

ECONOMIC DEVELOPMENT OF BOTSWANA

Facets, Policies, Problems and Prospects



Edited by:
Happy, K. Siphambe, Nettem Narayana
Oluyele Akinkugbe, Joel Seetsho

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Foreword

Botswana was rated as one of the poorest countries in Africa at the time of Independence in 1966. Moreover in a period of about three decades thereafter, the country managed to emerge as an upper-middle-income developing country, with the annual growth rate of per capita income averaging 8.4% and per capita Gross National Income (GNI) now standing at about \$3,430. Over the three decades, Botswana was one of the fastest growing economies in the world, with a growth rate that compared favourably well only with those of the high performing economies of East Asia. The country has set itself a credible track record in the provision of social services such as education, health-care and public utilities, and has built both public and parastatal institutions that have driven the process of economic growth.

The country has also brought on board the private sector as a partner in economic development. There has largely been complementarity among fiscal, monetary and exchange rate policies, as a result of which the economic environment has been stable and conducive to both domestic and foreign investors. Unlike other mineral-based economies which have fallen prey to the “Dutch disease” and the “resource curse phenomenon”, Botswana has avoided these developmental problems. Instead the country has pursued prudent financial management, thus enabling it to meet not only the recurrent and development expenditures, but also the accumulation of savings in the form of foreign exchange reserves, which should cushion the country against external economic shocks, and assist in a “soft landing” when the mineral boom is over.

Fortunately, the outside world has recognised Botswana’s efforts in economic development, and this has resulted in the country acquiring an international reputation for good governance, transparency and negligible corruption. Consequently, Botswana has, since 2001, attained and maintained the highest sovereign credit ratings in Africa, awarded by both Moody’s Investors Service and Standard and Poor’s. The ratings compare favourably with those of several middle-income countries elsewhere in the world. The country has also scored highly in the Global Competitiveness Report for the period 2003/04, and Transparency International has recently ranked Botswana at 30 out of 133 countries in its Corruption Perception Index. All of these scores are the highest among surveyed African countries and are higher than those of several countries in Europe, Central America and Asia.

Despite these positive developments, Botswana and, in particular, its economists, still face enormous challenges in developing policies that will contribute to the realisation of economic diversification, eradication of poverty and unemployment as too many of our people are still without jobs, and the HIV/AIDS pandemic which is raising many new social and economic problems.

A dynamic globalising world requires equally dynamic local approaches. The international recognition that Botswana continues to receive in terms of good governance and competitiveness in the public sector should now be matched by good performance in the private sector. But, the entrepreneurs, both existing and aspiring, will not succeed if they cling to public incentives at the expense of private innovation. Here, it is the educated, informed youth who, in particular, have the energy and capacity to move the country forward. The private sector can and

must also make a greater commitment to local hiring and on the job training. The creation of more job opportunities will also continue to demand government's efforts to ensure the material infrastructure, as well as human resources, to compete for global markets and investment.

The government should also continue to review the existing laws, regulations and policies, and where it is appropriate, formulate new ones, in order to further foster an enabling environment for citizen empowerment, as well as foreign direct investment and thereby to achieve economic diversification. In the coming years, to further enhance the country's competitiveness and the country's private sector development through foreign direct investment, additional steps have also to be urgently undertaken. The Vision 2016 calls for the people to remain compassionate and caring, as well as just. To maintain these values, it is necessary to continue to integrate into the mainstream of the society, those sections of the population that are marginalised by circumstances. But, in as much as we seek to reduce dependency on the state, the government should, nonetheless, remain committed to the continued provision of social safety net programmes for those in need.

The book *Economic Development of Botswana - Facets, Policies, Problems and Prospects* is a compilation of papers contributed by the lecturers in the Department of Economics, University of Botswana. The book is intended to cater for the needs of students, researchers, policy makers as well as casual readers interested in knowing about the Botswana economy. The authors have endeavored to produce a highly readable book, making the writing a literary effort that should compliment and supplement the existing literature on development economics in general and the experience of the Botswana economy in particular that is striving to undergo structural change with varied socio-economic policies and redirection strategies that have been formulated and implemented in order to achieve economic diversification and sustainable development.

The chapters in the book have covered diversified aspects of economic growth and development of Botswana. The chapters link theory to the functioning of the economic system by focusing on the relevance of policies as well as strategies on selected macroeconomic issues that the country has confronted over the years.

The crucial economic issues covered under the different chapters of the book aptly reveal the direction in which Botswana economy is moving not only in terms of understanding its commendable overall performance in economic growth and development but also in achieving structural transformation to reshape the economy and to fulfill the goals of Vision 2016.

N. H. Fidzani

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Dr. Happy K. Siphambe is a Senior Lecturer and Head of the Department of Economics, University of Botswana. He holds a Masters degree from Western Michigan University, USA, and a PhD from the University of Manitoba, Canada. He currently teaches labour economics and economic theory. He has published extensively in the area of labour economics, HIV/Aids, gender, and the general area of the economics of education.

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Dr. S. M. Kapunda was an Associate Professor at the University of Dar-es Salaam, Tanzania before joining the University of Botswana as a Senior Lecturer in the Department of Economics in September 1999 on a sabbatical leave and subsequently on leave of absence. He has a long experience in teaching, consultancy and research related to industrial economics, economic development, management and policy analysis among others, at both Universities and the African Economic Research Consortium (AERC/JFE) Nairobi, Kenya. He has published a number of books, has contributed several chapters in books, and authored many journal articles.

