DIMPEX
ASSOCIATES, INC.

A REVIEW OF PRIVATE ENTERPRISE PROJECT OPPORTUNITIES IN BOTSWANA

Submitted to:

AFRICA BUREAU/OFFICE OF PRIVATE ENTERPRISE
AGENCY FOR INTERNATIONAL DEVELOPMENT

By: DIMPEX ASSOCIATES, INC.

In Collaboration with:

E.R. Ambrose, Fairfield International Inc.
Thomas R. Parks, Food and AgroSystems Inc.

Management • Economics • Research • Education & Training

New York • Washington, D.C.

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PREFACE

The Government of Botswana (GOB) is sending a Trade and Investment Mission to the United States in September 1985 consisting of GOB and private sector representatives.

In preparation for this mission, the GOB requested AID funding for consultants to review several investment project proposals to determine whether the proposals might be of interest to potential U.S. joint venture partners.

The Africa Bureau of USAID Washington agreed to fund the review through its Africa Private Enterprise Fund. A two person team of consultants was accordingly sent to Botswana in May 1985 for a period of five weeks. The team was assisted by a third specialist, a U.S. expatriate residing in Botswana. The team's mandate was to:

- conduct a brief review of the climate in Botswana for private enterprise development; and
- critically review selected prefeasibility and feasibility studies which proposed investments in the following productive activities:
  - ° brick and tile
  - ° foundry
  - ° fresh water prawns
  - ° abattoir by-products

The report summarizes the findings of the consultants.

ACKNOWLEDGEMENTS

This report is based on the findings of a three-person DIMPEX ASSOCIATES INC. consulting team financed by the Africa Bureau, U.S. Agency for International Development, Private Enterprise Office through the Africa Private Enterprise Fund.

The team members were:

Edwin R. Ambrose, President, Fairfield International Inc., international business consultants, Darien, Connecticut. Mr. Ambrose was formerly with Abex Corporation (subsidiary of IC Industries) where he had twenty-five years of international business development experience as Vice President and Director of worldwide planning, implementation and supervision of joint ventures, technology licensing and trade. He was responsible for the preparation of Chapter I, Investment Climate, Chapter II, Brick and Tile Project, and Chapter IV, Foundry Project.

Thomas R. Parks, President, Food and AgroSystems Inc., consultants to the food and agriculture related industries, Sunnyvale, California. Mr. Parks is a food process engineer and food technologist with considerable experience in planning and implementating slaughter-house and meat packing plants, and fish and food processing projects. He was formerly Manager, Food and Agrosciences, Stanford Research

Institute. He also held executive positions with Star Kist Foods, Inc. and Gerber Products Company. Mr. Parks was responsible for Chapter III on agribusiness opportunities in Botswana.

Robert Brink, consultant with Coopers and Lybrand Services, Botswana, is an American expatriate residing in Gaborone. As a consultant, Mr. Brink advises clients on accounting, tax and financial matters, particularly as they relate to business development in Botswana. Mr. Brink assisted the team in his specialty areas and provided general support. His knowledge of Botswana and his close contacts with both government and business leaders were of particular importance in arranging interviews.

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Botswana's political stability and regulatory environment, its dedication to democratic processes, private entrepreneurial initiatives, and free trade, and the GOB's sound management of monetary and fiscal affairs should progressively appeal to foreign investors from the developed democracies of America, Asia and Europe, as well as to local entrepreneurs. Botswana has a business climate in which they can feel comfortable.

Such is the consensus of over 80 business and government leaders interviewed by a team of U.S. AID consultants who visited Botswana in May and June 1985. The team was in Botswana to review several investment project proposals in preparation for a Trade and Investment Mission visit to the United States in September 1985. The Mission will consist of both private and government leaders of Botswana.
Botswana -- despite its limited internal market, and natural, human and infrastructural resources -- may honestly promote itself as an attractive location for private sector operations, including regional headquarters activities.

The team reviewed four industries for which feasibility or opportunity studies had been conducted, as well as others selected during their visits and arrived at the following conclusions:

Brick and Tile: Although the five proposals for brick and tile projects which had previously been conducted were overly ambitious in both size and technology levels, a modified, labor intensive brick production facility appears to be economically and technically viable. The proposed facility, which would initially produce 2.5 million wire-cut face and common bricks annually for sale in Botswana, would be located at Lobatse, adjacent to a major unexploited clay deposit at Woodhall.

Fresh Water Prawns: A farm has been proposed to produce a large fresh water prawn, Macrobrachium rosenbergii, at Kasane, in the north of Botswana. The market for the proposed output of 150 metric tons of prawns was South Africa. However, interviews with nine of the leading fish distributors in that country indicated that consumers greatly preferred salt water shrimp over Macrobachium. Additionally, the proposed site for the farm at Kasane is no longer available. Although alternative sites are possible, land clearance and preparation and lack of buildings and piping systems, such as those available at Kasane, would raise investment costs significantly. The team therefore concluded that this proposal should be given no further consideration.

Abattoir By-Products: Four investment projects were reviewed which proposed to utilize the by-products of the Botswana Meat Commission (BMC) slaughter house at Lobatse to manufacture tallow, gelatin, and pharmaceuticals. The team concluded that none of these proposed projects were viable at this time principally because neither the quantity of raw materials available nor the market size justified economical levels of production. Possibilities for private investment do exist, however, in two other industries based on BMC by-products:

- a plant for canning meats, petfood and other specialty products, provided the BMC were willing to divest itself of its current operations; and
- hides and tanning, if the BMC does not otherwise commit its 250,000 hides to European buyers.

Other Agribusiness Projects

Although feasibility studies had not been completed, two other industries appear to offer longer term opportunities for private investors:

- fish farming of tilapia, of particular potential interest to the small local investor; and
- production and processing of fruits and vegetables in the Tuli Block, north of Gaborone.

While not an agriculturally based industry, there may be attractive investment opportunities in the manufacture of cosmetics for sale in local and neighboring country markets. At least three local firms are examining this possibility.

Foundry: The final group of investment project proposals examined were three foundry operations. Two of these proposals were far too ambitious, however, and the third -- while technologically sound-would be premature given the existing size of the market in Botswana and the strong competition from both South Africa and Zimbabwe.

I. BOTSWANA'S INVESTMENT CLIMATE

INTRODUCTION

This chapter of the report examines the climate for private enteprise development in Botswana. It is based on the viewpoints of private business executives who are currently active in the country; GOB officials who are responsible for planning, encouraging or regulating private enterprise activities; U.S. Embassy and AID Mission officers who have had the opportunity to observe the relationships between government and private sector leaders; as well as officials of other U.S. government, World Bank and international agencies involved in private sector development.

The chapter is divided into two parts:

- First, a critical examination of GOB policies, regulations and procedures that may promote or constrain private sector development; and
- Second, a short review of basic economic, market and resource factors that also influence investment decisions.

Subsequent chapters will focus on opportunities for private development of several specific private sector projects which were presented to the consultants for analysis.

Over 80 business and government leaders were interviewed in the course of this study, both in Botswana and abroad. The consulting team was also able to observe what was happening in this country as a result of extensive visits throughout most of the major cities and agricultural regions.

BOTSWANA GOVERNMENT POLICIES, REGULATIONS AND PROCEDURES

Political Stability and Risk

Botswana is fortunate. It is one of the few African countries which has had domestic stability since attaining independence. There have been four free elections in this multi-party democracy since independence in 1966, and it is expected that future political change will be orderly and that fundamental free market policies will remain intact.

The country's relations with its neighbors -- Zimbabwe, to the east, Nambia on its west, Zambia to its north and South Africa on its south -- have been peaceful, and close trading relationships have been and are being developed, especially with South Africa and Zimbabwe.

Both private business and government leaders consider this internal and external stability a major factor in encouraging the growth of private enterprise. As one multinational business executive stated, "Investors have the

freedom of basing their business decisions on normal business judgment and risk without fear that the 'rules of the game' will suddenly and arbitrarily be changed by government decree."

Several of those interviewed agreed with the opinion of the consultants that Botswana's political and regulatory stability is strong enough for promotion of Botswana as a headquarters base for business activities in all of southern Africa. It was also suggested that the forthcoming Trade and Investment Mission (TIM) to the United States consider discussions of this possibility with U.S. multinational companies.

National Development Plan

Botswana is now implementing its fifth National Development Plan. It is also in the process of introducing its sixth. These plans have consistently given high priority to private enterprise as the vehicle for national development, and each has encouraged private sector investments, both foreign and domestic. Promotion of commercial and industrial activities is done through the Ministry of Commerce and Industry's Trade and Investment Promotion Agency (TIPA), as well as the Botswana Development Corporation (BDC), which is responsible for the development of new, larger ventures, and the Botswana Enterprise Development Unit (BEDU), which is primarily active in promoting small scale and rural industries.

The Development Plans have given no priority to parastatals, although a number have been established (as discussed in more detail below). All sectors are open for private enterprise, although the GOB encourages development of export-oriented and import-substitution projects, and businesses which will locate outside the capital city of Gaborone.

The priority given to private sector development in the National Development Plans and the implementation of investment promotion activities as directed by the Plans have undoubtedly been a significant factor in encouraging both local and private investors. Although those interviewed could not be precise as to the degree and extent of impact of this factor, a recent report emphasized that the number of new private firms employing more than ten people had grown from 81 to 209 between 1980 and 1984. This report, by Barclays Bank, provided the following statistics:

Firms Employing More Than Ten People

Category	1980	1984
Locally Owned	10	32
Foreign Owned	45	122
Joint Ventures	26	55
Totals	81	209

Licenses for 67 additional manufacturing projects have been issued, but are not yet operational.

Business Formation and Investment

Through Botswana's Industrial Development Act, all firms employing ten or more workers or using machines of twenty-five horsepower or more must be licensed.

