Institute of Vevelopment Aanagement

A TANNERY IS PROPOSED FOR BOTSWANA

BY

DR. ROBERT CURRY

STUDIES IN DEVELOPMENT MANAGEMENT

NO. 2

DECEMBER, 1977

Botswana Lesotho Swaziland DEVELOPMENT STUDIES

PIEASE RETURN NOT LATER THAN

SIREN

A TANNERY IS PROPOSED FOR BOTSWANA

BY

DR. ROBERT CURRY
STUDIES IN DEVELOPMENT MANAGEMENT

NO. 2

DECEMBER, 1977

FOREWORD

The Institute of Development Management has undertaken a series of Studies in Development Management. These have a two-fold purpose; first to provide much needed additional materials based on local experience for use in IDM training courses and seminars; and second, to assist members of the IDM and others concerned in analysing development policies and programs and their implementation.

This study is the second in the series to be published. It was undertaken for the IDM by Dr. Robert Curry of the California State University, Sacramento, during the months of June and July, 1976.

The author assumes full responsibility for the contents of the study. Provided acknowledgement is made part or all of the study may be reproduced.

George V. Haythorne, Director.

OUTLINE

- I. Introduction: The Development Corporation
 - Proposes a Tannery.
 - A. Enabling a Local Leather Goods Industry.
 - B. An Addition to Botswana's Manufacturing Sector.
- II. Botswana's Lagging Manufacturing Sector.
 - A. The Botswana Meat Commission in the Manufacturing Sector.
 - B. Other Manufacturing.
 - 1. Employment Patterns.
 - 2. Export Focus.
- III. Early Proposals for a Tannery: 1970 1972.
 - A. A Proposal is Outlined for a Wet-Blue Tannery.
 - B. Wet-Blue in the Product Cycles for Finished Leather Goods.
 - C. The Lunden Report and the Tannery's Feasibility.
- IV. Finding a Tannery Partner.
- V. Base-Line Data for Financial Feasibility Calculations.
 - A. Independent Tannery.
 - B. Semi-Integrated Tannery.
 - C. Fully-Integrated Tannery.
- VI. Selecting the More Preferred Alternative.
- VII. State of the Proposed Project.
 - A. The Vital Role of the Botswana Meat Commission.
 - B. The View of the Meat Commission.
- VIII. Summary and Conclusion.
 - IX. Questions for Discussion.

1. Introduction: The Development Corporation Proposes a Tannery

One of the first industrial projects proposed by the Botswana Development Corporation was a tannery processing upwards of 150,000 hides annually. The Corporation evaluated the economic and commercial feasibility of such a project where the processing would take place near the Botswana Meat Commission's Lobatse abattoir. In a 1970 study, the Development Corporation concluded that the project would be economically desirable and commercially profitable. The Corporation's Board felt that implementing its tannery idea was simply a matter of negotiating with a foreign firm of repute in the industry to undertake the project. But six years later, Botswana remains without a tannery.

The Development Corporation is continuing its efforts to implement the idea of a tannery. The Corporation envisions that a tannery could act as a spur to the development of more manufacturing activity in Botswana. The basic logic underlying the Corporation's efforts is that the tannery could enable the country to develop a leather crafts industry on a level greater than the current one. Footwear production and sales throughout the country could be one aspect of the type of expanded manufacturing, both for local consumption and export sale, something that the Corporation deems desirable. It notes the fact that the country's manufacturing sector is small in terms of value added in production, employment opportunities created, and local income generated. Let us therefore undertake a brief review of the country's manufacturing sector.

II. Botswana's Lagging Manufacturing Sector

Manufacturing lags behind other sectors in generating employment and income-earning opportunities. Botswana's manufacturing sector is dominated by the Botswana Meat Commission. The Commission accounts for about 90 per cent of the country's total meat sales. The Commission's activities affect the material interests of a great many Batswana. The Commission buys directly from freehold farmers, tribal farmers, cooperatives and middle-men who in turn buy from small producers. In addition to the prices paid to suppliers, the Commission remits to them all revenue in excess of its operating costs, taxes and reserves. The scheme

The materials for this case are drawn from fact and are provided for class-room use. No effort has been made to evaluate the policies discussed herein. The case was prepared with the generous co-operation of officials for the Botswana Development Corporation and the Botswana Meat Commission.

generates excess profits to the middlemen who are not currently required to pass on to the small farmers any portion of the supplementary remittances that they receive from the Commission.

This situation could be remedied by the Government if several actions were taken. First, if the Stabilization Fund of the Botswana Meat Commission could be increased and changed to permit higher prices to be paid to farmers, supplementary payments will be reduced and those actually raising the cattle will be directly renumerated. Second, the cooperatives could be strengthened so that they can make advances to producers on terms similar to the middlemen. Cooperatives could be given priority in the allocation of Commission purchasing quotas. This latter step appears to be working as their sales to the Meat Commission have taken a substantial upward shift.