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Preface

The pace of economic development of a country is best analysed when there is a full understanding of the process of development as influenced by the country's resource endowments, its structure in terms of economic, social, political and cultural set up, and the macroeconomic policies pursued over a period of time. In most developing countries of the world, the rate of development is adversely influenced by structural rigidities and poorly functioning institutional structures. Many countries in Africa, Asia and Latin America exhibit these characteristics, and these tend to differentiate them largely from the developed countries of Europe and North America. Despite the obvious structural diversities, most of these countries share a set of common and well-defined goals. These include an appreciable reduction in poverty, inequality, and unemployment; the provision of minimum levels of education, health, housing, and food to every person; and a broadening of economic and social opportunities. Thus the main focus of many African countries centres mainly on achieving social and economic development.

Most of the countries in Africa (and particularly sub-Saharan Africa) have performed poorly in the last three decades or so. Their rates of growth have been very low, as has been their rates of integration into the global trading and financial systems. One country that seems to have escaped from such dismal performance is Botswana. Botswana has not only achieved high economic growth rates, but has also made significant progress in creating the conducive political and economic environments and social infrastructure necessary for development. The United Nations Economic Report on Africa (2003) singles out Botswana as the overall number one performer on the African continent. This performance is the result of a better quality of the civil service, and a greater access to and reliability of telecommunications services, transport and electricity, in the aggregate, than elsewhere on the African continent.

Botswana has a well-established tradition of good governance, having the best public institutions in Africa in terms of their quality, low levels of corruption and respect for the rule of law. Botswana was also ranked number one in Africa in the World Economic Forum's 2003-2004 Global Competitiveness Report, based on key factors that contribute to an enabling environment for sustained growth, such as macro-economic policy, the quality of public institutions, and the state of infrastructure. Similarly, the Economic Freedom of the World: 2003 Annual Report, which was released by the Washington, DC-based Cato Institute, in conjunction with the Fraser Institute of Canada and more than 50 other high level economic think tanks from around the world, specifically singled out Botswana as "A Shining Example". In the same report, the country is ranked alongside Norway and Japan as having the world's highest levels of economic freedom.

This book is the product of a sincere attempt by the Department of Economics, University of Botswana, to provide a comprehensive book on the Botswana economy and its growth achievements, with special attention to policies, problems and prospects for the economy in the longer term. The different chapters of the book broadly reflect upon development issues that are currently influencing the economy, and which are also relevant in the context of sweeping economic reforms and globalisation efforts. The book also pays special attention to crucial

economic challenges the country is facing, such as poverty, unemployment, and the HIV/AIDS pandemic that is adversely affecting the prospects of human development. With the latest information on topics of current relevance to the Botswana economy, the book not only meets the general needs of students of economics, but will also be useful as an indispensable reference material for other interested readers in and beyond Botswana.

Chapter 1: Botswana's Economy - An Overview gives a brief overview of Botswana's economy, highlighting the historical pattern of economic change, its political economy, and the structure of the economy over the post-independence period. The chapter highlights how the country has made the desired progress towards achieving the norms of good political and economic governance by adopting a development path that not only brought a congenial environment needed for economic progress, but also balanced social and economic development in Botswana.

Chapter 2: National Development Plans in Botswana analyses the role of national development plans in Botswana, while covering the details of the rationale for planning, its origin, framework and objectives, and the performance of the various development plans that have been formulated and implemented since Independence. The chapter focuses on the need to incorporate the goals of Vision 2016 into national development plans in order to sustain the spirit of the Vision in future national policies and programmes. It also highlights some of the problems experienced in the practice of development planning in Botswana, as well as the political will required at the national, district, urban and village levels for better cohesion and effective coordination and implementation of national development plans.

Chapter 3: Macroeconomic Policies for Development in Botswana discusses the contribution of macroeconomic policies to economic growth and development in Botswana. The focus is on how various National Development Plans in Botswana have emphasised the role of macroeconomic policies that have been pursued to achieve sustainable economic growth and diversification of the economy away from a heavy dependence on minerals and the government for economic development.

Chapter 4: Financial Sector Development in Botswana emphasizes the role of the financial sector in economic development, with a focus on the experience of Botswana. It is divided into three sections, namely 1. Finance and Development, 2. the Bank of Botswana: A Historical Perspective and its Role in the Development of the Financial Sector in Botswana, and 3. Saving-Investment Flows and Financial Sector Development. The chapter highlights the fact that there has been a significant improvement in financial intermediation in Botswana from the 1990's, and also that the role of the Bank of Botswana has been undergoing tremendous changes in terms of monetary, exchange rate, and financial policy formulations. It also examines the increasingly active financial services sector of Botswana, through the establishment of the Botswana Stock Exchange, different money markets, the introduction of the Government Bond market, and the establishment of the International Financial Services Centre.

Chapter 5: Fiscal Systems and Policy in Botswana deals with government revenues and expenditures in Botswana. It highlights the fact that the Government of Botswana has had to address issues of public finance, bearing in mind the fact that diamonds, which currently

generate the highest proportion of annual fiscal revenue, are an exhaustible resource. The chapter concludes with an account of budgetary policy and tax reforms in Botswana.

Chapter 6: The Role of the Public and Private Sectors in the Botswana Economy examines the public sector in Botswana; its growth and structure; the relative roles of the public versus private sectors in the development of the economy; the environmental preconditions for privatisation; and public sector reform as a substitute or complement to privatisation for enhanced efficiency. It highlights the fact that, although the public sector in Botswana is still the biggest employer, and is increasingly becoming the biggest investor, its growth has been identified with increasing inefficiencies in the use of resources. In this regard, the government has embarked upon a privatisation programme, which will need to be accompanied by a strong competition policy if it is to be successful.

