

Education Division documents No.2

# Education and training in Botswana 1974-80.

The impact of Swedish Assistance.

An evaluation.

J.O. Agrell

I.Fägerlind

I.Gustafsson



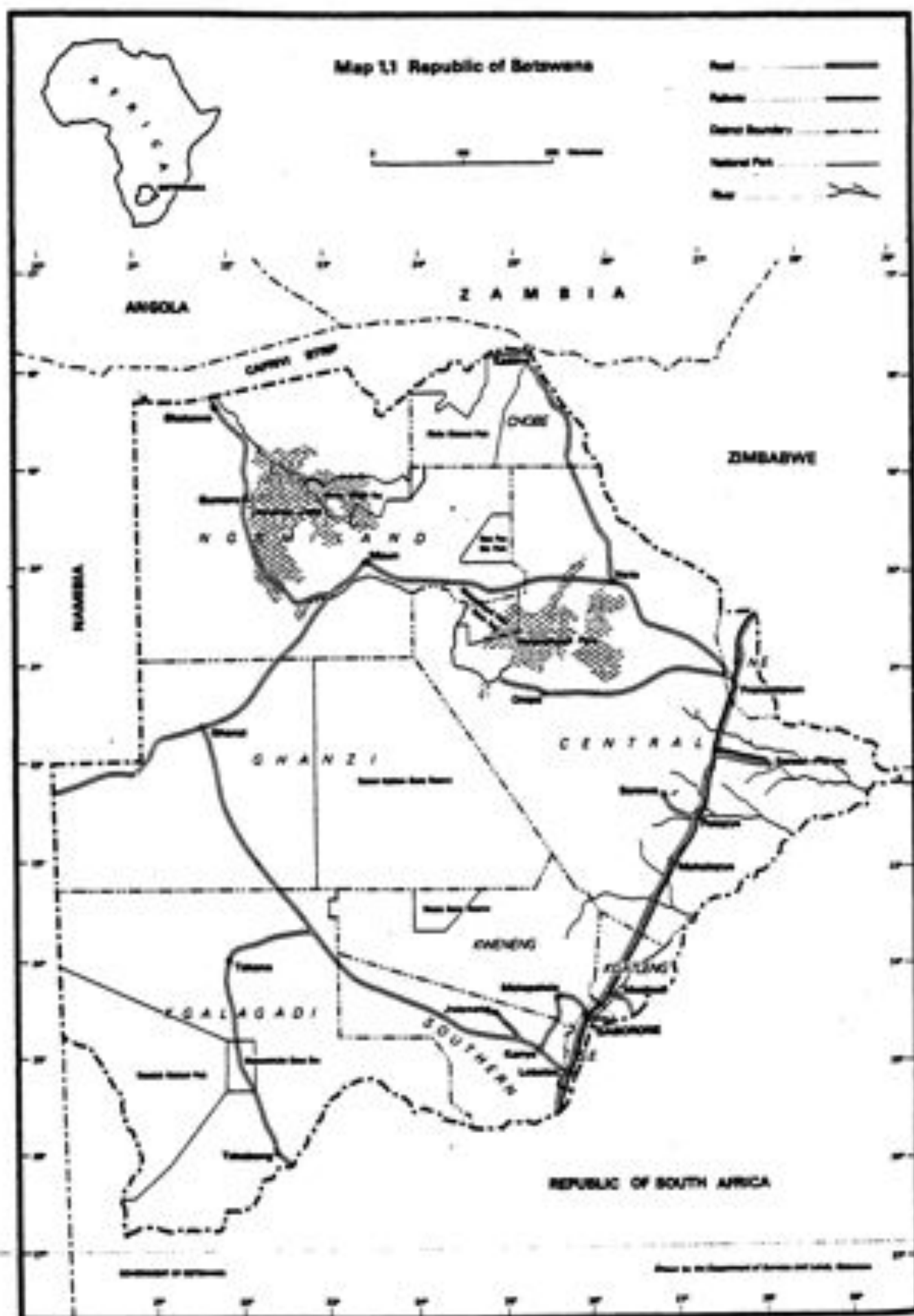
March 1982

# TABLE OF CONTENTS

## Page

	MAP OF BOTSWANA	
	LIST OF TABLES AND FIGURES	
	ABBREVIATIONS	
	FOREWORD	1
	SUMMARY	3
1	BOTSWANA - A DEVELOPING COUNTRY	7
1.1	Economic Development	7
1.2	Political Development	13
1.3	Cultural Development	15
1.4	Trends of Educational Policies	17
1.5	The Current Structure of the Education System	23
2	OBJECTIVES OF AND STRATEGIES FOR THE DEVELOPMENT OF THE EDUCATION SECTOR	29
2.1	Introduction	29
2.2	National Development Plans 1970-75, 1975-78 and 1976-81	29
2.3	The White Paper on Education	31
2.4	The 1979-85 Development Plan	32
2.5	Analysis of Objectives	33
2.6	Observations	39
3	FULFILMENT OF THE OBJECTIVES AND THE IMPACT OF SWEDISH ASSISTANCE	40
3.1	Primary Education	40
3.1.1	Equity	40
3.1.2	Relevance	46
3.1.3	Quality	47
3.1.4	Swedish Assistance	48
3.1.5	Observations	50
3.2	Secondary Education	52
3.2.1	Equity	52
3.2.2	Relevance	55
3.2.3	Quality	56
3.2.4	Swedish Assistance	58
3.2.5	Observations	59
3.3	Technical and Vocational Training	61
3.3.1	General	61
3.3.2	Swedish Assistance	63
3.3.3	Observations	65

3.4	Teacher Training	67
3.4.1	General	67
3.4.2	Swedish Assistance	69
3.4.3	Observations	70
3.5	University Education and Research	71
3.5.1	General	71
3.5.2	Swedish Assistance	75
3.5.3	Observations	76
3.6	Non-formal Education	77
3.6.1	General	77
3.6.2	The Ministry of Education	79
3.6.3	Libraries, Museums and the National Archives	79
3.6.4	Community Service	81
3.6.5	Swedish Assistance	82
3.6.6	Observations	84
4	SWEDISH ASSISTANCE TO THE EDUCATION SECTOR AND THE OBJECTIVES OF SWEDISH DEVELOPMENT COOPERATION	86
4.1	General	86
4.2	Swedish Assistance to the Education Sector	87
4.2.1	The Impact in Financial Terms	87
4.2.2	The Impact of Technical Assistance	88
4.2.3	The Impact on Educational Development	90
4.2.4	Fulfilment of the Objectives of Swedish Development Cooperation	91
4.2.5	Concluding Remarks	92
5	SUGGESTED AREAS OF COOPERATION BETWEEN BOTSWANA AND SWEDEN IN THE FIELD OF EDUCATION	94
Annex 1	Sectoral agreements - The case of Botswana	
Annex 2 a	Agreements on Swedish Assistance within the field of education 1966/67 - 1980/81.	
Annex 2 b-c	Swedish Assistance in figures.	
Annex 3	Terms of reference.	
	References.	



Sources: Republic of Botswana, 1990 a

LIST OF TABLES AND FIGURESCHAPTER 1

Figure 1.1	Development of Total Gross Domestic Product 1966-1978/79
Figure 1.2	Industrial origin of the GDP 1966-1984/85 (Actual and projected in per cent of GDP at current market prices)
Table 1.1	Sector origin of GDP 1966-1984/85 (in per cent of GDP at current market prices)
Table 1.2	Botswana's total expenditure, domestic revenue and foreign aid 1976/77-1980/81 (million Pula at current prices)
Table 1.3	Formal sector employment 1973 and 1978 and estimated employment 1984/85. Republic of Botswana
Figure 1.3	Structure of the Educational System (1979)
Table 1.4	Growth of total enrolments by level of education

CHAPTER 3

Table 3.1	Primary School Enrolments 1972-1980 (round figures)
Table 3.2	Distribution of Standard 1 enrolments by district in relation to distribution of the total population 1971 and 1981
Table 3.3	Average number of pupils per classroom by district, 1974 and 1980
Table 3.4	The Primary School Classroom Shortage 1974-1979 (absolute numbers)
Table 3.5	Classroom deficits 1974, 1977 and 1980 (absolute numbers and as percentage of total needs)
Table 3.6	Percentage unqualified primary school teachers by district 1974 and 1980
Table 3.7	Percentages of Cambridge Overseas School Certificate School Candidates Awarded Division I and II
Table 3.8	Total enrolments in vocational schools 1976/76-1980/81
Table 3.9	Actual and projected numbers of post-secondary students in Botswana and abroad 1970/71-1984/85

CHAPTER 4

Table 4.1	Swedish financial assistance as percentage of total development expenditure, by subsector 1974/75-1979/80
Table 4.2	Swedish technical assistance within the field of education 1972-80 (number of individuals by subsector)
Table 4.3	Swedish technical assistance 1972-80; manmonths per annum

ANNEX 2

- Annex 2b Botswana Education Sector - Projects and Programmes supported by SIDA since 1966 (in million SKr)
- Annex 2c Botswana Education Sector - Approximate Expenditure in thousands Pula/Rand during the Swedish financial years 1973/74-1980/81
- Annex 2d Boipelele Education Project - Costs during the Botswana Financial Years 1976/77-1980/81 (ISRD, SIDA, Botswana Government and other donors) in Pula.
- Annex 2e Development expenditures - Botswana financial years (Pula/Rand)

ABBREVIATIONS

BRIDEC	Brigades Development Centre
CSO	Central Statistics Office, Gaborone
GDP	Gross Domestic Product
GNP	Gross National Product
NCE	The National Commission on Education 1977
NDP V	The National Development Plan 1979-85
NCVT	National College of Vocational Training
TTC	Primary Teachers Training College
NIR	The National Institute of Development and Cultural Research
UCB	University College of Botswana

# FOREWORD

Swedish assistance to education and training in Botswana dates back to the time of independence. It was rather modest up to 1974, when, as a result of a SIDA sector study, it was increased substantially. In 1974 a new and very flexible sectoral agreement was introduced which was not confined to subsectors or to specific projects.

The sectoral agreement, by the time it was introduced, represented a new feature of Swedish development co-operation. Similar agreements were later introduced in other sectors and in other countries.

The purpose of the present study is twofold. It has been initiated by SIDA with a view to evaluating the impact of Swedish assistance within the field of education and at the same time to review the procedures that were introduced under the sectoral agreements.

It is a broadly based review of trends of educational policies and their implementation. The period of study is 1974-80. The emphasis is on trends rather than on absolute numbers. Hence, it does not go into details of specific projects or programmes that have received Swedish assistance. Rather it seeks to place Swedish assistance in the context of overall developments of the education sector. Readers interested in details of specific programmes are referred to the many specialized evaluation reports undertaken during the period of study (See references.)

The study was undertaken by a SIDA-team in November 1981. It would not have been possible without the wholehearted support of the Botswana authorities concerned and we would like to thank all persons involved for their cooperation and support.



We would in particular like to thank Dr U Kann and Mr G Mokgwati of the Planning Unit of the Ministry of Education, Mr C Sharp and Mr D Oke of the Planning Unit of the Ministry of Local Government and Lands.

We would also like to thank members of the SIDA staff who have in various ways contributed to the study. In particular we would like to mention Mr J Rylander and Mrs S Hermansson at the SIDA-office in Gaborone and Mrs H Dyrssen, Mrs S Halvarsson, Mrs I Nerman and Mrs K Björkman at SIDA Headquarters in Stockholm.

Stockholm, March 1982

    
/ Jan-Olof Agrell / Ingemar Fägerlind / Ingemar Gustafsson /

## SUMMARY

The Botswana society is in a process of rapid change. The economy has grown at 15-20 per cent per annum during the 1970's. Revenue from the mining sector has become increasingly important in comparison with income from arable agriculture and livestock.

Migration to the towns has added to or even replaced to some people the old pattern of seasonal migration between the village, the lands areas and the cattle post.

There are tendencies of increasing income disparities between the urban and the rural areas at the same time as consumer goods and a new and modern culture is penetrating the rural areas.

Despite this very rapid transformation of the conditions of life, the political situation has been remarkably stable. This has allowed for systematic efforts to plan for development, not least in the field of education.

Great strain has been put on the education system since independence. The training of skilled manpower has been lagging behind the needs of a growing economy. The need for skilled manpower has been growing steadily and so have people's expectations on education as a route to formal employment in the modern sector.

The starting point was bleak with only six post-secondary students available at the time of independence. Government and the District Councils as the main employers, have required not only technicians and engineers but also planners, administrators, nurses and teachers.

But, the Botswana Government is also committed to fostering democracy which implies communication to

and with the people. Hence non-formal education programmes including literacy have become increasingly important.

This report seeks to analyse how the Government of Botswana has responded to these diverse needs for education. It is a report on priorities between conflicting objectives and on trends and strategies rather than on absolute numbers.

Up to the middle of the 1970's the emphasis was on manpower development for the modern sector. Priority was given to secondary and higher education and to vocational training. Primary education was seen as ancilliary to the higher levels of education and was expected to grow at a modest rate. Quality rather than quantity was emphasized. Little attention was paid to non-formal education programmes for adults.

The National Commission on Education (the Republic of Botswana, 1977) suggested that nine years of basic education should be provided to all children and be given highest priority. More attention should be paid to non-formal education activities for adults.

Gradually since 1975, there has been a shift of emphasis towards basic education for children and adults in Botswana. In 1980 Botswana was able to offer seven years of education to almost all children and a National Literacy Programme had been launched. During the 1980's there will be a new focus on the lower levels of secondary education so as to eventually provide nine years of basic education to all. There is also likely to be an expansion of the National Literacy Programme, the first in the history of Botswana.

The National Commission, however, did not only discuss access to education. Equally important were its recommendations to improve quality and to revise curricula towards "the realities of life". Little has been done in this direction during the 1970's.

Implementation of the strategy of the Commission will require concerted action at all levels of the education system, not only to redirect what is being taught and how, but also to control costs.

Swedish assistance has followed this redirection of policies in Botswana. Primary education, and during recent years, non-formal education programmes, have replaced secondary education as priority number one.

It has adhered closely to the general objectives of Swedish development cooperation with Botswana, which has been built on a basic needs strategy. There has been close supervision and control of the programmes and the production targets set, have largely been met. For example, about 1 350 classrooms have been constructed in the rural areas out of a total stock of 3 200 in 1979. This means about 61 000 new places for a school population that had grown to 160 000 in 1979. Nine secondary schools have been partly financed by Sweden. One out of three Teacher Training Colleges as well as the only Centre for Vocational Training in the country, prior to 1980, have also been financed under Swedish development cooperation.

Swedish assistance has had its biggest impact in that it has helped to widen access to basic education for children and during the late 1970's also for adults, particularly in the rural areas.

Funds have been provided for facilities such as classrooms, teachers quarters and branch libraries in the rural areas to the extent of 35 per cent of the total development expenditure on education in Botswana during the 1970's. It has also facilitated the localization of staff by financing Botswana students abroad.

Efforts to support training of middle level manpower for the modern sector and for the rural areas have also been made, but they have proved insufficient.

The technical assistance has been very modest in relation to the needs. It reflects the general emphasis on quantitative expansion and the related needs for facilities during the 1970's.

It is suggested that Swedish assistance during the 1980's should be redirected to support qualitative improvements both as regards the quality of teaching and the relevance of education.

Also, more attention should be paid to the needs of skilled manpower, particularly in the rural areas, which have arisen partly as a result of Swedish assistance to rural development programmes including provision of primary schools in these areas.

Resources have been provided under very flexible, so called sector agreements. They have allowed for redistribution of resources between projects and programmes. These procedures have been used fairly rarely in Botswana, Swedish assistance having been concentrated to a few major programmes for construction of facilities.

However, the openness and flexibility of Swedish assistance, which is reflected in the sectoral agreements, has been greatly appreciated in Botswana. The merits and demerits of sectoral agreements in relation to conventional project agreements are discussed in this report. It suggests ways in which reporting and feed-back to SIDA and to the general public can be improved. This evaluation report is a step in that direction.

## 1. BOTSWANA - A DEVELOPING SOCIETY

1.1 Economic Development

When Botswana gained independence in 1966 it was one of the poorest countries in Africa and the prospects of rapid progress appeared to be slight.

Its estimated population of 500 000 was almost entirely dependent upon cattle rearing, subsistence production of sorghum, maize millet and beans and upon remittances from migrant workers in the South African mines.

In 1981 the population was 936 000 according to the 1981 National Census (Republic of Botswana 1981 b). The economic growth has been remarkable since independence with an average annual growth of GDP of 15 per cent at the end of the 1960's and more than 20 per cent during the best years of the 1970's. As can be seen from figure 1.1 the total GDP was five times bigger in 1978/79 than at the time of independence.

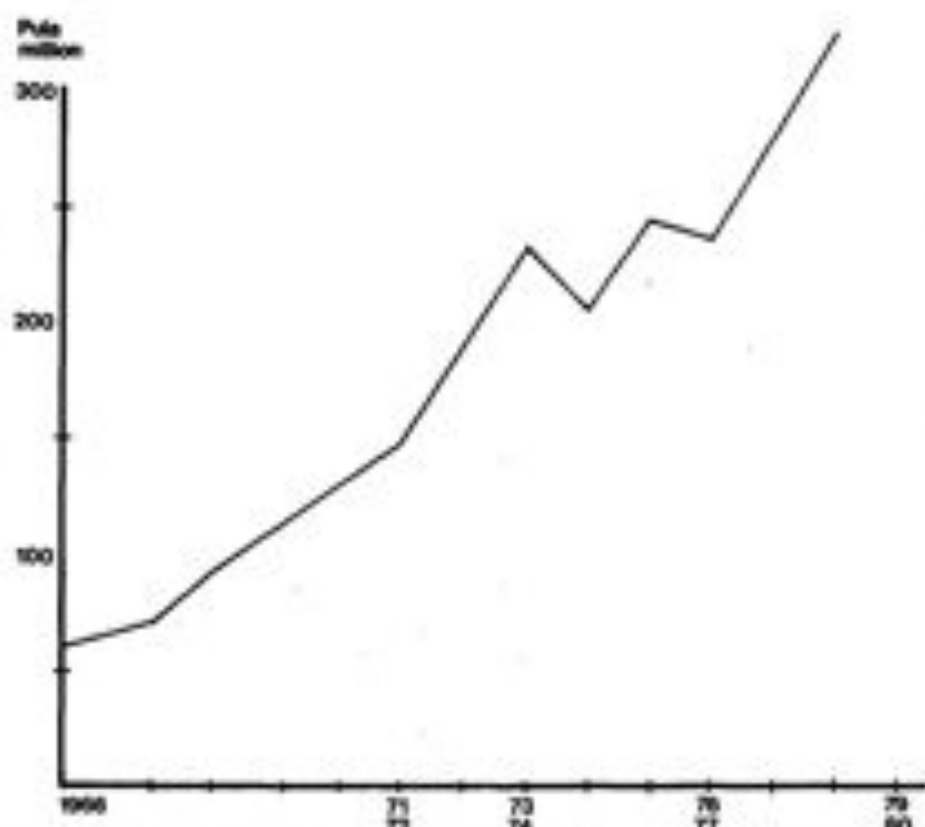


Figure 1.1. Development of Total Gross Domestic Product 1966 - 1978/79 (constant 1974/75 prices)

Sources: Colclough C. and McCarthy S., 1980

Despite rapid growth also in the field of agriculture, particularly livestock and meat production, the relative importance of agriculture and forestry diminished during the 1970's and is expected to do so during the first part of the 1980's (Republic of Botswana 1980 a).