Small scale business projects, with a fixed capital of less than pula (P) 20,000 are normally reserved for Botswana citizens.[1/] A business official justified this constraint to foreign investment as necessary to prevent Middle East and Asian traders from taking over retail and wholesale trade. Private business leaders seemed to have no particular objection and the consensus was that this was only a minor constraint.

Applications for industrial licenses must be advertised for two weeks in the Gazette and the Daily News. This allows an existing industrial license holder to object to the granting of a license for a new project which might seriously compete with the existing firm. If an objection is filed, the appropriate Ministries review the situation and make a determination of whether the new license should

1/ The Botswana pula (P) was, in June 1985, equal to approximately U.S. $0.56. It has strengthened somewhat since then.

be awarded -- a reportedly slow process.

In some cases, based on GOB judgment, an exclusive license may be granted which prevents the establishment of any competing firm in Botswana. Such licenses are granted for a maximum period of four years, but, in special circumstances, the exclusivity may be extended for an additional period.

Aside from the set-aside of small business for citizens, foreigners are free to invest in Botswana on the same basis as local investors. The approval mechanism is consistent with respect to ownership, size and type of business. However, approvals are routinely slow. One business executive states that approvals "can take four to six months on the average, and more if an objection is lodged."

Despite the various conditions and restrictions placed on new investments, business executives interviewed believe that the procedures involved in business formation are not unduly onerous and should be viewed as only minor irritants. One executive told the team that although the GOB should try to speed up its approval process, "the licensing procedure allows the potential investor to learn early in his program

the limitations under which he will have to operate, so that he can make his business decision accordingly." Both business and government officials also emphasized that the licensing process is "fully transparent." There was no concern expressed about "hidden deals" or corruption.

The consulting team, however, believes that the GOB should take care that its protection policy does not support inefficient business at the expense of the consumer.

International Remittances

Largely because of sound monetary and fiscal policies, and a healthy balance of trade, Botswana's foreign exchange position is excellent. The Botswana pula is based on a basket of currencies, mostly the South African rand, but also the U.S. dollar and U.K. sterling. The rate is adjusted frequently and realistically so there is no parallel rate or black market.

There are no constraints on repatriation of capital nor remittance of profits, provided appropriate taxes have been paid. The GOB, however, has a policy of not approving repayment of debts until two years after loans are drawn down. The purpose of this policy is to encourage equity investment instead of short term loans. Businessmen who were contacted during the team's visit to Botswana were not concerned about this minor constraint.

There are no constraints on payments of royalties and other licensing fees after the related agreement has been approved by the Bank of Botswana.

Most business leaders believe that the positive foreign exchange situation is of major importance in encouraging private enterprise development and should be emphasized by the TIM during its visit to the United States.

International Trade Restrictions

Botswana believes in free trade, and has it. Although tariffs exist, these are nominal. There are no import quotas or other non-tariff barriers to free trade. A mining construction equipment executive stated, "There is no restriction on importation of new equipment and spare parts, which is extremely important to our operations."

Also, there are no export constraints such as quotas, price controls, export licenses, or export taxes. Similarly, there are no special incentives such as tax relief or export subsidies.

Business leaders also suggest that the TIM emphasize Botswana's commitment to free trade during their visit to the United States.

International Agreements

Botswana, together with Lesotho, South Africa and Swaziland, is a member of the Southern Africa Customs Union, which permits duty-free trade between the members, a common external tariff and a sharing of pooled customs receipts.

Botswana also has joined with Angola, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe to form the Southern African Development Coordination Conference (SADCC). The major aim of SADCC is to create regional integration, mobilization of resources and concerted action for economic liberation.

Botswana is a member of the Commonwealth. It is not a member of GATT, but observes its provisions. It is a signatory to the LOME III Convention which provides duty-free access to the EEC. It also participates in the U.S. Generalized System of Preferences (GSP), which provides duty-free treatment into the United States for a broad range of manufactured and semi-manufactured products.

Botswana, Malawi and Zimbabwe have a trade agreement providing for duty-free trade, without restrictions, between the three countries.

The Overseas Private Investment Corporation (OPIC) provides inconvertibility, expropriation and war risk insurance to U.S. investors.

Trademarks may be registered. Regarding patents and designs, only those registered in the United Kingdom or South Africa may be re-registered in Botswana.

Botswana has also evidenced its support of and cooperation with the United Nations and other international aid agencies.

Taxes

The corporate tax rate is 35 percent. Personal income taxes are graduated and range from five percent to 60 percent on income which exceeds P 63,000 a year. The tax on royalties and other fees is 15 percent; entertainment taxes are 10 percent, and taxes on construction contracts are 25 percent. Expatriates must pay the same personal income as citizens, although 25 percent of salary may be tax free if it is withheld for a period of two years.

Corporate taxes are reasonable by international business standards, as are taxes on royalties and fees. However, business leaders feel that taxes on personal income are too high. Many believe that lower tax rates, such as in the United States, would improve productivity, encourage savings, and stimulate capital formation.

Investment Incentives

Botswana's program of investment incentives is spelled out in the Financial Assistance Policy (FAP) of 1983. This policy, which applies to all sizes of productive ventures that produce goods for export or replace imports, provides extremely liberal grants and tax holidays. Only the cattle industry and large scale mining are excluded.

As noted above, small scale projects (investments up to

P 20,000) are reserved for Botswana citizens. However, both citizens and non-citizens are eligible for benefits for medium scale projects (investments between P 20,000 and P 900,000) and large scale projects (investments over P 900,000). The magnitude and type of grants vary somewhat by size of project, but the incentives are clearly stated, consistently applied, and fully transparent. Incentives apply to both new ventures and expansions of existing ventures.

Investors in new projects have a choice of two packages of incentives: Automatic Financial Assistance (AFA) and Case-by-Case Financial Assistance (CFA). Established firms planning expansions receive incentives under CFA only.

AFA Incentives include tax holidays starting at 100 percent for the first two years, falling to 25 percent off the normal tax rate in the fifth year of operation. Grants are given for employing unskilled labor whose wage rate is less than P 7.40 per day. Grants start at 80 percent of the wage bill in years one and two, falling to 20 percent in year five. Grants are also given to cover up to 50 percent of the cost of off-the-job training during the first five years of the project.

CFA incentives include grants of P 1,000 per job created up to 40 percent of total fixed investments in major cities increasing to 85 percent in rural areas in the western part of the country. These grants are paid

toward the fixed costs of the project. Thus, a project requiring an investment of P 400,000 and employing 100 persons would be eligible for a grant of P 100,000.

In addition, under CFA, firms are eligible for "augmentation grants" of eight percent of sales revenue for the first two years of operation, decreasing to two percent of sales revenue in the fifth year of operation. Under CFA, a project is also eligible for the unskilled labor and training grants described under AFA.

In the opinion of both government and business executives, these liberal incentives have been an extremely important factor in encouraging private sector industrial development, and have made it possible for entrepreneurs with limited capital to start projects.

Labor Laws

The minimum wage is P 0.60 per hour, P 5 per day or P 100 per month. The law requires no payment of fringe benefits. Workers can be laid off with one month's notice or by paying a sum equal to the wage for the notice period.

Actual labor rates are low, the equivalent of about $55 per month for unskilled labor and $85 per month for skilled labor. Labor-management relations are good, with infrequent incidents of unrest or strikes.

Expatriates may enter Botswana without a visa for up to one month. However, permits are required to work in the country. Business executives complain that the permit procedure is slow but consistently applied. They consider this as only a minor problem which can usually be overcome by advanced planning.

Government Controls and Interference

Botswana is essentially a free market economy. Except for the licensing procedures previously discussed, businesses can operate free of government interference. There are no price, production or profit controls. Other than the exceptions noted below, the GOB plays no role in the purchase or marketing of materials and services. The business executives interviewed unanimously agreed that government interference was no problem in their operations. This is a remarkable situation relative to what occurs, officially or unofficially, elsewhere in the developing world.

Since independence, no company has been expropriated or nationalized in Botswana. The business community, in fact, has a close working relationship with the government. One business executive stated that the GOB "is pragmatic, careful to make the best decisions for the country, actively

promotes both foreign and local private investments, and uses its resources to develop business projects only when the private sector is unable or unwilling to undertake the necessary investments."

One government official said that the GOB prefers not to be an owner or a partner in an enterprise. However, in a number of cases parastatal and joint public-private ventures have been established principally through the Government-owned Botswana Development Corporation (BDC). Currently, the BDC has 29 wholly-owned subsidiaries and is a joint venture partner in 15 other companies. However, no special treatment is given to these companies, and those interviewed believe the companies are managed in a business-like manner. There were no complaints of favoritism.

In addition to the BDC, two other parastatal organizations of importance are:

- The Botswana Meat Commission (BMC) which is responsible for the principal slaughterhouse at Lobatse and Maun and for all meat exports.
- The Bostwana Agricultural Marketing Board, which is authorized to buy agricultural products to support farm prices at guaranteed minimum levels. The Board has facilities for storing purchased products. Surpluses are exported. When shortages occur, the Board imports agricultural products.

Banking and Credit Policies and Regulation:

Business executives in Botswana have indicated that the banking and credit policies and regulations of the GOB are straightforward and have not interferred with business activities.

The Bank of Botswana, the country's central bank and government banker, does not currently have any credit controls. For a short period in 1982, the Bank did ask the three commerical banks to restrain lending, but this request was removed late the same year.

The three commercial banks -- Barclays Bank, the Bank of Commerce and Credit, and Standard and Chartered Bank are all privately owned. The National Development Bank, supplements credit facilities provided by the commercial banks and disburses funds under the FAP.