In the event that the above measures would fail the smaller farmers, other initiatives have been proposed including making credit available to small producers for cattle-fattening, and improving their knowledge of their alternatives in the marketing system. This would tend to enhance their abilities to sell their products without having to go through the middlemen in the marketing chain.

The economic welfare of many Batswana families is tied to meat processing profitability. Other Batswana have an interest in manufacturing's other sub-sectors currently including prepared grains and feeds, metal products and machinery, beverages (the sales of which will increase as Prinz Brewery begins operations), games and trophies, garments, footwear, furniture and chemicals, and rubber and plastic products. However, for the period 1971 to 1973, the manufacturing sector as a whole accounted for no more than five per cent of the estimated total cash employment and only nine or so per cent of estimated Gross Domestic Product. The above estimates do not account for the activities of very small-scale manufacturing enterprises because no data exists about their operations. Firms employing ten or more workers must be licensed and they are required to provide data about their employees on an annual basis. The returns of 55 firms for 1973 showed collectively that 37 (or 67 per cent) were wholly foreign-owned. 14 (or 25 per cent) were partly foreign-owned joint ventures, and the remaining four firms (or seven per cent of them) were wholly owned by Batswana entrepreneurs. This suggests a minimal involvement of Batswana in these manufacturing sub-sectors.

The manufacturing sub-sectors have developed an export orientation. In 1973, 52 per cent of sales were exports. The sector shows a heavy dependence on imported materials and semi-manufactured inputs, and import costs are 33 per cent of total sales. In particular, import costs as propor-

tions of total sales for the main subsectors were 70 per cent for garments, 56 per cent for metal products and machinery, and 53 per cent for furniture. For the main subsectors, the degree of export orientation expressed as a percentage of exports to total sales for games and trophies, it was 95 per cent; for textiles 96 per cent; for garments 85 per cent, and for rubber and plastic products it was 41 per cent. Furniture, beverages and chemicals sell only in the domestic market.

In these sub-sectors, the Batswana workers account for 94 per cent of total employment. The average wage for a foreign employee is ten times that of a Motswana. The latter are concentrated in unskilled jobs with only two per cent in managerial and 17 per cent in skilled positions. The growth of manufacturing exports has been dominated by foreign capital and expertise and has not significantly augmented Batswana income.

A tannery might be able to change the above situation somewhat. By adding value to the country's manufacturing sector, the idea of a tannery is appealing. First, it is attractive from the standpoint of generating local income-earning opportunities on the part of the families selling cattle. Income from tanning hides, over the cost of doing so, could in part be distributed to the families whose incomes are largely based on agricultural activities, primarily cattle raising. An increase in local processing that increases the values of hides exported could partly be shared with supplier-families. Secondly, the concept is appealing because it could generate some local employment opportunities for Botswana. Manufacturing employment in the country lags significantly behind other sectors. Thirdly, the additional value added in Botswana could bring in more revenue when processed hides are sold in export markets. Currently all hides are sold in the "wet-salted" state to brokers and tanners in South Africa and to buyers in European countries. The buyers of Botswana's hides then process them in various ways leading to the production of finished leather goods. Table I is a flow chart showing the various stages in leather production.

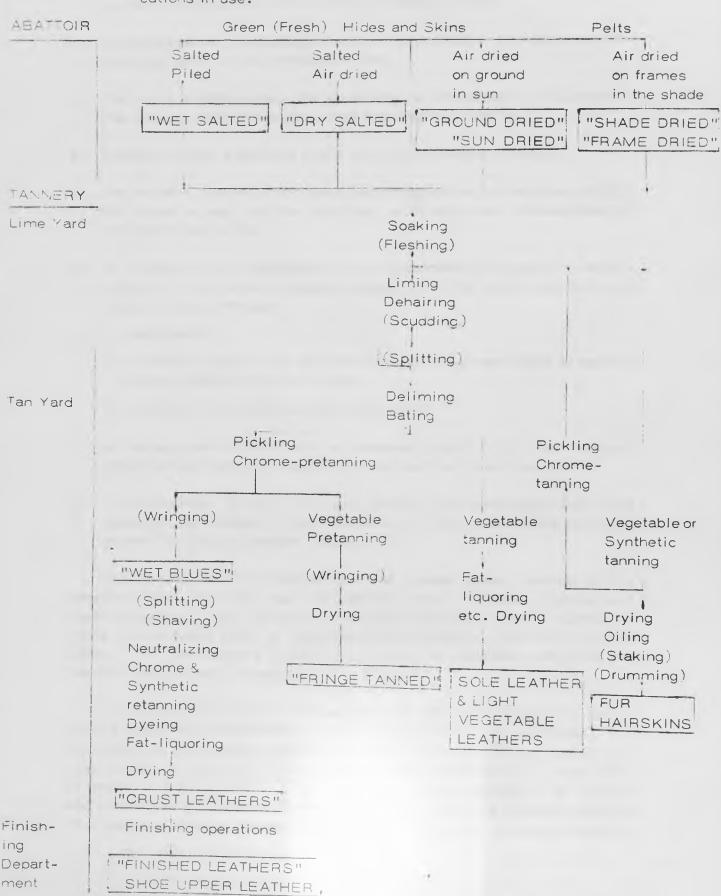
III. Early Proposals for a Tannery: 1970-1972