The mining sector, dominated by copper-nickel and diamond production, increased rapidly during the 1970's and will, during the 1980's increase its share of the GDP.

The relative importance of most other sectors has remained constant over time except for wholesale and retail traders, restaurants and hotels that increased their importance during the 1970's. The service sector expanded after independence with the establishment of the new capital of Gaborone.

The composition of GDP by subsector is illustrated by table 1.1 and figure 1.2 below.

Table 1.1 Sector origin of GDP 1966-1984/85 (in per cent of GDP at current market prices)

	1966	67/68	68/69	71/72	73/74	74/75	75/76	76/77	78/79	79/80	Forecast 84/85
Agriculture, forestry, hunting, fishing	39	42	45	33	35	29	23	24	16	13	11
Mining, quarrying & prospecting	-	2	-	11	9	7	12	14	23	32	41
Manufacturing	8	8	5	5	6	7	8	7	8	4	4
Water and electricity	1	1	1	1	2	3	4	4	2	3	3
Building and construction	6	5	4	10	11	10	7	6	5	9	4
Wholesale and retail trade, restaurants and hotels	18	11	10	10	15	20	20	19	20	17	15
Transport, storage and communication	8	6	7	4	3	3	3	1	3	2	2
Banking, insurance, real estate	7	7	7	5	7	7	6	8	9	10	9
General Government	13	17	19	11	9	12	13	16	15	13	14
Other services	-	2	3	3	3	4	5	-	-	-	-
GDP at current market prices	36,3	43,3	51,2	103,8	197,5	213,1	276,2	299,2	-	-	-
GDP at constant 1974/75 prices	63,0	73,0	84,0	148,0	227,0	213,0	245,0	235,0	330,0		
Average annual rate of growth	6,8	10,3	15,1	20,8	23,8	-4,2	15,0	-4,0	-	-	-

Sources: 1966-76/77 Galehouse & McCarthy, 1980 p.58  
 1978/79: Republic of Botswana 1980c  
 1979/80 and 1984/85: Republic of Botswana 1980a



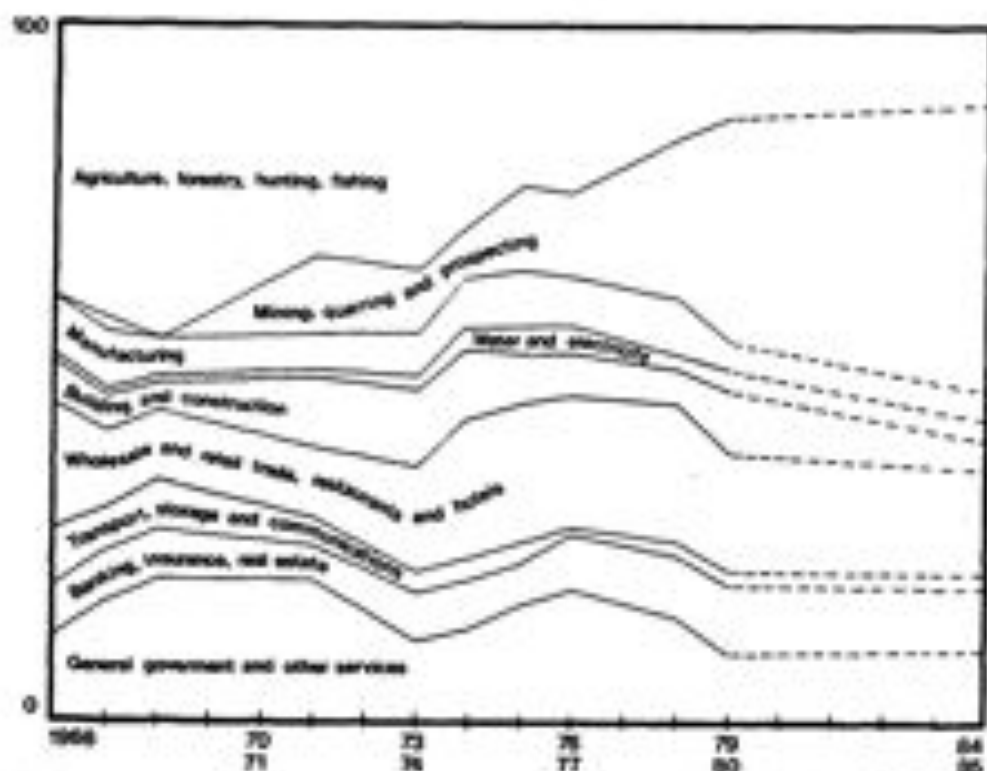


Figure 1.2. Industrial Origin of the GDP, 1966-1984/85 (Actual and projected in per cent of GDP at current market prices).

From independence to the beginning of the 1970's the cattle industry catered for the main parts of the export. During the 1970's the copper-nickel and diamond export increased to more than two-third of the total export. Beef is to a large extent exported to the Common Market countries but also to South Africa. Copper-nickel matter is mainly exported to the United States and diamonds are marketed in England. In 1979 only eight per cent of Botswana's export went to South Africa compared to 38 percent in 1974. (Republic of Botswana 1980 b).

However, most imports come from South Africa. Largely because of a custom agreement, almost all capital and consumer goods come from that country with 88 per cent of total imports in 1979 compared to 75 per cent in 1974 (Odén, 1981 p.7). Mainly because of investment spendings there has been an increase in imports during the 1970's always exceeding the exports.



Financial aid has been a crucial supplement to the Government's budgetary resources. From independence until 1972/73 half of public expenditure was financed from foreign aid (Colclough & McCarthy, 1980 p.99). Since that date aid has become proportionally less important and by 1980/81 only 15 per cent of total Government expenditures were financed by foreign aid. Until 1970 Britain was the main donor providing over 80 per cent of foreign development grants and loans. From 1971 large amounts of aid were received from other countries. The construction of the mining town at Selebi-Phikwe absorbed over 50 million pula and was provided mainly by aid and loans from the United States, Canada and the World Bank. By 1974 Sweden had become the main bilateral donor and aid continued to increase also from other Scandinavian countries. Only Britain did not increase its aid. As seen from table 2 aid is mainly there to balance the budget and some years when there were higher increases in the prices of diamonds than anticipated the budget had a considerable surplus. This is illustrated in table 1.2 below.

Table 1.2 Botswana's total expenditure, domestic revenue and foreign aid 1976/77 - 1980/81 (million Pula at current prices)

Year	Total Expenditure	Domestic Revenue	Aid	Balance
1976/77	108,1	70,9	35,5	- 1,7
1977/78	122,9	100,2	23,7	+ 1,9
1978/79	168,0	135,8	42,5	+ 11,3
1979/80	228,0	212,2	49,0	+ 33,2
1980/81	306,5	264,2	49,9	- 12,4

Source: Botswana's statement of accounts to the IMF,  
February 1981  
Odeh (1981, p. 50)

### 1.1.1 Employment

Only 15 per cent of the labour force have domestic formal sector employment. However, formal employment has grown rapidly with an average of about eight per cent between 1973 and 1978 and according to the plans

this will continue. The mining sector, that according to the plans will contribute a substantial part of the Gross National Product, only employed seven per cent of the formal sector workers and that percentage will be about the same in 1984/85. Of 22 000 new jobs provided between 1973 and 1978 half the number was created within the Government. 25 per cent of all jobs within the Government were created in the educational sector. (Table 1.3.)

Table 1.3 Formal sector employment 1973 and 1978 and estimated employment 1984/85

	1974	1978	1984/85
Agriculture	4 625	5 000	4 300
Mining and Quarrying	3 525	4 700	8 650
Manufacturing	2 850	4 500	8 480
Electricity and Water	325	1 200	1 990
Construction	7 225	9 300	8 400
Wholesale and Retail Trade, Restaurants and Hotels	8 600	11 300	20 200
Transport and Communications	1 350	2 100	3 750
Finance and Business Services	3 275	4 800	8 850
Education (private and Government)	3 350	6 300	-
Central Government	5 275	8 100	32 340
Central Government (Industrial class)	4 800	7 900	-
Local Government	1 750	4 100	-
TOTAL	46 950	69 200	116 960

Source: Republic of Botswana, 1980a

Approximately one third of Botswana's male labour force worked in South Africa in 1979 (Colclough & McCarthy, 1980 p.171). Up to half of them are working in the mines. However, the South African policy is to gradually reduce dependence upon foreign mine labour and there are indications that recruitment of Botswana mine workers according to the South African plans would cease entirely at the latest by 1985. "Nothing could be more damaging for the poorest Botswana than cessation of mine recruitment". (Egner & Klausen, 1980 p.31.)

In spite of a growing formal sector employment and a high percentage of the male workforce still in South African mines, agriculture provides the fundamental part of the livelihood of the majority of Botswana families. Even those employed in the formal sector own cattle. However, the distribution of cattle is very uneven. The Rural Income Distribution Survey of

1974/75 showed that non-cattle-owning households comprise about 45 per cent of all rural households at the same time as 15 per cent own three-quarters of the national herd (Republic of Botswana 1976 b).

Agricultural surveys give evidence that income from arable agriculture is low among non-cattle owners. One reason is that oxen are used for ploughing and households without cattle have to hire a ploughing team.

Though the distribution and use of cattle traditionally is much more complex than is reflected in these figures, it does not alter the overall picture of uneven distribution of ownership and use of cattle.

There is a growing awareness that the agricultural progress benefits mostly those who own cattle and that the gap between rich and poor is widening. In their study of poverty in Botswana Egner & Klausen (1980 p.2) write: "liberty in some cases resembled licence, and equality of opportunity had more reality for the rich, the influential and the educated than for the poor".

Egner & Klausen continues: "Apart from the fact that national survival arouses stronger emotions than the plight of the poor, it is a pity that large scale strategic projects for heavy infrastructure and ordering sophisticated equipment overseas are so much easier to implement than programmes for eradicating poverty by redistributing income and creating new work places".

Clear-cut policies for reducing the gap between rich and poor is an important task for the politicians in the 1980's. Employment and rural development are the main themes of the National Development Plan 1979-85. Policy decisions in the educational field will certainly play an important role when these problems are dealt with. For example in 1978 half the number of Junior Certificate holders found no formal employment within a year of leaving school. This problem is likely to snowball in the 1980's.

1.2 Political Development

Traditionally the chiefs had wide executive and judicial power. However, the Kgotla, where the tribe was gathered, was important for the decisions of the chiefs who were not supposed to be absolute dictators. Before independence there appeared a power struggle between the educated leaders of the Botswana Democratic Party (BDP) and the chiefs, who had been given constitutional status by the creation of a separate chamber, the House of Chiefs. The growing educated elite was successful in the first elections held in 1965 and the BDP won 28 out of 31 seats and Seretse Khama became Prime Minister. The BDP has remained the dominant party since then and after the 1979 election it holds 29 of the 32 seats. At independence the Prime Minister, now Sir Seretse Khama, became the first president which he remained until his death in 1980. The new president is Dr Quett Masire who formerly served as the vice-president. In addition to the BDP there are three small parties the Botswana People's Party (BPP), the Botswana National Front (BNF) and the Botswana Independence Party of which the first two hold seats in the National Assembly. (Kann, 1980 p.64.)

Compared to some other neighbouring countries Botswana has had a stable and peaceful political development with no coups or violent liberation struggle. There are a few examples of violence such as the strike in the Selebe-Pikwe Mine in 1975 which turned into a riot and the demonstrations at the University College of Botswana in 1979 when the police entered the campus.

Generally speaking, Botswana is an open society where debate and criticism is accepted even if relatively little can be found in Radio Botswana or the Daily News, the only daily newspaper.

The fact that only 24 per cent participated in the general elections in 1974 was by some groups interpreted as a measure of apathy in face of intractable poverty (Parson, 1976). In 1979, however, 58 per cent voted in the general elections. In spite of the dominance of the BDP, the Government is deeply committed to multi-party democracy.

#### 1.2.1 Relations to South Africa

Botswana rejects political dialogue with South Africa except on the basis of equal rights for all, regardless of race. The country tried to commit itself toward non-violent solutions of Southern Africa's problems and is not permitting guerilla bases on its territory. With the political changes in Zimbabwe and Mozambique transports and communications are easier to solve but still Botswana is dependent on the South African railway system. Telecommunications with Europe are now independent of the South African telephone system when they are transmitted from Gaborone via satellite. In 1983 the new airport will be tied to the international network. There are also plans from 1983 to produce electricity for the country from coal in a new power station at Moropale. However, from 1981/82 Gaborone and Jwaneng will get their electricity from South Africa. Economically, in spite of its own monetary system, Botswana is becoming more tied to South Africa when companies from this country are establishing their business.

Botswana has been in the forefront in the foundation of the Southern Africa Development Coordination Committee (SADCC) where Angola, Botswana, Lesotho, Malawi, Mozambique, Swaziland, Tanzania, Zambia and Zimbabwe are members. The goal of the committee is



cooperation between the states in order to reduce dependence on South Africa. However, when it comes to economic realities a certain amount of pragmatism can be found in Botswana's relations to South Africa.

### 1.3 Cultural and Ideological Development

Like many other developing societies, the concurrent existence of a traditional and a modern culture is prevalent in Botswana.

Almost everybody working in the modern sector has close ties to the agrarian sector. Life in the new cities is very different from life in the village and the population living in the cities is growing at a fast rate.

Even if the political role of the chiefs has changed after independence, they have high prestige and social status. Traditionally the social ranking of the tribe was based on the individuals relationship with the chief (Kann, 1981 p.65). Wealth was also related to rank. Sex and age were also important factors for status. The man was the head of the family and old people were respected.

As many Botswana men are absent from the village for longer periods for example as migrant workers, women are heading the family and have to take great responsibilities both for cattle and for arable land production. There are indications that this has affected the traditional pattern and division of work within the family. It is likely to explain why there is high participation of females both in primary education and in the literacy programme.

Formal education is prestigious and salary scales within Government are closely related to formal education qualifications. This means for example that young persons with formal education, despite their low age, acquire a high prestige and status which

causes problems when younger persons are teaching adults in the literacy programme.

One important cultural phenomenon is the seasonal migration of the population. In addition to keeping a home in the village it is common that families maintain a house at the lands, where they grow crops and another at the cattle-post, where the grazing areas are situated. The lands and the cattle-posts can be situated far away from each other and also at a long distance from the village. Nowadays it is not uncommon that children are left alone or with some relatives when the ploughing season begins in order to be able to go to school. Other children follow their parents and have no possibility to attend school.

Traditionally boys and girls were introduced to adulthood at the age of 16-20. Training in hardship, discipline and self-control as well as songs, customs and the role of men and women were important features of this kind of education. This was linked with the organising of regiments based on sex and age.

Initiation still takes place but little is known about to what extent it is still being practiced. Christianity is the dominant religion in Botswana but traditional beliefs and customs are practised at the same time.

#### 1.3.1 Foreign influence

The fact that Botswana has been a British Protectorate has been of profound importance from a cultural point of view. English and Setswana are the two official languages.

Administrative procedures and practices are also based on the British tradition.

The British educational system has also been very influential for the development of education at primary, secondary and tertiary levels. The ultimate goal of secondary education is to pass the Cambridge Overseas School Certificate and hence ultimately to maintain a standard acceptable at British universities (where entrance is at A-level).

After independence a wider range of nationalities has been employed in important positions within Government which has had an influence on planning and planning procedures. Since these are not value free it has added further to the diversification and contradictions of Botswana culture to day.

#### 1.4 Trends of Educational Policies

How have the socioeconomic developments described above been reflected in educational policies? Chapter 3 will deal with the actual outcome in relation to the targets set.

This section will seek to analyse why these targets have been set and why certain objectives have been given priority over others.

The National Commission on Education, 1977 (NCE) represents a turning point in that it suggests a change of priorities between different objectives as well as a change of strategy to reach these objectives (Republic of Botswana 1977 d).

##### 1.4.1 The manpower approach

National Development Plans prior to the Commission emphasized the needs of skilled manpower (in the modern sector). Therefore, priority was given to secondary and to higher education. Courses and numbers



of students in these courses were to be closely related to the needs of the modern sector.

Primary education was seen as ancilliary to the higher levels of education. Funds were to be directed towards maintaining quality at the expense of quantity.

This, so called manpower approach to educational planning was predominant in many African countries in the late 1960's and the beginning of the 1970's and Botswana is no exception.

It should have been particularly attractive in Botswana in view of the very limited number of people with higher education at the time of independence and the increasing shortage which resulted from the rapid growth of the economy after independence. For example, there were 44 students at post-secondary level in 1965 (Kann 1980, p. 18).

The First World Bank Loan on Education signed in 1976 should be seen in this light. It has a heavy bias towards secondary education.

#### 1.4.2 Basic needs approach

The NCE suggests a shift of emphasis towards primary and adult education. It introduces equality as the main theme of educational planning in Botswana. Its recommendations emanate from a basic needs strategy. Development is seen as a process, the main purpose of which is to satisfy basic needs for education, health, food and employment.

Hence, access to basic education, i.e. primary and adult education should be widened as quickly as possible. Quantity is also quality because it raises the general level of education of the people. Also, the NCE argues, manpower needs at higher levels will not be met unless priority is given to the basic levels of education. Development of manpower

is first and foremost to raise the level of education on a broad front, rather than trying to educate only the few at the highest levels.

Some comments may be made in relation to this.

Actual developments of education in Botswana (cf chapter 3) have not adhered strictly to any of the two strategies.

For example, primary school enrolments show a steady increase from 1971 onwards, having remained constant between 1968 and 1970.

Already at the time of the NCE numbers of junior school students were beyond the needs of the modern sector, at least if the private secondary schools were included. The shortage of skilled manpower remained, due to the fact that too few students had the necessary qualifications, particularly in Mathematics and Science.

Some possible explanations for this imbalance will be indicated here.

#### 1.4.3 The implications of a traditional and a modern sector

As a result of the development of the modern sector and the return of migrant workers from South Africa the urban culture has been spreading quickly into the rural areas.

