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AID DEVELOPMENT ASSISTANCE PROGRAM

BOTSWANA

January 1975

BOTSWANA

DEVELOPMENT ASSISTANCE PROGRAM (DAP)

The main body of the DAP, which constitutes OSARAC's proposals for the future direction of the AID program in Botswana, is the joint product of several OSARAC and REDSO/EA staff members but the responsibility of OSARAC. REDSO's contributions are acknowledged with thanks. Three sector assessments are attached as annexes. They should be read as technical background papers rather than policy recommendations from OSARAC.

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DEVELOPMENT ASSISTANCE PROGRAM: BOTSWANA

OVERVIEW

I. Economic and Social Development since Independence

A. Setting

Botswana (formerly Bechuanaland) is surrounded by the Republic of South Africa, Rhodesia and Namibia (South West Africa). Its only direct link with black Africa is provided by a ferry connecting it with Zambia across the Zambezi River. In size, climate and geography Botswana is similar to Texas. Most of the country is a vast tableland with a mean altitude of 3,300 feet. Soils are generally poor. Rainfall is low and variable, with the greatest amount falling in the north and east. The country is well endowed with mineral resources, including diamonds, copper, nickel and coal.

The estimated total population of Botswana is 700,000, including 30,000 Bushmen, 5,000 whites, about 5,000 of mixed race and several hundred Indo-Pakistanis. The remainder of the population is native African, grouped in eight main tribes. The population is concentrated along the eastern border of the country and tends to congregate during certain times of the year in large villages, many of which are larger than the modern towns of Lobatse, Francistown and Gaborone. The latter towns together account for less than 10 percent of the total population.

The British Government declared Bechuanaland a protectorate in January 1885, at the request of local chiefs who were resisting Boer advances from the Transvaal. The reasons for the declaration

had little to do with the area itself. Britain wanted to project its line of access to the interior of Africa and limit expansion of Boer and German influence in Southern Africa. It had no intention of exercising much initiative or authority. Later when Britain began preparing other colonies for eventual independence it was assumed that Bechuanaland would ultimately become part of South Africa. This rationale persisted until formal apartheid was established in South Africa. At that point, when it was obvious that neither political nor human considerations would permit such an action, a modest effort was made at development. This late start left Botswana with little infrastructure and few trained people at the time of independence in 1966.

Botswana is a country with a genuine national commitment to democracy. This commitment is personified in the President who in the conduct of his office manages to avoid most of imperial aspects that are increasing common in the Western and third world. Botswana has a unicameral national assembly with representatives of four parties sitting in it. In the October 1974 general election, President Khama was re-elected by an overwhelming margin and his ruling Botswana Democratic Party (BDP) won 27 of the 32 elected seats in parliament. Local Government in Botswana has two prime elements: districts and villages. Districts correspond to provinces in other countries and have appointed officials. Village governments are elected and frequently exercise authority over large groups of people. Several villages have 20,000 or more people, with one surpassing 50,000.

B. Botswana and South Africa

Economically, Botswana is closely linked to South Africa although politically it identifies increasingly with black Africa. Within the OAU Botswana plays an active role in advocating progressive if moderate policies. This role in the OAU will result in increasingly vocal criticism of South African policy but will not mean economic independence from South Africa. Only extreme circumstances could separate Botswana from South Africa economically. However, black majority rule in Rhodesia could provide an alternative to Botswana's transport dependence on South Africa by opening railway access to Mozambique's ports.

The Southern African Customs Union is probably the most important economic link between Botswana and South Africa. Originated in 1910, it includes Swaziland and Lesotho as well as Botswana and South Africa. The 1910 agreement was renegotiated in 1969 and became effective on March 1, 1970, yielding substantially increased revenues to the BLS countries. Each member receives a portion of the total customs, excise, and sales tax pool of the whole area, the amount being determined on the basis of actual imports and excisable local production.

South Africa views the 1969 revenue formula as a significant and generous concession. Five years later this formula appears less generous to Botswana, and pressure exists for renegotiation. Even so, the Government of Botswana derives over 40% of its income from Customs Union revenue. While this percentage varies considerably from year to year it is likely to remain the GOB's single largest

source of revenue for some time.

The 1969 agreement permits the BLS states to impose protective tariffs in support of infant industries. Botswana has invoked this provision to protect a new brewery. South Africa is committed to consult on changes in tariffs "except when proposed changes are primarily for fiscal purposes." Botswana feels that South Africa has not always honored this agreement. In any case the potential for dispute exists because the needs of the two economies are not the same. Fiscal policies that suit South Africa frequently do not fit Botswana's requirements.

Botswana, a part of the South African rand monetary area, uses the rand as its currency. This denies Botswana control over monetary policies affecting the country and gives it no financial benefit from currency issue. The Government of Botswana recently announced, however, that it intends to establish a central bank and introduce its own currency within two years.

The Botswana labor market is linked with South Africa. Approximately 50,000 Botswana citizens find employment in South Africa -- primarily in the mines. For all of its obvious social disadvantages this forms a convenient safety value against the pressures of unemployment. This safety value is threatened by recent decisions of the major South African mining companies to mechanize and to employ local South African labor. Any significant reduction in employment opportunities in South Africa

the next few years will create a serious unemployment problem in Botswana.