One business executive reported that in order to establish a new commercial bank in Botswana, it is necessary that it not only be a full service bank, but also the bank must establish a network of branches. This, he added, has acted as a disincentive to the establishment of U.S. banks, for example, who might otherwise consider Botswana as a base for activities in southern Africa. The GOB might reconsider the requirement for branches as a major U.S. bank in Botswana might be an important encouragement to other types of U.S. investments in the country.

Availability of Business Advisory and Promotion Services

TIPA provides advisory, consultancy and liaison services to private investors. The Agency also provides trade and industrial information services, organizes trade fairs and exhibitions, and assists trade and investment promotion missions. The BDC also performs feasibility studies and works with potential investors on specific projects,

In addition, according to those interviewed, there are ample private consultants, accounting firms and lawyers to assist potential investors in the preparation of feasibility studies, business plans, and other aspects of starting or expanding a business.

Summary

In summary, of the eleven categories of factors relating to government policies, regulations and procedures, the team found that ten were very favorable for encouraging private sector development. The principal complaints were:

- delays in granting licenses for new businesses, and
- the high personal income tax rates.

As Table 1 indicates, all other factors were considred to be relatively favorable and of major importance in attracting investors.

Table 1

RELATIVE IMPORTANCE GIVEN BY BUSINESS EXECUTIVES TO GOVERNMENT POLICIES, REGULATIONS AND PROCEDURES IN ENCOURAGING PRIVATE SECTOR DEVELOPMENT IN BOTSWANA

Factors	Considered as Favorable			Considered as Unfavorable		
	Degree of Importance			Degree of Importance		
	Major	Moderate	Minor	Major	Moderate	Minor
Political Stability & Risk	X					
National Development Priorities	X					
Business Formation Regulations						X
International Remittances	X					
International Trade Policies	X					
Taxes						X
Investment Incentives	X					
Labor Laws		X				
Government Controls	X					
Banking and Credit	X					
Business Advisory Services		X				

Source: DIMPEX Associates, Inc. based on results of interviews in Botswana, May - June 1985.

BASIC ECONOMIC, MARKET AND RESOURCE FACTORS

Economic and Market Stability and Growth Prospects

Since independence in 1966, the GOB has encouraged the development of the private sector through an essentially open market economy, free trade, and sound fiscal and monetary policies. As a result, despite few natural resources, limited good rain-fed agricultural lands, and a small population base, per capita income has grown over 1200 percent, from about US $70 in 1966, to about US $900 today.

The current population of the country is about one million. Between 1971 and 1981, the population increased from 574,000 to 941,000 -- a 64 percent increase. Currently, the annual growth rate is about 3.4 percent. This high growth rate is expected to continue through most of the 20th century.

One government official estimated that only about 150,000 persons are in the cash economy, however, primarily in the cities. Thus, in order to support economic-sized manufacturing activities in most industrial sectors, Botswana must develop markets outside of the country. With a few exceptions, this has not been achieved.

Botswana has had a surplus balance of trade in recent years, however, resulting from its expanded production of diamonds. In 1984, diamonds represented two-thirds of the value of exports. Diamond production exceeds that of South Africa, making Botswana the second largest producer in the

world. Growth of diamond production is expected to increase through exploration and opening of new deposits.

Much of the remaining exports are meat and copper/nickel matte which represent eleven percent and nine percent of the total value of exports respectively.

Business growth in Botswana is unlikely to be sufficiently rapid to create jobs for new entrants to the labor force. The sixth five-year National Development Plan forecasts an increase of about 7,600 new jobs each year, while the labor force is expected to increase by 20,000 each year.

The Botswana business base is relatively narrow. Mining operations account for about 18 percent of GDP, agriculture about 10 percent, and manufacturing 9 percent. Commercial trade and government activities account for 24 percent and 17 percent of GDP respectively, with the remaining 22 percent in a variety of service industries.

Despite its membership in the South African Customs Union, the Southern African Development Coordination Conference, and the existence of other local trade agreements, exports to neighboring countries are small. Furthermore, duty-free imports from South Africa and Zimbabwe compete with actual or potential Botswana products and thus seriously constrain industrial development in Botswana. Zimbabwe has serious foreign exchange problems, so there are strong incentives to export, often at marginal or near-marginal cost rates, to

Botswana. Similarly, South Africa has been in a recession in recent years, so South African producers are encouraged to export at low prices to utilize excess production capacity.

Production Resources and Services

The following chapters of this report summarize the findings of the team with respect to investment opportunities in several industries in Botswana. A review of these findings indicate many of the strengths and weaknesses of Botswana with respect to availability, quality and costs of factors of production. Therefore, this section will only briefly examine these factors.

Basic materials and parts are generally not available within Botswana. However, thanks to adequate availability of foreign exchange, they are imported, principally from Zimbabwe and South Africa, currently at favorable prices.

Infrastructure is generally good in urban areas, but quality falls off rapidly in rural areas, especially of transportation systems, as witnessed by the consultants during extensive travel throughout Botswana. However, roads, electricity and water systems are being expanded in rural areas.

Local credit and capital is available to both local and foreign owned businesses at free market rates through the three commercial banks and the GOB National Development Bank. Interest rates are comparable to those in the United States, two or three percent above the U.S. prime rate. Equity capital

is available through joint ventures with the BDC or through the FAP.

Business services such as maintenance and repair are limited due to the size of the market, but they are generally available from South Africa and Zimbabwe.

Entrepreneurial and managerial talent is in short supply, as might be expected in this young country's state of development. Most senior positions are filled by expatriates. In 1980 there were 4,600 expatriates in Botswana, mostly in senior positions.

The shortage of skilled labor is a major constraint to industrial development according to persons interviewed in both government and business. The government recognizes the need for manpower development and has established several training programs. The University of Botswana has also established management development courses in its curriculum, and students who appear to have good potential are sent abroad for study.

Non-skilled labor is plentiful and considered to be of good quality by those interviewed. Turnover and absenteeism rates are reportedly low. Labor unrest is infrequent.

Other facilities are reasonably good. Fire and police services are adequate. Expatriate housing is available but costly. Basic food items and household equipment are available at reasonable prices, primarily from South Africa and Zimbabwe. Medical services for minor health problems are adequate, but

persons in need of more specialized attention are flown to Johannesburg, one hour by plane from Gaborone.

Corruption is virtually non-existent. Contracts are honored and upheld under Botswana's laws which are based on British common law.

Table 2 summarizes the findings of the consultants based on interviews with both government and business leaders in Botswana.

Table 2

RELATIVE IMPORTANCE GIVEN BY BUSINESS EXECUTIVES TO ECONOMIC AND MARKET FACTORS IN ENCOURAGING PRIVATE SECTOR DEVELOPMENT IN BOTSWANA

Factors	Considered as Favorable			Considered as Unfavorable		
	Degree of Importance			Degree of Importance		
	Major	Moderate	Minor	Major	Moderate	Minor
Size of Market and Growth Prospects				X		
Basic Materials and Parts		X				
Infrastructure		X				
Credit and Capital	X					
Business Services						
Entrepreneurial Talent						X
Management and Technical Personnel				X		
Skilled Workers				X		
Unskilled Workers		X				
Other Services		X				
Corruption, Contracts	X					

Source: DIMPEX Associates, Inc. based on results of interviews in Botswana, May - June 1985.

II. BOTSWANA BRICK PRODUCTION PROJECT PROFILE

BACKGROUND

The AID consulting team was asked by the GOB to review several investment project proposals concerned with the production of red clay products at Lobatse, about 35 miles south of Gaborone, adjacent to a major unexploited clay deposit at Woodhall. Feasibility and other studies have been conducted since 1981 but no project has been initiated.

British Study

In 1981, a British consulting firm sponsored by the Commonwealth Secretariat made a feasibility study for a brick and tile manufacturing operation at the request of the GOB. The team concluded that the clay deposits at the Woodhall site are of "very high quality" and could be used to make a variety of red clay products such as bricks, hollow blocks and floor quarry tiles. The consultants proposed a plant to produce three million face 1/ bricks and eight million hollow clay blocks annually. The proposed investment was P 5.75 million (approximately $5.4 million at the exchange rate at the time of the study). The project would employ 53 persons.

1/ Face bricks, as the name implies, are used on the exterior of buildings and walls because of their superior appearance. They can be produced in various colors by varying the temperature when heating the bricks.

French Studies

A French company, CERIC, has made three proposals during the period 1983 to 1985 for brick factories using the Woodhall deposits.

The proposed output, capital investment and employment levels for the three proposals are as follows.[1/]

Year of Proposal	Brick Production Per Annum (In Millions of Bricks)		Capital Investment (Millions of Pulas)	Employment
	Face	Common		
1983	4.5	1.5	3.1	102
1984	6.4	16.0	2.6	140
1985	18.0	6.4	6.0	131

South African Proposal

In addition to the British and French studies, in 1984, a small South African brick manufacturer proposed to invest in an operation to produce 30 million face and common bricks annually. Estimated investment costs were not reported. Although the AID consultants were unable to verify this, they were told by a business executive that the South African brick producer most likely planned to move equipment from his existing South African plant to Botswana.

GOB Position

The GOB has not approved any of the proposals. One major concern is the size of the operations proposed and the consequent high investment costs. Secondly, the GOB is concerned that the proposed production would seriously compete against

1/ As reported by the Ministry of Commerce and Industry, Botswana

locally produced hand-molded bricks and displace workers in that sector.

Critique by AID Consultant

The AID consultant, after a review of the market for bricks in Botswana, concluded that both the British and French proposals are unrealistic. The principal difficulty with the proposals is that large investments of technologically sophisticated equipment and processes were recommended, and to justify the investment, high levels of brick production were proposed. It is unlikely that the local market could absorb the proposed output, as discussed below. Furthermore, the proposed operations would be relatively capital intensive (about $98,000 per employee for the British proposal and $26,000 per employee for the 1985 French proposal).