This fact together with widening income disparities between the modern economy and a more traditional way of living results in an increasing demand for more and higher education. As long as paper qualifications are the only keys to formal employment this situation tends to lead to an ever increasing demand for higher paper qualifications, characterised by Dore (1976) as the diploma disease.

There is no reason to believe that Botswana is an exception, particularly since 50 per cent of all new jobs have been created within Government where formal paper qualifications are a necessary condition for employment.

Yet, it would be wrong to state that there exists a qualification spiral in Botswana as a result of competition for the attractive jobs.

So far, the main problem has been that too few students have acquired the minimum qualifications required, particularly in science based occupations.

Hence, there is growing unemployment among primary and secondary school leavers at the same time as there is a desperate shortage of skilled manpower particularly in science based professions. Teaching has a low status in comparison with other options that are available to qualified science students. There is an almost desperate shortage of Botswana science students.

The strategy as recommended by the Commission was to focus on the quality of the basic levels of education at the same time as basic education for reasons of equality should be made available to all. This is the dilemma of educational planning at present. The question is how to combine, in the short term, a rapid expansion of a comprehensive system offering nine years of education with measures to improve standards of the few who have to compete internationally at institutions outside the country?

Again, these problems can not be seen in isolation from the rest of the society, in particular Botswana's relations to the outside world.

For example one could as well have expected a continuation of the original manpower approach which would point towards a more selective, perhaps even a two tier system; one for those who work in the urban areas and one for the great majority who have to make their living in the rural areas.

The NCE recommended against this. No doubt the closeness to South Africa has influenced its considerations. Such a strategy could easily develop into a two tier system with connotations of Bantu education which Botswana is very sensitive against. For the same reason one would have expected a strong emphasis on Setswana culture and national identity in educational planning. Though there is political pressure for national unity and national identity this seems to have no immediate implications for educational planning, for example as regards production of Setswana-material, indigenous history books and research work into the Tswana culture at university level.

#### 1.4.4 The implications of foreign influence

Needless to say, Botswana's dependence on the British educational tradition is profound and the Cambridge Examination is the yardstick of the quality of education.

A fact less seldom discussed is the new role that this yardstick has got through the new technologies that follow with foreign investments, notably in the mining sector. Botswana needs highly skilled and specialized manpower for this. It has to meet with international education standards over which it has no control. Such specialized training is offered outside the country where Botswana students have to compete for places. This makes it necessary to maintain international standards and to use an examination that is accepted internationally. This is a constraint on educational planning that can be eased only in a long term perspective if at all.

It is important to note, however, that the remarkably stable political situation has allowed for continuity of the educational planning which is rare to find elsewhere. This is evidenced among other things by the systematic approach to planning in general in Botswana and in particular the coherent policy laid down as a result of the Commission.

On the other hand there has been relatively little pressure for radical change in the field of education which perhaps could explain why curriculum as a continuous process is a very recent phenomenon.

#### 1.4.5 The concept of equality

Equality, as mentioned earlier, has now come into the forefront of educational planning.

It is common to define equality in either of the following ways: equal access to education; equal participation in education by social class, sex and residential area, equity as regards educational achievements and finally, equality in the sense of redistribution of wealth through education. The latter definition implies *inter alia* that education should promote social mobility so that students from the lower strata get access to better paid jobs and jobs of a higher status through education. In addition to this there is the question of equality between generations for example whether adult education should be given priority over primary education.

There is not enough data in Botswana as yet to analyse the effects of educational reform in relation to all these aspects of equality.

It seems, however, that efforts so far have focused on access to education.



## 1.5.1 Primary Education

The primary school cycle starts at the age of six, comprises seven years and leads up to the Primary School Leaving Examination. As seen from Table 1.4, the total enrolment of primary school students has increased from 71 500 at the time of independence in 1965 to 170 800 in 1980. Due to the attendance of over aged students the number of students attending primary school is approaching 100 per cent. A rough estimate of the gross enrolment ratio indicates that the present number of students enrolled in primary schools constitutes 80-85 per cent of the 6 - 13-year-olds.

Table 1.4 Growth of total enrolments by level of education

	Total Primary	Total Secondary Enrolment		University Enrolment (Botswana Campus)**
		Government and aided	Private *	Including Foreign Students
1966	71,546	1,531		-
1967	71,577	1,854		-
1968	78,963	2,299		-
1969	82,214	3,099		-
1970	83,002	3,905		-
1971	78,442	4,740		42
1972	81,662	5,564		70
1973	95,511	6,152	2,611	132
1974	103,711	7,055	3,253	201
1975	116,293	8,434	3,664	289
1976	125,588	9,558	4,433	465
1977	137,290	10,219	5,506	523
1978	145,459	11,136	4,905	623
1979	156,890	12,175	4,561	764
1980	171,914	13,424	4,901	865
1981				926

\* No information available 1966-1972.

\*\* Refers to the University academic years ending in the years shown.



In principle, all students are promoted to the next class, as repetition has been abolished in primary schools except in Standard 7. As a result of the NCE a test will be introduced in 1982 after Standard 4, which will imply repetition of Standard 4.

The proportion of girls has traditionally been higher than that of boys: 55 per cent girls and 45 per cent boys. The proportion has remained constant 1976-80. In addition to this there is a higher drop-out for boys than for girls.

Setswana is the medium of instruction during the first three years, after which English becomes the official medium of instruction.

#### 1.5.2 Secondary Education

The secondary school cycle builds on the primary and is divided into a three-year Junior Secondary and a two-year Senior Secondary level. In 1980, 43 per cent of the Standard 7 leavers proceeded to the Junior Secondary level. 28 per cent were enrolled in Government and aided and 15 per cent were enrolled in private secondary schools.

At the end of the Junior Secondary school there is a national examination, the Junior Certificate Examination, compiled by the Examinations Council of Botswana. At the Junior Secondary level there are both private and government schools. The private ones are of poor quality. Approximately 50 per cent of the Form 3 leavers continue to the Senior Secondary school at the end of which the Cambridge Overseas School Certificate is taken. They are all recruited from government and aided secondary schools. Numbers proceeding from private secondary schools are negligible.



Due to the distances in Botswana, boarding is very common in secondary schools. In 1981 the proportion of day and boarding students was even (50/50) in Government and aided schools. The private secondary schools are all day schools.

#### 1.5.3 Vocational Training

As seen from Figure 1.3 there are some vocationally oriented training opportunities at the post-primary level.

The brigade movement started in 1965 when the first brigade was set up at Swaneng Hill. Brigades are small production units which combine productive activities with training on the job.

At present the training usually has a length of three years. In July 1981 there were 80 brigades at 20 brigade-centers, 935 employed and 676 trainees. During the last years the trend in the brigades has been to emphasize production at the expense of training.

The National Health Institute has a capacity of 280 students. The intake of students at the Botswana Agricultural College is a little more than 100 students a year, while the craft-training at the Botswana Polytechnic takes almost 200 students.

The Primary Teacher Training Colleges in Francistown, Serowe and Lobatse all admit approximately 150 students per year.

#### 1.5.4 Tertiary Education

The selection of the students for the university and other tertiary level education is based on the results from the Cambridge Overseas School Examination. Table 1.4 shows the development of the number of students at the University College of Botswana which

in 1981 had faculties of Education, Economics and Social Studies, Humanities and Science. Faculties of Law and Agriculture are being planned.

At the tertiary level training is also given at institutions outside the university, such as training of nurses at the National Health Institute, Diploma Courses at the Botswana Agricultural College and technicians at the Botswana Polytechnic.

Students in other specialized fields at diploma and degree level are being sent abroad (approximately 200 a year).

#### 1.5.5 Non-Formal Education

The Department of Non-Formal Education, into which the Botswana Extension College has been incorporated, focuses on correspondence courses and on literacy programmes. About 3 000 students study by correspondence for the Junior Certificate. The National Literacy Programme had approximately 30 000 learners in 1981 and is aiming at eradicating illiteracy in Botswana by 1985. The training of adult educators outside the Literacy programme is carried out by the Institute of Adult Education which is part of the University. The Institute also carries out evaluation and research within its field of responsibility.

#### 1.5.6 Research

The National Institute of Cultural and Development Research forms part of the University and documents and undertakes research, and acts as a clearing house for outside researchers.

The faculties at the University has minor research projects.

The Ministry of Agriculture has a Rural Sociological Unit for evaluation and research.

## 2 OBJECTIVES OF AND STRATEGIES FOR THE DEVELOPMENT OF THE EDUCATION SECTOR

### 2.1 Introduction

In this chapter an attempt is made to describe in further detail how objectives and strategies have developed over time.

The analysis is based on National Development Plans, the Report of the National Commission on Education, The White Paper on Education and Swedish Project Memoranda for assistance to the education sector in Botswana.

It provides a summary of objectives as they appear in official plan documents. No attempt has been made to analyse the so called hidden objectives of the curriculum.

### 2.2 National Development Plans 1970-75, 1973-78 and 1976-81

The first two plan documents mentioned above are not very explicit in strategy or goal formulations. The following interpretation has been made.

#### 2.2.1 1970-75 Development Plan

The ultimate goal should be to reach self-sufficiency of manpower in 25 years time. Planning should be closely related to manpower projections. Secondary and higher education should be expanded. Immediate concern is with technical and vocational training. At primary school level, funds should be directed towards improving standards rather than spent on increasing quantity. Facilities should be improved through self-help schemes. Universal primary education should be the ultimate goal but no time schedule is fixed.

## 2.2.2 1975-78 Development Plan

Planning should focus on manpower self-sufficiency. Sufficient manpower should be trained so as to allow for localization of all except some senior posts by 1988 (15 years time).

Form 1 intakes should be widened in order to meet these needs. Output after 1988 should be limited to meet the needs for replacements and the needs resulting from the growth of the labour market. The content of secondary education should be diversified as a response to the Government's strategy for rural development.

Universal primary education should be reached in 20 years time. Priority at this level should be given to curriculum development, teacher training and the provision of classrooms.

A policy for non-formal education should be developed during the plan period.

## 2.2.3 1976-81 Development Plan

The principles of this Plan are as follows:

Resources should be used in pursuit of the national objectives of economic growth, social justice, economic independence and sustained development.

Primary education should be made available to all. The formal education system should be supported by non-formal education programmes to meet specific needs.

Post-primary education is exclusive but the Government will ensure a fair distribution of facilities and ensure that a fair selection is made.

The content of education should reflect the various roles that individuals play in society (at home, at work, etc).

Self-help efforts will be encouraged by the Government.

It is noted that primary school expansion has been faster than foreseen in the previous Plan and the demands for secondary education exceed the needs of the labour market.

### 2.3 The White Paper on Education

The White Paper on Education (Republic of Botswana, 1977 c) is based on the recommendations of the NCE. It should be noted that university education and cultural services were not included in the terms of reference of the NCE and are not contained in the White Paper. The National Development Plan 1979-85 provides guidelines for these subsectors.

For the sake of easy reference the main problems as identified by the Commission will be repeated here.

The Commission concluded that schools in Botswana are separated from the real world. There are big differences in quality between urban and rural areas and between Government and aided schools and private. Also there are too few opportunities for people to continue learning outside the formal system of education.

The strategy included the following:

- highest priority should be given to primary education, both to improve its quality and to widen access to it,

- effective and wide-ranging non-formal education programmes should be developed,
- curriculum development work should be strengthened and directed towards preparing children for a useful and productive life "in the real world",
- a new kind of intermediate schools should be developed with standards and costs of facilities between existing primary and secondary schools. Intake to junior secondary education should be widened so as to eventually provide nine years of basic education to all,
- differences in quality between rural and urban areas and between private and public education should be reduced gradually.

#### 2.4 The 1979-85 Development Plan

The Plan states four basic objectives of education. They are:

- to increase educational opportunities and to reduce inequalities of educational opportunities so far as resources permit,
- to contribute to the balanced economic development of Botswana by seeking to satisfy manpower requirements for all sectors, emphasizing the needs resulting from rural development and employment generation,
- to promote personal qualities such as respect for national ideals, self-reliance and concern for other people, and to encourage full development of individual talents,
- to extend the role of schools and colleges in the local community and vice-versa.



Implementation will be constrained by the shortage of manpower to implement projects and the ceiling for the growth of recurrent expenditure which has been set at ten per cent per annum.

The Plan document goes on to explain how these objectives should be met. The proposed strategy follows the White Paper very closely but is supplemented by policies for the higher levels of education and for the cultural activities for which the Ministry of Home Affairs has portfolio responsibility.

The following section compares the objectives contained in the White Paper and in the National Development Plan. The two set of objectives taken together represent official current policies on education in Botswana.

## 2.5 Analysis of Objectives - White Paper on Education and NDP V

---

### White Paper

---

### NDP V

---

#### PRIMARY EDUCATION

##### Main Goals

1. Make children literate in Setswana and English, basic command of mathematics and knowledge of science and social studies.

Curriculum to orient children towards the realities of life in Botswana. Primary education not to provide vocational training.

2. All children to have access to primary schools

##### Subgoals

a) Measures to improve teaching

b) Curriculum development led by a new Curriculum and Testing Unit

1. Universal access to primary education with special emphasis on:  
- lands areas and cattle posts  
- more evenly spread physical facilities

2. Revision of entire curriculum and examination

3. Continuous assessment and remedial teaching to be introduced

4. Standard 4 competency test

5. Improvement of preservice and in-service training of teachers, school inspectors and tutors

- c) Changes in the examination system and continuous assessment introduced
- d) Provision of teaching materials including survey of needs, distribution, preparation and publication
- e) Construction of more schools, take-over of unaided schools and provision of smaller schools in remote rural areas
- f) English as medium of instruction introduced only at Standard 4
- g) Changes of automatic promotion

## SECONDARY EDUCATION

### Main goals

- 1. Nine years of education to be made available to all children
- 2. Schools to be made more similar to primary schools in class size, physical facilities, level of training of teachers and content of curriculum
- 3. Change of the curriculum to include "orientation toward work in the real world". Attitude goals to be stressed
- 4. Unit costs at junior secondary school level to be reduced, part of the costs to be borne by the students
- 1. Network of low cost junior secondary schools to be established through:
  - a scheme of support to former private schools
  - additional streams financed by Government
  - revision of curricula in accordance with National Commission recommendations

### Subgoals

- a) Increasing assistance to unaided junior secondary schools
- b) Access to existing secondary schools to be made more equitable, including introduction of quota system and administration of selections to be improved
- c) Bursaries system to be adjusted. No students should be excluded on economic grounds
- d) Information to avoid unwanted pregnancies
- e) Examinations to be reviewed
- f) Senior secondary schools to have Board of Governors
- g) The function of libraries to be strengthened, including training of librarians

## TEACHER TRAINING: PRIMARY

Main goals

- |   |  |
|---|--|
| a) Improve the status of the teaching service                       | 1. In-service project to be expanded   |
| b) Provide additional professional contact and support in the field | 2. Assistance to headteachers, inspectors and TTC tutors                         |
| c) Strengthen the training provided at TTCs and at UCB              | 3. Expansion of TTCs   |
|   | 4. New in-service programme to be started for a selected number (50) of teachers |

Subgoals

1. More posts of responsibility
2. Gradual increase in the number of posts to which salary scales rather than allowances are attached
3. Construction of career ladders
4. Less emphasis on paper qualifications
5. More contacts through inspection, conferences etc
6. Involvement of teachers in curriculum development activities
7. Support to the Botswana Teachers Union for training and publications
8. More places at TTCs
9. Probationary year of teaching for all
10. Revision of content of teacher training including elements such as training of handicapped

## SECONDARY TEACHERS (goals)

- |  |   |
|--|---|
| a) More junior secondary teachers to be trained  | Actions to increase numbers of teachers |
| b) Training of teachers training tutors at UCB   |   |
| c) Avenues to be opened for primary teachers to obtain further training and become tutors  |   |
| d) Measures to improve recruitment and retention of expatriate tutors. Turnover of expatriates to be reduced. Expatriates to spend a period of orientation observing primary schools |   |

## NON-FORMAL EDUCATION

- |   |  |
|---|--|
| a) Many more opportunities for people to learn through formal and non-formal education whilst working at the same time  | Stress the needs of rural communities. Stress on the expansion of materials available for women's education. Literacy to be given priority |
| b) Consideration to be given to literacy programmes   |  |
| c) The final goal is a variety of courses and programmes such that any Botswana can add to his or her knowledge and skills through some type of non-formal learning opportunity |  |

Subgoals

- 1) A new unit in the Ministry of Education for non-formal education to be established
- 2) A Cultural Council under Home Affairs to be established
- 3) Non-formal education agencies to share facilities. New financial and administrative procedures to be worked out
- 4) Training of local non-formal educators
- 5) White Paper on Non-Formal Education to be worked out
- 6) Priority to be given to programmes serving the needs of women, out-of school youth and the unemployed

## VOCATIONAL TRAINING

- |   |  |
|---|--|
| a) NCVT to provide a wider range of courses                     | Technician level training to take place in Botswana. Automotive Trades Training School to be established. Support to the establishment of new brigades centres |
| b) Technical Secondary School to be established at Selebe-Pikwe |  |
| c) System of trade tests to be revised                          |  |
| d) BTC to serve both public and private sectors                 |  |

## ADMINISTRATION, PLANNING AND IMPLEMENTATION

- 1) Recurrent budget expenditure allowed to rise by 11 per cent per annum compared with 15 per cent until 1980/81
- 2) Administrative capacity of Ministry of Education and other ministries to be strengthened
- 3) Closer liason between the Ministry of Education, the Ministry of Local Government and Lands and other ministries concerned
- 4) The Government shall conduct reassessment of education policy in 1980, 1985 and 1990
- 5) More detailed planning and analysis in following areas to be carried out:
  - establishment of national service
  - expansion of intermediate education
  - procedures for assistance to unaided secondary schools
  - policy on non-formal education
  - phasing of implementation in the light of cost considerations
- 6) Consultations with all parties concerned parents, teachers, local authorities on a number of issues

Ceiling of recurrent costs at 10 per cent per annum throughout the plan period

## UNIVERSITY LEVEL

Main goals

- a) University to respond to nation's development needs. The Government to have final say in defining the needs. These are mainly but not exclusively manpower needs
- b) Botswana will seek a greater degree of self-sufficiency in university education
- c) 1980's a period of consolidation
- d) Students will continue to study at universities elsewhere in subjects not available in Botswana

Subgoals

1. Introduce a new degree level programme in Business Administration and Commerce, Anthropology, Demography and Environmental Science
2. Introduce diploma and certificate programmes in Librarianship and Adult Education
3. Introduce a number of related programmes in the Faculty of Education for Teacher Training College tutors, primary school head teachers and inspectors
4. Widening of intake to the Pre-entry Science Course
5. Establish a Faculty of Agriculture
6. Establish a School of Earth Sciences
7. The bonding system will be maintained but increasing numbers of graduates to be allocated to the private sector

## CULTURAL SERVICES

## LIBRARIES

1. Priority to be given to providing library services in rural areas
2. Eleven more branch libraries to be built during the plan period (two already established)
3. Possibilities to establish national information system to be investigated

## NATIONAL ARCHIVES

1. A National Archives Building to be constructed
2. Training in archive administration to be organized

## NATIONAL MUSEUM AND ART GALLERY

1. Establishment of permanent display in four galleries
2. Further development of mobile displays, films et to cover rural schools
3. Recording, investigating national monuments. Analyse and sort archaeological collection
4. Ways of expanding museum services to rural areas to be considered

2.6 Observations

There is a gradual shift of emphasis from secondary and higher education to primary and non-formal education starting with the 1976-81 Development Plan.