At present Botswana is also dependent on South Africa for transport. With the exception of a small amount of beef exported by air to Zambia, all of Botswana's trade transits South Africa. Were it not for South Africa's international position, and particularly the threat of a general oil embargo, Botswana would be in an enviable position. It has good rail and road links to major markets and suppliers and ready access to efficient deep water ports. However any additional embargo action against South Africa beyond the current Arab oil boycott would have a very negative impact on Botswana. Barring a settlement in Rhodesia which would allow Botswana access to Mozambique, there is no practical alternative to dependence on South Africa. Oil is the commodity most likely to be cut off, but further radical actions seem unlikely since Iran, South Africa's leading oil supplier, also owns substantial interests in South Africa's refineries.

C. Development Trends since 1966

From a low base, Botswana's economy has expanded rapidly during the past eight years. The real rate of GNP growth is estimated at 15 percent per annum for the period 1968-1972, resulting in an estimated GNP of $109 million (1971/1972) or about $160 per capita. This rapid growth rate is attributable to the increase in exports from $20 million in 1969/1970 to $65 million in 1972/1973. About half of this export growth is due to increases in the value of cattle exports, and about half reflects the start-up of a large diamond mine in 1972.

The improvement in Botswana's revenue situation has been equally striking. Prior to independence, Botswana's recurrent budget was supported by grants from the U.K. These grants continued after independence and reached nearly $10 million in 1968/1969. By 1972/1973, recurrent revenue had increased to the point that there was a small recurrent surplus available for financing development programs, and in 1973/1974 the recurrent surplus was equivalent to half of recurrent expenditures. The main components of the rapid rise in revenues were the increase in receipts from the Customs Union following the 1969 renegotiations and taxes, royalties and dividends from the diamond mine at Orapa.

The most important single development since independence is the beginning of mineral exploitation on a large scale. The diamond mine noted above began production in 1972, while the much larger Shashe copper-nickel mining complex, built at a total investment of over $300 million, opened in late 1973. Some development of manufacturing enterprises has occurred, but manufacturing still accounts for only 9 percent of GNP; the only large industrial enterprise is the Botswana Meat Commission's plant at Lobatse.

In agriculture, the cattle industry has expanded, and there was a record offtake in 1973 accompanied by sharply rising beef export prices. Crop production has generally kept up with population growth, thanks largely to relatively good rains since independence. However, the expansion in both livestock and crops

has brought production on existing farms closer to the limits of the land's carrying capacity under traditional practices.

Botswana has also made some progress in overcoming the serious lack of physical infrastructure facilities. At the time of independence Botswana had adequate access to the port at Cape Town via the Salisbury - Cape Town railway (which passes through Francistown, Gaborone and Lobatse in eastern Botswana), but internal transport facilities were almost nonexistent. The Government has begun the improvement of an all-weather road paralleling the rail line from Lobatse to Francistown and then going north to Zambia via Nata and Kagungula. (A $16.6 million AID loan is assisting with the latter segment). The road linking Francistown to Maun in central Botswana has also been improved. The other major infrastructure investment involves water and transport development for the Shashe mining project (AID provided a $6.4 million loan to assist in constructing a water pipeline as part of the multi-donor Shashe infrastructure project.) Nevertheless Botswana's infrastructure is still inadequately developed and is a significant constraint to development. Enrollment in educational institutions has increased rapidly, but the output of these institutions is still too small to overcome the extreme shortage of trained manpower. Primary enrollments were relatively high at the time of independence and have increased slowly to about 90,000 or 55 percent of the eligible age group, but secondary enrollments have more than quadrupled. Enrollments in diploma and degree courses have also roughly quadrupled,

although the absolute numbers are still very small (about 300 in 1973). In health, the GOB has concentrated on curative medicine, nearly doubling the number of hospital beds to 1900, or 3.3 beds per 1000 population (a high figure for Africa).

While output growth in Botswana has been very rapid since independence it has probably not benefited the average Batswana a great deal. Paid employment in Botswana increased by about 7 percent per annum to somewhat over 50,000 in 1971, or less than 10 percent of the labor force. Paid employment for Batswana outside of Botswana (mainly in the mines in South Africa) also increased to about 60,000, reflecting lack of adequate opportunities in the country or better opportunities in South Africa. In the rural areas, the period since independence saw little improvement in rural infrastructure or access to social services, and little or no improvement in production methods and real incomes. Cattle exports provide a strong linkage between the modern and traditional sectors of the economy, but the patterns of land use and cattle holding are such that the position of the small and average herder has not significantly improved.

II. Current Development Priorities and Prospects

A. Current Development Priorities

Botswana follows a practice of developing five year plans and revising these plans every two to three years. Thus there have been plans for the periods 1966-1971, 1968-1973 and 1970-1975. The current National Development Plan is for the period 1973-1978, and is to be revised and updated in 1976.