Chapter 7: Agriculture and Rural Development in Botswana analyses the structure, organisation and role of agriculture in Botswana's economy in terms of its contribution to the nation's output and to the livelihood of the people. The chapter posits that, despite significant measures and programmes implemented to raise agricultural output and productivity over the years, agriculture in Botswana has been in steady decline due to various constraints. Therefore any strategy aimed at enhancing overall agricultural productivity must take into consideration the characteristics, prevailing conditions and constraints within traditional and commercial agricultural production systems. It is hoped that the agriculture sector will be made more attractive and productive, allowing it to make a large contribution in terms of the provision of food security and employment.

Chapter 8: The Mineral Sector in the Botswana Economy discusses the contribution of the mineral sector to Botswana's economic growth and development. It starts by looking at the prospects and challenges of mineral-led economic growth in mineral-based economies. On the basis of these, it assesses Botswana's mineral-led economic development to see how the country has taken advantage of the opportunities for economic growth offered by mineral wealth, and how it has worked to overcome the challenges of economic growth faced by mineral-based economies. The chapter concludes that Botswana has managed to overcome most of the problems of mineral-based economies and may thus offer some lessons of experience to resource-based economies in general.

Chapter 9: Industrial Development in Botswana starts by introducing the concepts relating to industrial development and the different approaches to industrialisation. The chapter examines the criteria for gauging the degree of industrialisation, the central role of the industrial sector in diversification and economic development, and policies and strategies for industrialisation. The performance of the industrial sector and a road map for economic diversification in Botswana are also examined in this chapter. The chapter also highlights the relationship between international trade and industrial growth, with particular reference to Botswana. It then concludes with the challenges to and prospects of the industrial sector in Botswana.

Chapter 10: The Small and Microenterprises and the Challenges of Employment Creation in Botswana presents empirical evidence showing that the SMEs are by far the single most important economic actors in the country in terms of income and employment generation among

the poor, and hence their potential for facilitating poverty alleviation in the country is certainly pivotal. Yet, these enterprises face numerous constraints that can be addressed with moderate effort if the will to do so exists. There is no doubt that such an effort would certainly earn the country significant dividends. Among the principal constraints facing these enterprises as discussed in the chapter are a lack of finance, lack of proper information on sources of finance, lack of information on government assistance programmes, marketing problems, a scarcity of suitable business premises, difficult regulatory formalities, bureaucratic red tape, and unreliable yet costly utilities. It is recommended that these constraints be eliminated by providing affordable credit through the introduction of a Credit Guarantee Scheme; appropriately structured Financial Assistance; the facilitation of market access to SMEs; easing of the regulatory environment; provision of relevant and appropriate education and training; gender empowerment; provision of fiscal and financial incentives; and the elimination of bureaucratic red tape. If well designed and correctly implemented, these recommendations should go a long way in achieving the objectives of employment and income generation among the poor, and the consequent alleviation of poverty in the country.

Chapter 11: Human Development in Botswana: Issues and Problems examines the level of human development in Botswana and its implications on the economy. The chapter explains how recent debate has begun to focus on development measurement other than the growth in Gross National Product, with emphasis on human welfare and human potential, and accepting human development rather than mere Gross National Product (GNP) growth as a true reflection of development. The chapter shows that, although Botswana has made good progress compared to other African countries in raising per capita Gross Domestic Product, literacy, and school enrolment, as well as improving health, the gains from education and health are lower than those in other developing countries. Botswana is facing a high rate of HIV prevalence that poses serious challenges for the economy through its macroeconomic impacts on labour markets and human development.

Chapter 12: Poverty and Unemployment in Botswana focuses on issues of poverty and unemployment in Botswana. Taking a broader view about poverty, the chapter undertakes an analysis of income poverty, capability poverty and participatory poverty in Botswana. The chapter looks at the causes of poverty in Botswana. It also assesses past efforts to deal with poverty, and provides some suggestions on future policies to address the problem. The last part of the chapter looks at the related issue of employment in terms of its historical development, past efforts at employment creation, and finally recommends the way forward in terms of policies to deal with the problem of unemployment.

Chapter 13: The Issues of the Environment and Development in Botswana focuses on various issues of the natural environment and development in Botswana. Where there are public goods and externalities, the market system needs to be corrected to reflect the true value of environmental resources. The key concepts on public goods and externalities are presented in this chapter. The chapter concludes that, even though there has been an earnest effort to preserve the ecosystems of Botswana, there still remain significant challenges concerning the issues of poverty and the environment, land degradation, deforestation and pollution.

Chapter 14: International Trade, Balance of Payments and Trade Policy reviews Botswana's trade policy, trade structure, balance of payments, foreign exchange reserves management, and the exchange rate policy. Botswana is a relatively open economy and has experienced a remarkable growth in its foreign trade relations over the years. The chapter highlights the fact that Botswana's trade relations are dictated by her membership of the Southern African Customs Union and other trading arrangements. These trading arrangements have consistently influenced her trade policy, structure, pattern, and direction of trade.

