability to cover its unit cost of production.

There was a relentless fall in copper prices to as low as .58 dollars per pound in June, 1982. A modest recovery of prices took place in the second half of the year, and by year's end, market sentiment was pointing to a price recovery during 1983. Although there was great uncertainty concerning the speed and magnitude of the expected rise in copper prices, it was recognized that, while speculative buying could cause a sharp rebound of prices, the overhang of large stocks, as well as the less-than-robust recovery of OECD economies which was forecast for 1983, might render such price rises unsustainable. This forecast underestimated the magnitude of the recovery and its positive impact on Botswana, as copper prices rose sharply during 1983.[20]

The Government of Botswana was obviously unable to alter global economic events, but it was able to lessen the impact of troublesome supply and demand phenomena on its tax effort and the economy's performance. The combined royalty, dividend and profit tax components worked in a way which cushioned the fiscal impact of the economic slump of late 1981 and early 1982. Mineral sector tax collections fell from 101 million Pula in 1980–81 to 77 million the following fiscal year. They rose again to nearly 105 million in 1982–83. The Government's mining sector tax effort, *e.g.* mining tax revenue as a proportion of GDP, fell from 0.13 to 0.09 from 1980–81 to 1981–82. However, it bounced back to 0.11 in 1982–83. Despite the sectorial decline, the central government was able to maintain reasonably well overall and mineral sector tax revenues throughout the slump of 1980/81–1982/83. The tax effort improved substantially once the recovery got underway, during 1983/84 and 1984/85 (see Table VI).

Botswana's government was able to offset the deterioration in its mining sector tax effort partly by obtaining added non-tax revenue and grants, particularly from Botswana's participation in the Southern Africa Customs Union (SACU) and donor grants. Such transfers increased from 102 million Pula in 1980/81 to 114 and then 158 million Pula in the following two fiscal years. Grants from donors fell slightly during the period—from 38 to 36 million Pula—mainly because Botswana was no longer considered a least-developed country.

Not only was Botswana able to maintain a healthy tax effort during, and immediately following the slump, but the central government collected revenue to match expenditures each fiscal year since 1980/81. The total deficit accrued during the four-year span 1980/81 to 1983/84 will be about 43 million Pula.

By 1984/85, a surplus of revenue over spending in the neighborhood of 45 million Pula is projected, and this would exceed the recent, modest debt accrual. According to the Ministry of Finance and Development Planning, the reason for the projected budget surplus is because implementing ministries argue that they cannot predict in advance which projects will fall behind schedule due to problems in arranging donor or domestic financing or obtaining the skilled manpower required, and that, therefore, they must be allowed to have a larger volume of projects in the pipeline than will actually be implemented. Thus, overplanning is intentional.[22]

Clearly, then, fiscal policies have led to a strong tax effort and modest public debt accruals—a fact unique among African countries. Effective macroeconomic management and a fortuitous mineral resource base—these are responsible for Botswana's impressive record of real economic growth. This two-fold strategy, *e.g.* mineral development and sound macroeconomic approaches, permitted the country to rebound quickly from the economic slump. In his most recent budget message, Vice President P. S. Mmusi made these points:

> Government's strategy is to chart a development course consistent with the best allocation of the nation's growing supply of skilled manpower, to build up foreign exchange reserves and government revenues in good years and to stick to our steady development course in bad years by running down the reserves accumulated in good years.[23]

Mr. Mmusi went on to point out that this approach continues to be a guiding principle in Botswana'a economic management policies. Nothing has happened since then to alter this approach. Equally important are three other principles which Botswana emphasized in the *Mid-Term Review of NDP V.*[24] First, there is a close causal relationship between development expenditures and recurrent expenditures. As the country proceeds into the 1984/85 budget year and ahead into NDP VI, one must recognize and take account of the fact that today's development expenditures require recurrent expenditures in the future. Second, because the economy is so strongly affected by forces beyond control, Botswana must always take a cautious and flexible approach to economic planning and policy-making, *e.g.* foreign exchange management. Plans and policies must be flexible, permitting adjustments to ever-changing circumstances in international markets. Finally, and consistent with the first two principles, Botswana must monitor closely its external indebtedness, not only that to which the Government is already committed, but also that which is now being contemplated. If careful watch is not kept, Botswana could well find its debt service requirements going beyond acceptable limits.