The basic objectives of the Plan are (1) rapid economic growth, (2) more equitable distribution of wealth and income and access to services and opportunities, (3) economic independence and (4) sustained production. In designing programs to reach these objectives, the GOB accords highest priority to expanding job opportunities, expanding agricultural production on a sustained basis, and improving living conditions in the rural areas. The GOB's general strategy for supporting these priorities is to maximize the benefits accruing to the economy from the mining and other capital intensive industries, and to re-invest most of the resulting revenues in rural development. Education, manpower development, manufacturing, and health are also to receive attention.

The target GNP growth rate (in constant prices) is 14 percent per annum which would increase per capita GNP from $160 (1971/1972) to $330 by 1978. The major contributor to this rapid growth rate is mineral production from the mines at Orapa and Shashe. The Plan envisages the development of a large soda and salt mining project at Sua Pan, with mining's contribution to GNP rising to about 30 percent in 1978 (as compared with 7 percent in 1970/1971).

The Plan's employment target is an increase of domestic paid employment from 50,000 to 80,000, which would absorb about half the increase in the labor force during the Plan period and increase the proportion of the resident labor force in paid employment to nearly 25 percent. The Plan does not spell out any quantitative goals for the distribution of wealth and income, but the rural development program is intended to reduce income disparities between urban

and rural areas. The main elements of the program include development of crop and livestock production on a sustained basis, improved marketing and credit facilities for rural areas, expansion of rural industries, and improvement of access to water, health and education. The Plan emphasizes local-level involvement in the planning and implementation of rural development activities through District Development Committees and Village Development Committees. Some of the activities planned are expanded research on livestock production systems, further modifications in land use and tenure to arrest the degradation of range areas, establishment of industrial estates in rural areas, revision of the primary school curriculum to make it more appropriate to rural Botswana, construction of 300 miles of rural road per year by the Rural Roads Unit of the Ministry of Works and Communications, continuation of a program (begun in 1972) to bring water to all villages by 1980, establishment of 90 clinics and 178 health posts by 1978 (compared to 28 clinics and 22 health posts in 1972), and initiation of experiments with integrated rural development projects.

B. Principal Constraints

The principal constraints to Botswana's development at this stage are the acute shortage of suitably trained and experienced local manpower; the absence of effective networks for meeting marketing, transport, technical and credit needs of the typical rural agriculturalist; and the country's fragile physical resource base for agriculture, which despite new revenues from mineral exploitation remains the largest source of national livelihood.

Every endeavor in Botswana is plagued by the severe manpower squeeze. Suitable local personnel are in short supply or in many fields simply do not exist. Both government and the private sector must rely heavily upon expatriates or do without needed skills. In many instances, expatriates are used extensively but there still is an insufficient number of suitably qualified people. Frequently, organizations enjoy capable leadership -- local or expatriate -- but have serious difficulties with implementation because they lack the necessary middle level, technical and supporting staff. This problem will loom heavily in any development activity for the foreseeable future; even with training efforts now underway and planned, the current Plan does not project self-sufficiency in trained manpower until about 1990.

Constraints affecting agricultural production and the improvement of rural life are dealt with in some detail in the agriculture sector assessment. At the moment, little in the way of assistance is reaching the typical rural subsistence farmer. Without knowledge of better techniques and access to the credit necessary for improving his cultivation or livestock management, the ordinary farmer has little way of increasing his productivity. Lacking an effective marketing and transport system directed to his needs and within his means, he has no motivation for stepping up production in any case. How to make an effective attack on these rural development problems, especially given the manpower shortages already described, is a priority question for Botswana today.

The country's fragile physical resource base for agriculture -- basically its land and water, or lack of water -- is another constraint. Botswana's agriculture depends heavily on scanty rainfall, and several bad years in a row could lead to famine or near famine. Moreover, parts of the arable land are already approaching the limits of their carrying capacity for livestock and crops, given traditional methods. With continued growth of human and livestock populations, the pressure on available physical resources will increase. The most immediate need is for grazing control, better range management techniques and better use of water. With care, Botswana's land and water resources can become much more productive than they are now. But failure to adopt suitable production and conservation measures before a crisis is reached could leave the way open for disaster in the future.

Two other significant problems should be mentioned, though they may not yet rank as full-fledged constraints. First, Botswana's economy is clearly vulnerable to prices determined externally. World commodity prices (in Botswana's case, for minerals and beef) come immediately to mind, for they are the major factor affecting revenues from exports. In addition, however, the broad influence of Southern African and world inflation is becoming more important as mineral and infrastructure investment increases. The amount of money required for investment purposes is growing by leaps and bounds. Meeting management requirements externally can also be a source of difficulty. Trouble at the huge Shashe mining complex is a current illustration of the effect of soaring prices and the dearth of local

managerial skills.

Second, the domineering presence of South Africa's powerful and relatively efficient economy is a fact with mixed consequences. Now it is probably a net benefit, providing as it does considerable wage employment for Batswana who might otherwise lack jobs. But in the long run, Botswana could find that South African wages lure away labor needed at home. Certainly South Africa has an inhibiting effect on local production in Botswana. Decreasing the country's economic dependence on South Africa is a difficult business, and it may become more so, not less, as Botswana takes the first steps toward manufacturing and industrialization.