Chapter 15: Botswana in the Context of Regional Economy discusses the prospects for Botswana's economic growth and development in the context of current regional and global developments in the world economy. To this end, the chapter covers the implications of globalization, regional free trade arrangements - such as SACU, SADC Trade Protocol, EU-SA Free Trade Agreement, EU-SADC Free Trade Negotiations, and USA-SACU Free trade Negotiations - and the implications of current developments in the WTO trade negotiations for developing countries. The chapter concludes with some policy recommendations on how Botswana, and the economies of Southern Africa in general, can strategically position themselves to mitigate the negative impacts of regionalism and globalization, while at the same maximizing the benefits therefrom.

Chapter 16: Economic Prospects for Botswana: Policy Options presents the future prospects for Botswana and suggests some policy options towards these. It posits that the economic progress made by Botswana so far has been due to the policies and commitments of the government to achieve the goals set in the development plans. But, given the current situation, the country's prospects to achieve a growth rate of at least 7-8% per annum for a sustained period depend on the ability and efforts of the economy to devise measures that will balance the country's macroeconomic policies with the concerns for rapid economic growth, economic stability and social equity. Achieving rapid and sustained economic growth in Botswana is now linked to a paradoxical situation wherein the country needs to ensure a high degree of economic growth by diversifying the economy away from the mining sector, while simultaneously tackling problems such as the HIV/AIDS pandemic, high poverty, and growing unemployment and income inequalities in the country.

We sincerely hope that the different chapters, contributed by colleagues in the Department of Economics, University of Botswana, will be of value to readers and researchers alike. We believe the chapters will add to the existing literature on development economics in general and to the experiences of the Botswana economy in particular. We are thankful to the authors of the various chapters for their scholarly contributions made at our request, and for the cooperation received at different stages of the preparation of this book. We also express our sincere appreciation to Bay Publishing (Pty) Ltd. for publishing the book in an elegant and meticulous manner.

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Chapter 1

Botswana's Economy – an Overview

N. Narayana, H. K. Siphambe, O. Akinkugbe and J. Sentsho

Introduction

The objective of achieving rapid economic growth with social justice has received the highest priority in all the National Development Plans for Botswana since the country gained independence from Britain in 1966. The country has made significant progress towards achieving norms of good political and economic governance. Improved economic governance in the country is evidenced by the adoption of a development path comprising a set of strategic choices that place income growth and social development of the people, through the development of education and health care, poverty reduction, and employment creation at the centre of the country's development process. In more recent times, the task of sustaining economic diversification has necessitated not only a strengthening of the public sector in Botswana but also providing incentives to attract investment in the private sector. An integral part of this process is the adoption of strategies aimed distinctly at creating a congenial social and economic environment needed for the development process.

Botswana has thus been able to attain during the last three decades the highest economic growth rate among Sub-Saharan African countries. This achievement is a result of the nation's commitment to the implementation of sound economic reforms, the promotion of macro-economic stability, and by enabling the private sector to be an engine of economic growth.

In this chapter, we highlight the historical pattern of economic change, the political economy, and the structure of the economy, as well as structural changes in the economy particularly during the post-independence period. This overview is intended to provide a *starter menu*, so to say, to the other chapters of this book, all of which study the different sectors of the economy in greater depth.

Historical Pattern of Economic Change

Botswana, then known as Bechuanaland, became a British Protectorate in 1885. During this period, the British policy was to do "as little in the way of administration and settlement as possible" (Colclough and McCarty, 1980). As a result, the country was administered from Vryburg (1885 to 1895) and from Mafikeng (1895 to 1966), both in South Africa. Consequently, until Independence, the country had neither a capital city nor a Resident Governor to initiate and drive the process of economic development. In addition, the 1910 Union Treaty had provisions to incorporate three High Commission Territories, namely Bechuanaland, Basutoland and Swaziland, into the Union of South Africa. Because of these factors, the British colonial office neglected Botswana's economic development, thus making it one of the poorest countries in the world at the time of Independence in 1966. Thus in 1966, Botswana, which was landlocked and surrounded by hostile white minority regimes in South Africa, Southern Rhodesia (now

Zimbabwe) and South West Africa (now Namibia), depended on British grant-in-aid for about half of its recurrent budget.

In terms of infrastructure, the country had the railway line that ran through its eastern side from South Africa to Southern Rhodesia. This line was first administered by South Africa and later by Rhodesia. As a result, it benefited the people of Botswana very little in terms of employment and the acquisition of skills needed to run a railway system (Harvey and Lewis, 1990). On the industrial side, Botswana inherited an abattoir and a meat cannery, a maize mill, a malt mill, and two textile plants in Lobatse; and a leather tannery, a creamery and a bone meal and fodder plant in Francistown. Further, the need to raise funds to pay the British hut and poll taxes, which were imposed to run the colonial administration office, gave rise to the growth of migrant labour to the South African mines and farms.

Despite the above problems, Botswana experienced a Gross Domestic Product (GDP) growth rate that is comparable to that of the East Asian Newly Industrializing Countries (NICs) soon after independence (Sentsho, 2004). This economic transformation is explained by several factors. First and foremost, Botswana had a number of untapped or partially tapped sources of revenues at independence. These existed in the form of Southern African Customs Union (SACU) revenues, access to the European Economic Commission beef market, donor aid funding, and most important, mineral exploration and exploitation. These four sources of revenue, more especially the latter, have transformed the economy of Botswana from a predominantly rural agricultural economy to a near modern industrial economy.