The Vice President elaborated further on each of these principles. Regarding public finance, he noted that both recurrent and development expenditures over the past few years were only slightly higher than planned in NDP V and exceeded their planned levels by less than did revenues. That both types of expenditure have been close to their planned levels is due to correct identification of the relationship between the two. For example, when the Government committed funds to build a new hospital or to expand the number of secondary school places available for Standard Seventh grade school leavers, it also committed funds well into the future. The hospital and the schools need to be maintained and serviced, supplies need to be provided, and skilled and ancillary staff need to be employed and paid. Because every new development has its recurrent implications, the Government must examine not only the short-term question of which are priority areas for development expenditure, but also the longer-term questions of whether revenues and manpower will be available to keep projects operating in the future. While this has been important to Botswana's planning in the past, it was, if anything, more important as one looked to 1984/85 and ahead to NDP VI.[25]

Consistent with these principles, the *Mid-Term Review* projected that the development budget would grow at 2 percent per annum in real terms and the recurrent budget at 5.6 percent in real terms over the remainder of the decade. While these growth rates are well below those of recent years, they start from high base levels and do allow for moderate growth over and above inflation. Further, they are consistent with our long-term financial expectations and with the Government's goals of controlling the budget and allocating a larger share of skilled manpower to the private, parastatal and local government sectors. The task the Government faces is making the difficult decisions required to keep within these budgetary growth limits. The process will be made all the more difficult by the fact that the Government has already identified several priority areas for which recurrent budgets will grow by more than 6.5 percent. Since this requires other budgets to have lower growth rates, accomplishing these goals will call for much cooperation among the line Ministries. Among the specific areas identified to receive priority funding the following five deserve special mention: firstly, the expansion of the education sector, particularly technical and vocational education; secondly, the provision for Financial Assistance Policy; thirdly, Rural and Urban Authority Deficit Grants; fourthly, maintenance of road systems which will deteriorate rapidly if nothing is done; and, finally, the operation and maintenance of an increased number of water supply systems. Each of these areas will have an expenditure growth rate well in excess of the 6.5 percent limit and will thus place further restraints on other, lower priority areas.[26]

V

Emerging Socioeconomic Problems

AGGREGATE ECONOMIC GROWTH without broad social and economic development centralizes benefits among relatively few people and virtually disenfranchises the majority from progress. Benefit-sharing in Botswana is far from even, or even reasonably equitable. A growing inequality in asset ownership—mainly land, cattle, and access to water—as well as in productive employment, could threaten Botswana's growth and stability. Rooted in agricultural underdevelopment, inequality is one of four critical and interrelated longer-term problems with which the Government must be willing and able to cope.

The others are a rapidly expanding demand for an uncertain water supply, food insecurity, and a growing dependence on external economic linkages with the Republic of South Africa.[27] Each is related to the pattern of mineral-led growth.

That pattern of growth is producing two Botswanas—one rich and the other poor—and this poverty amidst plenty is disillusioning many Batswana. Their disillusionment could threaten the foundation upon which progress has been based. What emerges is the intrinsic need for enlightened policies to widen access to employment and income-earning, and asset accumulation.