C. Development Prospects

Botswana's development prospects are excellent, particularly in comparison with most other African countries. The nation is well endowed with mineral resources, has dedicated and pragmatic leadership, and has a good reputation for efficient use of resources. It appears doubtful, however, that the target growth rate of 14 percent per annum will be achieved, and it is perhaps even more doubtful whether objectives of equity and economic independence can be achieved to the extent desired.

The most immediate problem facing Botswana is a substantial decline in the growth rate of exports and revenues due to production difficulties at the Shashe copper and nickel mine. Although the mine was to have come into full production in 1974, it now appears that this will be delayed until well into 1976 or even later; currently production is running one-sixth to one-third of projected levels.

Although the implications have not been fully worked out by the GOB, this shortfall will obviously affect the GNP growth rate, exports and domestic revenues. The impact on domestic revenues may have far-reaching consequences for the pace of further infrastructure development, the rate of implementation of the rural development program and employment. For example, the infrastructure investment for the next mining project (the Sua Pan, soda ash, phosphate and salt mine) is currently estimated at nearly $90 million, and was scheduled to begin within the next year or two. The estimated budget surplus available for development expenditures had been expected to decline from $21 million in 1974/1975 to $6 million in 1975/1976 even before the full magnitude of the Shashe production problems was known. It is possible that the recurrent budget surplus will disappear altogether for several years.

A related problem is the vulnerability of the economy to external factors. While the markets prospects for Botswana's major export products (diamonds, copper, nickel, cattle) are excellent at the moment, normal fluctuations of commodity prices, not to mention a serious downturn in the world economy, could affect earnings drastically. Private investment is sensitive to similar forces and could decline sharply. Import prices are also rising, although it should be noted that the sharp increase in oil prices has not affected Botswana so seriously as it has many other countries. The increased cost of oil imports in 1974 is estimated at $2.5 million, as compared with a projected increase of $10 million in overall imports to a total of about $150 million. The Arab oil

embargo against South Africa has been a cause of concern for Botswana, but thus far petroleum products have continued to be available, albeit at much higher prices. Fertilizer prices have also increased markedly, but since Botswana uses relatively little fertilizer this has not had a serious effect on the typical Botswana farmer.

Botswana can offset the effects of the external resource constraint by increased borrowing from commercial sources or aid donors, and this should not create any undue debt servicing problems in the near future. Previous projections showed external debt increasing to $120 million by the end of the Plan period, with debt servicing equivalent to only 6 percent of domestic revenues and less than 3 percent of export earnings. Thus Botswana appears to have considerable additional debt service capacity, particularly in view of the good growth prospects once Shashe production difficulties are overcome.

The achievement of the GOB's equity and other goals will also be seriously hampered by poorer growth and revenue prospects, although these objectives are also heavily affected by the principal constraints already outlined. A reduced growth rate will tend to retard the development of locally-controlled trade and industry, which is important to greater economic independence and fuller integration of the modern and traditional sectors of the economy. This will in turn affect the generation of paid employment, as will pressures on the recurrent budget which serve to slow the growth of government services. The decline of the recurrent budget surplus will

slow the implementation rate of rural development, since the GOB will have difficulty in expanding current programs and in providing the necessary local cost input for donor-financed technical and other assistance. Any decline below anticipated technical assistance availabilities will particularly affect production-oriented rural development activities and efforts to develop sustained production approaches for crops and livestock.

The general prospects for progress toward the GOB's "social justice" objectives are difficult to judge. Access to government services such as health and potable water should improve sharply during the Plan period, even if the rate of implementation is below that currently planned. Access to education will not improve, since primary school places are projected to expand only rapidly enough to maintain enrollments at about 50-55 percent of those eligible. The equity impact of agricultural production programs could be favorable or unfavorable, depending on their nature. As discussed in the agricultural sector assessment, the existing patterns of livestock ownership and range use have a tendency to favor the large holder at the expense of the small herder. Programs aimed at reversing this tendency will require a good deal of research and pilot testing before they can have significant impact and may have to overcome resistance on the part of traditional authorities. Programs to increase crop production will have to take similar factors into account, since there has been a tendency in Botswana as elsewhere

for larger and more progressive farmers to benefit most from available agricultural services and innovations.

The GOB's stringent budgetary position may have a favorable effect on urban-rural income differences if it restrains the government from granting further large wage increases. In spite of the GOB's stated policy of limiting pay increases in order to maximize paid employment and reduce disparities between the urban and rural populations, the GOB recently granted increases to government workers ranging from 17 percent for the highest level to 150 percent for the lowest. Pay raises are spreading to the private sector as well and will probably retard the growth rate of paid employment.

The Plan does not explicitly mention women in discussing equity issues. Because many male agricultural workers are absent in the mines, women play an even greater role in agricultural production than they do in many other African societies. The Ministry of Agriculture recently began to develop an extension program to involve women more actively in agricultural improvement, although the program will take some time to show results. There is also an increasing awareness among educated women of the international women's movement and its implications for Botswana. A Business and Professional Women's Club is active in Gaborone and makes itself felt. Other women's groups are active although less visible. Women seem to do well in professional employment.