It was against this general economic background that the Botswana Development Corporation first introduced the idea of a tannery. Vigorous attempts to locate a tanning partner failed mainly because too little was known about the technical and financial aspects of the industry. The Corporation then decided that the project warranted further consideration so it arranged a full feasibility study. The study was completed by Mr. Bo Lunden, a leather consultant whose services were made available by the Swedish International Development Authority. Mr. Lunden made the following observations and recommendations:

TABLE | FLOW CHART: LEATHER AND FUR PRODUCTION

Note:

Shown are commonly practiced processes and mechanical operations (in brackets). There are of course numerous variations and modifications in use.



- 1. A wet-blue tannery will have a good impact on the development of the economy of Botswana and will be profitable in itself.
- 2. An implementation strategy should be formulated. A prompt decision could be taken on its immediate start.
- 3. The most suitable place for a tannery is considered to be Lobatse in the vicinity of the Botswana Meat Corporation (BMC).
- 4. Lobatse is also a suitable place for a future leather industry.
- 5. The tannery site and plant should be designed for a production of 200, 000 hides a year and the machinery and equipment dimensioned for 125,000 hides initially.
- 6. A tannery either integrated into or independent from BMC is recommended. The tannery should, however, in the latter alternative be related to BMC through
 - partnership
 - a contract concerning deliveries of raw hides and skins at defined prices, quantities and qualities
 - a contract concerning technical services.
- 7. A management contract with an overseas tannery for at least the construction and running-in periods of the plant is recommended.
- 8. A development project for rural tanning and leatherwork activities should be formulated. Such a scheme will also prepare the domestic market for a future leather industry.

The Development Corporation sent the Lunden study, mailed with a covering letter, to more than 100 tanning firms in Africa, Europe and North America. The Corporation received responses from a number of firms and selected eight of them for initial contact. One was Scott and Sons. The Development Corporation decided to negotiate with Scott and the firm was initially interested in the project.

The project did not get underway as Scott and Sons dropped out of the picture declaring that the project would not be sufficiently profitable. The Development Corporation contacted again the seven firms passed over when Scott was selected. Information was sent out to about 50 other firms of repute in the industry. Only three other tanners expressed an interest and one of them, Silverton Tannery of Pretoria, decided against investing in a tannery prior to formal negotiations. Two other firms continued to

discuss the matter with the Corporation: Mossop and Son of Cape Town, and Leonard Jowett of the United Kingdom.

It was clear to the Development Corporation's management that finding a tannery partner was no easy matter. In policy terms, a tannery for Botswana was an appealing prospect; one that was feasible according to the Corporation, the Lunden report, and some tanners' estimates. Until recently, the relatively modest expected returns, coupled with the associated risks, kept established foreign firms from participating in a tannery in Botswana. However, the Development Corporation signed an agreement with Mossop. It would be a joint venture with a payments guarantee to the Corporation. There would be a provision for developing down-stream investment in the crusting and producing stages should this become economically viable.

The potential profitability of a "wet-blue" tannery has been estimated by the Development Corporation based on "base-line" data assumptions and various types of possible tannery arrangements.

Based on Lunden's report, the Development Corporation in conjunction with Scott and Sons, had envisioned a three or four step project. In the first, the tannery purchases hides and tans them to the "wet-blue" stage. An initial stage of cooperation between the proposed tannery and the Meat Commission was to work out any technical problems arising between the tannery and the abattoir. It was proposed that the initial stage would last for a year but no longer. The second stage was to produce up to 200,000 hides per year to "wet-blue". The third and fourth stages were to follow and eventually add even more value to hide processing. In its 1973 proposal, the Development Corporation gave no details about the third and fourth stages except to say that eventually the tanning process would include the "crust" and then "finished" stages in leather goods production.

In the initial proposal, the Botswana Development Corporation was to buy land, erect buildings, install water piping and other required facilities and then lease the plant to an independent company to be called "Kgomo Leathers" at a commercial rate. In 1973, "Tanland", a company owned by John T. Scott and Sons, had purchased a 44 acre ideal site which could have been leased until ownership was transferred to the Development Corporation when construction of the tannery was to begin. The proposal went as follows: (a) Kgomo Leathers was to install machinery and make available share capital from their own sources, and obtain a loan facilities guaranteed by Scott and Sons' British Bank; (b) Kgomo was to design and construct an effluent treatment plant meeting British Royal Commission standards; (c) the Development Corporation would

hold a notarial bond over the machinery and all other goods on the site, and should the tannery fail, ownership of all assets would accrue to the Corporation.