Based on discussions with specialists in both Botswana and Zimbabwe, the AID consultant has determined that a smaller, less sophisticated plant producing 2.5 million bricks per year can be achieved for an investment of only P 405,400 (about $225,000), and employ approximately 63 persons. Thus, investment per employee is reduced to about $3,600. The proposed labor-intensive alternative is discussed below.

MARKET AND SALES

There are three general categories of building blocks used for construction in Botswana:

- High quality face and common bricks,

- Low quality hand-molded bricks, and
- Concrete blocks and bricks.

High Quality Bricks

The proposed project is to manufacture and sell high quality, wire-cut face and common brick. Botswana does not manufacture wire-cut bricks. Currently all are imported from South Africa and Zimbabwe.

In 1984, GOPA, a German consulting firm, completed a report for the GOB entitled "Building Materials Sector Study." The report estimated that the Botswana demand for quality clay brick, one of twenty materials analyzed, would be 3.6 million units in 1985. Thereafter, demand would decline as follows:

Year	Demand (Millions of Bricks)
1986	3.5
1987	3.5
1988	2.6
1989	2.4
1990	2.2
1991	2.2
1992	2.2

The reason for the decline is that housing programs for new mining operations will be completed within the next few years.

Interviews with the two major building supply distributors in Gaborone confirmed the GOPA findings. The distributors

also indicated that they were paying the following prices for imported bricks in June 1985:

Face bricks (from South Africa)	P 230 per thousand
Face bricks (from Zimbabwe)	P 190 per thousand
Common bricks (imported)	P 120 per thousand

High quality brick is used in the construction of government and business office buildings and in quality home construction. To some extent high quality bricks compete with concrete blocks (discussed below). The distributors interviewed believed that locally produced quality bricks priced at P 190 per thousand (face bricks) and P 100 per thousand (common bricks) would compete favorably with concrete blocks, and that there should be no difficulty in selling the full 2.5 million bricks to be produced in the proposed plant.

The distributors thought it doubtful that export sales could be generated to the neighboring markets of South Africa and Zimbabwe without special export incentives, such as Zimbabwe's Export Incentive Scheme. There is no shortage of bricks in either country, according to the consultant who visited brick manufacturers in both countries

Low Quality Hand-Molded Bricks

The low quality, hand-molded bricks are used principally for low-cost housing and huts in villages, and low cost business construction. These bricks sell for P 50 to P 60 per thousand.

Currently there are approximately 40 small-scale producers of hand-molded bricks in Botswana. In total, they produce an estimated 10 million bricks annually and employ some 300 to

400 workers. Most of the production is in Gaborone and Lobatse, but a couple of plants exist in Francistown.

The high quality, wire-cut bricks produced in the proposed factory would not compete significantly with the lower quality, hand-molded bricks. Thus, the small-scale producers would not be seriously affected by implementation of the proposed project.

Concrete Blocks

Because of the relatively high prices for imported bricks, there is a flourishing industry in Botswana producing concrete blocks and lower quality sand/cement bricks using imported cement.

As pointed out above, building supply distributors believed that wire-cut common bricks would compete with concrete blocks if common bricks are priced at P 100 per thousand ex-factory. As one distributor noted, "Unlike clay bricks, the concrete block surface requires mortar or whitewash, adding to the cost of construction. The Market potential is large."

The GOPA estimated that demand for concrete blocks averages about 190,000 cubic meters annually, equivalent to 31.5 million blocks. All cement used in Botswana is imported. Therefore, there would be a savings in foreign exchange costs to the extent that clay bricks are substituted for concrete blocks.

PRODUCTION PROCESSES, PLANT CAPACITY, LOCATION AND INVESTMENT REQUIREMENTS

Unlike the British, French and South African proposal, the AID consultant recommends a relatively small plant using

a high labor to capital ratio. Production capacity would initially be 2.5 million bricks per year. Clay would be excavated manually and transported in tip-trailers to the processing site where the clay would be processed by rollers and mixed. The clay would then be put in an extruding machine with a capacity of 10,000 "green" bricks per day.

Initially, production would be one million face bricks and 1.5 million common bricks annually. Face bricks would be fired in two downdraft kilns, each of which produces about 500,000 bricks annually. If demand for face bricks warrants, additional downdraft kilns could be added. Downdraft kilns allow temperature to be regulated so that face bricks of different colors (red, brown and blue) can be produced.

The balance of the bricks extruded would be used to make high quality, wire-cut common bricks in well-designed clamp kilns which consume less coal per brick produced than downdraft kilns. As sales of face bricks increase, production of wire-cut common bricks could decline unless demand for both types of products could be increased by speeding up the extruder and constructing additional kilns.

Location of the plant would be adjacent to the Woodhall deposits in Lobatse. The site is one-half mile from the good main highway from South Africa through Botswana to Zimbabwe. The proposed site for a Botswana Railways marshalling yard is less than one-half mile away.

Investment costs for the proposed project are shown in Table 3. These total P 405,400, including working capital. The cost of extruding equipment, rollers and mixers were

based on quotations from a Zimbabwean engineering company. Kilns and technology would be provided by a Zimbabwe brick manufacturer.

Table 3

ESTIMATED INVESTMENT COSTS FOR A BRICK PLANT IN BOTSWANA TO PRODUCE 2.5 MILLION WIRE-CUT FACE AND COMMON BRICKS ANNUALLY
(Prices in Pulas)

EQUIPMENT COSTS

Process	Equipment	Costs (P)
Excavate clay	Manual (bank cave-in)	Negligible
Delivery to stock pile	Tractor and Tip-Trailers (2)	32,000
Process clay	Disintegrator roller and 2 smooth rollers	164,000
Mix clay	Mixer	
Extrude and wire cut	Extruder (30,000 bricks per day capacity)	
Drying	Outdoor, covered sheds with concrete floors	10,000
Firing: Facing brick Common brick	Two downdraft kilns. Clamps, 100,000 bricks each.	15,000
Deliver bricks	Truck, seven ton, new	55,000
TOTAL EQUIPMENT COSTS		276,000
SITE SURVEY PREPARATION AND FENCING		17,000
BUILDINGS		
Factory Building		6,000
Office Building		9,000
TOTAL COST OF BUILDINGS		15,000
WORKING CAPITAL REQUIRED		97,400
TOTAL INVESTMENT COSTS		405,400

Source: DIMPEX ASSOCIATES, INC.

PRODUCTION REQUIREMENTS AND COSTS

Raw Material Requirements

There is ample clay available for the proposed level of production for approximately 60 years. The GOB will provide a license to extract the clay from the Woodhall deposits for P 4,000 per year plus a royalty of three percent of the sales value of the finished product. Based on the proposed production levels and selling prices, this would total P 14,200 per year.

Infrastructure Costs

These costs include transportation, communications, power, fuel and water which are estimated as follows:

Item	Estimated Annual Costs (Pulas)
Transportation	49,000
Communications	2,000
Power	2,500
Fuel	29,250
Water	300
TOTAL ANNUAL INFRASTRUCTURE COSTS	83,050

Personnel Requirements and Costs

With the assistance of a Zimbabwe brick manufacturer company, staffing and annual personnel costs were estimated as follows:

Personnel	Number	Monthly Rate (Pulas)	Annual Cost (Pulas)
Production Labor			
Skilled	5	150	9,000
Unskilled	55	100	66,000
Administrative Staff			
Management	1	1,800	21,600
Clerical	2	300	7,200
TOTAL ANNUAL PERSONNEL COSTS			103,800

Total Operating Costs

Based on the above, total annual operating costs are as follows:

Item	Annual Cost (Pulas)
Raw Materials	14,200
Infrastructure	83,050
Manpower and Management	103,800
TOTAL	201,050

FINANCIAL AND ECONOMIC EVALUATION

As shown in Table 4, the proposed project would produce almost P 31,000 in after tax profits when operating at the proposed production levels. This is based on an equity-debt distribution of 25 percent - 75 percent and an annual rate of interest of 15 percent.

The annual rate of return is estimated to be 19 percent, and the repayment period 3.3 years.

Table 4

ESTIMATED PROFIT AND LOSS STATEMENT FOR A BRICK PLANT IN BOTSWANA PRODUCING 2.5 MILLION WIRE-CUT FACE AND COMMON BRICKS ANNUALLY (Prices in Pulas)

ITEM		Pulas/Year
Sale Revenue		
One million face bricks @ P 190 per thousand	190,000	
1.5 million common bricks @ P 100 per thousand	150,000	
Total Sales Revenue		340,000
Total Operating Costs		201,050
Depreciation (15 percent)		46,200
Operating Profit		92,750
Interest payments (average 15 percent)		45,600
Gross Profit Before Tax		47,150
Corporate Tax - 35 percent		16,500
NET PROFIT		30,650

$$\text{Rate of Return} = \frac{\text{net profit + interest}}{\text{total investment outlay}} \times 100$$

$$= \frac{76,250}{405,400} \times 100 = 18.8 \text{ percent}$$

$$\text{Repayment Period} = \frac{\text{total investment outlay}}{\text{net profit + interest + depreciation}}$$

$$+ \frac{405,400}{30,650 + 45,600 + 46,200} = 3.3 \text{ years}$$

$$(122,450)$$

Source: DIMPEX ASSOCIATES, INC.

Proposed Financial Structure

For purposes of analysis, it was assumed that the financial structure of the proposed project would be 25 percent equity and 75 percent debt, as follows:

Total Investment Cost	P 405,400
Equity Investment (25 percent)	101,350
Debt (75 percent)	304,050

If the GOB approves the project, medium and long-term debt financing would be available from the National Development Bank. Working capital would be available through one of the local commercial banks.

Financial Assistance Policy (FAP)

Although FAP benefits were not incorporated into the above financial analyses, substantial benefits would be available if the GOB approved the project. (See Chapter I, page 10). If the project sponsors were to choose the Case-by-Case Financial Assistance (CFA) scheme, capital grants for jobs created would total P 63,000. The grant could be used for equity purposes or to reduce the debt. In addition to the capital grant, the project could receive in excess of P 250,000 in recurrent benefits in its first five years of production. Tax holidays and training grants would also be available.