Botswana's most prominent novelist, the Minister of Commerce and Gaborone's leading citizen physician are all women.

Botswana has successfully mobilized relatively substantial amounts of development assistance thus far and has earned a reputation for efficient use of aid. The major donors are the UN agencies, the IBRD, the UK Overseas Development Ministry (ODM), Canada, the U.S., Sweden and Norway.

The current estimate for total public investment during the Plan period is $340 million, or about $68 million per annum. The GOB has negotiated or is negotiating a total of $166 million in assistance for the next four years, an average of over $40 million per year. The GOB anticipates additional resources being made available by the African Development Bank (AFDB), Norway and the Federal Republic of Germany.

The GOB estimates that the number of expatriate technicians will have to increase from roughly 2,500 at present to 4,000 by the end of the Plan period. While projections of donor technical assistance personnel are not available, most if not all donors are currently planning increases in their technical assistance programs in Botswana. Thus the prospects for adequate technical assistance staff seem good.

III. U.S. Assistance

A. RATIONALE AND GENERAL STRATEGY

U.S. foreign policy recognizes the unique position of the BLS states vis-a-vis South Africa as well as their general position in Southern Africa as multi-racial islands in a sea of apartheid. Their potential as progressive and enlightened examples of human progress in Southern Africa and their unique development problems provide the U.S. with an opportunity to match political and humanitarian policy goals.

Our official assistance contributes to Botswana's efforts to develop as an independent, democratic, non-racial society. By the end of the century Botswana could be quite prosperous by the standards of the third world and be in a better position to help promote growth and stability in Southern Africa. The U.S. is in a position to encourage such development which in turn supports our overall objectives in Africa.

U.S. private investment is already present in Botswana and almost certainly will increase significantly. Only minerals are currently involved, but cattle ranching is under consideration. The present market for these products is good. Botswana has excellent factor endowments to pursue these interests and seeks to maintain a good investment climate. It allows repatriation of profits, guarantees against expropriation and offers other investment incentives.

The GOB priorities for development are: 1) infrastructure, 2) rural development and 3) agriculture. Its strategy in pursuing these priorities is to develop national infrastructure so that mineral

resources can be exploited. The revenue from mineral development will then be used to pursue rural development and agricultural improvement. This strategy is realistic and should bring prosperity to Botswana if it is continued with the enthusiasm and intelligence that has been demonstrated to date.

The U.S. can play a useful role in this plan of action which will support our interests in Botswana and Southern Africa. As discussed below, our economic assistance has already contributed to important infrastructure developments, helped mobilize domestic revenues, made a start toward improving maternal and child health and family planning activities, and provided manpower for agricultural and rural development. Current additions to the AID program and our future planning are concentrating on agriculture and rural development. The physical conditions encountered by Botswana's farmers are very similar to those found in the American southwest. Thus in agriculture, particularly livestock production, the U.S. has a clear comparative advantage.

To help cope with the manpower constraint to Botswana's development, it is AID strategy to finance the services of U.S. specialists who serve in key operational GOB positions (especially in agriculture) while Batswana are being trained to assume positions of responsibility. Overseas and third country training funds and

the services of technicians to conduct in-country, in-service courses are provided along with the OPEX technicians. The principal aim of this approach is to make shortrun progress on current development activities while simultaneously laying the groundwork for eventual citizen-managed development programs. The agricultural technical manpower being provided is doing its part toward alleviating other principal constraints by working to help meet the needs of Botswana's ordinary farmers while establishing a base for greater production and sounder land use practices.

Most of the operational technicians whose presence helps alleviate the manpower shortage are working, directly or indirectly, to support the establishment and effective operation of programs that will eventually raise the productivity of the ordinary farmer while helping conserve Botswana's physical resource base for agriculture. At the same time training is offered to help prepare Batswana to assume managerial and technical responsibility for these activities. Details of current and prospective AID assistance along these and other lines are found in the following sections of this paper.

In the past AID has been able to commit significant amounts of capital to infrastructure projects in Botswana. The program currently active comprises both loans and grants. There

are more technical assistance projects, but capital projects represent a substantially greater financial input. However, given current AID guidelines, it is likely that technical assistance projects will come to dominate the Botswana program. This is not entirely in keeping with Botswana's desire for more infrastructure. Roads are a particular capital requirement that, if judiciously chosen and planned, can help the rural poor while also contributing to macroeconomic development. In a transport-poor country like Botswana, AID should be alert to the possibility of key infrastructure projects that would warrant making an exception to generally prevailing policy.