In fact it prepares the ground for the strategy as recommended by the Commission. The Commission, however, is much more elaborate and specific than any of the foregoing plan documents in which objectives are not very explicit or defined in operational terms. The Development Plan 1979-85 which is based on the White Paper on Education, 1977 is more detailed and elaborate than any of the previous ones.

No doubt the quality of the main plan documents has gradually improved to becoming more detailed and coherent. This in turn will facilitate future evaluations of education in Botswana.



3 FULFILMENT OF THE OBJECTIVES AND THE IMPACT OF SWEDISH ASSISTANCE  
 3.1 Primary Education

From the middle of the 1970's onwards, the Government has given priority to primary education. Has this been followed by continuous improvements quantitatively and qualitatively of primary education? Developments will be analyzed in terms of equity, relevance and quality.

3.1.1 Equity

Equity will be discussed mainly in terms of access to education. Access to education is mentioned specifically in previous plan documents. It could be noted that NDP V also deals with equity in terms of equality of achievement by stating the needs for remedial teaching (of paras 14.5 and 2.5).

Total enrolments have doubled in seven years time as can be seen from the table below:

Primary School Enrolments 1972-1980 (round figures)

	1972	1973	1974	1975	1976	1977	1978	1979	1980
Std 1	13 500	21 500	20 700	25 400	23 800	25 500	24 200	27 600	32 100
Std 7	9 700	12 000	13 800	14 400	13 600	12 800	14 400	18 300	21 300
TOTAL	23 200	33 500	34 500	39 800	37 400	38 300	38 600	45 900	53 400

Source: Republic of Botswana, 1980a

This is slightly higher than anticipated in the 1976-81 Development Plan.

Despite some variations in Standard I intakes the average rate of increase of total enrolments has been about 9,5 per cent as compared with an estimated population increase of 3-4 per cent per annum.

Hence, at the national level access to primary education has improved both in relative and in absolute terms. Based on 1981 Population Census data (Republic of Botswana 1981 b) it can be estimated that the gross enrolment ratio at primary school level was 80-85 per cent 1980.

In NDP V this proportion is assumed to be bigger and it is concluded that the annual growth rate will slow down to six per cent during the period 1979-85. The assumption is that Botswana has achieved nearly 100 per cent enrolment and therefore, that the increase will be only slightly higher than the population growth.

Since the population of school going age has turned out to be bigger than in the Plan, the demand for primary education will be much stronger than anticipated. The shortage of qualified teachers as well as classrooms and equipment will be much bigger than anticipated in the Plan.

If we look at equity from a regional point of view the following picture emerges.

Regional variations could be analysed in a number of ways. We have analysed the situation by district and used four indicators namely:

- Standard I enrolments
- Pupil/classroom ratio
- Relative classroom deficits
- Proportion of untrained teachers.

In the absence of population data by age-group a comparison has been made between the proportion of Standard I enrolments by district and the proportion of the total population by district. These are given in table 3.2.

Table 3.2 Distribution of Std 1 enrolments by District in relation to distribution of the total population 1971 and 1981

District/Town	Std 1 Enrolment 1971 (in per cent of Std 1 enrolment)	Population 1971 (in per cent of total population)	Std 1 Enrolment 1980 (in per cent of Std 1 enrolment)	Population 1981 (in per cent of total population)
North East	7,1	4,5	4,8	3,3
Central	40,3	37,4	35,2	34,2
Gaborone	5,5	5,4	5,3	4,5
Bechuanaland	8,6	11,3	13,1	12,3
Southern	8,2	14,0	14,6	12,2
South East	4,9	3,5	3,4	3,3
Kgalagadi	2,8	2,4	3,2	2,4
Chobei	2,0	2,0	1,7	2,0
North West	7,3	9,1	6,5	8,0
Botswana	4,4	3,1	4,5	6,3
Francistown	4,9	3,2	2,7	3,3
Lobatse	3,1	2,0	2,1	2,0
Selele-Phikwe	-	0,8	2,3	3,2
Grape	-	-	-	0,5
Amaseg	-	-	-	0,5
TOTAL	100,0	100,0	100,0	100,0

The figures indicate that the Districts lagging behind in 1971 (Southern and Kwaneng) have improved their situation relatively speaking.

In the districts defined as remote areas in Botswana North West, Chobei and Kgalagadi the proportions have remained the same whereas the towns have not kept pace with their increasing population. There is also reason to believe that the proportion of younger people has increased in the towns which make their situation more unfavourable than this indicator shows.

The shortage of classrooms has also been analysed by district. A comparison has been made between 1974 and 1980.

Table 3.3 Average number of pupils per classroom by district  
1974 and 1980

District	Pupil/classroom ratio	
	1974	1980
North East	58	46
Central	60	56
Egatleng	54	49
Ervenburg	68	48
Southern	60	57
South East	54	47
Kgalagadi	49	30
Shasani	48	41
North West	49	58
Gaborone	61	64
Francistown	45	54
Lobatse	42	58
Salebe-Phikwe	39	54
Jwaneng	-	10
All country	57	
Total number of classrooms	1 700	3 278
Total number of streams	2 996	5 224
Total number of pupils	97 463	171 914

The situation in all districts except North West has improved. Remarkable improvements have been made in Kgalagadi. Hence in the districts the construction of classroom has been faster than the growth of primary school enrolments. In the towns the number of students per classroom is higher in 1980 than it was six years earlier.

One could perhaps expect that this simply is a result of migration from the remote areas to the towns. Partly this is so but the population in the districts has not decreased in absolute terms. Hence the improvement in the districts is genuine and neither a result of a decreasing proportion of the children being enrolled nor a decreasing population in the districts.

The fact that the situation has improved in the remote districts does not mean that all children have access

to a primary school. It is well known that because of the low density of the population in parts of the North West, Ghanzi and Kgalegadi, these have specific remote area problems.

If the situation has improved in the districts in relative terms, the classroom deficit has increased in absolute terms.

Table 3.4 The Primary School Classroom Shortage 1974-1979 (absolute numbers)

	Total needs	Total stock	Deficit
1974	3 593	1 847	1 346
1975	3 579	2 003	1 576
1976	3 818	2 271	1 647
1977	4 338	2 523	1 815
1978	4 536	2 688	1 838
1979	4 993	3 230	1 763

Source: Republic of Botswana 1980 a

A further analysis by district shows that the deficit in absolute terms has increased in Kgalegadi and North West and in the towns with the exception of Gaborone.

Table 3.5 Classroom deficits 1974, 1977 and 1980 (in absolute numbers and as percentage of total needs)

District	1974		1977	1980	
	Number	Percentage	Percentage	Number	Percentage
North East	81	40	35	102	34
Central	544	46	49	625	35
Kgatleng	75	39	51	125	38
Desheng	216	57	45	191	30
Southern	138	43	45	297	42
South East	29	34	35	21	16
Kgalegadi	60	52	27	56	32
Ghanzi	27	46	20	8	11
North West	69	35	40	171	47
Gaborone	41	49	27	70	37
Francistown	5	7	17	16	14
Lobatse	9	16	10	15	20
Selebe-Phikwe	2	5	20	25	20
Added schools	25	20	18	53	30
Unadded schools	25	34	43	8	8

Hence, if the towns and some of the remote districts face the biggest difficulties in providing school facilities the situation is different if we look at the proportion of untrained teachers by district.

In the towns in 1980 the proportion of unqualified teachers varied between 13 and 32 per cent whilst the districts at the bottom end (North East Southern and Kgatleng) had 40-46 per cent unqualified teachers. The remote areas have slightly improved their situation.

This represents only a marginal improvement from a regional point of view in comparison with 1976 when Lobatse, Gaborone and Francistown had nearly 100 per cent qualified teachers and there were some 50 per cent unqualified teachers in the North West.

It should be noted, however, that the general level of education among the unqualified teachers has risen.

Further details are given in table 3.6 below.

Table 3.6 Percentage unqualified primary school teachers by district 1974 and 1980

District/Town	1974	1980
North East	24	44
Central	39	35
Kgatlang	28	40
Botswana	45	39
Southern	30	46
South East	11	17
Kgalagadi	26	25
Ghanzi	37	36
North West	46	43
Gaborone	0	26
Francistown	11	23
Lobatse	1	13
Selebe-Phikwe	19	32
Jwaneng	-	-
Total share of unqualified primary school teachers	33	34
Of which only std 7	89	65

## 3.1.2 Relevance

The curriculum at primary school level comprises three blocks.

The first consists of measures to make children literate in Setswana and English and to impart the basic skills in Mathematics.

The second block aims at imparting basic knowledge of the environment. It includes subjects such as science, geography and history.

The third block contains the so called practical subjects (gardening, music, needlework, arts and crafts).

The National Commission recommended that the primary school curriculum be made more practical to all children. In the words of the White Paper the curriculum should "orient children toward the realities of life in Botswana".

This seems to imply both a new approach to teaching in all subjects and more emphasis on practical work and out-door activities.

The establishment of a Department for Curriculum Development represents a new feature of educational planning in Botswana. The Unit was formed in 1978 and is concentrating its efforts on the primary school curriculum, presently Standards I-IV.

The formation of the Unit is in response to NCE recommendations and implies that a structure for systematic curriculum reform work has been established.



It has so far focused on the first two blocks of the curriculum. The practical subjects have so far been left aside. It will take a number of years before the effects of this reform can be determined nationwide. The question of relevance is complex. Suffice here is to say that Botswana has analysed the deficiencies of the existing curriculum and established an organization to correct these.

A tracer study was carried out in 1980 of Standard VII-leavers. It indicates that after one year 22 per cent of all Standard VII-leavers were unemployed. It also shows that virtually all who obtained Grades A and B proceeded to further education.

### 3.1.3 Quality

Two kinds of indicators will be used. The first relates to achievements at Standard VII and the other to various inputs which aim at improving the teaching process, such as up-grading of teachers, provision of material, remedial teaching etc.

The NCE made a test of achievements in English, Mathematics and Science and a comparison was made to some other countries. Botswana scored low. More interesting would have been a comparison over time within Botswana. The test, however, has not been repeated.

As pointed out by the Commission examination results are not comparable over time since the "raw scores" are not easily available.

The retention rate is an irrelevant indicator in Botswana because of automatic promotion at primary school level.

During later years the retention rate has varied between 70-90 per cent but there is no clear trend neither upwards nor downwards.

Some steps have been taken to improve the quality of primary education. The total number of qualified teachers has increased from about 2 000 in 1974 to about 3 000 in 1979. Numbers of unqualified teachers have risen at a fast rate, however, so that the proportion of unqualified teachers has risen from 33 per cent of the total force in 1974 to 36 per cent in 1979. It is envisaged that the trend should be the reverse in the next five years to come. The proportion of unqualified teachers should be 27 per cent by 1985.

There are plans and programmes to increase the number of qualified teachers, education officers and tutors at the Primary Teacher Training Colleges, TTC's, through pre-service and in-service schemes.

With the new curriculum, new textbooks are required. Some material is being developed and tested. However, there is lack of any kind of supplementary material in Setswana. Such material is vital to the objective of making children literate in Setswana as well as to their understanding of the environment. The emphasis of the Commission on practical subjects in order to bring education closer to "the realities of life" seems to have been largely neglected.

Little attention has been paid to this in curriculum development work and there is a shortage of tutors at the TTCs in such subjects.

#### 3.1.4 Swedish Assistance

During the Swedish Fiscal Years 1973/74-1980/81 a total of P 19,2 million (SKr 122,9 million) has been spent on primary school construction. This constitutes 65 per cent of the total Government funds spent on primary education during the period including facilities in the urban areas.

The Swedish financial assistance has been used for classrooms, teachers quarters, storerooms, toilets, furniture and equipment.

1 546 classrooms, 488 teachers quarters and 3 200 toilets have been constructed in the rural areas during the period. This constitutes 86 per cent of all classrooms constructed in the country during the period.

Swedish funds have been used for schools in the rural areas only and as a rule not for schools in the major villages. A small amount has also been used for the special programme for remote area dwellers (mainly Basarwa).

During the same period 162 classrooms have been constructed in the urban areas and some 60 through self-help efforts at various places.

During the period 1974-80 a total of 70 560 new places have been created (assuming 45 students per classroom). In reality the number of places is bigger because of the shift system being used in more than 20 per cent of all classrooms (Republic of Botswana 1980 d).

This is slightly higher than the expansion of primary education during the period.

The total number of trained teachers in the districts has increased by about 900. This could be compared with the number of additional teachers quarters which is in the range of 500.

Swedish assistance has had its emphasis on widening access to primary education by provision of facilities for primary school students and teachers quarters for qualified teachers in the rural areas.

The Swedish share has been 66 per cent of the total expenditure which in turn constitutes more than 75 per cent of the resources spent in the rural areas.

The technical assistance has been limited. SIDA has provided consultants for the evaluation of the technical aspects of the construction programme (White Architects 1978).

Some technical assistance has been provided to improve the quality of instruction in primary schools. Two Swedish teachers have formed part of the In-Service Team of the Ministry of Education. Their contribution includes visits to schools and production of Setswana material, a much neglected area.

#### 3.1.5 Observations

Overall, access to primary education has improved. Botswana has a high proportion of women participating in primary education compared to many other countries. Disabled children have to a very limited extent had access to primary education. Statistical information on the incidence of handicaps have not been available but there is reason to believe that a very low proportion of this group receives any kind of primary education. There are only three schools in the country for disabled children to be compared with an incidence of handicaps of ten per cent among children of school going age in other developing countries.

There is no data available to allow for a more sophisticated analysis of other aspects of equity such as reasons for non-participation in education or the relation between achievement/attrition and the socio-economic background of students.

The Commission concluded that the curriculum at primary school level is not relevant to the realities of life. Efforts are now being made to rectify the situation. Insufficient attention so far has been paid to the importance of practical subjects.

Efforts are also being made to improve the quality of education. There are few if any indicators to determine the effects of these measures. There is a need to work out indicators that are comparable over time, such as the tests used by the Commission.

The Government has so far given priority to curriculum development and to pre-service and in-service training of teachers, which no doubt are key areas for the improvement of quality.

It should be noted that these efforts now include headteachers, TTC tutors and education officers.

The main bottleneck in the short run seems to be the understaffing of TTCs.

Another bottleneck at present is the shortage of supplementary reading material particularly in Setswana. Botswana is now making a deliberate effort to eradicate illiteracy through universal primary education and non-formal education programmes.

Unless sufficient and relevant written material is produced people may relapse into illiteracy and resources will be wasted. We consider this issue as crucial to the achievement of one of the main goals of primary education i.e. making students literate in Setswana and in English.

The efforts of Swedish assistance can not be separated from the overall development of the sector. It has had its emphasis on helping to widen the access to

primary education in the rural areas. The distribution of facilities has on the whole been in line with the equity objectives and there is today a machinery which is efficient in correcting regional imbalances that may occur from time to time.

### 3.2 Secondary Education

The long-term objectives of secondary education are:

- to provide universal access to junior secondary education so as to eventually provide nine years of basic education to all and,
- to seek to meet manpower requirements particularly for Form 5 leavers with good qualifications in mathematics and science.

#### 3.2.1 Equity

Secondary education has expanded steadily ever since independence. Total enrolments have almost doubled between 1973 and 1980 both in Government and aided secondary schools and in community secondary schools (former private secondary schools). (Cf table 1.4.) In 1973 there were about 6 000 students in Government and aided schools and about 2 600 in private secondary schools. In 1979 numbers had increased to about 12 000 in Government and aided schools and to 4 500 in the private secondary schools. Up to 1978/79 the private secondary schools were not part of the national planning and received no financial or professional support from the Government.

The policy prior to the White Paper on Education (Republic of Botswana 1977 b), was that Government and aided secondary schools were to expand according to manpower needs. Targets were set according to the Manpower Plan first carried out in 1973 and up-dated three years later.

In the 1974-81 Development Plan it is noted that private secondary schools have been started as a result of "social demand" and in excess of manpower needs. Also targets for the expansion of Government and aided secondary schools in the 1974-81 Development Plan were exceeded by 27 per cent (Republic of Botswana 1977 c).

As a result of this the proportion of Standard VII-leavers offered Form 1 places has risen. For example, in 1972 about one third were offered places in either of the two types of schools. In 1976 the proportion had risen to about a half (Republic of Botswana 1980 a). In 1980, 43 per cent were enrolled in Form 1.

The target for the expansion during the 1979-85 plan period has been set at maintaining a 50 per cent intake of Standard VII-leavers into Form 1.

The NCE gave a new impetus to this trend by recommending that intakes should be widened further so as to make junior secondary education available to all.

In terms of policy this represents a drastic change in relation to previous plans. In reality it seems to have been more of a justification of trends which were already there. The importance of the Commission was rather to give a new direction to this level of education and to suggest a strategy for the expansion which sought to include all secondary schools so that Botswana eventually would have a unified (comprehensive) system of nine years of basic education.

The strategy as outlined in NDP V, includes support to the former private secondary schools as its main element.



Funds for the programme have been secured from the World Bank and implementation has commenced.

In principle the schools will remain in private hands and the schools will be responsible for the implementation. This represents a new trend of decentralized educational planning in Botswana.

There are many problems involved, particularly to determine the location of new schools and to determine the element of self-help. So far, priority has been given to the up-grading of existing schools. It is too early to make any judgements about the implementation of this programme.

Suffice is to say that the strategy of the MCE is being followed as far as the widening of access is concerned.

The great majority of Government and aided secondary schools are boarding schools and selection is made on a nationwide basis. In order to compensate for some shortcomings in the poorer primary schools, a quota system has been introduced, whereby five per cent of the best performers in each school are offered a place in a secondary school.

The community schools are all day schools and they make their own selection.

They absorb students who have not been offered a place in a Government secondary school. They offer in the main high fees, poor facilities and unqualified teachers.