V. Base-Line Data for Financial Feasibility Calculations

From combined estimates made by consultants to the Development Corporation and those offered by Scott, Silverton, Nossop and Jowett, the Corporation has made base-line estimates of the real costs and returns associated with operating a "wet-blue" tannery at Lobatse. They are based on the assumption that a tannery would be able to buy 150,000 cattle hides yearly from the Botswana Meat Commission at market prices. The estimates assume no special privilege and assume an average mix of hides in terms of size, weight and quality. The financial projections of the Corporation make another assumption: that there is a debt-equity ratio of approximately 1:1 or (R400,000 debt and R391,000 equity). Tables II and III show the capital requirements and projected profit and loss derived from the base-line data estimates.

There are some practical difficulties that the Development Corporation realises would have an impact on its January 1976 base-line estimates. In the projected relatively low rate of profitability and associated high rate of risk, it is questionable that commercial lenders would be willing to make available the assumed long-term finance to an independent company.

Since the tannery's requirements for working capital to finance both hides in work and process chemicals is a permanent requirement, it is doubtful that banks would be willing to allow overdraft facilities to cover these needs. To seek to increase the debt component of the tannery's financial structure would only increase the debt service burden to the Company's operating account. This would, in turn, increase the risk of the company's operations failing, and thus decrease still further the enthusiasm of commercial banks for lending to the project. To increase the equity component would cause a reduction in the rate of return to capital for the company's share holders in certain circumstances.

The Corporation's research and negotiations determined that there are three possible financial and ownership arrangements. One is an <u>independent</u> wet-blue tannery that hires management on contract and sells on the open market through an agent. Another alternative is a <u>semi-integrated</u> tannery associated with a finished leather product purchasing a major portion of the wet-blue tannery's output at favourable or at least open market prices. This would save on marketing and sales commissions although production costs would be similar to the prior format company. Another is a <u>fully-integrated</u> tannery associated with an existing firm of repute in the industry. The Lob-

TABLE II Capital Requirements

1.	Site and Plant Land Buildings (incl. fence, service roads, etc.) Effluent plant Electrical plant Water, steam and compressed air Fittings, lockers, etc. Staff housing	TOTAL	RAND 15 000 80 000 100 000 10 000 11 000 2 000 55 000 273 000
2.	Production Machinery and Equipment		
	Liming drum		13 000
	Tanning drum		21 000
	Fleshing machine		40 000
	Water heater		10 000
	Forklift truck		12 000
	Various pallets, trucks, boxes		5 000
	Squeezing machine		25 000
	Photo-electric sizer/scanner		12 000
	Tractor		5 000
	2 trailers		1 500
	Car for manager		4 500
	Laboratory equipment		2 000
	Office equipment		2 000
	Maintenance equipment		
	Procurement costs, freight, etc.	TOTAL	15 000 170 000
	D. J. Jacksticking and Companies	TOTAL	170 000
3.	Design, Installation and Supervision		25 000
	Surveying and design		5 000
	Installation		6 000
	Supervision	TOTAL	36 000
	Marking Capital	TOTAL	30 000
4.	Working Capital Hides in work (less credit on raw hide		
	purchases)		115 000
	Chemicals, consumable stores		22 000
	Water, power, fuel		2 000
	Salaries and wages		10 000
	Debtors		138 000
	Debtors	TOTAL	287 000
5.	Start-up costs	TOTAL	207 000
	Those include market developments,		
	advertising, recruitment, training, etc.	TOTAL	25 000
	1. Site and plant 2. Production machinery and equipment 3. Design, installation and supervision 4. Working capital 5. Start-up costs	ENTS	273 000 170 000 36 000 287 000 25 000

TABLE III

PROJECTED PROFIT AND LOSS (a)

1. Sales

The hide market is extremely volatile. Processors at all stages attempt to operate on a margin, selling their products at a set figure above the fluctuating cost of their raw material purchases. An estimate made by the tanners contacted by BDC is that the difference between the cost of a raw hide and the selling price of a wet-blue is about R4.30.

		150,000 hides	180,000 hides
	150,000 hides at R4.30	R 645,000	
	180,000 hides at R4.30		R <u>774,000</u>
2.	Costs other than raw hides	RAND	RAND
	Chemicals	239,000	286,000
	Water	22,000	26,400
	Electricity	31,000	37,200
	Fuel	2,000	2,400
	Salaries	48,000	48,000
	Wages	60,000	72,000
	Telex and post	3,000	3,600
	Insurance	3,000	3,600
	Auditors, bankers, etc.	3,000	3,000
	Travel	2,000	2,000
	Sundries	20,000	24,000
	Sales and other commissions	40,000	48,000
	Depreciation	40,000	40,000
	Interest	48,000	48,000
	Contingencies (5%)	28,000	32,000
	TOTAL	589,000	677,000
з.	Profit and Loss		
	Profit before tax	R 56,000	R 97,000

⁽a) Notes outlining the assumptions which produce figures are contained in the BDC Board papers of January, 1976, and are appended to the end of this paper.