IMPLEMENTATION SCHEDULE

According to the Zimbabwe engineering firm, the project

could be implemented within three months of approval of the lease on the clay deposit, approval of the license and obtaining financing. Assuming approvals were received by October 1985, the following schedule could be achieved:

Lease and License	- October 1985
Order Extruder	- October 1985
Financing	- December 1985
Construction	- January - March 1986
Equipment Delivery	- July 1986
Production Begins	- August 1986
Extrusion & Drying	- August - October 1986
Initial Firing	- November 1, 1986
Initial Shipments	- December 1, 1986

RECOMMENDATIONS

It is recommended that the Government approve the program outlined above. (See Chapter V "Conclusions and Recommendations")

III. CRITIQUE OF AGRIBUSINESS INVESTMENT PROJECT PROPOSALS

INTRODUCTION

Summary

A review was made by the AID consulting team of the investment opportunities offered by the production of fresh water prawns and abattoir by-products in Botswana. Neither of these activities have sufficiently strong markets or are sufficiently large in scope to attract foreign investment in the near term. Canned meat products may constitute a future opportunity, however.

Additional agriculturally-based activities examined as possible investment opportunities included fish farming and production of fresh and/or processed fruits and vegetables.

- Fish farming is an active project of the Ministry of Agriculture. It should present viable opportunities for local investors but the size of the market is unlikely to attract foreign investors.

- The Botswana Development Corporation (BDC) operations in the Tuli Block are highly impressive and demonstrate that the technology exists for a strong fruit and vegetable industry based in that area. Currently, however, the infrastructure of roads, reasonably priced electric power, and communications necessary to permit the development

of large scale production does not exist. With the development of the infrastructure, however, attractive project opportunities might develop for both local and foreign investors.

Table 5 summarizes the findings of the AID consultant.

SUMMARY OF PROPOSED AGRIBUSINESS PROJECTS IN BOTSWANA

Project	Recommendation	Comments
Previously Completed Studies		
Fresh water prawns	Terminate	Market weak and sporadic; entirely in RSA.
Tallow bleaching and refining	Terminate	Ninety percent of easily available tallow was recently committed to a local soap producer.
Hard capsules	Terminate	High Capital investment with minimum economic production levels greater than local market; large, strong competitors.
Organ extracts	Defer	Present slaughtering rate too low. Must double or triple to provide sufficient supplies of raw materials to make this project economically viable.
New Possibilities		
Canned meats, petfoods and specialty products	Pursue as local or foreign joint venture	Contingent on BMC divestiture of these operations.
Hides and tanning	Pending	Needs resolution of on-going negotiations. Major constraint is lack of sufficient tanning capacity.
Fish farming Tilapia	Pursue as local venture	Both domestic and Zimbabwe markets appear good; capital investment requjired depends on scope of operation.
Fresh and processed fruits and vegetables	Pending	Currently inadequate infrastructure. Needs development plan.
Cosmetics	Needs study. Possible joint venture opportunity	Strong, rapidly growing market in U.S.; rapidly growing market in Botswana; U.S. world leader in technology of cosmetic formulation for blacks.

Source: DIMPEX Associates Inc.

Background

The GOB has developed or received a large number of proposals for agribusiness projects. These have gone through a number of screenings to select those which appear to be most promising for promotion by the TIM during their visit to the United States in September. Prior to the visit by the AID consulting team, the candidate agribusiness projects had been reduced from 74 to essentially two:

- Commercial aquaculture production of fresh prawns, Macrobrachium rosenbergii, and
- Abattoir by-products including tallow, gelatin, canned meat, organ extracts and hides.

This chapter briefly reviews these two project areas to determine the degree to which they might contribute to economic development in Botswana and, more specifically, to the objectives of the TIM. For the purpose of this analysis, the animal by-products grouping has been divided into five sub-groups each of which are addressed individually.

In addition to the two agribusiness projects which the consulting team was asked to examine, two additional agriculturally-based activities were briefly investigated. These included fish farming and production of fresh and/or processed fruits and vegetables.

Review Criteria

The analyses were based on available published studies and data, interviews with relevant personnel in the public and private sectors, and observations of existing sites and facilities. The criteria considered in assessing the attractiveness of proposed projects included estimates of the following:

- Technical and economic feasibility
- Availability of adequate markets
- Availability of raw materials and infrastructure
- Potential value added
- Employment impact
- Suitability for expansion and diversification
- Attractiveness for potential joint venture partners

REVIEW OF PRE-SELECTED PROPOSALS

Fresh Water Prawn Farm

The Proposed Project

The Product. The proposed project is aimed at the commercial production of a large fresh water prawn, Macrobrachium rosenbergii, indigenous to the coastal Indo-Pacific regions. Other areas in which this prawn is being farmed include Hawaii, the continental United States (on an experimental basis), and the Far East. The product would be sold in frozen blocks of "heads on" Macrobrachium.

Sponsorship. A feasibility study was completed in May 1984 by Aquaculture Production Technology Ltd. (APT), an Israeli aquaculture consulting firm, at the request of the BDC. While APT was not to take an equity position, it would provide technical assistance in the setting up and running of the project for the first five years on a fee basis. APT assumed local ownership, but potential owners were not identified.

GOB Support. The BDC board did not accept the proposal as they were apparently nervous about the relatively new and sophisticated technology involved.

Market. Botswana consumes virtually no shrimp. The principal market identified by APT was the Republic of South Africa (RSA). While detailed quantitative data were not presented in the document, APT estimated that the total shrimp market in RSA is in the range of 1,200 to 1,600 metric tons (MT) per year. This represents salt water shrimp imported primarily from Mozambique, Taiwan and Australia. APT estimated that the Botswana operation could penetrate the RSA market "at prices slightly below the current market." Annual sales were projected to start at about 140 MT rising to 155 MT within six years. By the sixth year sales revenue would reach P 1.4 million.

Production Plan. Using techniques recommended by APT, the proposed prawn farm could produce 155 MT of various sizes of prawns annually. The feasibility study includes a comprehensive description of the technologies involved in the production of these prawns, the facilities required, and the various cost factors anticipated. Overall capital investment was estimated at P 2.3 million (approximately $1.3 million). The site suggested for the production facility was the "Chobe Brigade Farm" at Kasane, in northern Botswana. This site has adequate space as well as supplies of fresh water. Existing facilities which were to be available to the project, according to the feasibility study, included buildings, irrigation piping, and cleared land for construction of growout ponds.

Production Requirements. The farm would employ 92 persons resulting in a per capita investment of P 25,000. Feed pellets, chemicals and other raw materials would be imported, although feed pellets might eventually be produced at the site using locally available ingredients. Operating costs were estimated to total P 540,000 the first year of operation, and fall to P 377,000 by the sixth year.

Profitability. Assuming an equity position of 1/3 of the total capital investment costs, total cash flow after interest payments and taxes was projected to be negative

in the first year of operations, but becoming positive in the second year, rising to P 400,000 the sixth year, a return on investment of about 17 percent. The pay back period was estimated to be about 6.5 years.

Financial Structure. Except for the assumed 1:2 equity to debt ratio, there was no indication in the study as to how or by whom the project would be financed.

Critique of the Project

The Market. Discussions with a producer in Hawaii indicates that Macrobrachium falls in a distinctly second position behind salt water shrimp as far as consumer preference is concerned. This status as an inferior product, coupled with high production costs and restricted storage life even when frozen, places the fresh water prawn producer in a potentially difficult position when salt water shrimp are available.

Because of these problems in Hawaii, discussion were held via telephone with principal seafood wholesalers in South Africa. The results of these discussions, as shown in Table 6, indicate that the majority of seafood wholesalers, including two of the largest "houses", also feel that the consumer will accept Macrobrachium only when salt water shrimp are unavailable, and that it might be able to compete with salt water shrimp only if it could be offered at a

price about 70 to 75 percent of that of the salt water species.

If prices of the fresh water prawns were lowered to 70 percent of the salt water shrimp, and if 155 MT could be sold at that price (questionable as this would be ten percent of the RSA market) annual revenue at full production would fall under one million pulas. In such a case, in the sixth year of operation cash flow would fall from P 400,000 to about P 130,000 (using the APT cost estimates), a return on investment of only 5.6 percent.

The Site Location. A visit to Kasane to examine the farm location revealed that the site and facilities on which the proposal was based have been redesignated as an experimental farm by the BDC and are no longer available. The nearest available site is closer to the river, but is uncleared and consists of clay overlaid by four to five meters of sand. There are no existing facilities, either buildings or irrigation system, at the new site.

While this relocation might be suitable for construction of the necessary ponds and facilities, the costs of soil testing, topographical surveys, land clearing, removing sand, erecting buildings, and constructing piping systems would be significantly higher than those contained in the APT proposal.

Conclusion

In view of the apparent weak market for fresh water prawns in RSA, and the loss of the original site for the prawn farm, it is recommended that this proposal be shelved pending the identification of more promising market opportunities than appear to exist in South Africa.

Table 6

COMMENTS OF SEAFOOD WHOLESALERS IN SOUTH AFRICA REGARDING DEMAND FOR FRESH WATER PRAWNS

1) Fish King - Mr. Costas

   a) Has tried marketing fresh water prawns in the past, not well accepted.

   b) Customers complained about big head and flavor inferior to salt water species.

   c) Customers accepted only when salt water species not available.

2) Irvin and Johnson - Mr. Knotze (Pretoria), Mr. Campbell (Capetown)

   a) Customer preference is for salt water prawns.

   b) Price is high for amount of meat.

   c) Might make a penetration if 70-75 percent of salt water species price.

   d) Would not recommend farming M.r. right now.