This is the most serious aspect of equity at secondary school level at present. In addition to this, location of schools will become increasingly important in view of the fact that the new community schools will be day schools.

The great majority of the secondary schools with the exception of Matshe Community College and Maun Secondary School are located along the line of rail in towns and major villages.

The proportion of girls admitted into Form 1 has remained stable at 56 per cent of the total number of students 1974-80. At Form 5-level the situation has changed drastically in that about 60 per cent of the students are boys and 40 per cent are girls. This aspect of equity is not discussed in official plan documents but we have felt that it ought to be mentioned here.

### 3.2.2 Relevance

The White Paper provides guidelines for a new curriculum at junior secondary school level and this is followed up in NDP V. Further details are given in the report of the Commission (Republic of Botswana 1977 4). It is suggested that the new curriculum should be less academic and constitute a continuation of the primary school syllabus. Throughout the report of the Commission it is argued that the first nine years of basic education should put emphasis on practical subjects and orient the students towards the world of work.

Most Government and aided schools offer some practical subjects mainly agriculture, home economics and wood-work/technical drawing. The policy so far has been to develop these four subjects. Apparently the Commission has had something much more fundamental in mind. This is also evident from NDP V.

This will require concerted action at various levels of the education system and include revision of curricula, textbooks, teacher training and examinations at primary and junior secondary school level. So far there have been few if any moves in this direction.

possibly with the exception of the consultancy report on teacher training for the new type of junior secondary schools (Jannerts, F.A., 1981)

The second major problem is the gap between the two categories of schools. Community secondary schools have few qualified teachers, no laboratories and a shortage of books. The standard of the buildings is poor. The new Government secondary schools have a very high standard of buildings and equipment as well as qualified teachers.

At present more than 65 per cent of the teachers in community secondary schools are unqualified and the proportions has remained the same since 1974. During the same period the proportion of unqualified teachers in Government and aided secondary schools has decreased from 37 per cent in 1974 to 13 per cent in 1980.

A tracer study of Form 3 and Form 5-leavers was undertaken for the first time in 1980. Of all Form 3-leavers, 22 per cent were reported as unemployed. The figure was 11 per cent at Form 5-level.

No firm conclusions can be drawn from these figures but there are indications of growing unemployment among Form 3-leavers with a low grade. At the same time there is a growing gap between the supply of and demand for Cambridge leavers with good results in mathematics and science.

### 3.2.3 Quality

Examinations results as an indicator of quality at junior secondary level (JC) have the same deficiencies as Standard VII examinations. They give only the deviation from the average score which is set at the same level each year. Hence, they are not comparable over time. The National Commission made some tests

at this level using international tests. The results were quite discouraging even taking language problems into consideration. The tests have not been repeated. At Form V-level, Cambridge Examinations are being used and these are by and large comparable over time.

	(1) Total Candidates	(2) Divisions I and II	(3) As percentage of (1)
1980	255	63	25
1971	235	77	28
1972	238	94	25
1973	503	77	15
1974	519	67	13
1975	686	121	18
1976	832	137	16
1977	866	236	27
1978	1 071	232	22
1979	1 198	268	22

Source: Republic of Botswana 1980a

The proportion awarded divisions is in the range of 20 per cent of all who sat and there is no clear trend. A further analysis shows, that the group of students with the necessary qualification for further education which requires a background of Mathematics, Science and English is even smaller, or only about nine per cent of the total, e.g. 100-120 a year. About half that number has during the last four years been admitted to the Faculty of Science. This is far below the needs for manpower in science based professions and the shortage of Botswana science teachers is almost desperate.

This explains the emphasis given to this goal in NDP V.

There is no easy solution to this problem in the short term.

The Commission did not deal specifically with the problem. NDP V envisages and expansion of the Pre-Entry Science Course as a remedy to the situation in the short term.

In the long term the only solution is to strengthen the quality of basic education as recommended by the Commission.

#### 3.2.4 Swedish Assistance

Prior to 1974, Swedish assistance at secondary school level was confined to the three schools, Madiba, Shashe and Swaneng which at that time followed the model developed by P v Rensburg at Serowe (Rensburg 1974). Originally these were meant to serve as a model for a new-type of secondary education which combined theory with practice. Gradually these schools have been integrated into the regular system and the brigades have been separated from the schools. Yet, they have had some impact on secondary education. Development Studies now being offered in all schools was developed there.

The First World Bank Loan on Education had its emphasis on secondary education and included construction of six new secondary schools (Bobonong, Letlhakane, Francistown, New Maledi, Ramotswa and Matsha) with about 500 students each.

SIDA provided Botswana's counterpart contribution which constituted about 36 per cent of the total cost. Minor contributions have also been made to the upgrading and expansion of Moeng and St Josephs' College.

This programme was based on the policy laid down prior to the Commission. Buildings are of high standard, and the schools have been provided with sophisticated equipment.

A comprehensive final report on the First World Bank Loan to Education is being prepared and will be available in March 1982. We have seen no reason to go into the details of this project in this report.

Technical assistance at this level has mainly consisted of teachers in practical subjects. 12 volunteers have been recruited altogether, 1973-80.

Swedish funds have not been requested for the new generation of low cost junior secondary schools.

Swedish assistance has no doubt contributed to widening the access to secondary education and to improve the quality of the facilities.

Swedish volunteers have also successfully filled important gaps of skilled manpower in one of the practical subjects. Teachers in such subjects have been in short supply ever since such subjects were introduced.

### 3.2.5 Observations

Access to secondary education has gradually improved. The Government has decided that future expansion should take place through a network of community junior secondary schools owned by a local trust. Since these schools are day schools, location is vital from the point of view of access to education.

The problem is to find a formula to combine national planning with a decentralized system based on self-help. It is too early to pass any judgement as to whether the strategy will work according to the objectives laid down in the White Paper.

There are several aspects of equity involved. The immediate problem is to reduce the gap between well equipped schools with qualified teachers and relatively low fees and schools with a high proportion of unqualified teachers, poor facilities and high fees. Location, as repeatedly said earlier in this report, poses a new problem through the strategy of self-help. What should be done to compensate poor areas where self-help efforts can be expected to be small?

A third aspect is the phasing of the expansion. The time schedule indicated by the Commission seems to have been too optimistic. Present plans indicated a slower rate of expansion than envisaged in the NCE Report. Plans have been worked out however and solutions are likely to be found to these problems.

Generally the impression is that the question of relevance is a more difficult one.

The Commission as well as NDP V suggests drastic changes to be made. The recommendations are not specific, however.

The question of curriculum is vital to the new strategy since it will determine the future needs of specialized teachers workshops and material and hence the costs. The Commission had envisaged not only a new direction of secondary education but also education at a much lower unit cost than traditional secondary education.



There is no indication of any moves in the direction of drastic curriculum reform, one reason being that the purpose of this new type of education has not been defined beyond general statements such as "realities of life" and "the world of work".

Botswana is sharing this problem with a great number of other countries and there is a need for a thorough policy discussion before a programme of action can be implemented.

### 3.3 Technical and Vocational Training

#### 3.3.1 General

The Botswana Polytechnic (formerly MCVT) is the main institution for artisan and technician training. An Automotive Trades Training School has also been established in Gaborone.

Brigade Centres exist at 20 places. Three are situated in the western part of the country and the rest are situated in the eastern part.

In addition hereto there are three main institutions in the field of vocational and technical training. They are: Botswana Agricultural College, Botswana Institute of Administration and Commerce and the National Health Institute.

Figures in table 3.8 below are given to indicate the relative size of the programmes.

Technician training as well as diploma courses in agriculture have hitherto taken place abroad mainly in Swaziland.

Table 3.8 Total enrolments in vocational schools 1975/76-1980/81

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81
Botswana Agricultural College *)	138	146	158	143	145	215
Botswana Polytechnic	249**)	99	72	339**)	193	312
Brigades	977	1 029	994	1 217	912	672
National Health Institute	163	202	278	322	322	362
Total	1 477	1 486	1 502	2 021	1 571	1 561

\*) Certificate courses only

\*\*) Probably including part-time students

Source: Principals report Botswana Polytechnic 1979/80 and 1980/81.  
 Republic of Botswana 1975, 1976a, 1977a, 1978, 1979a, 1979b  
 and 1980f.

From an almost non-existent network of institutions of vocational training at the time of independence, Botswana is now able to train its own nurses, agricultural extension workers and technicians within the fields of Auto, Mechanical, Civil and Electric Engineering. Basic skill training in 15 trades is offered by the brigades.

Swedish assistance in this field has been confined to the Polytechnic and to the brigades. This report will therefore be confined to this subsector.

Traditionally vocational training has consisted of two wings. The first wing, the Polytechnic, has provided crafts training for modern industry.

The second wing, the brigades, were started as a response to the needs for skill training in the rural areas. It was assumed that these needs were partly different from the needs of the modern sector. Very briefly, the assumption was that the modern sector will require specialists and the rural areas will need generalists.

There have been various arguments over this issue. Some have argued that the needs are the same, only that there could be a difference between the levels of training required. According to this view a builder is a builder wherever he/she works. The same holds true for a car mechanic.

The Commission does not seem to have dealt with the issue from this point of view and recommends that both types of training be expanded. The NCE stresses the importance of training by employers. NDP V suggests further expansion and upgrading of the Polytechnic as well as continued support to the brigades.

The policy for vocational training has largely remained unchanged since the 1960's. The problems encountered have had to do with implementation. It seems, however, that Botswana now has reached a critical point at which major policy decisions will have to be made. We will revert to this issue later.

The development of the Polytechnic during the period of study, 1974-80, has fallen short of expectations. Numbers of trainees have fluctuated but has generally been below the capacity of the institution. There has been a shortage of instructors and lack of consistent planning. After 1979 it has developed rapidly in accordance with the guidelines laid down in NDP V.

The brigades have provided most of the skill training that has existed in Botswana. They have gone through various stages of developments documented in detail in several studies (cf for example SIDA 1973 a and SIDA 1973 b and Republic of Botswana, 1981 a).

A detailed discussion of the merits and demerits of the brigades model here, would lead too far.

An evaluation is presently being undertaken by the National Institute for Development and Cultural Research, NIR. Results are not available as yet.

Results from tracer studies (Eukler R, 1976 and CSO, 1979) show that brigades leavers get employment, some in the urban and some in the rural areas. A somewhat new trend has been reported recently. Former brigades trainees who have been employed in the urban areas return to the rural areas as small entrepreneurs.

There are also indications that the financial situation of brigades has improved in comparison with 1979 and 1980 when the brigades in Molepolole and Serowe in particular showed big deficits.

### 3.3.2 Swedish Assistance

Swedish funds have been allocated to both wings of vocational training in Botswana. The construction of the facilities at the Polytechnic was financed by SIDA and ILO and the latter body was responsible for planning and recruitment of staff.

The brigades movement has also been supported in a number of ways.

The three secondary schools initiated by P v Rensburg (Swaneng Hill, Madiha and Shashe River) originally included a brigade centre (cf 3.2).

The First World Bank Project included support to the expansion of existing or new brigades centres and the establishment of the Brigades Development Centre, BRIDEC, in Gaborone.

Technical assistance has also been provided. Out of total of 32 Swedish experts recruited to the education sector, 8 have been working for the brigades and 3 have been posted as Chief Education Officers (overall planning and implementation) in the Ministry of Education.

The general impression is that the facilities at the Polytechnic are now being used to their full capacity having been underutilized during the 1970's.

The brigades have been the most important contributor to skill training in Botswana during the 1970's and have been the more efficient part of Swedish assistance to vocational training, during this period.

### 3.3.3 Observations

There have been no major changes of policy during the period of study. Vocational and technical training has been lagging behind the needs for manpower. The shortage of artisans is likely to persist even with the planned expansion of the two programmes. By and large, matters of implementation have been the concern of planners during the 1970's. Two models, brigades and more conventional training of artisans have existed concurrently, partly serving different needs. Recent economic difficulties within some of the brigades has lead to a discussion on matters of policy. There are two fundamental issues involved. One is related to the objectives of the brigades movement as a whole and its relation to Government. This is dealt with at length in the Finlay-report (Republic of Botswana 1981 a). The other related issue is how the vocational training part of the brigades activities could form part of a national system for vocational training.

The trend within the brigades movement seems to be to give priority to viable productive activities at the detriment of training. This is in response to their financial difficulties. Numbers of employees have risen whilst numbers of trainees have fallen.

On the issue of the relation and possible integration of the two systems two different views have emerged.

One of them equalises the two systems as serving two different but equally important needs. According to this view, the training at the Polytechnic is more suitable for serving the modern sector whereas brigades training is the best method of meeting the needs of the rural areas. Brigades are also seen as the first level of a national system of vocational training.

The second view rates "polytechnic type" of training as superior and more efficient than brigades type of training. Hence, priority is given to vocational training for the modern sector, the basic level of which should be a network of trade schools. Brigades training should be gradually phased out.

Although the evaluation of the brigades has not been finalized as yet, there seems to be enough evidence to suggest that the brigades despite economic and other difficulties have an important role to play for the development of the rural areas.

They offer training opportunities all over the country and have, with the support of BRIDEC, fostered entrepreneurship, something which conventional trade schools cannot be expected to do.

The effects of the support given by BRIDEC is evident by the demand for more advanced courses in management and administration. There is a need for basic skill training in the rural areas as well as conventional crafts and technician training for the modern sector.

It is hoped that this will be recognized when priorities are finally laid down.

### 3.4 Teacher Training

#### 3.4.1 General

The White Paper includes proposals for action in three related fields:

- measures to improve the status of the teaching service through restructuring of pay-scales, creation of more posts of responsibility and opening up of new career ladders;
- provision of more professional contacts and support in the field;
- strengthening and expansion of the training at TTCs and the Faculty of Education.

Traditionally the teaching profession and teacher training has had a low status in Botswana. Following the Commission, steps have been taken to improve the situation both in quantitative and in qualitative terms.

Primary school teachers are trained at three TTCs which are affiliated to the University.

The numbers trained did not meet the targets set during the previous plan period and the proportion of unqualified primary school teachers has risen from 28 per cent unqualified in 1973 to 36 per cent in 1979.

A fourth Teacher Training College will be opened in 1983, and by 1985 the Government anticipates that the deficit of trained teachers will have been reduced from 36 per cent to 27 per cent.



Staffing of the colleges represents a problem. Not only is Botswana dependent on expatriate staff in mathematics, science and practical subjects, but overall the colleges are understaffed.

Most of the tutors are former secondary school teachers. There seems to be few if any possibilities for primary schools teachers to qualify for a TTC post.

The Commission suggested a probationary year for the students at TTC. This has not been made compulsory but a number of students have some teaching experience. For example in Francistown in 1981 every second student had such experience.

Secondary school teachers are being trained at the University College of Botswana at diploma and degree level. Teachers of some practical subjects are being trained at the Polytechnic (woodwork/technical drawing). The Botswana agricultural College, BAC, will take over the training of teachers of agriculture from Swaziland. Botswana is likely to be able to meet its needs for secondary school teachers of Arts subjects and of practical subjects in a near future.

A separate College is being planned for the training of teachers at junior secondary school level. The problems relate to the curriculum at this level as discussed under the section on secondary education. The fact that the secondary school curriculum has not been revised as yet, hampers the planning of teacher training at this level. The other major problem is the persistent dearth of science teachers. The main reason is the shortage of qualified students with a background in mathematics and science, a problem to which there are no immediate or easy solutions.

Efforts to improve the quality of teaching have also included in-service training. The Commission deals with this problem at length and a programme has been started recently to up-grade headteachers in primary schools, education officers and TTC tutors. This more or less replaces the previous more limited In-Service Project. Quality is also maintained through the affiliation to the University College of Botswana which acts as the examining board.

#### 3.4.2 Swedish Assistance

Swedish assistance in this field has been very modest during the period dealt with in this report (1974-80). It is worth noting, however, that SIDA together with Unesco financed the Francistown Teacher Training College, one of three TTC's in Botswana.

The agreement lasted 1967-72. The annual output from this College is 150 teachers. The College was originally planned also to training secondary school teachers at diploma level, but this section was later moved to the University College of Botswana. Apart from this, the programme has been implemented according to plans and the TTC is in operation.

Hence, funds have been provided for facilities which have catered for one third of the output of qualified primary school teachers in Botswana. The College has also established a small Unit for the development of teaching aids, the only one in the country. Its impact at a national level has so far been rather limited.

In addition to this Sweden has provided technical assistance including teachers in practical subjects and for the In-Service Team as from 1979. 1979.

## 3.4.3 Observations

Three observations can be made as regards the structure of teacher education.

The new in-service training of teachers is built on the philosophy that teachers in the field will change their way of teaching if headmasters, educational officers and TTC tutors impose a certain strategy. This thinking deviates from the previous strategy of in-service training in that ideas of change to a greater extent were expected to come from the teachers themselves. The role of educational officers was to be instrumental in spreading and diffusing the different ideas among the teachers.

The second observation is that if examinations of TTC's as being discussed, in the future will be the responsibility of the Examination Council, then the link between the TTCs and the Faculty of Education at the University College of Botswana will be weaker. Even the Diploma of Secondary Education will be taken care of by a separate Teacher Training College and the role of the Faculty of Education could be expected to change. There are some signs that the Faculty of Education together with the Institute of Cultural and Development Research, NIC, in the future will be able to take more responsibility for educational research needed in the country.

The third observation is that the shortage of science teachers is a structural problem which can not be solved within the field of teacher training only. Basically it is a question of increasing the supply of qualified science students but it is also a question of maintaining a balance between the competing needs for such students. This in turn is a complex mechanism of matching national needs with the preferences of students.

3.5 University Education and Research

## 3.5.1 General

University Education was excluded from the terms of reference of the Commission. Policies of university education as expressed in Five Year Plans have by and large remained the same and could be summarized as follows:

- University education should be directed towards the most important manpower needs of the country;
- Botswana will gradually seek a higher degree of self-sufficiency in university education in a relatively small number of fields, selected on their relevance to manpower needs and their economic viability.

During the 1970's it has been understood that self-sufficiency should mean division of work and sharing of facilities with Lesotho and Swaziland. The University of Botswana, Lesotho and Swaziland was established at Roma, Lesotho in 1970. Intakes were at O-level into four year degree courses divided into Part I (the first two years) and Part II (the last two years of study) courses.

For political and economic reasons it was soon found inappropriate to concentrate all facilities to Lesotho. A devolution package was agreed upon which included the establishment of Part I courses in Botswana and Swaziland. Before the plan had been fully implemented, Lesotho had withdrawn from the cooperation. This was in 1975. Botswana and Swaziland made a new agreement whereby some faculties would be located in Botswana (science and economics part II and earth science) and some in Swaziland (law and agriculture).