TABLE IV

Internal Rate of Return to "Independent" Tannery

(all figures in 000's Rands)

3 141 38,4 105,6 85,7 19,8 5,97 99,63 40 59,63 4 144 33,6 110,4 17,5 92,9 27,87 82,53 40 42,53 5 185 23,8 156,2 17,5 138,7 41,61 114,59 40 74,59 6 185 24,0 161 17,5 143,5 43,5 117,95 40 77,95 7 185 19,2 165,8 17,5 148,3 44,49 121,31 40 81,31 8 185 14,4 170,6 17,5 153,1 45,93 124,67 40 84,67 9 185 9,6 715,4 17,5 157,9 47,37 128,03 40 88,03	Flow 11%	Net cash flow	Principal repayment	Net income after tax	Tax	Pre-tax income	Tax credits	Income before tax credits	Interest	Income before debt Servicing, Tax, etc.	Year
3 141 38,4 105,6 85,7 19,8 5,97 99,63 40 59,63 4 144 33,6 110,4 17,5 92,9 27,87 82,53 40 42,53 5 185 23,8 156,2 17,5 138,7 41,61 114,59 40 74,59 6 185 24,0 161 17,5 143,5 43,5 117,95 40 77,95 7 185 19,2 165,8 17,5 148,3 44,49 121,31 40 81,31 8 185 14,4 170,6 17,5 153,1 45,93 124,67 40 84,67 9 185 9,6 715,4 17,5 157,9 47,37 128,03 40 88,03	50,40	56	40	96	-	96	96	96	48	144	1
4 144 33,6 110,4 17,5 92,9 27,87 82,53 40 42,53 5 185 23,8 156,2 17,5 138,7 41,61 114,59 40 74,59 6 185 24,0 161 17,5 143,5 43,5 117,95 40 77,95 7 185 19,2 165,8 17,5 148,3 44,49 121,31 40 81,31 8 185 14,4 170,6 17,5 153,1 45,93 124,67 40 84,67 9 185 9,6 715,4 17,5 157,9 47,37 128,03 40 88,03	49,30	60,80	40	100,80	-	100,8	100,8	100,2	43,2	144	2
5 185 23,8 156,2 17,5 138,7 41,61 114,59 40 74,59 6 185 24,0 161 17,5 143,5 43,5 117,95 40 77,95 7 185 19,2 165,8 17,5 148,3 44,49 121,31 40 81,31 8 185 14,4 170,6 17,5 153,1 45,93 124,67 40 84,67 9 185 9,6 715,4 17,5 157,9 47,37 128,03 40 88,03	3 43,59	59,63	40	99,63	5,97	19,8	85,7	105,6	38,4	141	3
6 185 24,0 161 17,5 143,5 43,5 117,95 40 77,95 7 185 19,2 165,8 17,5 148,3 44,49 121,31 40 81,31 8 185 14,4 170,6 17,5 153,1 45,93 124,67 40 84,67 9 185 9,6 715,4 17,5 157,9 47,37 128,03 40 88,03	3 27,98	42,53	40	82,53	27,87	92,9	17,5	110,4	33,6	144	4
7 185 19,2 165,8 17,5 148,3 44,49 121,31 40 81,31 8 185 14,4 170,6 17,5 153,1 45,93 124,67 40 84,67 9 185 9,6 715,4 17,5 157,9 47,37 128,03 40 88,03	9 44,23	74,59	40	114,59	41,61	138,7	17,5	156,2	23,8	185	5
8 185 14,4 170,6 17,5 153,1 45,93 124,67 40 84,67 9 185 9,6 715,4 17,5 157,9 47,37 128,03 40 88,03	5 41,63	77,95	40	117,95	43, 5	143,5	17,5	161	24,0	185	6
9 185 9,6 715,4 17,5 157,9 47,37 128,03 40 88,03	1 39,11	81,31	40	121,31	44,49	148,3	17,5	165,8	19,2	185	7
	7 36,66	84,67	40	124,67	45,93	153,1	17,5	170,6	14,4	185	8
10 185 4,8 180,2 17,5 162,7 48,81 131,39 40 91,39	34,33	88,03	40	128,03	47,37	157,9	17,5	715,4	9,6	185	9
	9 32,17	91,39	40	131,39	48,81	162,7	17,5	180,2	4,8	185	10
	399,40								1		
			-								

atse wet-blue tannery would share management and production costs and the entire output of the wet-blue company would be sold by the participating foreign company through its existing market channels.

The Corporation has made financial analyses of each of three alternative structures and the following sections present the projections in each case.

VI. Financing Alternative Tannery Structures Independent Tannery. An independent tannery assumes participation by no existing tannery or leather business. The share holders would be either non-tanner private entrepreneurs or the Botswana Government, represented by a special State Commission or Corporation.

The tannery owners would be able to commission tannery building designers and production engineers to plan the tanning process and purchase machinery. They would recruit and hire business managers and production staff, and commission forwarding, shipping and sales agents. There would be substantial personnel costs, especially when considering housing and air-fares. Most likely the staff assembled would have no experience in tanning and selling Botswana hides. The independent tannery, having no special marketing arrangement, would be dependent upon the efficiency of a sales agent.