3) Seafood Wholesaler - Mr. Marlender

   a) Has tried marketing Macrobrachium before.

   b) Customer complaints about big head, muddy flavor, and mushy texture but Marlender feels these latter two were the result of improper packing and could be improved.

   c) Would need to be priced at about 70 percent of salt water price to penetrate market.

4) Transvaal Fisheries - Mr. Agrella

a) Does not sell fresh water prawns, and has no plans to.

5) Indi-Ocean Seafoods - Mr. Saharin

a) Appearance detracted from customer acceptance.

b) Suggested going to larger sizes to improve competitive position.

6) Sea World - Mr. Wrainer

a) Is currently selling Macrobrachium.

b) Feels pricing would need to be at about 80% of comparable sizes of salt water species.

c) Most of his experience with M.r. was when salt water species were not available.

7) Hoxies - Mr. Ali

a) Big head, little meat for the price.

b) Even 20-30% discount from the price of salt water prawns will not compensate for the small amount of meat.

c) Only way Macrobrachium will be accepted is if nothing else is around.

8) City Deep Sea Products - Fernando

a) Not currently selling M.r.

b) Feels M.r. could compete if it were cheap enough, i.e. 25-30% below the price of salt water prawns.

c) Does not know much about them.

Tallow Bleaching and Refining

There is no point of going into detail regarding the tallow project because it is no longer possible under existing conditions. The proposal was for a plant to produce industrial, refined tallow for sale to cotton textile manufactures in the Southern African Development Coordination Conference (SADCC). A plant with a capacity of 2,700 metric tons per year was proposed using raw tallow from the Botswana Meat Commission's slaughter house in Lobatse. This would have been technically feasible since the Lobatse abattoir produces 3,000 to 4,000 tons of raw tallow annually.

However, in June 1985, while the AID consultants were in Botswana, the BMC reached an agreement with Kgalagadi Soap Industries in Gaborone by which Kgalagadi was extended a long-term option to purchase up to ninety percent of BMC's raw tallow at current market prices, providing that Kgalagadi perform some reasonable degree of processing on this tallow and not merely act as a broker. The AID consultant interviewed executives at both BMC and Kgalagadi and confirmed this agreement, and that indeed Kgalagadi would exercise its option.

Thus only 300 to 400 MT would be available from the Lobatse abbatoir, an amount insufficient to support a tallow refining plant. While some 1,000 MT of raw

tallow are available elsewhere in Botswana this tallow would not only be difficult and costly to collect, much of this tallow is consumed locally.

The feasibility study was initiated in 1983 by the Commonwealth Fund for Technical Co-operation, Industrial Development Unit (IDU) at the request of the coordinator of regional industrial development, Southern African Development Coordination Conference (SADCC). IDU, after detailed in-house work, contracted for a team of Indian tallow specialists to conduct the survey in Botswana. The study report was issued in March 1984.

The total capital investment requirements were estimated to be P 783,000. Return on total investment was projected to be 13.3 percent, and the pay-back period was estimated at 5.43 years. The plant would have employed 33 people on a three shift operation. The 2,700 MT output was to be sold to cotton textile manufacturers for sizing and finishing operations, principally in the SADCC countries of Zambia, Zimbabwe, Mozambique and Tanzania.

Comparisons with current world market figures for tallow indicate that the ingredient and product pricing used by the IDU were realistic. Also, the general process, equipment selection and plant layout appeared reasonable for the scale of operation proposed.

Perhaps, at some future date, if raw tallow again becomes available in sufficient quantities, the proposed project can be reconsidered.

Hard Gelatin Capsules

Preliminary analysis by the UNCTAD/GATT on the feasibility of hard gelatin capsule manufacture gave mixed recommendations. Dr. Kierman, author of this 1980 report, recommended against capsule production because of limited domestic bone production and the high capital investment requirement. Subsequently, however, he submitted a proposal suggesting capsule production using gelatin purchased from South Africa.

Presently there are five principal firms plus one independent located in Taiwan which essentially produce the world's supply of gelatin capsules. These include Lilly, Parke-Davis, Scherer, Roche and Helms. Lilly is a major capsule producing firm in the U.S. and, interestingly, has a hard capsule plant in the RSA.

The only plant in Bostwana, Zimbabwe or Zambia using these capsules is CAPS which has a sales office in Gaborone but does their actual filling in Zimbabwe. CAPS uses approximately 60-70 million capsules per year and purchases through European brokers. Lilly (RSA) is a frequent supplier.

Because a hard capsule plant in Botswana would have a limited bone resource (about 1/2 the amount needed for

viable bone gelatin operation), the high capital investment involved (estimated at about US $6-8 million), the fact that they would have essentially a one customer market, and the pressure which would undoubtedly be exerted on that potential customer by the five major producers, we recommend against establishing a hard capsule plant in Botswana at this time. If, in the future, cattle slaughtering increases by at least 200 percent, and sufficient additional markets for capsules can be identified, then this recommendation should be reviewed.

Organ Extracts and Pharmaceuticals

In 1983, a report was prepared by two consultants to the United Nations Development Program (UNDP) which examined the potential for using animal organs and blood from BMC abattoirs for the production of pharmaceuticals including: insulin, albumin, amino acids, edible gelatin, hyaluronidase and edible gelatin.

The report was not a feasibility nor prefeasibility study but rather a broad discussion of the BMC followed by a detailed discussion of the processes involved in producing the pharmaceutical products from animal organs and blood. No market surveys were conducted.

At present the BMC collects and sells intact organs depending on market conditions but does no extraction. Blood meal is also produced.

The general conclusion of the UNDP analysis was that BMC production of organs was at present too small to warrant extraction because of the high capital investment involved, such as in the case of insulin. In the case of other materials such as blood, pancreatin, and hyaluronidase, the report speculates that capital investment requirements may be sufficiently modest to warrant additional processing.

Dried blood prices can fluctuate considerably and a more in-depth evaluation of the markets would be necessary to establish whether it would justify the capital investments involved, and precisely the quality of blood required for these markets. Capital investments might be reduced by the use of less costly equipment than recommended in the study. There are blood driers available less expensive than the spray driers suggested in the study.

In any event, it would appear that these activities belong within the BMC. In order to attract venture capital and stimulate industrial development in this sector, the BMC may find it desirable at some future date, when slaughtering volume increases to two or three times current levels, to initiate these types of operations and then spin them off as they become strong enough to stand on their own and/or attract foreign capital.

Currently, at existing slaughtering rates, there is insufficient supplies of organs and blood to support economic-sized operations.

Other Possible Projects Based on Abattoir By-Products

Although previous studies have not been undertaken of the feasibility of these products, the AID consultant briefly examined possible projects for expanding canned meats, petfoods and specialty meat production, and the tanning of animal hides. These are discussed below.

Canned Meats, Petfoods and Specialty Products

All three of these types of products are currently being produced at Lobatse by the BMC, primarily for the RSA and EEC markets. Observation of the facility indicated that the existing plant and equipment are adequate for the current market and products. No valid judgements could be made about the particular products observed since these were being packed to specification.

Because of the parastatal structure of the BMC, it is somewhat unlikely that it would be an acceptable candidate for a joint venture with U.S. firms. Licensing agreements might be a more satisfactory solution. It is felt that were the BMC to divest or spin off (wholly or in part) the existing meat canning and petfood operations, etc., the attractiveness of these as possible joint ventures might significantly increase. Other products which could be

added to this line include stews and game products such as soups and pates. While the game products should be well accepted, add a uniqueness to the product line, and may have a degree of promotional value, the actual market for this type of product is limited (probably centered in the UK, Switzerland, and Germany).

Dry Sausages from Botswana may also find a welcome on the European market. These, however, would require totally different equipment from the canned products, and could feature game meats as well as beef. The advantage of sausage production is that it can, provided local market acceptance, achieve "stand-alone" status even at a comparative artisan level whereas canning cannot.

Hides and Tanning

Botswana currently produces slightly less than 250,000 hides per year. Because of the generally good condition of the animals and care exercised during removal, these hides appear of good to very good quality, though some problems exist due to occasionally poor branding practices.

Currently the BMC exports its hides in the "wet blue" stage to Italy, Spain and the RSA. At this level of the tanning process the hides are storage stable but have accumulated little in the way of value added. Value added starts to become significant only at the next level of processing, the "crust" stage.

The BMC is currently negotiating with some foreign interests in Europe about hide production. Should these negotiations prove unsatisfactory it is recommended that the feasibility of further tanning in Botswana be reconsidered.

It is felt that this operation might be a better candidate for local capital than foreign investment, but efforts should be made during the trade mission to contact MacPherson Leather, Los Angeles, California, and similar firms. Because of the availability of exotic game hides in Botswana, we also recomend that contact be made with makers of "Western" boots, especially Nocona Boot Company, Nocona, Texas.

DISCUSSIONS OF SUPPLEMENTARY AREAS

In addition to the fresh water prawn and abattoir by-product opportunities, the AID consultant also briefly examined two other areas of potential development: fish farms and the production and processing of fruits and vegetables. The findings are summarized briefly here.

Fish Farming

Botswana is blessed with native stocks of a species of Tilapia, three-spotted Bream. This fish is not only abundant in the Okavango river and delta, but lends itself well to fish farm propagation. Mr. John Rogers, Fisheries Officer, has an active program in the delta region training fishermen in proper techniques for taking and handling this fish.

Current plans call for consideration of a dike in the Maun area to create a lake of approximately 100 KM^2 and about 2M deep. In addition to providing water for irrigation, this lake would enable Tilapia to be actively farmed.