Secondly, Botswana's economic success is attributed to the emergence of a developmental state immediately after Independence (Sentsho, 2004; Charlton, 1991; Leftwich, 1995). Botswana is a multi-party democracy, in which there is equality of franchise; freedom of the press, speech and assembly; secret ballot; and rule by elected representatives. Because of this, the country has been characterized by peace and stability that ensured no disruption to the process of economic growth and development. Even though the country chose a private sector-led economic development model, during the early years of its economic development it created many public enterprises that were meant to drive the process while the private sector remained at its nascent stage. It is only in recent years in response to the global shift towards market economy and the need to increase efficiency, that government decided to privatize most of the country's public enterprises. Botswana's economic transformation is also traced to the country's five-year National Development Plans (NDPs), first introduced in 1966. These plans provide a detailed guide in terms of development projects for the coming five-year implementation period, as well as the associated development and recurrent expenditure. No government project is funded until it is included in the country's approved National Development Plan. In part because of this, Botswana's civil service has been described as the most successful in Africa (Holm, 1988).

Finally, Botswana's successful economic growth and transformation is attributable to the country's prudent financial management of its mineral resources. For many mineral-based economies, a mineral boom that creates an abundance of wealth eventually leads to the problems of the "Dutch disease" and the resource curse. In the case of Botswana, these problems of mineral-led economic development have generally been minimized, reflecting prudent financial management of the country's diamond wealth. Even though it may be premature to argue that the country has completely escaped the problems associated with mineral-led economic development, there is the potential for the country to achieve sustainable development if it can realize its economic diversification plans and programmes.

Political Economy of Botswana

Botswana presents a unique case in the region and the whole of Africa in a number of ways. Firstly, the country did well economically when most of the other countries in the region were going through economic crises. For instance, the country has never been subjected to World Bank/International Monetary Fund-supported Structural Adjustment Programmes (SAPs). Except for a brief period in 1981/2, Botswana has always run a balance of payment surplus, generally of substantial amounts. Due to its strong balance of payment position, the country has built up large foreign exchange reserves - currently the accumulated reserves represent about 22 months' of import cover of goods and services, or US \$5.68 billion (Ministry of Finance and Development Planning, 2005).

A second notable feature of Botswana is that the country voluntarily adopted liberal policies quite early in its development approach. The country's development strategy has been based on the philosophy of free enterprise and a market economy, and successive national development plans have always emphasised that the role of the government in the economy is that of a facilitator of economic growth and development rather than an active participant. The government has limited its role to providing infrastructure, training the labour force in essential skills, setting the legal, fiscal and monetary framework within which various economic sectors operate, and securing favourable international arrangements for domestic producers and consumers (Botswana Government, 1979). By contrast, for most African countries, liberalisation measures have come about as conditions of SAPs. Such measures, even though bringing recovery to the economy in terms of growth, have also resulted in increased human suffering due to poverty, unemployment, etc. (Mwanza, 1992; Chakaodza, 1993).

Thirdly, Botswana has been the exception in the region in that it upheld the principle of liberal democracy when most of its regional neighbours were ruled by either racist regimes or autocratic one-party rule. Since 1965, Botswana has held elections every five years, all of which have generally been referred to as having been free and fair, even though no change of government has yet occurred. A number of reasons have been given for the dominance of the ruling party, the Botswana Democratic Party (BDP). One major reason given by critics is that the opposition is both weak and too fragmented to offer a credible challenge to the Botswana Democratic Party. Some of the reasons given for the weakness of the opposition are the poor resource base for opposition parties, and fragmentation of the major opposition parties. From an economic environment point of view, the *de facto* one party rule has provided peace and stability, and thus a conducive economic environment. Although weak in terms of not being able to assume power, the opposition has played a very important role in Botswana's politics - that of keeping the government in check at all times.

Botswana is also known to uphold freedom of press. Compared regionally, news-papers in Botswana are relatively free to write and criticise government policies. Botswana is also known to be less corrupt than other countries in the region. The 2003 Corruption Perception Index placed Botswana 30th in the world, and it was recorded as being the least corrupt country on the continent.

The peace that Botswana enjoys has also been a result of Botswana's general democratic principles, which include participatory democracy with roots in the traditional set-up in the form of the *kgotla* (the traditional village meeting place, at which all men and women can speak freely). There are various illustrations in the Tswana language that emphasise peaceful dialogue as a way of resolving differences amongst persons. Upholding such principles has also been a catalyst for peace. Botswana also was lucky to have a small population with relatively few tribal

differences, thus making the country relatively peaceful and stable. Part of the country's success in managing tribal differences has to do with the government's assimilation process, which saw Setswana being declared a national language and being accepted by other tribes without any major resistance. In recent years, the so-called minority tribes have been arguing for constitutional reforms that would include, among others, the use of their languages in education; none of this however, has led to any serious tribal clash that could impact negatively on the economy (Siphambe, 2004).

On development issues, Botswana has done better in terms of the growth and development of infrastructure than most countries in the region. The country, however, still faces serious challenges relating to the skewed distribution of income, high levels of income poverty, high levels of unemployment, and high dependence for revenue and exports on a non-renewable resource, diamond mining. The country still faces challenges regarding how to diversify the economy away from diamonds, and how to deal with poverty and unemployment effectively. HIV/AIDS also poses a major challenge for the country's human development efforts, and has - according to recent statistics - reversed most of the health gains achieved over the past three decades. Life expectancy has, for instance, fallen from 65 years to just below 40 years of age. Government has been responding to the scourge by allocating more revenue towards fighting HIV/AIDS, which has correspondingly retarded development in other areas.