Several of AID's conditions place a strain on Botswana and may warrant reconsideration in order to make U.S. strategy more realistic. One is the legislative requirement of a 25% host government contribution to all projects. This is no particular burden for technical assistance, but it is a significant obstacle for capital projects. If other donor contributions could be counted against this requirement, at least in part, it would ease the difficulties. The proposed northern abattoir is a case in point. In following such a course, some care would be needed to avoid over-leveraged situations. Another problem is direct off-shelf procurement in South Africa. Costs would be reduced and delivery speeded up if AID projects could use such procurement more freely for local cost items. Since South Africa is already the major source

for all Botswana suppliers and South Africans in Botswana are the principal local dealers, Botswana's economic position would not be compromised by this action. A related difficulty is AID's reluctance to finance housing for technical assistance personnel in Botswana except on a piecemeal, position-at-a-time basis. But lack of housing is, in fact, a major constraint on Botswana's ability to accept additional technical assistance, and AID could make a real contribution by agreeing to a grant or loan program of building enough houses to accommodate the anticipated number of AID-supported technicians over the next five years. In the short run this would help the Government of Botswana meet its manpower problems; in the long run, it would provide capital assets for the Government's permanent housing pool.

B. CURRENT AID ASSISTANCE

On the technical assistance side, our primary target is agriculture and rural development, with specific concentration on range and livestock management, agricultural planning and agricultural management.

During 1974 a five-man operational team arrived to help develop replicable systems of group smallholder range and livestock management units which will be socially acceptable and

economically viable in Botswana. The project has six major target outputs critical to the proper functioning of range and livestock management schemes:

(1) Research:

Improper stocking rates leading to severe overgrazing in certain areas of Botswana indicate a need to control stock numbers. To date, there is still need for research in the field of pasture management. The research will deal with baseline data for future comparisons of changes in range ecology, grass and browse balance, and bush encroachment with a view towards preventing and redressing damage. Preparation of range site and condition classification maps for the test sites early in the program will assist in determining carrying capacity based on the forage production.

(2) Training:

Trained manpower in technical positions within the GOB is largely limited to non-citizen personnel. The project allows for academic, in-service and on-the-job training for Ministry of Agriculture staff as

as well as short course training for participating small stockholders.

(3) Range and Livestock Management:

Modern husbandry techniques are to be introduced into the project at ranch test sites as well as through the farmers' training courses held by GOB staff.

(4) Surface Water Land Use:

Currently the primary source of water for stockholders is boreholes. There is considerable ecological risk involved in ground water development in Botswana and, taking this into consideration, the project intends to utilize haffirs, dams and reservoirs to improve surface water yields. The project engineers will prepare a handbook of plans and procedures for surface water.

(5) Marketing and Credit:

For smaller producers and local consumption most of the present marketing of livestock is done through either the local traders or butchers. A direct marketing channel to the Botswana Meat Commission is desirable to increase profit shares and to present a

more reliable market to stockowners. Credit through the Botswana Development Bank is to be initiated to establish a small stockholders' revolving credit fund.

(6) Systems Expansion and Management:

After thorough research of the various test site systems, the ones proving to be most feasible and economical will be replicated by the GOB. It is anticipated, at the end of the project, upon determination of the most economical system of management, that the GOB will attempt to secure funds from international lending agencies for this purpose.

AID has also agreed to finance the services of three technicians to work in the planning unit of the Ministry of Agriculture. Recruitment is underway, and the positions should be filled during 1975. The agricultural planning activity has three primary purposes. The paramount of these is to strengthen the planning capability of the Ministry of Agriculture. Secondly the planning unit, using the OPEX personnel, will ensure that the lessons being learned from ongoing projects, both operational and research, are spread throughout the Ministry and incorporated into the overall program. Finally this project will give the Ministry an increased capability to design its

own projects and programs.

The first and senior agricultural economist will serve as Chief of the Planning and Economic Analysis Section (PEA). In this capacity the incumbent will be responsible for the identification, planning, and evaluation of agricultural and rural development projects and programs. In performing these functions it is anticipated that he will prepare feasibility studies, internal rates of return, and cost/benefit analysis. Particular attention is to be paid to the opening of new markets for all elements of Botswana agriculture.

The second agricultural economist will also serve in the Planning and Economic Analysis Section and will have principal responsibility for the planning and evaluation of livestock development programs and projects. The rural sociologist will work with a senior, Botswana citizen rural sociologist and will become involved in one or more rural development projects. The incumbent will advise technical and administrative officers on the social problems involved in development projects and programs and will place particular emphasis on the extension activities of the Ministry.

The overall impact of this project should be considerable because it will place personnel in key positions in the most important sector of the Botswana economy. They will be in an excellent

position to work on two of Botswana's critical problems:

1. bringing prosperity to the rural sectors by rational use of resources; and

2. training and guiding the citizen personnel who must eventually assume responsibility for the complete agricultural program.

AID will supplement the on-the-job training which will take place in this project with U.S. or third-country academic training for suitably-qualified local citizens.

There are also two other key positions AID is financing in the field of agriculture. The first is the Deputy Permanent Secretary (Technical) in the Ministry of Agriculture. AID has filled this post since January 1973. At the GOB's request, the incumbent will extend through June 1976. In making the request for his extension the GOB agreed to provide a citizen to train to become the Deputy Permanent Secretary. During the next 18 months the incumbent will devote considerable attention to training the person who will succeed him. Secondly, AID is recruiting a lecturer for the Botswana Agricultural College. BAC is a post secondary school institution which is the primary source of trained agricultural personnel in Botswana. The incumbent will conduct

courses in a variety of agricultural disciplines but will emphasize practical course work in animal health and husbandry that will be of direct benefit to Botswana agricultural production.