It is anticipated that the principal markets for these fish will be Botswana, Zimbabwe, and to a lesser extent South Africa. No relevant market data exist, however, very preliminary and limited market tests conducted by Mr. Rogers in Gaborone and Francistown indicate that Tilapia should be well accepted. A local resident, Mr. John Seaman of Maun, is also highly interested in farming Tilapia. Mr. Seaman is currently farming crocodiles, and is in the process of creating additional ponds for Tilapia.

Because Tilapia holds up well both iced and frozen, this allows considerable latitude with regard to handling. As a matter of prudence, however, it would seem desirable to plan butchering and freezing the fish as soon after catching as possible, and transporting in the frozen state. When the road from Maun to Nata is tarred, the marketing of iced, unfrozen fish could be considered.

More extensive testing is recommended to define the market(s) for Tilapia. Should the results of this testing corroborate the results of the earlier tests by Mr. Rogers, it would appear that commercial production of Tilapia would be warranted.

Agricultural Production - Fresh/Processed Foods

To assess the potential for U.S. investment in the production and processing of fruits, vegetables, and other agricultural commodities, a trip was made to the Tuli Block. Four farms were visited as follows:

a. Babedi Farms - a commercial operation located in Sherwood, growing primarily cotton under irrigation.

b. Tuli Ruins, a commercial farm, located near Sherwood, growing corn presently without irrigation (due to a pumping system breakdown).

c. Seleka Farms, a BDC farm located near Sherwood, growing fruits and vegetables including oranges, cabbage, tomatoes, cauliflower, and onions under a range of conventional and state-of-the art irrigation systems.

d. Talana Farms, a BDC farm located in the northern Tuli Block growing maize, sorghum, cotton, wheat, and legumes under both pivot and conventional irrigation.

The technical competence and production capability of the BDC operations are especially impressive. Production at Seleka, Talana, and Babedi show that, with irrigation, adequate yields can be produced for a broad range of crops and that improved irrigation technology can significantly reduce the amounts of water required for many fruits and vegetables.

Based on our observations of the Tuli Block it would appear, however, that 1) lack of adequate roads for transporting agricultural products, 2) lack of electrical energy at prices comparable with those being paid by competing farms in South Africa, and 3) lack of adequate telephone communication will preclude any likelihood of U.S. investment in the near term, and is a major impediment to current and future domestic agricultural development in this area.

Long term development of the Tuli Block could include both domestic and foreign investors and encompass fresh produce packinghouses as well as canning and dehydration. The degree to which these potentials are realized will depend not only on the development of the infrastructure discussed above, but also on the development of adequate resources of well trained and experienced technologists (both production and processing) as well as management personnel.

CONCLUSIONS AND RECOMMENDATION

None of the above areas, either those originally selected or those chosen as supplementary areas show potential for significant foreign investment in the near term. However, good potential appears to exist for both domestic and foreign investment in the long-term in certain product categories, especially fresh perishables and processed foods including meat products as well as fruits and vegetables. The largest of these is the opportunity created by the

agricultural development of areas such as the Tuli Block which involve a broad range of activities.

Agricultural activities, properly selected, could have regional significance with the high capital investment facilities being located in Botswana because of its stability, yet drawing on the agricultural production capabilities of not only Botswana, but neighboring agricultural areas as well. These operations might involve potato dehydration, citrus concentrate production, or a canning operation which would draw on a range of agricultural products over the packing year.

The major candidates for such operations would most likely be the diversified multinationals such as a Heinz, Del Monte or Castle and Cooke. Specialty products which might evoke interest in the Europe and United States include spices, nuts, and herbs. Table 7 presents a listing of selected companies which could be contacted during the trade mission's visit.

Table 7

CANDIDATE AGRIBUSINESS COMPANIES TO CONTACT DURING THE BOTSWANA TRADE AND INVESTMENT MISSION TO THE UNITED STATES IN SEPTEMBER 1985

Canning Companies

H.J. Heinz - (Pittsburgh, Pa.)

California Packing Corp/Del Monte - (Oakland, Ca.)

Libby, McNeil & Libby, Inc. (Chicago, Illinois)

Castle & Cooke/Dole - (San Francisco, Ca. and Honolulu, Hawaii)

Hanover Canning Co. - (Hanover, Pa.)

Hunt-Wesson - (Fullerton, Ca.)

Green Giant, Div. of the Pillsbury Co. - (LeSueur, Minn.)

Stockley-Van Camp, Inc. - (Indianapolis, Indiana)

Vegetable Dehydrators

CVC/General Foods - (Modesto, Ca.)

McCormick-Schilling/Gentry - (Gilroy, Ca.)

Gilroy Foods - (Gilroy, Ca.)

Basic Vegetables (Vacaville, Ca.)

Spice Manufacturers

Baltimore Spice - (Baltimore Md.)

Lawry's Foods, Inc. - (Los Angeles, California)

Spice Islands, Inc. - (South San Francisco, California)

McCormick and Co. - (Baltimore, Maryland)

Armanino and Sons, Inc. - (San Francisco, Ca.)

Soups

Campbell's Soup Company - (Camden, New Jersey)

H.J. Heinz - (Pittsburgh, Pa.)

Canned Meats

Armour & Co. - (Phoenix, Arizona)

George A. Hormel & Co. - (Austin, Minnesota)

Underwood Company, William - (Westwood, Massachusetts)

Petfoods

Ralston-Purina - (St. Louis, Mo.)

Starkist/Heinz - (Terminal Island, L.A., Ca.)

Bordens - (Chicago, Ill.)

Carnation - (Van Nuys, Ca.)

Kal Kan - (Los Angeles, Ca.)

Miscellaneous

Beatrice Foods (Chicago, Ill.)

CPC International, Inc. - (Englewood Cliffs, New Jersey)

General Foods Corp. - (White Plains, New York)

Fruit Juices

California Packing Corp/Del Monte - (Oakland, Ca.)

Castle & Cook/Dole - (San Francisco, Ca./Hawii)

Libby, McNeil & Libby, Inc. - (Chicago, Illinois)

Hunt Wesson - (Fullerton, Ca.)

Sunkist Growers, Inc. - (Van Nuys, California)

Nut Procesors

California Almond Growers Assoc. - (Sacramento, Ca.)

Vegetable Oils

Pacific Vegetable Oils - (Concord, Ca.)

CPC International, Inc. - (Englewood Cliffs, N.J.)

COSMETICS

In addition to the agribusiness possibilities, there appeared to be important opportunities in cosmetic production. Import statistics show that the value of cosmetic perfumery and toilet preparations, including deodorant, entering Botswana have grown as follows in the last five years:

Year	Value (Million Pula)
1980	2.70
1981	3.18
1982	4.49
1983	6.63
1984	8.52

Because of the strong and rapidly growing market for cosmetics formulated for black people, both in Africa and the U.S., it is felt that this could constitute a highly favorable candidate for joint ventures. At present two Botswana companies are manufacturing cosmetics for the Zimbabwean market. These are Glen T, located in Selebi-Phikwe, and American Girl in Francistown. Kgalagadi Soap, Gaborone, is considering expanding their line to also include cosmetics. Accordingly, it is recommended that the TIM schedule include major U.S. cosmetic firms which express an interest in the African and black U.S. market. Possible contacts might include:

- Alberto Culver Co. - (Melrose Park, Ill.)
- Ashland Chemical Co. - (Columbia, Ohio)
- Charles of the Ritz Group, Ltd./Jean Nate (New York, N.Y.)
- S.C. Johnson & Son, Inc. - (Recine, Wisconsin)
- Neutrogena Corp. - (Los Angeles, California)
- Max Factor & Co. - (Hollywood, California)
- Maybelline Co. - (North Little Rock, Arkansas)
- Estee Lauder - (New York, N.Y.)
- Noxell/Covergirl - (Baltimore, Maryland)
- Del Laboratories - (Farmingdale, N.Y.)
- Mary Kay Cosmetics, Inc. - (Dallas, Texas)
- Elizabeth Arden, Inc. - (New York, N.Y.)
- Westwood Pharmaceuticals - (Buffalo, N.Y.)
- Person & Corey, Inc. - (Glendale, California)
- Cococare Products, Inc. - (Northvale, N.J.)
- Helene Curtis Industries, Inc. - (Chicago, Illinois)
- Faberge, Inc. - (New York, N.Y.)
- Chesebrough Ponds, Inc. - (Greenwich, Conn.)
- Clairol, Inc. - (Stanford, Conn.)

IV. CRITIQUE OF PROPOSED FOUNDRY PROJECT

INTRODUCTION

Summary

The final project investigated by the AID consulting team in Botswana was a foundry to produce gray iron products such as brake shoes for railroad cars and manhole covers, alloy iron grinding balls for the mining industry, and various ferrous and non-ferrous alloys. The investigation concluded that at the present time the market for foundry products in Botswana could not justify the plant, equipment and personnel which would be required.

Background

German Study

In the 1979 German Study, the German consultants from B.C. Berlin Consult made an in-depth survey of the market in Botswana for various types of ferrous castings:

Gray iron - simple and thin sections

Grinding balls

Manganese steel

Malleable iron

They determined that a gray iron foundry operation in Botswana would be viable, though of marginal profitability. In 1980, they recommended that such a foundry be established. The manufacture of grinding balls was not recommended because of the low selling price from a foundry in Zimbabwe; manganese steel and malleable iron were also not recommended because of the limited market.

The study estimated that total capital investment needed for a plant capable of producing 1,070 metric tons of gray iron castings annually on a one shift basis would be P 2.4 million (approximately $3.1 million at the 1980 exchange rate). The capacity was based on the projected 1985 Botswana market, the assumed first year of full production. The consultant did not believe that any significant exports were likely in view of the highly competitive and well established foundries in South Africa, Zimbabwe and Zambia.

The proposed foundry would use local steel scrap, but pig iron, foundry coke and limestone would have to be imported. Also all materials for the production of foundry moulds and cores, except silica sand would have to be imported. The proposed site for the plant was Selebi-Phikwe where Bamanqwato Concessions Ltd. (BCL) is located. The projected rate of return on total investment was low (below 9 percent) through 1988, but when full two-shift capacity was achieved in 1992, the rate of return would be just over 14 percent.