Assuming that the independent tannery meets the capital cost and budget projections of the "base-line" estimates, and further that the company is financed R391,000 equity and debt finance R400,000, at an interest of 12% per annum for ten years, and that the hides are increased to 180,000 annually in the fifth year's operation, the return on investment to the company is 11 per cent per annum.

The probability of achieving an 11 per cent rate of return is remote because of cost overruns, reductions in hide cost/selling price margins, and other unfavourable adjustments to base-line data. A less attractive rate of return is very likely. Given this high risk factor, commercial banks would likely not make loan finances at the base-line level and rate without very strong guarantees by the share holders. The probability of the independent tannery realizing the projected rate of return is estimated at ten per cent by the Development Corporation. See Table IV for the data illustrating the independent tannery situation.

Semi-Integrated Tannery. The semi-integrated option offers the project a more reliable and potentially less costly marketing operation. If the owner or major partner of a Lobatse tannery purchased all the Lobatse wet-blues with no marketing cost to the Lobatse tannery, then an

TABLE V

Internal Rate of Return to "Semi-Integrated" Tannery

(all figures in 000's Rands)

Year	Income before Debt Servicing Tax, etc	Interest	Income before tax credits	Tax credits	Pre-tax income	Tax	Net income after tax	Principal repayment	Net cash flow	DCF 11%
1	180	48	132	132	132	-	132	40	92	76,67
2	180	43,20	132,80	133	3,80	1, 14	135,66	40	95,66	66,43
3	180	38,40	141,60	17,5	123, 10	37,23	104,37	40	64,37	37,25
4	180	33,60	146,40	17,5	128,90	38,67	107,73	40	67,73	32,66
5	228,2	28,80	199,40	17,5	181,90	54,57	144,83	40	104,83	42, 13
6	228,2	24,00	204,20	17,5	186,70	56,01	148, 19	40	108,19	36,23
7	228,2	19,20	109,00	17,5	191,50	57,45	151,55	40	111,55	31,13
8	228,2	14,40	213,80	17,5	196,30	58,89	154,91	40	114,91	26,72
9	228,2	9,60	218,60	17,5	201,10	60,33	158,27	40	118,27	22,92
10	228,2	4,80	223,40	17,5	205,90	61,77	161,63	40	121,63	19,64

output of 150,000 hides per annum, about R36,000 could be saved in sales cost. The semi-integrated wet-blue user scheme would not save on over-sales and production costs, and the assumptions used in the case of the independent company remain unchanged. A rate of return of about 20 per cent per annum is projected because of the projected savings.

The Development Corporation's analysis estimates that the probability of a semi-integrated scheme achieving the projected rate of return is higher than for an independent tannery. The risk of overruns on capital and production costs are similar but marketing is likely to meet less difficulties. If a semi-integrated tannery could be constructed, its chances of achieving the projected rate of return is about 30 per cent. See Table V for the data.

Fully Integrated Tannery. Integrating production and marketing would require the participation of a foreign firm which already processes and markets a large volume of crust of finished leathers close to Lobatse. An ideal company for Botswana would be the Bata tannery in Kafue, Zambia, but unfortunately it is unable to offer a Lobatse wet-blue tannery the necessary technical, managerial or marketing assistance. Such assistance would have to come from a European or South African firm such as Mossop. It is an established buyer and processor and it has indicated that management functions could be absorbed into its existing operations.

Assuming capital costs and a capital structure similar to the other schemes, but eliminating some sales costs, a more favourable projection emerges. The projected rate of return increases to 27 per cent due to the cost savings. But the probability of the tannery achieving the projected 27 per cent rate of return is greater than in the cases previously analysed. The tanner could begin operations with understanding of the special characteristics of Botswana hides and would be less likely to encounter major unexpected technical and managerial problems. Market channels for wetblue are already established; thus the proposal avoids the difficulties in introducing a new product. Difficulties outside the control of the owners of a fully-integrated tannery remain but the chances of reaching the projected rate of return goal are estimated about 50 per cent by the Development Corporation. The data are shown in Table VI.

VI. Selecting the More-Preferred Alternative

The alternative tannery schemes are each plausible in a technical sense. A fully-integrated tannery could achieve capital and operating savings by sharing certain facilities with the abattoir, improving upon the 11 per cent rate of return projected for an independent company. It would continue to face the high risks but provided that adequate guarantees were

TABLE VI

Internal Rate of Return to "Fully-Integrated" Tannery

(all figures in 000's Rands)