Structure of the Botswana Economy

The economic structure of a country is most commonly understood by the matrix of inter-relationship between the different productive sectors or activities. The structure of an economy gives a momentary picture of the relationships between the different segments of the economy. More dynamically, the economic structure reveals the modifications that these relationships undergo from time to time, and brings to light the economic changes that lead the country from one type of function and performance to another. In order to understand the Botswana economy, it is these aspects in the structure of the economy that should engage our attention most.

Structure of GDP Growth in Botswana

The most comprehensive indicator of an economy's performance is that of national income or Gross Domestic Product (GDP). All-embracing as an economics concept, GDP provides a broad view of the structure and functioning of the economy. The distribution of GDP according to the sectors in which it originates throws considerable light on the economy's state of development, its intersectoral relationships and its structure. When we consider that economic development is a structural transformation of the economy in respect of intersectoral changes in income, its process is a continuous movement of income in relative proportion away from primary sectors like agriculture and mining, although it may be geared to absorb increases in sectoral outputs (Chenery, 1971). An essential feature of rapid economic development is the relative decline in the importance of agriculture or mining in the economy as a source of income, and the simultaneous expansion of income from other sectors of the economy, primarily industry and ultimately the services sector.

Over the past three decades, Botswana's economy has recorded impressive growth rates. Table 1.1 shows that GDP growth may have averaged about 9.1% per annum in real terms over

Table 1.1 Sectoral distribution of Botswana's Gross Domestic Product, 1966-2002/03 (real, 1993/94 prices) P Million.

	1966	1975/76	1985/86	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03
Agriculture	387.6	431.1	318.9	480.6	492.4	488.6	467.2	459.4	489.9	7453.1	479.9	443.4	404.6	444.5	433.2	441.2
Mining & Quarrying	-	365.3	2790.8	3956.8	3945.9	3766.9	3956.2	3899.4	4076.3	4310.7	4721.8	4588.5	5142.3	6045.9	5864.9	6471.7
Manufacturing	51.4	159.2	224.9	471.4	518.9	499.6	430.5	531.5	572.8	593.7	625.8	661.4	684.3	682.5	682.5	703.3
Water & electricity	5.2	48.4	113.1	168.4	179.0	209.5	240.3	256.4	256.9	268.8	295.4	333.5	371.1	391.3	405.7	444.2
Construction	71.2	267.1	260.7	764.4	791.1	666.8	710.1	722.5	746.5	787.9	822.1	916.9	939.4	954.8	999.7	1005.5
Trade, Hotels, etc	81.4	179.0	361.6	591.2	536.5	541.6	882.3	1085.8	1192.7	1359.0	1422.7	1501.9	1595.6	1700.0	1839.7	1901.3
Transport	39.4	23.5	141.5	323.5	365.4	390.3	406.5	435.9	437.7	456.4	497.8	578.7	594.0	623.7	625.4	631.2
Bank, Insurance, & Business services	183.0	97.5	367.4	884.5	920.0	1050.2	1144.4	1231.6	1351.5	1367.9	1500.8	1636.3	1707.3	1794.7	1922.2	1972.5
General Government	89.2	305.0	730.5	1355.0	1555.7	1622.4	1706.7	1762.4	1854.9	2009.4	2195.7	2333.3	2474.3	2640.6	2861.0	2965.5
Social & Personal Services	-	57.8	145.4	421.1	442.7	456.1	690.8	739.5	788.5	838.8	853.2	916.4	965.3	999.1	1065.2	1095.4
* Adjustment items FISIM	-	-14.8	-114.7	-230.4	-237.7	-249.8	-294.6	-308.5	-310.3	-353.3	-461.8	-480.5	-532.9	-548.3	-608.0	-680.9
Taxes on imports	-	-	-	812.3	1077.3	1067.9	792.7	673.8	695.3	729.0	847.3	929.3	945.9	888.6	880.2	777.1
Net Taxes on products/production	-	164.3	368.0	107.0	127.8	153.6	161.5	179.7	201.1	219.0	272.0	308.3	328.8	341.3	389.5	758.1
Subsidies on products/production	-	-	-	-54.9	-54.5	-51.7	-32.5	-36.4	-67.1	-55.9	-65.4	-73.1	-61.0	-68.0	-94.6	-76.9
GDP at Constant Prices	908.6	2083.5	5708.1	10009.8	10634.2	10612.0	11041.3	1397.6	12029.5	12703.7	13728.6	14295.6	15238.8	16554.8	16905.8	18038.1
GDP excl. mining	908.6	1718.1	2917.3	6053.0	6688.3	6845.2	7085.2	7498.1	7953.2	8393.0	9006.8	9707.2	10096.5	10508.9	11040.9	11566.4
GDP per capita	1682.5	2861.9	5175.0	7584	7858	7658	7781	7844	8073	8318	8769	8909	9265	9811	9785	10195
Excl. mining	1682.5	2360.1	2644.9	4586	4942	4940	4993	5160	5337	5495	5753	6049	6139	6228	6390	6537
Real GDP growth rate	-	18.4	7.7	8.3	6.2	-0.2	4.0	3.2	5.5	5.6	8.1	4.1	6.6	8.6	2.1	6.7
Real GDP growth rate excl mining	-	11.8	11.6	7.6	10.5	2.2	3.5	5.8	6.1	5.5	7.3	7.8	4.0	4.1	5.1	4.8

Sources: (i) Bank of Botswana (BoB), Annual Report, various Issues, 1988 to 2003.
(ii) Ministry of Finance and Development Planning, National development Plan (NDP) 9, 2003/04-2008/09.

most of the post-independence period (1966 to 2002/03). However, much of this growth has been due to the sustained and rapid expansion of one sector - the mining sector - and of government, which has largely been financed by the proceeds of mineral revenues. Mining and government together account for almost one-half of GDP (Table 1.2). As a result, the economy remains vulnerable to the rather fluctuating fortunes of the mineral sector.