By 1980 these facilities had been established. At the same time there had been a gradual move towards autonomy of the two Colleges and Swaziland had established its own Part II Science and Economics courses. In 1980 it was agreed that the two countries should no longer be jointly planned. There will be continued cooperation but the two countries should have their own national universities.

This development is not unique. It has parallels in many other parts of the world. Space does not allow for a discussion of the specific reasons for this development in Botswana, Lesotho and Swaziland. One observation could be made. Donors involved have always advocated regional cooperation and regional solutions. Universities all over the world, however, are important symbols of national aspirations, a fact which also in this case has been underestimated by outside donors.

The number of Botswana students at the three campuses has gradually increased from 56 in 1970 to 845 in 1980 of whom 772 in Botswana and 73 in Swaziland (Education Statistics 1980). In NDP V it is envisaged that "the early 1980's will be a period of consolidation and less rapid growth than in the recent past".

If the overall expansion has been impressive, the intake of science students has fallen short of expectations. In the 1976-81 Development Plan it is stated that "placements for degree studies at the University have been well below target each year... there is still an acute shortage of students qualified to undertake science degrees". A Pre-Entry Science Programme was established in Botswana in 1976 which has improved the situation, but overall the problem remains.

As pointed out earlier in this report the major manpower shortages are to be found in professions which require a solid foundation of mathematics and science. From this point of view, university education has not met the targets. The reasons, however, are mainly the low output of qualified Cambridge leavers.

Also with regard to the second objective, self-sufficiency in university education, the obstacles are to be found in science based fields of study.

The problem is briefly this. At present students are sent abroad for courses such as engineering, medicine and veterinary, upon completion of Part I studies at the University College of Botswana. Part I is generally recognized as equivalent to A-level, which is the level of entry into universities in many other countries, particularly English-speaking African countries. There is a variety of needs for such manpower but numbers in each field are small. Hence, Botswana cannot be expected to afford to offer courses at university level in all these fields. In 1980 they numbered about 30.

This makes it difficult to build up a strong faculty of science in Botswana which in turn makes it difficult to improve the quality of teaching. This is and will be the dilemma of university planning for a long time to come.

In NDP V it is foreseen that Botswana will continue to send increasing numbers of (science) students abroad for further education at the same as university education in Botswana will expand. New faculties of agriculture and law are being planned.



The net effect of these efforts are that the proportion of post-secondary students studying abroad will remain fairly stable over the plan period 1979-85.

Table 3.3 Actual and projected number of post-secondary students in Botswana and abroad 1970/71-1984/85

	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78	78/79	80/81*)	81/82*)	84/85*)
Botswana	42	-	70	157	247	344	382	577	569	800	930	1 050
Africa	139	-	130	135	156	124	159	272	248	433	444	300
(of whom Lesotho & Swaziland	(115)	-	(85)	(91)	(113)	(72)	(115)	(169)	(156)	(248)	(231)	(102)
Outside Africa	73	-	64	73	62	69	66	73	71	136	187	272
Total	254	-	264	365	465	537	607	922	888	1 234	1 361	1 622

\*) Projected

Source: Kahn, T, 1980

Republic of Botswana 1980a and 1980b

As a comparison it should be noted that in 1966 there were six (!) post-secondary students altogether.

As can be seen from the table, the proportion studying outside Botswana will remain the same in 1984/85 as in 1979/80 having decreased during the 1970's. This decline was a result of difficulties in placing students in other African countries.

A higher proportion of the students are expected to be sent outside Africa than during the 1970's. Even in absolute terms numbers of students in other African countries will decrease mainly as a result of courses being taken over from Swaziland.

Hence in quantitative terms the degree of self-sufficiency will remain the same. In financial terms it will even decline because of recent drastic cost increases in the U.K and the U.S.



It is no longer favourable from a pure financial point of view to send students outside Africa which still was the case in the late 1970's.

In qualitative terms, self-sufficiency has gradually improved and new faculties and courses have been established in Botswana. The University College, however, is still heavily dependent on expatriate staff despite efforts to localize.

### 3.5.2 Swedish Assistance

Financial assistance has been given to cover the costs of further education for Botswana students abroad. The first agreement was signed in 1972. Prior to 1979 the agreements were confined to financing studies in other African countries, including Swaziland. In 1979 the agreement was amended to include studies in English-speaking countries outside Africa. The objective has been "to contribute to the achievement of trained manpower self-sufficiency within the Botswana public administration". It comprises pre-service education as well as in-service training of staff. The latter part, however, has been negligible.

The programme was subject to a detailed evaluation in 1980 to which we refer for further details (Kann, 1980 b).

From the evaluation it can be concluded that the students almost without exception have been offered employment related to their fields of study within Government. The drop-out rate has overall been low and the so-called "brain-drain problem" negligible. On the question of relevance the students themselves consider their training to be relevant to the work they are doing. "However, they did find it frustrating that most examples and case studies during their studies were totally irrelevant to Botswana" (para 12.29). Opinions among employers vary: "Some argue

that training in Botswana is not only more relevant but also of a higher quality than training abroad whereas other claim that it is not possible to reach the same high standards with training in Botswana as abroad" (12.31).

It has not been possible to establish exactly what proportion of the students in table 3.9 that has been financed by Sweden.

However, Canada and Sweden have been the two main donors up to 1979 and Canadian funds have been limited to technician training in Africa. The share of Swedish funds seems to have exceeded substantially the Canadian contribution particularly during the late 1970's.

It would therefore not be an exaggeration to conclude that Sweden, as the biggest single donor to this programme, has successfully contributed to the self-sufficiency and localization within the Botswana public administration.

The biggest proportion of the students is to be found within the field of agriculture and animal health, 47 per cent of the total.

The shortage of science students is also reflected in this programme. Only eleven per cent of all students have taken such courses.

### 3.5.3 Observations

University education has expanded steadily ever since independence. In qualitative terms Botswana has improved self-sufficiency gradually by the establishment of its own institutions. In quantitative and financial

terms dependence on other countries will remain for the foreseeable future, particularly for science based professions.

Manpower planning has been successful in that virtually all students have got employment in their field of education. There are no indications as yet of unemployment among students at this level of education. On the contrary numbers so far have been too small to allow for any allocation of graduates to the districts and to the private sector.

The planning has been less successful in the sense that numbers of science students have fallen short of expectations to the extent of underutilization of resources. Short term measures have been undertaken through the establishment of the Pre-Entry Science Course but these have only partly remedied the situation. Swedish assistance has substantially contributed to the training of students outside Botswana. The fact that the programme up to 1979 was confined to other African countries has been a constraint to the expansion. However, the basic problem has been the general shortage of qualified students.

### 3.6 Non-formal Education

#### 3.6.1 General

The Commission made a distinction between formal, non-formal and informal education. It defined non-formal education as "any organized educational activity outside the established formal system that is intended to serve identifiable clientele and learning objectives" (para 7.05).

It went on to conclude that "in practice, however, Botswana's Non-Formal Education Subcommittee has concerned itself almost exclusively with extension work". The Commission suggested a widening of the concept to include correspondence studies, on-the-job training and informal learning activities such as libraries and clubs. In the views of the Commission all these activities "should be treated as elements of a single education system in Botswana" (7.06).

The Commission pointed at the crucial role of women and their needs for training. Also, the need for literacy was emphasized.

Overall the Commission suggested that non-formal education activities should be given a much more prominent role than hitherto and be looked upon as an integrated part of the education system.

Non-formal education prior to the Commission included extension work mainly under the Ministry of Agriculture, brigades and correspondence education up to JC-level at the Botswana Extension College. The Division of Extra Mural Activities at the University (now Institute of Adult Education) established in 1972, gave support through evaluation and research and through two information campaigns. One was a popularization of the fourth Five Year Plan. The other campaign which involved 4-5 000 radio listening groups throughout the country, formed part of the consultation on proposed Tribal Grazing Land Policy.

Two pilot literacy projects were also undertaken but apart from this literacy work had a low priority.

### 3.6.2 The Ministry of Education

As a response to the recommendations made by the Commission a Department of Non-Formal Education was established in 1978 in the Ministry of Education.

The Department has established a network of District Adult Education Officers in all districts. It has focused on literacy work, but also produced material for women and the correspondence programmes has continued.

The literacy programme which aims at making the adult population, approximately 250 000, literate during a five year period has got a very good response and by the end of 1981 it had 30 000 learners enrolled, the majority of whom were women. A mid-term evaluation is being planned for August 1982, by which time more detailed information will be available.

Hence, there has been a notable shift of emphasis in line with the Commission's recommendations within the programme of the Ministry of Education and a higher priority given to non-formal education within the Ministry.

### 3.6.3 Libraries, Museums and the National Archives

Following the definitions used by the Commission, libraries and museums should be included in the network of non-formal education activities.

The National Library in Gaborone was opened in 1968. During the period 1972-80 a network of branch libraries has been built up, serving Francistown,

Lobatse and nine of the major villages. In addition hereto there are two library centres and two mobile units.

A third phase of the programme includes an additional 8 library branches in medium-sized villages.

The programme is coordinated by the Botswana Library Service, BNLS whose tasks also include provision of library services to schools. BNLS has seconded librarians to secondary schools and to colleges. Primary schools are to be provided with small book boxes which are circulated between schools. The library services were subject to a special evaluation in 1980 (Stellingma, R, 1980).

In brief the conclusions were as follows:

- the number of members (and borrowers) which has increased almost three times between 1973/74 and 1977/78 tends to stagnate. There are indications of increasing numbers of "sleeping" members,
- the borrowers are mainly to be found among students, about 50 per cent of all members and among well educated adults including expatriate staff,
- the libraries are very important for the students as a place of study. Unfortunately some libraries do not have electricity and/or are not open during evening hours,
- more could be done for the libraries to reach out to the community and to participate in community life. Services to schools should be improved.



The reasons for stagnation, according to the report, include shortage of relevant books and lack of information on the part of libraries. Our impression confirm this. Especially there is a lack of Setswana books both for children and adults. Experiments with book boxes to 20 rural primary schools (out of about 400) are encouraging but are hampered by lack of an efficient delivery system.

The shortage of qualified staff has been a problem in this field as well as in most other sectors. However, a certificate and a diploma course to train librarians for the branch libraries was started in 1979 at the University College of Botswana. Training of more qualified staff will as hitherto have to take place overseas.

The National Museum and Art Gallery, situated in Gaborone, was founded in 1966 and became a Government Department until 1976.

It seeks to provide a picture of historic and contemporary life in Botswana and has made deliberate attempts to reach out by providing training to children and adults including teachers. Its activities include surveying and preservation of historical sites throughout Botswana. A Museum in Mochodi has been started at private initiative. It includes collections that reflect the development of the village of Mochodi and has an educative role. It also serves as a community centre.

The National Archives situated in Gaborone has recently got new facilities which will strengthen its activities.

#### 3.6.4 Community Service

Following a suggestion in 1975 by the late President Sir Seretse Khama, the NCE suggested a national service scheme for school leavers and drop-outs.



The Commission saw the scheme mainly as a means of alleviating the shortage of unqualified primary school teachers.

The objectives of the scheme were later changed slightly to become:

- a) "to give an educating, broadening, maturing experience to all Form V leavers, before they begin further education and employment"
- b) "to provide educated manpower to help carry out development programmes in rural areas, particularly in remote areas"
- c) "to encourage greater understanding of each other among people from different parts of the country".

The scheme has started as a pilot project involving 28 participants and a further 90 have completed their year of service. Plans are to select 330 in January 1980 so that gradually the scheme will change from being voluntary to being a requirement for employment for senior secondary school leavers.

An evaluation carried out in 1981 (Kann and Mokgethi, 1981) confirms that the objectives largely are being fulfilled and it recommends that the scheme be implemented according to plans.

#### 3.6.5 Swedish Assistance

Swedish assistance to non-formal education had adhered to the wider concept suggested by the Commission.

Hence, it has included support to the literacy programme, to the libraries, the Museum as well as the National Archives.

A network and a structure for adult education has over the years been built up with the assistance of Sweden. Also in this field the technical assistance component has been limited.

The financial support to libraries has included buildings, furniture and equipment as well as books. No funds have been requested for the training of librarians at the University College of Botswana.

So far, library branches have been established at eleven places and a Centre for External Services in Gaborone. A third phase includes construction of another eleven branch libraries. The technical aspects have been followed-up and improvements proposed. Overall the programme has been implemented according to plans.

The problems encountered relate to the training of staff and to the role of the libraries as outlined in the agreement and discussed in the evaluation report referred to above (Stellingma, R, 1980). It should be noted, however, that the regular issuing of books has grown at a fast rate and in 1978 there were 56 000 book issues at 13 places and 51 000 members.

From the agreement it is clear that expectation were that the library should serve as a community centre involved in various non-formal education activities. The evaluation report suggests that libraries could do more to reach out to the Community and to participate in community life. It also suggests that services to schools should be improved.

Swedish funds have also been used for the construction of a new building for the National Archives and for technical assistance in relation to this (director and short-term consultant). The National Museum has got support to its efforts to survey and protect national monuments. This forms part of the basic structure as mentioned above.

Swedish contributions to other non-formal education activities, prior to the National Literacy Programme have been limited. The main reason has been that such activities have been given a low priority. However, one of the campaigns on "Popularization of the Five Year Plan" was financed out of Swedish funds.

With the start of the National Literacy Programme Swedish assistance can be expected to be more substantial.

The input of Swedish technical assistance in this field has been very limited despite chronic shortages of qualified staff. This is somewhat surprising in view of the fact that Botswana did not start its own training programme for librarians until 1979. It should be noted, however, that a Swedish consultant drew up the original plan for an extended network of branch libraries before the first agreement was signed in 1972. Also the National Archives could draw upon Swedish experience.

#### 3.6.6 Observations

Non-formal education activities during the 1970's have been very modest in comparison with the expansion of the formal education system. The National Commission represents a turning point in that it gives non-formal education a more prominent role as one of the two legs of a unified system of organized learning. The fact that the section on libraries, museums and archives are to be found under the chapter

on education in NDP V might indicate new efforts of coordination as suggested by the Commission.

The establishment of the Department of Non-Formal Education and the literacy programme in particular indicates that non-formal education activities will be given a higher priority than hitherto. The network of library branches together with the network of district adult officers provide an important framework for the development of non-formal education in Botswana. Swedish assistance has contributed very substantially to this new structure, particularly through the establishment of library branches. The problems at this stage are those of coordination particularly between libraries and the formal education system. For example, the system of book-boxes to primary schools ought to be produced and distributed. The role of libraries in literacy work as well as outreach activities ought to be defined. The shortage of qualified staff is still a serious constraint to further development of the library services.

The Commission also included extension work and brigades in its definition of non-formal education activities. Brigades have been dealt with elsewhere in this report. Suffice here is to say that the present trend within the brigades movement is to give priority to productive activities at the detriment of training. They have played and could still play an important role in the field of non-formal education. Unless some kind of subsidies for such activities are being introduced these are likely to decline. Another problem as regards extension work seems to be one of coordination with the Department of Non-Formal Education.

4 SWEDISH ASSISTANCE TO THE EDUCATION SECTOR AND THE OBJECTIVES  
OF SWEDISH DEVELOPMENT COOPERATION

4.1 General

The overall objectives of Swedish development cooperation are to further:

- economic growth
- economic and social justice
- economic and political independence
- democratic development of society

The objectives are generally considered to be equally important, but their relative importance may vary from country to country.

When Swedish assistance to Botswana was initiated after independence, emphasis was placed on economic and political independence.

Botswana, in particular, stressed the need in the short term to replace South African and British staff in key positions with expatriates from other countries.

The Swedish interpretation of the objective of independence was wider and included long-term development programmes in rural areas. This implied that the second objective i.e economic and social justice was given priority.

This latter objective has increasingly become important to both parties in view of tendencies of increasing income disparities in a dual economy.

In relative terms the objectives of economic growth and democratic development have been given less emphasis.

4.2 Swedish assistance to the education sector

## 4.2.1 The impact in financial terms

Swedish assistance to the education sector commenced in 1966. The first agreement included support to Swaneng Hill School in Serowe (1966-1969) followed by an agreement to support the TTC in Francistown in cooperation with Unesco (1967-1972).

Total commitments amount to SKr 217,1 million. Total disbursements during the period 1966/67 - 1980/81 amount to SKr 173 million (approximately P 31,6 million in current prices).

Details by project and by agreement are given in annex 2a-d.

Out of the total, SKr 146 million have been disbursed under the Education Sector Programme I-V during the period 1974/75 - 1980/81 (current prices).

Total development expenditure to education 1974/75 - 1979/80 in Botswana has fluctuated between 15 and 20 per cent of the total capital budget.

The Swedish assistance to the education sector has overall constituted more than 35 per cent of total development expenditures since 1966/67.

A further breakdown by year and subsector is given in table 4.1 for the period 1974/75 - 1979/80. (For further details see annex 2f.)

Table 4.1 Swedish financial assistance as percentage of total development expenditure by subsector 1974/75-1979/80

As percentage of:	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80
Primary Education	30	70	98	90	31	38
Secondary Education	15	13	15	26	33	16
Vocational Training	36	27	68	13	40	37
Non-formal Education	"	"	"	7	36	38
Overall Expenditure	23	41	50	56	48	33

Note: The table does not include projects outside the Ministry of Education and the Ministry of Local Government and Lands. Hence, Libraries and National Archives are not included.

Third Country Training has also been excluded since disbursements for most of the period have been recorded as recurrent costs under the budget of the Directorate of Personnel.

Please note that figures in annexes 2c and 2e are not immediately comparable. The reason is that the Botswana financial year does not coincide with the Swedish financial year.

#### 4.2.2 The impact of technical assistance

Swedish technical assistance has been very modest in relation to the financial assistance.

In total, there are 29 individuals who have held posts as experts (9) or volunteers (20) in Botswana during the period 1972-80.



Table 4.2 Swedish technical assistance within the field of education 1972-1980; number of individuals by subsector

Secondary schools	11
Brigades	8
SCVT	7
Planning	2
Other	4
Total	32

The following table indicates the size of Swedish technical assistance in terms of manmonths per annum

Table 4.3 Swedish technical assistance 1972-1980 - Manmonths per annum

	1972	1973	1974	1975	1976	1977	1978	1979	1980	Total
Secondary schools	-	15	36	40	43	32	33	60	36	295
Brigades	-	-	1	12	21	9	24	15	13	95
SCVT *)	6	12	11	12	24	19	8	19	24	135
Planning	-	-	-	-	-	-	5	12	9	26
Other	-	5	28	10	10	-	-	-	12	79
Total	6	32	76	88	98	60	70	106	94	630

\*) including Chief Technical Education Officer.