The two additional technical assistance programs now underway are related to the primary AID effort in agriculture and rural development. One is an institution-building activity with the Department of Taxes. A four-man group of senior U.S. tax specialists has been working with the department since early 1973. During their tenure significant improvements have occurred: for instance, revenue collected has doubled. This is of key importance to agriculture and rural development because of the GOB's policy to use as much as possible of its growing revenues for development of rural parts of the country.

In 1972 the GOB outlined its plans for the development and institutionalization of a revenue collecting organization. The major objectives identified were:

(a) the erection of an efficient administration wholly staffed by competent citizen officers; and

(b) the development of a decentralized operating organization based at key centers throughout the country but controlled by a small headquarters office. The two principal aspects of AID's role in that process were:

(i) to help the Department of Taxes in filling the immediate requirements for manpower which could be operational and advisory; and

(ii) to assist in the training of the Department's staff by providing both formal instruction and on-the-job counterparting.

The technical assistance team arrived on post as planned and immediately began functioning in operational and advisory capacities. The initial effort was directed to restructuring the withholding tax system to meet the provisions of a new Income Tax Act. Many other actions were taken to ensure that as from 1st July 1973 the Department would begin functioning under this new Act. Concurrently, assessment, collection and administration commenced to be brought up to current work levels. New tax forms for all types of taxpayers were revised, and operating procedures were developed for inclusion in Instruction Books (Manuals). On-line operational assignments for members of the team included the examination of returns, managing collection and administration branches, evaluating performance of key personnel, and participating in technical determinations.

All members of the team participated in the formal

training program by delivering specialized lectures dealing with the new law and other areas in which they had expertise. In addition, a TDY Tax Training Specialist prepared and conducted an eight week advanced training program and participated in a basic course for new entrants. A report was submitted to the Commissioner recommending future training needs and evaluating the potential of the participants of the advanced course just completed. The training course material and other aids were handed over to the Department for future training uses.

As the two-year tours of the income tax team end, the activity is being revised to provide more direct operational assistance to the Department of Taxes, now that reorganiztion has been accomplished and the basic procedures established. Four technicians will be provided in the second two-year portion of the project as in the first, but three of them will be tax assessors serving in field offices. Only one of the senior positions filled for the last two years (Assistant Commissioner for Collection) will be maintained in headquarters.

The other technical assistance project, also started in 1973, is Maternal and Child Health/Family Planning. It is true that Botswana has a very small population in relation to its land area. However, this population is concentrated in the arable eastern section of the country and is already placing considerable pressure on the productive

land. MCH/FP has a good opportunity to be effective in Botswana. With an effective program over the coming years, there need not be a severe population problem, and the AID project is an initial step in that direction.

Three public health nurses, a health educator and an administrative officer constitute the project staff. The technicians have prepared a curriculum for MCH/FP public health in-service training, and in-service Batswana nurses have begun attending courses based on that curriculum. In-service training is running behind schedule, but it has been difficult to obtain the release of nurses from their operational duties. Following the eight-week in-service course, nurses undertake four weeks of field practice under the broad guidance of the American team. Work is also underway on an integrated curriculum for basic nursing programs to be used in local nursing schools. Three participants are in training in the U.S. and one in Nairobi under project auspices. Other scheduled outputs are a functioning health education unit (progress here is handicapped by the lack of an on-board health educator in the project at the moment), an effective family planning service at government hospitals and the extension of MCH/FP services to new rural health clinics as they are established.

This project has encountered a number of personnel and support difficulties but is now showing signs of improvement.

The currently-active AID capital project is the northern section of the Botswana-Zambia road, a 230-mile stretch from Nata to Kazungula on the Zambezi River. AID provided $16.6 million in FY 1973 to finance this gravel-surfaced highway connecting eastern Botswana with its only black-ruled neighbor, Zambia. Construction is well underway and is scheduled for completion in the first quarter of 1976.

C. PROPOSED AND PROSPECTIVE AID ASSISTANCE

The major new activity in process now is a proposed AID development loan for the construction of a northern abattoir, probably near Dukwe, which will be closer to the northern Botswana livestock production areas than the Lobatse abattoir. Such a facility should increase cattle offtake, open up new marketing channels for small producers at higher prices and increase the country's general returns from livestock.

It is generally accepted that Botswana possesses a clear comparative advantage in livestock production with vast range land and access to both European and nearby African markets. A new abattoir will, in part, address key development problems by creating

additional processing facilities for expanded livestock production. Locating an abattoir near northern production areas will benefit small producers who currently trek their cattle long distances before selling at low prices to expatriate-owned fattening ranches rather than directly to the processing agent. The new abattoir therefore is aimed not only at the government's priority of expanding the overall livestock industry but also at achieving greater social equity.

AID/Washington approved the preliminary paper in late 1974 and authorized preparation of the project paper. It is now projected that an FY 1975 final design loan will be followed by a later construction loan, at an estimated total cost to AID of approximately $11 million.