Tables 1.1 and 1.2 show the level and sectoral distribution of Botswana's GDP in real terms (1993/94 prices) for the period 1966 to 2002/03. As revealed in the tables, the country's real GDP in 1966, valued at 1993/94 prices, amounted to P908.6 million. Of this total, agriculture accounted for P387.6 million or about 43%, with Bank, Insurance and other business services the second largest sector, contributing P183 million or about 20%. None of the other major sectors of the economy accounted for as much as 10% of real GDP in 1966; the share of manufacturing was only 5.7%, while that of construction and general government was 7.8% and 9.8% respectively. This shows that, on the attainment of Independence in 1966, the country's economy was predominantly agricultural (cattle rearing, and beef production in particular).

ECONOMIC DEVELOPMENT OF BOTSWANA

Table 1.2. Sectoral distribution of Botswana's Gross Domestic Product, 1966-2002/03 (percentages).

	1966	1975/76	1985/86	1990/91	1991/92	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03
Agriculture	42.7	20.7	5.6	4.8	4.6	4.6	4.2	4.0	4.1	3.6	3.5	3.1	2.7	2.7	2.6	2.4
Mining & Quarrying	-	17.5	48.9	39.5	37.1	35.5	35.8	34.2	33.9	33.9	34.4	32.1	33.7	36.5	34.7	35.9
Manufacturing	5.7	7.6	3.9	4.7	4.9	4.7	3.9	4.7	4.8	4.7	4.6	4.6	4.5	4.1	4.0	3.9
Water & electricity	0.6	2.3	2.0	1.7	1.7	2.0	2.2	2.2	2.1	2.1	2.2	2.3	2.4	2.4	2.4	2.5
Construction	7.8	12.8	4.6	7.6	7.4	6.3	6.4	6.3	6.2	6.2	6.0	6.4	6.2	5.8	5.9	5.6
Trade, Hotels, etc	9.0	8.6	6.3	5.9	5.0	5.1	8.0	9.5	9.9	10.7	10.4	10.5	10.5	10.3	10.9	10.5
Transport	4.3	1.1	2.5	3.2	3.4	3.7	3.7	3.8	3.6	3.6	3.6	4.0	3.9	3.8	3.7	3.5
Bank, Insurance, &	20.1	4.7	6.4	8.8	8.7	9.9	10.4	10.8	11.2	10.8	10.9	11.4	11.2	10.8	11.4	10.9
General Government	9.8	14.6	12.8	13.5	14.6	15.3	15.5	15.5	15.4	15.8	16.0	16.3	16.2	16.0	16.9	16.4
Social & Personal	-	2.8	2.5	4.2	4.2	4.3	6.3	6.5	6.6	6.6	6.2	6.4	6.3	6.0	6.3	6.1
FISIM -	-	0.7	-2.0	-2.3	-2.2	-2.4	-2.7	-2.7	-2.6	-2.8	-3.4	-3.4	-3.5	-3.3	-3.6	-3.8
Taxes on imports	-	-	-	8.1	10.1	10.1	7.2	5.9	5.8	5.7	6.2	6.5	6.2	5.4	5.2	4.3
Net Taxes on products/ production	-	7.9	6.4	1.1	1.2	1.4	1.5	1.6	1.7	1.7	2.0	2.2	2.2	2.1	2.3	4.2
Subsidies on products/ production	-	-	-	-0.5	-0.5	-0.5	-0.3	-0.3	-0.6	-0.4	-0.5	-0.5	-0.4	-0.4	-0.6	-0.4
GDP excl. mining	-	82.5	51.1	60.9	63.1	64.5	64.2	65.8	66.1	66.1	65.6	67.9	66.3	63.5	65.3	64.1

Sources: (i) Bank of Botswana (BoB), Annual Report, various Issues, 1988 to 2003.

(ii) Ministry of Finance and Development Planning, National development Plan (NDP) 9, 2003/04-2008/09.

In the post-independence period, the contribution of virtually all the sectors of the economy grew rapidly, as shown in Tables 1.1 and 1.2. This rapid growth of the economy was accomplished by important structural changes, the most significant of which was the dramatic decline in the relative size and contribution of the agricultural sector. By 1985/86, the contribution of agriculture to GDP was only 5.6%; this was to decline further to 4.1% in 1995/96, and currently (2002/03) stands at approximately 2.4%. A major factor in this structural shift in the economy, moreover, was the discovery of minerals, especially diamonds in the early 1970's. The first diamond mine was opened in 1971, followed by a nickel-copper mine in 1973. More diamond mines have since become operational in the country, transforming Botswana into the world's largest exporter of diamonds. By 1985/86, real GDP has increased by over 600% of the 1966 level, and this impressive growth rate was maintained for most part of the 1980's and the 1990's. Thus over the period 1974/75 to 1999/2000, growth in the economy averaged 9.1% in real terms (Bank of Botswana, 2000). That of non-mining, on the other hand, was 7.9%. However, within the non-mining economy, it is obvious from Tables 1.1 and 1.2 that, with the exception of agriculture, growth was spread fairly evenly across the other sectors over the period 1975/76 to 2002/03, since their GDP shares remained more or less constant. Therefore, while the wealth of the mining sector may have provided the impetus that allowed the economy to grow rapidly over the years, the resulting growth has not been broad-based.