Notes

1. Christopher Colclough and Stephen McCarthy, *The Political Economy of Botswana* (Oxford: London, 1980), Ch. 1.
2. See, for example, Marcia Odell, "Planning for Agriculture in Botswana," *IDM Occasional Paper No. 7* (Institute of Development Management: Gaborone, May 1980), pp. i–ii; John D. Holm, "Liberal Democracy and Rural Development in Botswana," *African Studies Review*, Vol. 30. No. 1 (March 1982), pp. 86–97; and Robert Chambers, *Botswana's Accelerated Rural Development Programme: 1973–1976* (Gaborone: Government Printers, 1977), Chs. 1–4.
3. Stephen McCarthy, "Large is Profitable for the Botswana Housing Corporation," *Public Enterprise in Southern Africa* (London: Commonwealth Secretariat, 1979), Ch. 5.
4. Ministry of Finance and Development Planning, *National Development Plan VI: 1981–1986* (Government Gaborone: Printers, 1981), Chapters on education, housing and social services.
5. See, for example, Gwendolen M. Carter and E. Philip Morgan, *From the Frontline: Speeches of Sir Seretse Khama* (London: Collins, 1980), pp. 7–339; and James H. Polhemus, "Botswana Votes: Parties and Elections in an African Democracy," *Journal of Modern African Studies*, Vol. 21, No. 3 (September, 1983), pp. 397–430.
6. For a detailed history of mining in Botswana, see Alec Campbell, *Botswana* (Gaborone: Winchester Press, 1980), pp. 515–46.
7. *Ibid.*, p. 539.
8. Department of Mines, *Annual Report, 1982* (Gaborone, April 1983), p. 3.
9. *Ibid.*, p. 3.
10. *Ibid.*, p. 4.

11. Colclough and McCarthy, *op. cit.*, p. 154.
12. *Ibid.*, pp. 154–155. Also see "Kalahari Focus of Mineral Development," *Quarterly Economic Review of Southern Africa*, First Quarter (London: 1978), p. 94.
13. Colclough and McCarthy, *op. cit.*, p. 155.
14. *Ibid.*, pp. 155–56.
15. *Ibid.*, p. 156.
16. *Ibid.*
17. Bank of Botswana, *Annual Report, 1982* (Gaborone: April 1983), p. 17.
18. *Ibid.*, p. 17.
19. P. S. Mmusi, *Budget Speech, 1984, op. cit.*, p. 10.
20. Bank of Botswana, *Annual Report, 1983* (Gaborone: March 1984), pp. 10–11.
21. *Ibid.*, pp. 2–3.
22. Ministry of Finance and Development Planning, *The Mid-term Review of NDP (National Development Plan) IV* (Gaborone: Government Printers, August 1983), pp. 57–58.
23. P. S. Mmusi, *op. cit.*, pp. 7–8.
24. *The Mid-term Review, op. cit.*, Ch. 3.
25. P. S. Mmusi, *op. cit.*, pp. 8–9.
26. Central Statistics Office, *National Accounts of Botswana 1981/82*, (Gaborone: Government Printers, 1983), See Table 103.
27. See Lionel Cliffe, "A Critical Appraisal of Botswana's Development Strategy," paper presented at the Botswana Society, August 15, 1983 (Mimeographed: Gaborone), pp. 1–17; Harold Vierich and C. S. Sheppard, *Drought in Rural Botswana: Socioeconomic Impact and Government Policy*, (Rural Sociology Unit, Ministry of Agriculture, Gaborone, 1980), pp. 1–7; and Neva Seidman Makgetla, "Finance and Development in Botswana," *Journal of Modern African Studies*, Vol. 20, No. 1 (March 1982), pp. 69–86; and Ian Livingstone and R. K. Srivastava, "Poverty in the Midst of Plenty: Problems of Creating Incomes and Employment in Botswana," *IDM Occasional Paper No. 8* (Institute of Development Management, Gaborone, July 1980), p. 32.

The Cost of Farm Support Programs

GOVERNMENT INTERVENTION in agriculture is extensive and growing rapidly. Its costs are massive. U.S. federal farm programs have ballooned from $4 billion in 1981 to $26 billion in 1986. The European Community now spends about $25 billion on agricultural programs—two thirds of its total budget.

These figures do not include the large sums spent by individual American states and European countries. The total cost—direct budgetary costs plus indirect costs—to the industrialized countries' economies is on the order of $140 billion annually. This is a massive misallocation of resources and is an enormous burden on economic performance; it holds down standards of living. [From an address by the U.S. Under Secretary of State before the National Association of Wheat Growers, March 18, 1987.]