Prospects for new activities in FY 1976 and beyond are now being reviewed. One possibility is an integrated rural development project in the Shoshong catchment area of eastern Botswana. The land there has deteriorated considerably due to overgrazing and mismanagement and cannot support the existing population. A project, drawing on existing UNDP background studies, would be designed to return Shoshong to the point where it can satisfactorily support the people now living there.

The GOB has recently suggested the need for assistance in grain storage and sorghum research, which could lead to a proposed AID project combining capital and technical assistance. Aid to rural marketing and cooperatives might also develop as a project possibility. In view of Botswana's major transport requirements and poorly developed infrastructure, AID should (as suggested earlier) be willing to consider the possibility of a transport project that would bring demonstrable benefits to the rural poor while helping meet the GOB's top priority for infrastructure development.

Past and prospective AID help for the University of Botswana, Lesotho and Swaziland (UBLS) is reviewed in part G below.

D. OTHER U.S. ASSISTANCE

Other official U.S. assistance is given by the Peace Corps and OPIC. The Peace Corps has an active medium-size program concentrated in the areas of teaching and local government. Their efforts complement those of AID. OPIC is interested in promoting U.S. investment in Botswana and has taken special steps to encourage livestock investment. Some U.S. foundations are active in Botswana, notably Ford and the Rockefeller Brothers Fund, but generally there is little PVO activity.

E. FINANCIAL LEVEL OF AID ASSISTANCE, FY 1975-1979

Numerous exogenous variables make it difficult to cost out the likely AID program in Botswana beyond the period covered by the FY 1976 Field Budget Submission. At this stage it is possible only to speak in terms of gross magnitudes beyond FY 1976. Over the three fiscal years 1974-76, the actual and estimated grant program averages $1.27 million. The northern abattoir loans are the major capital activity scheduled in this same period; however, grain storage could become a project requiring capital funds.

It is estimated that the level of grant assistance for the three following years, FY 1977-79, will increase to an annual average of about $2.0 million.

Projected capital assistance to Botswana includes a $1.5 million agricultural credit loan for livestock improvement, probably in FY 1977 or 1978. Nothing precise can be shown at this point for annual levels, and other loans not yet foreseen could well emerge. In any event the initiation of new AID assistance will depend upon the capacity of the GOB to plan and implement existing programs and upon its financial resources for development purposes. It also depends, of course, on overall AID appropriations over the next few years.

F. AID MANPOWER REQUIREMENTS, FY 1975-1979

Consistent with the prospects for AID assistance and the need to monitor existing projects closely, AID manpower requirements are expected to increase somewhat during the 1976-1980 period over the 1975 level. Currently AID maintains a Southern Africa direct hire planning and support staff of nine Americans, one TCN and seven locals, mostly resident in Swaziland. One American and one local employee are based in Botswana. Two newly established direct hire American positions in Swaziland are to be filled in FY 75, bringing the total number to eleven. It is anticipated that the total number of American direct hire regional staff will increase to 13 in FY 77 as planning and support requirements increase in accordance with program magnitude, and this could include an additional position in Botswana. Local direct hire staff may also increase.

At the end of 1974, 17 contract technicians were engaged in implementing the AID program in Botswana -- six in agriculture, four in MCH/FP, four in income tax, and three in other activities. Many factors that cannot now be assessed will affect the future numbers of project technicians. On balance, though, we can expect the average number to increase between FY 1975 and 1979 to 30-35, of which more than half should be in agriculture, several in health

and population, and the rest in education and human resource development activities.

G. A SPECIAL NOTE ON THE UNIVERSITY OF BOTSWANA, LESOTHO AND SWAZILAND

U.S. assistance to the University of Botswana, Lesotho and Swaziland began in 1969 when California State Polytechnic College, under contract with AID, provided a six man team to strengthen the academic staff of the University. Following the termination of the California State Polytechnic College contract in 1972 U.S. technical aid continued to be supplied through OPEX arrangements. In all, approximately 35 man years of technical assistance have been provided through AID projects. Participant training aimed at lessening the University's dependence upon expatriate senior staff has amounted to about 26 man years. To support both local and U.S. staff members about $131,000 was programmed for commodity purchases; also $415,000 in grant funds was provided toward the construction of University buildings, including staff housing. Total obligations for UBLS since 1969 amount to $1,844,000. Some of the AID assistance has gone to the University campuses in each of the three cooperating countries.

Future U.S. assistance to UBLS will depend upon the emergence of a development plan suitable for an effective regional institution of higher learning serving developing countries. Any

acceptable plan likely will address the problems of needed physical improvements on all three campuses as well as anticipating the demand for a broader academic offering to a larger student body. Continued expansion at a moderate rate is necessary to establish the University firmly and to respond adequately to the development needs of the sponsoring countries. However, the cost of required improvements and expansion will probably be greater than can be afforded by the BLS governments. Therefore the University will have to continue to depend upon substantial amounts of donor assistance if it is to respond effectively to the training and manpower needs of the region. The purpose of future U.S. assistance will be to help the University become a mature, respected, efficient institution capable of strong leadership in solving problems of economic development. To this end AID is willing to consider a wide range of project assistance including capital grants or loans as well as the supply of technical expertise directed toward the resolution of key management and academic problems.