Debriefing reports tell that Swedes have found it easy to work in Botswana. Confrontation with a British educational tradition, however, is not always easy. The education system is considered as too hierarchical and too much concerned with rote learning. Generally, the feeling is that brigades should have been given a more prominent role. Few if any of the experts and volunteers have had counterparts and this has not been requested by SIDA. The effects of training of local staff are therefore likely to have been small. It has not been possible to ascertain the effects of informal contacts between Botswana staff and Swedish staff.

#### 4.2.3 The impact on educational developments

Developments in the field of education during the 1970's have focussed on access to education. The manpower approach which emphasized the needs for skilled manpower in the modern sector has gradually been replaced or at least supplemented by a basic needs strategy. Primary education, and in recent years, non-formal education has come into the forefront of education. The concept of non-formal education has been widened to involve institutions such as libraries and museums. The procedures of planning have been gradually improved and targets set for the widening of access to education have largely been met.

Swedish financial and technical assistance has through the size of the financial commitments made it possible for Botswana to build up an infrastructure, a base for educational developments.

It has also helped to improve the quality of the facilities at secondary school level and through technical assistance in some practical subject promoted the diversification of the curriculum at this level.

Finally, it has contributed to the localization of a substantial number of posts within Government. Through the third country training programme and schemes of vocational training some difficulties and underutilizations has occurred in the field of vocational training and efforts should have been made earlier to rectify the situation.

The rapid expansion of the education system during the 1970's has put strain on the resources and quality and relevance of education will have to be given more attention than in the past. The National Commission on Education provides a strategy

for such a redirection of education in Botswana. The emphasis on qualitative improvements as suggested by the Commission should not be followed by a redirection of Swedish assistance. Recommendations for such change are given in chapter 5.

It should be noted that the very expansion of primary education and other programmes for rural developments has resulted in increasing manpower needs, which have tended to be overlooked.

#### 4.2.4 Fulfilment of the objectives of Swedish development cooperation

As illustrated in table 4.1 and annexes 2a-f there has been a gradual shift of emphasis towards primary education. This partly reflects a change of strategy in Botswana but also a change of strategy within SIDA itself.

This was clearly expressed in the analysis of the education sector carried out by SIDA in 1973. The concluding paragraphs discuss the question of priorities in general terms: "Foreign assistance has broadly speaking, tended to take a short-term view of development in the education sector. This has led to a disinterest in primary and non-formal education, which can only be seen in a ten to fifteen year perspective. They bring in the whole fifteen-year cycle of educational planning, whereas in the short view more immediate manpower and other needs are experienced as more imperative" (SIDA 1973 a).

The manpower approach to which SIDA had adhered during the 1960's was then replaced by a basic needs strategy. The same change of policy took place in Botswana some years later as a result of the National Commission on Education. Swedish assistance has been closely linked to this strategy in that the major share has been allocated to primary education.

The support to education and training of Botswana outside the country (Third Country Training) represents a deviation from this policy since it involves financing of studies at post-secondary level, technicians as well as graduate courses.

There are few if any other examples of such a long-term and concerted effort by SIDA to support tertiary education.

The reason obviously is the importance given to reducing Botswana's dependence on other countries. In view of Botswana's extreme dependence on expatriate staff, this fits in very well with the overall strategy of the development cooperation.

One would have expected a similar manpower approach when it comes to promoting rural development, the other main objective of Swedish development cooperation with Botswana. The shortage of skilled manpower is a serious constraint to rural development programmes. For some staff in key positions the Third Country Training Programme has served a useful purpose. Overall, however, the short-term needs for training of staff at middle level in the districts have been overlooked.

There may be pure administrative reasons for this, for example that such programmes should be funded under the District Development Programme rather than under the sectoral agreements on education.

#### 4.2.5 Concluding remarks

Swedish assistance has adhered closely to the general objectives of Swedish development cooperation with Botswana. It has been based on a basic needs strategy, which, particularly after the National Commission on Education has coincided with Botswana's strategy.

The targets set have largely been met and it has had its emphasis on financial assistance which very substantially contributed to widen access to education both for children and adults. The needs for manpower for planning and implementation within the education sector and for other development programmes have partly been met through support to Third Country Training partly through technical assistance. These efforts have been insufficient and should be increased partly through long-term measures to improve the quality of education and training in Botswana, partly through short-term measures to improve the training of staff in the districts and through technical assistance.

5 SUGGESTED AREAS OF COOPERATION BETWEEN BOTSWANA AND SWEDEN IN  
THE FIELD OF EDUCATION

It is recommended that future Swedish assistance in the field of education should include the following:

1. Special efforts to make primary education available to less advantaged groups.

Comments: As Botswana is moving towards universal primary education it has now reached a stage where special efforts are required in order to reach some less advantaged groups of students.

This is foreseen in NDP 7 which outlines a programme for provision of facilities in remote areas and at cattle posts. A recent study contains some recommendations to this effect but a final programme of action is still to be worked out. We recommend that such efforts be supported.

It should be noted that similar programmes have been supported earlier under LG 32 (108/27) Remote Area Development Programme.

We would like to stress that if primary education is to be truly universal it should also include education for disabled children. It has been indicated that as a first step a consultant should be recruited in Sweden and be posted at the Ministry of Education. The tasks have to be specified but should comprise planning of special education programmes at primary school level.

2. Provision of locally produced furniture for primary schools.

Comments: It has been indicated that the Ministry of Local Government and Lands wants to further encourage local production of school furniture in relation to the next phase of the primary school construction

programme. A consultant to draw up a plan for production, distribution and maintenance of furniture is likely to be requested from Sweden. Also financial assistance will be required. Cost estimates have been made in connection with the third World Bank Education Project.

We support these proposals as being in line with the Swedish efforts to stimulate local production. It is assumed that cost estimates will be made to indicate any differences between costs of local production and import from neighbouring countries.

3. Education and training for rural development including support to:

- training of professional staff in key areas outside Botswana
- training for the needs of districts and District Councils
- brigades training, including instructor and other training at BRIDEC.

Comments: There are in principle two ways of providing education and training for rural development. One is to seek to provide basic education and training for children and adults in the rural areas through provision of primary schools and adult education programmes. Swedish assistance has in the past mainly been confined to meeting such needs.

In addition hereto priority should now be given to education and training within programmes aimed at promoting rural development, for example rural water supply, road construction in rural areas and construction of schools and health posts.



Training of professional staff with a technical background is essential to any rural development programme as indicated above. Some of this training will take place outside Botswana for some time to come. Financing of the third country programme should therefore continue.

Brigades are, in the words of NDP V "the rural wing of vocational training in Botswana". Some important policy decisions in relation to the brigades are expected to be taken in a near future. However, we have assumed that the above policy will still stand. Brigades have despite their recent problems made a unique contribution to training in and for the rural areas, which will not immediately be catered for through a system of trade schools. Hence, we recommend that brigades and/or BRIISC should receive continued Swedish assistance.

There are various suggestions aimed at strengthening the training programme within Local Government and Lands. As soon as a plan of action has been worked out it should be considered for Swedish funding. We strongly suggest that the possibilities of using brigades as well as BRIISC should be explored in this context. We also recommend that the instructor training at BRIISC be supported.

As pointed out in several follow-up studies training of staff for maintenance of schools and health posts should be included in such a programme.

4. Improvement of the quality of basic education.

Comments: Swedish assistance in the past has had its emphasis on the quantitative expansion of primary education. In line with the Commission's recommendations as well as several reports from the annual

sector reviews priority should now also be given to the qualitative aspects of education. One of the major problems at present is the shortage of written material particularly in Setswana. In order to sustain the results of major investments in primary education and various non-formal education programmes it is absolutely essential that suitable written material be made available also to the people in the rural areas.

We recommend that action to this effect be taken at various levels of the education system. We also recommend that support to other aspects of curriculum development work be considered.

Some programmes are already being planning and we recommend that they be supported. Details of a Swedish programme of assistance still have to be worked out but we recommend that it include support to the following programmes:

- curriculum development including preparation, testing and production of textbooks and supplementary material in Setswana for primary schools.
- working out of a plan for the future role of TAPU in this context
- development of school radio at primary level
- production of material for the literacy programme
- rural libraries, particularly efforts to reach out to the rural areas through distribution of book-boxes.

5. Evaluation and research.

Comments: There is a need, as pointed out by the Commission, to follow-up regularly the quality of education, for example the testing of reading comprehension in English and Setswana and achievements in mathematics and science. Proposals to strengthen these activities are being discussed between the Ministry of Education and the NIR. Definite plans of action do not exist as yet.

We recommend that support to such evaluation and research be included in a future programme of assistance.

6. Third Country Training.

Comments: Botswana will for some time to come have to send staff and students abroad for further education and training in particular for science based professions.

This is important not only from the point of view of localization but also for programmes aimed at promoting rural development (of para 3 above).

We recommend that continued support be given to the Third Country Training Programme.

7. Technical assistance in the field of education.

Comments: In several of the areas mentioned above there will be a need for technical assistance. It is envisaged that this component will be bigger than in the past.

Also at the TTCs although not mentioned above there is a need for staff.

SECTORAL AGREEMENTS - THE CASE OF BOTSWANA

The first sectoral agreement was signed with Botswana in the field of education. It was very open and did not confine the use of Swedish funds to specific projects. The agreements stipulate that resources will be made available "as support to the development efforts of the Botswana Government within the field of education as set out in the development plan for 1973-78" (Article I). However, "the Swedish contribution shall be used for such programmes within the sector as shall have been annually agreed upon between SIDA and the Ministry" (of Finance and Development Planning). It was assumed that there would be annual consultations based on "an annual report on activities financed by Swedish contributions" (Article III.2).

The Botswana Government also undertook to "inform SIDA of all changes of the Government policy with regard to education that may influence this Agreement" (Article III.5). Hence, the Government of Botswana had the possibility of replacing existing projects by others provided that these were given priority by both parties.

The original agreement was later renewed but flexibility has been maintained.

The rationale behind this new type of agreements was to allow for allocation of funds between projects and subsectors and hence, to provide a better basis for long-term planning within the sector.

From the donor point of view responsibility for the implementation was left entirely in the hands of the recipient country. Donor involvement should be confined to identification and to evaluation of projects and programmes. From the donor point of view the advantages were mainly administrative; less involvement in implementation, less concern with details

of projects and only one agreement to cover the whole sector.

Monitoring of projects financed under the new agreement was to take place through annual sector reviews. It was assumed that reports, financial as well as narrative ones, should be made available to SIDA prior to the sector review.

The experience of Educational Sector Programmes I-IV will be discussed from the following points of view:

- reallocation between projects and subsectors
- introduction of new projects
- reporting, financial and narrative reports
- sector reviews
- SIDA's administrative procedures
- Botswana's assessment of sectoral agreement as compared to conventional project agreements.

In a few cases, Botswana has used the flexibility built into the agreement to propose new projects or to make reallocations. Generally speaking the programme has been very stable. Botswana has spent the Swedish funds on a limited number of big and long-term programmes, notably primary school construction. For example, slow disbursements at the early stage of the primary school construction programme made resources available for the Remote Area Development Programme, RADP, which did not form part of the original agreement. Also, some minor contributions to the Botswana Extension College were funded in this way.

One reason for this stability seems to have been that Botswana's budgeting procedures do not allow for reallocations above the ceiling of individual projects as specified in the national capital budget, at least not as far as donor financing is concerned. Reallocation of domestic development funds can be made more easily.

A second reason is that the great majority of the projects are tied to specific agreements with other donors. The process of planning and implementation in Botswana can not be expected to change radically as a result of one donor (SIDA) introducing a new type of more flexible agreements.

The fact that few new projects have been introduced during the period of sectoral agreements could of course also be taken as an indication of consistency and continuity of planning. No doubt, the Swedish assistance has filled a gap providing funds for long-term investments in primary education.

The reporting system is not defined in detail in the sectoral agreements. That is probably one reason for initial difficulties in receiving reports. Gradually, however, the situation has improved with the exception of the Boipelego Education Project which has not been reported satisfactorily.

There has been no standardized format of the reports, those having been prepared by various departments. Therefore it is very difficult to follow the progress from year to year based on reports from the Botswana authorities. The reports from the sector reviews are a necessary supplement to the information provided by the Government.

The main problem has been, and still is, the focus of the reports. It is understood that they should analyse overall objectives and trends within the sector, since that is what is being supported.

It has also been assumed, however, that they should provide details on the particular activities on which Swedish funds have been spent. There has been a tendency to concentrate on the latter aspects to the detriment of the policy issues. The tendency has been the same in other countries where education sector support agreements have been introduced.



Annual sector reviews have usually been carried out by a joint Botswana/SIDA-team. We feel that this arrangement has worked well but want to point at some problems involved.

The advantage is that consensus can be reached on the spot regarding modifications of the programme.

On the other hand it may be difficult to bring up and agree on policy issues on these occasions. Despite these difficulties we feel that the arrangement has worked well. Documentation from earlier reviews, however, is scarce. Later reviews are well documented as a result of new guidelines within SIDA to this effect. Originally sector reviews were meant to be more of an informal consultation.

The follow-up of recommendations from sector reviews should be improved. This is mainly the responsibility of the local SIDA Office together with the Ministries concerned. Day to day contacts should be intensified. It seems to have been assumed that the annual sector review should be sufficient, but in our opinion they are not, considering the complexity of the sector and the need to follow policy issues involved.

Administrative procedures within SIDA seem to have worked well in that there has been feedback to the Management Committee. The tying of sectoral agreements to the overall agreement on development cooperation seems irrelevant in the case of Botswana. A longer planning horizon is desirable.

In line with the country programming philosophy, on which sectoral agreements have been based, SIDA's internal project memoranda have focused on general descriptions and analysis of the sector. Objectives and targets are not very specific and have tended to become less specific over the years. The impli-



cation of this in that the reporting on the part of Botswana has been inconsistent, which makes it difficult for example to get a complete picture of the financial flow without special efforts such as the present study represents.

Having said this it should be noted that the various projects and programmes have been subject to a number of detailed follow-up and evaluation studies. The physical and technical aspects in particular have been thoroughly examined and recommendations for improvements have been made.

These studies have been listed in the list of references.

The views on sectoral agreements, as expressed by Botswana officials, are on the whole positive. The flexibility and openness of Swedish assistance generally is emphasized rather than the possibilities to make reallocations between projects or programmes.

#### Observations

Procedures of follow-up and evaluation have to be improved. This implies that objectives and targets have to be specified and the regular reporting be made more standardized.

It is up to SIDA to specify the kind of information required. We believe that the Botswana administration has the capacity to produce the reports that are required. The problems involved have been caused by requirements not being specified. In order to allow for indepth analysis of trends and policies, special evaluation exercises ought to be made as a supplement to the annual sector reviews, say once every four years.

AGREEMENTS ON SWEDISH ASSISTANCE WITHIN THE FIELD OF EDUCATION 1966/67-1980/81

Swedish aid to educational activities in Botswana started in 1966.

The total Swedish commitments to the sector amounts to SKr 217, 1 million.

Up to 30 June 1981 SKr 173 million had been disbursed.

The sector support agreements (ESP) I-V 1974-82, add up to a total of SKr 190 million, out of which SKr 146 million had been disbursed up to 30 June 1981. Thus, SKr 27,1 million was disbursed for earlier projects or projects/programmes not covered by the ESP I-V, agreements.

The distribution on subsectors on these has been as follows (in million Swedish Kronor):

Secondary schools	5
Teacher training	2,3
Vocational training	6,3
Library branches	3,9
Third country training	9,6
TOTAL	27,1

The Education Sector Support Programme have the following content (figures indicate total commitments):

ESP I 1974-78, SKr 35 million

Main emphasis on school buildings and teachers quarters as well as equipment for primary schools in rural areas.

Extension of secondary school facilities at three secondary schools (Shashe River, Swaneng Hill and Madiba).

Extension of the Botswana Polytechnic.

ESP II 1976-79, SKr 45 million

Main emphasis on primary school construction programme and equipment for these schools.

Buildings and renovation at two secondary schools (Shashe River, Swaneng Hill).

In addition to this an unspecified item was also included in the agreement.

ESP III 1978-83, SKr 25 million

The main component of this agreement is the support to the Boipelego Programme, with emphasis on secondary education and vocational training.

Buildings, renovation and equipment at two secondary schools (St Joseph, Mater Spei).

A Housing and Office project for Community Development Staff.

Building of new premises for the National Archives.

National monuments, identification, transportation and arrangements around the monuments.

ESP IV 1978-83, SKr 50 million

Main emphasis again on primary school construction in rural areas. Equipment (furniture) also included.

Continued support to the Boipelego programme.

Library branches, continuing previous specific project agreement on library branches. Another eleven libraries to be constructed.

Improved technical facilities of two secondary schools (Moeng, Shashe River).

ESP V 1980-81, SKr 35 million

Basic component primary schools, buildings and equipment, in the rural areas.

Third country training. Continued support of earlier specific project agreements.

Non-formal education. 50 per cent financing of planned activities during 1980/81 - 1981/82.

Observations

Target and goal formation of the ESP's are not very specific, the main reason being that the objectives are to support activities in the sector as such.

The rudimentary goal analysis carried out points thus on priorities of the various national development plans. The changes, in the context of the sector support, thus reflects changes in priorities or emphasis in development strategies.

There is one exception from this pattern, however. The first ESP put main emphasis on providing primary education at a time when the Government did not.

All through the ESP's special weight has been given to primary education and to equity aspects.

The two latest ESP agreements have also included specific projects earlier financed by SIDA parallel but not as part of the sector programmes (i.e. Libraries and Third Country Training).