1 213 48 165 165 - 165 40 125 98,38 2 213 43,20 109,80 100 69,80 20,94 148,86 40 108,86 67,49 3 213 38,40 74,60 17,5 157,10 47,13 127,47 40 87,47 42,69 4 213 33,60 179,40 17,5 161,90 48,57 130,83 40 90,83 34,88 5 261 28,80 232,20 17,5 214,70 64,41 167,79 40 127,79 38,57 6 261 24,00 237,00 17,5 219,50 65,85 171,15 40 131,15 31,21 7 261 19,20 241,80 17,5 224,30 67,29 174,51 40 134,51 25,15 8 261 14,40 246,60 17,5 229,10 68,73 177,87 40 137,87 20,27 9 261 9,60 251,40 17,5 233,90 <th>Year</th> <th>Income before debt Servicing, Tax, etc.</th> <th>Interest</th> <th>Income before tax credits</th> <th>Tax credits</th> <th>Pre-tax income</th> <th>Tax</th> <th>Net income after tax</th> <th>Principal repayment</th> <th>Net cash flow</th> <th>DCF 11%</th> <th></th>	Year	Income before debt Servicing, Tax, etc.	Interest	Income before tax credits	Tax credits	Pre-tax income	Tax	Net income after tax	Principal repayment	Net cash flow	DCF 11%	
3 213 38,40 74,60 17,5 157,10 47,13 127,47 40 87,47 42,69 4 213 33,60 179,40 17,5 161,90 48,57 130,83 40 90,83 34,88 5 261 28,80 232,20 17,5 214,70 64,41 167,79 40 127,79 38,57 6 261 24,00 237,00 17,5 219,50 65,85 171,15 40 131,15 31,21 7 261 19,20 241,80 17,5 224,30 67,29 174,51 40 134,51 25,15 8 261 14,40 246,60 17,5 229,10 68,73 177,87 40 137,87 20,27 9 261 9,60 251,40 17,5 233,90 70,17 181,23 40 141,23 16,38 10 261 4.80 256,20 17,5 238,70 71,61 184,59 40 144,59 13,16	1	213	48	165	165	165	_	165	40	125	98,38	
4 213 33,60 179,40 17,5 161,90 48,57 130,83 40 90,83 34,88 8 261 28,80 232,20 17,5 214,70 64,41 167,79 40 127,79 38,57 6 261 24,00 237,00 17,5 219,50 65,85 171,15 40 131,15 31,21 7 261 19,20 241,80 17,5 224,30 67,29 174,51 40 134,51 25,15 8 261 14,40 246,60 17,5 229,10 68,73 177,87 40 137,87 20,27 9 261 9,60 251,40 17,5 233,90 70,17 181,23 40 141,23 16,38 10 261 4.80 256,20 17,5 238,70 71,61 184,59 40 144,59 13,16	2	213	43,20	109,80	100	69,80	20,94	148,86	40	108,86	67,49	
5 261 28,80 232,20 17,5 214,70 64,41 167,79 40 127,79 38,57 6 261 24,00 237,00 17,5 219,50 65,85 171,15 40 131,15 31,21 7 261 19,20 241,80 17,5 224,30 67,29 174,51 40 134,51 25,15 8 261 14,40 246,60 17,5 229,10 68,73 177,87 40 137,87 20,27 9 261 9,60 251,40 17,5 233,90 70,17 181,23 40 141,23 16,38 10 261 4.80 256,20 17,5 238,70 71,61 184,59 40 144,59 13,16	3	213	38,40	74,60	17,5	157,10	47,13	127,47	40	87,47	42,69	1
6 261 24,00 237,00 17,5 219,50 65,85 171,15 40 131,15 31,21 7 261 19,20 241,80 17,5 224,30 67,29 174,51 40 134,51 25,15 8 261 14,40 246,60 17,5 229,10 68,73 177,87 40 137,87 20,27 9 261 9,60 251,40 17,5 233,90 70,17 181,23 40 141,23 16,38 10 261 4.80 256,20 17,5 238,70 71,61 184,59 40 144,59 13,16	4	213	33,60	179,40	17,5	161,90	48,57	130,83	40	90,83	34,88	Ü
7 261 19,20 241,80 17,5 224,30 67,29 174,51 40 134,51 25,15 8 261 14,40 246,60 17,5 229,10 68,73 177,87 40 137,87 20,27 9 261 9,60 251,40 17,5 233,90 70,17 181,23 40 141,23 16,38 10 261 4.80 256,20 17,5 238,70 71,61 184,59 40 144,59 13,16		261	28,80	232,20	17,5	214,70	64,41	167,79	40	127,79	38,57	1
8 261 14,40 246,60 17,5 229,10 68,73 177,87 40 137,87 20,27 9 261 9,60 251,40 17,5 233,90 70,17 181,23 40 141,23 16,38 10 261 4.80 256,20 17,5 238,70 71,61 184,59 40 144,59 13,16	6	261	24,00	237,00	17,5	219,50	65,85	171,15	40	131,15	31,21	
9 261 9,60 251,40 17,5 233,90 70,17 181,23 40 141,23 16,38 10 261 4.80 256,20 17,5 238,70 71,61 184,59 40 144,59 13,16	7	261	19,20	241,80	17,5	224,30	67,29	174,51	40	134,51	25,15	
10 261 4.80 256,20 17,5 238,70 71,61 184,59 40 144,59 13,16	8	261	14,40	246,60	17,5	229, 10	68,73	177,87	40	137,87	20,27	
	9	261	9,60	251,40	17,5	233,90	70,17	181,23	40	141,23	16,38	
388,20	0	261	4.80	256,20	17,5	238,70	71,61	184,59	40	144,59	13, 16	
											388,20	

made, a tannery operating under this alternative might negotiate a lease for land and buildings with Botswana Development Corporation. This would reduce the capital requirement for the project and increase the projected rate of return to investment.