Indian Study

In 1981 an Indian company, HMT (International Ltd.) which manufactures foundry machinery and also consults to the foundry industry submitted its comments on the German study. Using the market data in the German study, the Indian company confirmed the manufacturing program recommended

the Germans, but suggested that larger equipment be installed to cover future expansion. This added equipment costs would reduce the rate of return on total investment which, as noted above was already quite low.

Yugoslav Study

In 1982, RO "Progres", a division of LZT "Kikinda", a Yugoslav company, which also manufactures foundry machinery and provides consulting services, recommended that a more comprehensive foundry be established in Botswana to produce the following castings:

Ferrous

Gray iron

Malleable iron

Alloy iron grinding balls.

Manganese steel castings

Non Ferrous

Bronze

The study recommended a much larger plant with a fixed investment of about $11.4 million. Annual turnover at full capacity was to be $5.5 million based on sales of 5,700 tons.

The report recommended the production of alloy iron grinding balls on the incorrect assumption that these could be sold for $937 per ton as opposed to $354 per ton used in the German study.

CURRENT SITUATION

In the opinion of the AID consultant, the German study was proper and correct based on 1979 market data and 1985 projected data. The market justified only consideration of gray iron castings, and their proposal of a cupola operation was correct. The situation today is the same, i.e., if the 1985 future market potentials now being projected were the same as projected in 1979, the iron castings only made in cupola furnaces, would be recommended. The Indian and Yugoslav proposed plants were unrealistically large considering the size of the Botswana market.

Grinding balls today are still sold at a very low price, less than 40 thebe (P 0.40) per kilogram, supplied by W.S. Craster (Pvt.) Ltd., Harare, Zimbabwe. Most of the raw materials (scrap steel, electrodes, alloys, etc.) would now have to be imported, and the cost of investment in arc furnace and molding equipment to make balls only is P 1 million. As the ball metal is steel, and not iron, the cupola furnaces which would be installed to melt iron could not be used for balls, necessitating the use of an expensive arc furnace. The fact that BCL is the only customer adds a serious risk factor.

BCL is the major customer for manganese steel castings which presently are bought from a South African foundry,

Vickers-Lenning, at a very low price caused by intense competition in a depressed industry. Manganese steel castings must be made in an arc furnace with refractory lining different from that required for grinding balls.

The market requirements for bronze and copper castings is small, but consideration could be given to their manufacturer after a foundry producing gray iron castings has had several years of experience, if such a foundry proves to be feasible in the future.

CURRENT MARKET - GRAY IRON CASTINGS

The primary customers for iron castings were visited and asked to provide their current annual purchases and also to estimate the size of the total market for the products they handle. These customers were BCL, Botswana Asbestos Cement (Pty) Ltd., Botswana Railways, and Builders Merchants Botswana (Pty) Ltd. The summary of findings listed below shows that the current and projected 1990 market in Botswana is substantially less than the markets projected in the German study. In fact, the current market is only 18 percent higher than the market estimate for 1979 made by the Germans.

	German Study Estimate (Tons)			Current Study Estimate (Tons)	
	1979	1985	1990	1985	1990
Simple Castings	45	80	198	60	80
Manhole Covers	239	436	712	240	300
Brake Shoes	57	193	552	2	2
Pipe Fittings	240	425	656	400	500
TOTALS	581	1134	2118	702	882

The major factor in the small increase is the fact that in 1983 the Zimbabwe Railways changed from using cast iron brake blocks to using compositon brake blocks, following the example of the South African Railways. Composition material is similar to automobile brake linings: asbestos, resins, etc. In the future, however, the railroads may switch back to cast iron brake shoes. Reportedly the South African Railways are experiencing thermal problems with composition blocks. If the South Africans switch, both Zimbabwe and Botswana would have to switch also because of future interchange plans.

Another market size factor is that major housing construction at mining operations are nearing completion, thus reducing the demand for manhole covers.

Market penetration must also be considered. If a foundry were to be established in Botswana, it could not expect to supply the entire market. Customers would want

more than one source of supply. For competitive and availability reasons, and customer reluctance to sole sourcing the AID consultant believes that the foundry should not expect to supply more than twothirds of its customers' requirements.

The level of technology must also be considered. Brake blocks are easy to produce and, with other simple castings, would provide a solid tonnage base for a foundry. Manhole cover manufacture is more difficult and pipe fittings are the most difficult of all. In addition, both manhole covers and pipe fittings have a large number of different sizes and shapes. This not only complicates production control, but involves large pattern expense.

Manhole covers are mainly supplied to the Botswana market by Besaans-du Plessis Pretoria Foundries (Pty) Ltd. Pipe fittings are supplied also by Besaans-du Plessis and by a foundry in Bulawayo, Zimbabwe.

RECOMMENDATION

From the above it appears that the sales volume which a gray iron foundry in Botswana could expect to achieve is about 400 to 500 tons per year, much of which would require a certain level of expertise.

This sales volume cannot justify the investment in plant, equipment and technical personnel which would be required.

The foundry project should continue to be deferred.

If demand increases for manhole covers and pipe fittings it might be desirable for Besaans-du Plessis to be approached about setting up a small subsidiary foundry in Botswana.

Also, if the South African and the Zimbabwe Railways, which governs Botswana Railways rolling stock specifications, switch back to cast iron brake blocks, then the foundry project should be re-evaluated.

V. CONCLUSIONS AND RECOMMENDATIONS

As discussed in the foregoing pages, a number of conclusions have been reached and recommendations made regarding the investment climate in Botswana, opportunities for investments in specific projects, and possible sectors, industries and projects for further analysis. The most important of these conclusions and recommendations, together with some additional possibilities which were put forth by business and government leaders interviewed, are summarized in this chapter in priority order. In general, the list is also in sequential order of timing, although action on several of the recommendations can be initiated at once.

Conclusion One

The modified, labor intensive brick production project described in Chapter II appears to be economically and technically viable. Project profitability is projected to be relatively high, particularly if FAP incentives are approved. Principal raw materials are locally available and are not being exploited currently. Value-added in Botswana would be close to 100 percent. The output would be an economical substitute for current imports.

Recommendation

TIPA, should immediately initiate a search for a qualified private entrepreneur in Botswana.

A detailed feasibility study is required for the candidate investor to verify initial findings and to develop a business plan.

Conclusion Two

Other pre-selected investment project proposals which were reviewed by the AID consultants are not viable at this time.

Recommendations

(1) No further consideration should be given to the following investment proposals:

- the various capital-intensive, large-scale brick projects,
- the fresh water prawn farm,
- tallow bleaching and refining,
- hard gelatin capsules, and
- the Indian and Yugoslav proposed foundry projects.

(2) The following project proposals, although not viable at this time, should be reconsidered in several years:

- organ extracts, and
- the German proposal for a foundry, or a similar type project.

Conclusion Three

Although detailed studies were not made, several other industries appear to have immediate or longer range potential. These include:

- canned meat, petfoods and specialty meats,
- hides and tanning,
- cosmetics, and
- production and processing of fresh fruits and vegetables.

Recommendations

(1) Initiate prefeasibility studies for the first three industries indicated above.

(2) Develop a long-term plan (five years or more) for the production and processing of fresh fruits and vegetables based on the experience of the BDC in the Tuli Block.

Conclusion Four

Although not specifically discussed in the previous chapters of this report, the AID consulting team noted that a large percentage of the feasibility studies which they

reviewed were conducted by equipment manufacturers or suppliers. Consequently, they may have been biased toward the use of capital intensive, technologically advanced processes not suitable for Botswana.

Recommendation

The GOB might suggest to donor organizations that they be more selective in their choice of "specialists" so that studies will not be biased toward any particular equipment or technology. It is further recommended that the first stage of any of these projects consist of a market study.

Conclusion Five

Botswana has only three private commercial banks -- two British and one Arab. Establishment of a branch of a major U.S. bank in Botswana would provide an important "show piece" and could encourage additional U.S. investments in the country as well as tourism. In fact, the bank itself would actively promote such investments.

Recommendation

Conduct a feasibility analysis of establishing a U.S. full service branch bank in Botswana, possibly as a regional bank for southern Africa. If the findings are positive, promote the concept with appropriate U.S. banks.

Conclusion Six

Although the consulting team found that business leaders were generally pleased with the investment climate in Botswana, there were two complaints which came up frequently:

- the length of time required to process applications for industrial licenses, and
- the high personal income tax.

Recommendations

(1) Relative to many other developing countries, the time taken to review applications for the establishment of a private business in Botswana is short. However, if this time could be further reduced, it might benefit both the potential investor and the country. The GOB is therefore encouraged to initiate a review of the application process -- possibly using an outside management consultant who has had experience with similar processes in other countries. One possibility which is used elsewhere would be to automatically approve an application if the GOB does not act on it within a specified period, for example, within 60 days.

(2) Although taxes are a universal subject of complaint, the frequent reference to the "high personal income tax rate on incomes over P 63,000" might warrant further investigation to determine if, in fact, these rates place Botswana at a relative disadvantage in attracting investments from both local and foreign sources.

Conclusion Seven

The investment climate in Botswana is excellent relative to that of other countries in the region, and might attract foreign investors especially those considering a regional headquarters. Unfortunately, many potential U.S. investors have limited knowledge of Africa in general and Botswana in particular. While the TIM can be a step in the right direction, Botswana needs to be further promoted in the U.S., possibly by professional public relations specialists.

Recommendation

If it has not already been done, contact several U.S. public relations firms to investigate their qualifications, experience in other countries, method of operation, and normal fees. The investigations would cost the GOB virtually nothing and yet provide a basis for planning.