BOTSWANA EDUCATION SECTOR - PROJECTS AND PROGRAMMES SUPPORTED BY SIDA SINCE 1966 (IN MILLION SKr)

Project	Agreement period	Agreed amount in Million Skr	Disbursed until 790630 in Million Skr	Disbursed 79/80 in Million Skr	Disbursed 80/81 in Million Skr	Total	Balance
Swaneng Hill School	1966-1969	0,70	0,70	-	-	0,70	-
Shashe River School	1968-1973	1,00	1,00	-	-	1,00	-
Madiba School	720210 - 780630	3,30	3,30	-	-	3,30	-
Teacher Training College (UNESCO)	1967	2,30	2,30	-	-	2,30	-
Vocational Training Centre (ILO)	720530 - 760630	6,30	6,30	-	-	6,30	-
Third Country Training I	720530 - 760630	1,90	1,90	-	-	1,90	-
Third Country Training II	760412 - 780630	2,80	2,80	-	-	2,80	-
Third Country Training III	790626 - 810630	4,90	0,40	1,60	2,90	4,90	-
Library Branches I	720922 - 760630	1,90	1,90	-	-	1,90	-
Library Branches II	741127 - 820630	2,00	1,60	0,20	0,06	1,86	0,14
Education Sector Programme I	740606 - 781231	35,00	35,00	-	-	35,00	-
Educ.Sector Progr. II	760217 - 790630	45,00	45,00	-	-	45,00	-
Educ.Sector Progr. III	780620 - 830630	25,00	13,60	6,50	4,00	24,10	0,90
Educ.Sector Progr. IV	790420 - 830630	50,00	3,30	17,30	17,20	37,80	12,20
Educ.Sector Progr. V	801212 - 820630	35,00	-	-	4,10	4,10	30,90
<b>TOTAL</b>		<b>217,10</b>	<b>119,10</b>	<b>25,60</b>	<b>28,26</b>	<b>172,96</b>	<b>44,14</b>

BOTSWANA EDUCATION SECTOR - APPROX. EXPENDITURE IN THOUSANDS PULA/RAND DURING  
THE SWEDISH FINANCIAL YEARS 1973/74 - 1980/81

Project	1973/74	1974/75	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81	Total
Primary School Buildings	631	593	1 942	1 820	3 700	3 111	1 979	2 160	15 936
Prim. School Equipment		316	791	97	352	551	465	427	2 999
Prim. School Stores			54	67	174				295
English Med. Prim. School			10	3					13
Madiba Sec. School	87	79	308						474
Moeng College						30	28	27	85
Shashe River School	76	6	19	63	279	80	292	375	1 190
Swaneng Hill School	74	3	59	227	140	129	83	59	774
St Joseph's College							451	405	856
Kater Spei College					305	268		25	598
Botswana Polytechnic (NCVT)	311	111	17	219	62	16	53	21	810
Brig. Dev. Centre (BUDOC)					58	44			102
Boipelego Educ. Project					678	1 176	757	948	3 559
Non-Formal Education (BNC Reading Cards)					0,4	11			11,4
National Literacy Project									
Remote Area Dev. Progr.			161	151	55			234	601
Third Country Training	36	210	51	125	164	168	296	523	1 573
Branch Libraries	53	55	134	110	144	31	33	10	570
National Archives						16	130	361	507
National Monuments						0,3		0,7	1
Comm. Dev. Housing						270	288	82	640
TOTAL	1 268	1 373	3 546	2 882	6 111,4	5 901,3	4 855	5 657,7	31 594,4

BOIPELEGO EDUCATION PROJECT<sup>x)</sup> - COSTS DURING THE BOTSWANA FINANCIAL YEARS 1976/77 - 1980/81  
(IERD, SIDA<sup>xx)</sup>, BOTSWANA GOVERNMENT AND OTHER DONORS) IN PULA

Subproject	IERD	SIDA	Botswana Government or other donors	Total
Bobonang Secondary School	1 212 041	597 960	2 249	1 812 250
Letlhakane Secondary School	1 338 883	662 297	191 992	2 193 172
New Secondary School Francistown	385 362	53 155	114 190	552 707
New Secondary School, Gaborone (New Maledi Secondary School)	315 110	2 659	126 975	444 744
Ramotswa Secondary School	603 152	19 580	258 825	881 557
Macha Comm. Centre	1 512 002	1 200 748	707 395	3 420 145
Botswana Extension College	128 950	78 951	11 751	219 652
Brigades	1 477 039	459 825	291 662	2 228 526
Central Education Store	36 961	34	12 932	49 927
Boipelele Education Project Unit (adm.)	396 960	118 932	59 697	575 589
TOTAL	7 406 460	3 194 149	1 777 668	12 378 277

<sup>x)</sup> University of Botswana and Swaziland, Faculty of Education is not included

<sup>xx)</sup> No SIDA-funds were provided in 1976/77 and 1977/78



## DEVELOPMENT EXPENDITURES - BOTSWANA FINANCIAL YEARS (PULA/RAND)

	<u>1970/71</u>	<u>1971/72</u>	<u>1972/73</u>	<u>1973/74</u>	<u>1974/75</u>	<u>1975/76</u>
Total Development Exp.	8 526 063	12 252 744	29 879 624	30 265 844	32 784 103	35 448 703
Total Educ. Dev. Exp.	573 791	303 982	1 033 270	2 362 112	5 681 134	7 338 458
a) Min. of Educ.	571 695	286 907	1 010 509	1 696 747	2 533 127	3 662 170
b) Min. of Local Govt. & Lands (primary schools)	2 096	17 075	22 761	665 365	3 148 007	3 676 288
Exp. in Subsectors:						
Primary (Min. of Educ.)	-	5 948	12 868	144 900	57 039	8 262
Total Primary (Min. of Educ. + Min. of Local Govt. & Lands)	2 096	23 023	35 629	810 265	3 205 046 ✓	3 684 550 ✓
Secondary	488 227	241 907	652 022	374 274	1 552 838 ✓	2 691 812
Vocational	30 362	7 281	253 657	701 926	296 328	62 265
Teacher Training Centres (primary school teachers)	53 101	31 767	50 747	51 203	4 111	43 984
University (incl teacher training for sec. school teachers)	-	-	41 207	248 936	500 163	844 000
Non-Formal Education	-	-	-	-	-	-
Other	-	-	-	175 500	122 640	11 840
Total Swedish Contr. to Educ. Dev. Exp.	-	-	506 386	744 208	1 303 988	2 978 149
Swedish Contr. to Subsectors:						
Primary	-	-	-	-	959 559 ✓	2 598 459 ✓
Secondary	-	-	284 788	87 000	239 027 ✓	362 951
Vocational	-	-	221 598	637 208	105 402	16 739
Teacher Training Centres	-	-	-	-	-	-
University	-	-	-	-	-	-
Non-Formal Education	-	-	-	-	-	-
Other	-	-	-	-	-	-

	<u>1976/77</u>	<u>1977/78</u>	<u>1978/79</u>	<u>1979/80</u>	<u>1980/81</u>	<u>Total</u>
Total Development Exp.	37 601 157	44 431 455	79 008 133	98 284 904	121 436 240	529 918 970
Total Educ. Dev. Exp.	5 468 536	8 920 303	8 920 006	14 468 291	18 172 257	73 242 140
a) Min. of Educ.	3 288 792	4 190 550	6 058 299	9 646 549	11 329 511	44 274 856
b) Min. of Local Govt. & Lands (primary schools)	2 179 744	4 729 753	2 861 707	4 821 742	6 842 746	28 967 286
Exp. in subsectors:						
Primary (Min. of Educ.)	7 418	-	-	103 221	9 466	349 122
Total Primary (Min. of Educ. + Min. of Local Govt. & Lands)	2 187 162 ✓	4 729 753 ✓	2 861 707	4 924 963 ✓	6 852 212	29 316 406
Secondary	1 894 471 ✓	2 490 661 ✓	4 073 045	6 100 963	6 736 557	27 296 777
Vocational	445 341	607 196	515 384	439 590	825 964	4 255 294
Teacher Training Centres (primary school teachers)	26 979	5 853	56 710	1 341 666	1 204 517	2 070 638
University (incl teacher training for sec. school teachers)	777 762	876 549	1 169 889	1 424 803	2 197 366	8 080 675
Non-Formal Education	-	5 750	87 778	115 522	178 696	307 746
Other	136 810	204 541	155 493	120 780	106 943	1 034 547
Total Swedish Contr. to Educ. Developm. Exp.	2 732 575 ✓	4 961 745	4 241 936	4 818 484 ✓	3 348 121	25 635 592
Swedish Contr. to Subsectors:						
Primary	2 138 296 ✓	4 237 532	2 592 777	3 596 696	877 155	17 000 474
Secondary	291 648 ✓	645 144	1 364 057	972 969	2 254 228	6 501 812
Vocational	302 631	78 672	205 477	163 095	183 814	1 934 636
Teacher Training Centres	-	-	-	-	-	-
University	-	-	303	52	-	355
Non-Formal Education	-	397	31 615	44 204	3 052	79 348
Other	-	-	47 707	41 308	22 872	118 267

TERMS OF REFERENCE FOR A SWEDISH TEAM TO STUDY PAST ACHIEVEMENTS AND FUTURE  
NEEDS OF SWEDISH ASSISTANCE IN THE FIELD OF EDUCATION IN BOTSWANA

BACKGROUND

The first sectoral agreement in the field of education between Botswana and Sweden was signed in 1974. The current agreement (Sector Support, phase V) covers the Swedish financial years 1980/81 - 1981/82. Swedish support to education has mainly been confined to the primary school construction programme, third country training, library branches the National Archives and the Boipelego Education Project. It is envisaged that cooperation in the field of education will continue.

PURPOSE OF THE STUDY

It has been agreed that a study should be undertaken mainly for the purpose of summarizing achievements of projects and programmes which have received Swedish assistance and of providing background information for decisions about future Swedish assistance. Also, it is hoped that the study could serve as a basis of joint sector review discussions, scheduled for November 1981.

The study will be undertaken by a team of two Swedish consultants in close cooperation with the Botswana authorities concerned and in particular with the Planning Unit of the Ministry of Education.

It is assumed that the study mainly could be based on data readily available such as Development Plans, Previous Sector Review Reports and other evaluation reports.

## DUTIES

Through study of relevant documents, visits to educational institutions and discussions with the Botswana authorities concerned the team should:

- a) Summarize achievements in relation to national targets of projects and programmes supported by Sweden under sectoral agreements I-V, including third country training.
- b) Identify bottlenecks in implementation of programmes indicated in the foregoing paragraph.
- c) Look into the effectiveness of sector support agreements as a mechanism for transfer of resources particularly as conceived by the different ministries involved.
- d) Describe and analyse overall developments in the field of education in light of the Report of the National Commission on Education and the subsequent White Paper on Education.
- e) Identify and discuss needs of Swedish assistance beyond June 1982.

Findings and recommendations under this paragraph should be presented to the Botswana authorities concerned and to SIDA prior to the sector review in November 1981.

A final written report in English should be completed not later than 15 January 1982.

## MEMBERS OF THE TEAM

The team should comprise two Swedish consultants, one from the Education Division of SIDA and one from outside SIDA with a wide experience of research and evaluation in education.

## DURATION

The work shall be undertaken during November and December 1981. Three weeks will be spent in Botswana in November. The consultant from outside SIDA will be employed for a period not exceeding a total of five weeks.

## COSTS

Costs induced by the work of the two consultants including their field trips, will be met by SIDA.

## REFERENCES

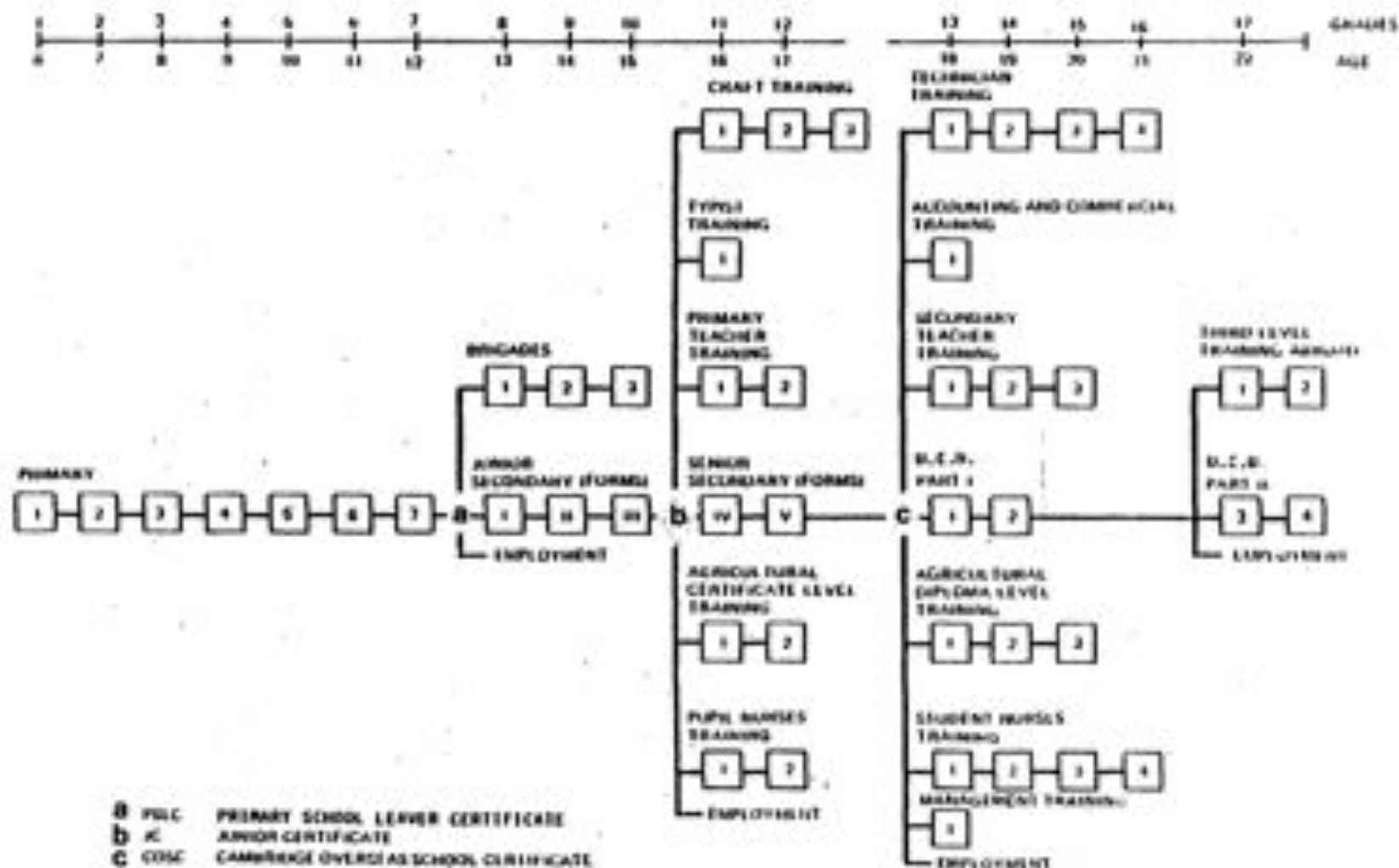
1. Cammaerts, P.A.  
Advice on Curriculum Development, Junior Secondary  
Schools and Secondary School Teacher Training  
College, Gaborone  
1981
2. Colclough, C and McCarthy, S  
The Political Economy of Botswana  
Oxford University Press 1980
3. CSO  
Standard VII, Form 3, Form 5 and brigade school  
leaver tracer study  
Gaborone (Mimeo) 1979
4. Dore, R P  
The Diploma Disease  
London George Allen & Unwin Ltd 1976
5. Egner, E B and Klausen, A-L  
Poverty in Botswana  
National Institute of Development and Cultural Research,  
Working Paper No 29, Gaborone, University College of  
Botswana 1980
6. Kann, U  
Career Development in a Changing Society. The case  
of Botswana  
Stockholm Institute of International Education, Uni-  
versity of Stockholm 1980 a
7. Kann, U  
The Second University of Botswana. An evaluation of  
Third Country Training  
Gaborone, SIDA 1980 b
8. Kann, U and Mokgethi, S  
An Educating Broadening, Maturing Experience. A report  
of the Evaluation of the Pilot Project of "Tirelo  
Setshaba", The Community Service Scheme for Senior  
Secondary School Leavers  
Government Printers, Gaborone 1981
9. Kukler, B  
Follow-up Study of Graduates from Brigade Centres,  
Ministry of Education, Government Printer, Gaborone 1976
10. Odén, B  
The Macroeconomic Position of Botswana  
Scandinavian Institute of African Studies, Uppsala 1981
11. Parson, J  
Aspects of Political Culture in Botswana: Results of  
an Exploratory Survey  
Gaborone (Mimeo) 1976

12. Rensburg, P v  
Report from Swaneng Hill  
The Dag Hammarskjöld Foundation, Uppsala 1974
13. Republic of Botswana
- 1970 National Development 1970-75  
Government Printer, Gaborone
- 1973a National Development Plan 1973-78  
Ministry of Finance and Development Planning,  
Gaborone
- 1973b Manpower and Employment in Botswana  
Ministry of Finance and Development Planning,  
Gaborone
- 1975 Education Statistics  
Ministry of Education, Gaborone
- 1976a Education Statistics  
Ministry of Education, Gaborone
- 1976b The Rural Income Distribution Survey in Botswana  
1974-75  
Government Printer, Gaborone
- 1977a Education Statistics  
Ministry of Education, Gaborone
- 1977b National Development Plan 1976-81  
Ministry of Finance and Development Planning,  
Gaborone
- 1977c Government Paper No 1, National Policy on  
Education  
Gaborone
- 1977d Education for Kagisano, Report of the  
National Commission on Education  
Government Printer, Gaborone
- 1978 Education Statistics  
Ministry of Education, Gaborone
- 1979a Education Statistics  
Ministry of Education, Gaborone
- 1979b Principals Report  
Botswana Polytechnic (Mimeo)  
Ministry of Education, Gaborone
- 1980a National Development Plan 1979-85  
Ministry of Finance and Development Planning,  
Gaborone
- 1980b Statistical Bulletin  
Central Statistics Office, Gaborone
- 1980c National Accounts  
Government Printers, Gaborone
- 1980d Education Statistics  
Ministry of Education, Gaborone



- 1980e Supply of Form 5 students for University Entrance  
Ministry of Education (Mimeo), Gaborone
- 1981a Towards a new relationship between brigades and Government  
Government Printer, Gaborone
- 1981b Preliminary data from the 1981 Population Census  
Central Statistics Office, Gaborone
14. SIDA  
Education and Training in Botswana  
SIDA, Stockholm 1973a
15. SIDA  
Brigades Survey Mission  
SIDA, Stockholm 1973b
16. Stellinga, R  
Report on the evaluation of the impact of the branch libraries on their communities  
Government Printer, Gaborone 1980
17. White Arkitekter AB  
Study of Rural Building Development in Botswana  
Stockholm 1978
18. SIDA  
Project Memoranda Sector Support I-V (Innsats-sektor-stöd I-V)
19. Republic of Botswana  
Principal's Report  
Botswana Polytechnic  
Ministry of Education (Mimeo), Gaborone 1980f
20. World Bank  
Staff Appraisal Report. A Third Education Project in the Republic of Botswana  
World Bank, Washington 1981

REPUBLIC OF BOTSWANA  
STRUCTURE OF THE EDUCATIONAL SYSTEM (1978)



The Education Division at SIDA initiates and implements a large number of studies regarding education and training, especially in SIDA's programme countries.

In order to make these studies more readily available, they will be published in a series called "Education Division documents". This series will also include earlier studies considered to be of current and general interest.

Included in this series:

No.1: "Education and training in Sri Lanka" by O.Engquist, L.Jivén, K.Nyström.



Coverpicture by: Micheal Kahn.  
ISBN 91-586-7015-7.  
SIDA, Education Division, 1982.