The Corporation concludes that, when considered on commercial grounds alone, a Lobatse tannery highly integrated in processing and marketing with a nearby tanning business is the most attractive alternative. It would more likely succeed in providing a permanent basis for developing an integrated Botswana leather industry.

VII. State of the Proposed Project

The Botswana Development Corporation believes that a tannery would be a spur to manufacturing leather products in Botswana. The Corporation feels that while the project is likely not to be immensely profitable, it would offer a reasonable profit level to an overseas investor. Only one potential investor appears to remain interested in the Corporation's proposal and that is the Mossop firm from South Africa. This could be of some concern from the standpoint of trade and investment diversification.

In addition to requiring an outside company under either the semi-integrated or fully-integrated schemes, the Botswana Meat Commission would have to play a key role. The Commission would have to make available the required hides. While the Commission would receive fair market prices, the channels through which hides are now sold would have to be modified. As it now stands, the hides are stripped from newly slaughtered cattle and are dry-salted for 30 days. After storage, they are sold eventually to Italian and Spanish buyers who use them in the footwear industry, and to South African buyers who use them in producing a variety of leather goods.

The Botswana Meat Commission supports the concept of a tannery in principle. Its management indicates that it looks forward to the day when rather than shipping all of the company's hides out of the country, some of them can be used to support a local leather manufacturing industry. In fact, the Meat Commission's Management indicated that it would welcome a share holding participation in a tannery for the country. The Meat Commission Board passed, in fact, the following resolution at its 10th April, 1973, meeting: ".... it would be in order for the Meat Commission to supply approximately 50,000 hides per year to the proposed tannery."

The Meat Commission does not agree with the project as outlined by the Botswana Development Corporation. First, the Meat Commission's management is careful to point out that its expertise is in purchasing, processing and selling meat products. It has no experience in the tannery business and the professional staff and management do not feel competent to manage another type of enterprise. Second, the Commission points out that it is a national para-statal Company that took over private companies in order to ensure local control of industry. The Botswana Meat Commission feels that it would be setting back the clock to turn over the hides to an outside enterprise. The Commission's management wants to maintain discretion and control over the terms on which Botswana's hides are sold abroad. It feels that an outside company might purchase hides in excess of local use and sell the surplus internationally on terms that might be less preferential to Botswana than the Commission could obtain. The country's hides are currently sold to buyers in South Africa, who then ship Botswana's hides to Spanish and Italian buyers as well as purchasers in the United Kingdom and elsewhere.

The Commission is aware of the various buyers' needs, that is, they know the type of hides that various kinds of producers require. Some need a heavier hide from, say, Australia, while others can use the type exported from Botswana. The Commission feels that it should not give up discretion over making marketing decisions based on the years of experience gained by the national para-statal company.

Management points out that it would be in the Meat Commission's interest to have a tannery. It would eliminate the problem of having to store the hides at the abattoir for thirty days. This not only uses space but it also adds to the pollution problem. The Commission uses 30,000 tons of salt in the plant each year and this gives a brine run-off causing a pollution difficulty in the plant. If the hides were not stored but further processed, it would relieve the Meat Commission of two problems storage and pollution. In addition, if the Commission did not have to export high weight hides, but rather lower weight leather, it could save on transportation costs.

VIII. Summary and Conclusions

The concept of a tannery remains an attractive idea, one promising to be commercially feasible even though it might not be an immensely profitable one. The basic desirability of a tannery is because it could offer an opportunity for a broader leather goods industry to come about in Botswana. On this score, the Meat Commission questions somewhat whether Botswana produces the type of hides usable in a leather shoe

industry. But even if their idea is generally acceptable, two problems remain. The first is to obtain an "outside" partner, and the second is to receive assurances from the Botswana Meat Commission that it will sell 150,000 or more hides to the tannery per year. The Botswana Development Corporation has thus far been unable to solve these two key problems although it is continuing its efforts. The Meat Commission supports the concept in principle and the Mossop firm of South Africa is continuing its negotiations with the Development Corporation. The matter is not closed and indeed a tannery may yet come about for Botswana. In fact, the officials of the Meat Commission are actively investigating a tannery and they hope to have something to table for consideration.

IX. Questions for Discussion

- 1. What is the meaning of a discounted cash flow and how is it related to the financial considerations in this case?
- 2. Discuss the basic differences between what might be in the national interest and what might not be in the interests of private or even para-statal companies.
- 3. Is there any other alternative that the Botswana Development Corporation might pursue in bringing about the tannery?



This work is licensed under a Creative Commons
Attribution – NonCommercial - NoDerivs 3.0 License.

To view a copy of the license please see: http://creativecommons.org/licenses/by-nc-nd/3.0/



Development Studies