An important feature of Botswana's economy is the relatively low level of industrialization. This, as shown in Table 1.2, is reflected in the relatively small proportion of real GDP originating from the manufacturing sector. In spite of the increased pace of modernization and diversification in recent years, as occasioned by the various intervention policies, manufacturing's share of GDP, which was 5.7% in 1966 and 7.6% in 1975/76, declined to 4.7% in

1990/91 and further to about 4.0% in 2002/03. Thus this sector has certainly not matched the hopes and expectations of the government and people of Botswana, who had wanted to position it as a key component in a successful diversification of the economy.

Within the manufacturing sector itself, the extent of diversification has been very minimal. At the time of Independence, the only significant manufacturing activity in Botswana was of meat and meat by-products (BoB, 2000), mainly undertaken by the Botswana Meat Commission (BMC). The next major addition to manufacturing was the commencement of brewery activities in the 1970s, the Hyundai Motor plant in the mid-1990s (which had since collapsed), and more recently textile and garment production.

In addition to manufacturing, the performance of the financial services sector (Banks, Insurance and Business services), and the Trade, Hotels and Restaurants, needs to be highlighted. Table 1.2 shows that these two sectors have consistently witnessed rising trends in their contribution to GDP over the years, a reflection of the widening and deepening of these sectors in response to the needs of the business sector. This development may also have contributed to the increasing real household incomes in the country, which similarly have continued to stimulate demand for the products of the two sectors.

Apart from increases in mineral production and the contribution of such to the development of the other sectors of the economy, the growth of the government sector has also played a very key and important role in the transformation of the Botswana economy. Even though the government sectors may be seen to have grown as a result of resources deriving from the mining sector, it has most significantly acted as a channel through which the wealth created by diamond mining has been reinvested in the economy. So, over the period 1966 to 2002/03, the government has in effect acted as the main link between the booming mining sector and the rest of the economy as a whole, a role that has spurred the rapid rate of overall development recorded during the period.

As Table 1.1 and 1.2 show, the contribution of the government sector to GDP has averaged about 16% over the period from 1966. This is not a surprising development, since over the years the government has implemented numerous public investment and development programmes, in addition to being an important source of wage employment in the country. The overall result of this is that government-induced demand has been very significant for the growth and development of the domestic economy.

Structural Issues of the Economy

Botswana can take pride in the fact that it has been able to record acceleration in the rate of economic growth whilst at the same time making impressive gains in social development by improving educational and health facilities for the people. But growth is not an end in itself unless it is accompanied by change in the socio-economic structure of the economy, allowing the generation of more income and employment, and the reduction of poverty, hunger and homelessness, thus improving the standard of living of a majority of the people. Further, economic growth must also be environmentally sustainable.

The Government of Botswana is focusing on structural issues such as accelerating economic diversification and increasing employment in non-mining sectors - especially in the manufacturing sector. More specifically, government has identified several areas of intervention, such as the battle against HIV/AIDS, reducing unemployment and poverty, increasing public sector reform, improving government expenditure control, and fostering greater citizen

economic empowerment. Although the government is encouraging foreign direct investment in order to promote private sector development, Botswana has not yet attracted significant foreign direct investment inflows. This situation has to be viewed seriously, as low performance with respect to Foreign Direct Investment (FDI) is attributable to an inadequate supply of skilled labour, the high cost of utilities, and the small size of the domestic market.

Another important structural issue in Botswana is privatisation. The country has not made much progress in this regard to date, in spite of making privatisation an integral part of the development policy. The programme needs to go beyond restructuring public enterprises. The privatisation policy can be more effective in diversifying the economy, improving the delivery of services, and in empowering the private sector by creating further growth opportunities, if appropriate measures are undertaken to bring change in the structure of existing social and economic institutions in the country.

The economic reforms introduced were not only meant for strengthening the public sector and freeing private enterprise from the shackles of bureaucratic control, but also for making the government more effective, efficient and people-friendly so that it can handle better the many tasks that only government can perform. As the country benefits from regional integration into the global economy, most of the structural problems remain unresolved. While pursuing economic reform and widening the space for private initiative and enterprise, the country cannot forego the obligation of running a government that works for improving the lives of its people. The reform of administration and of public institutions to improve efficiency and the quality of service delivery should receive highest priority. The focus of economic reforms should not only be to reduce the role of the government and to foster private sector growth, but also to promote entrepreneurial dynamism. The financial sector in Botswana must be strengthened, and financial reforms should promote domestic investment in the manufacturing sector to make use of institutional support mechanisms.

The Botswana economy has been rapidly integrating into the global economy over the past decade, with a growing sense of self-confidence. However, domestic enterprise needs cost-effective infrastructure. Better roads, better connectivity, and affordable and reliable power are all basic requirements for a competitive economy. For many years Botswana has been a trade-oriented nation, actively engaged in the mining sector. But the manufacturing sector is showing inadequate progress without real economic diversification. The country has to pursue policies that enable the economy to be better integrated with the world economy. The government should create an environment conducive to the utilization of local resources, with greater participation of the people in the development of Botswana. No objective in any development agenda can be met if the country does not reform the instrument in our hand with which we have to work, namely the government and public institutions.

Chronic poverty afflicts a majority of the population, who lack income and food security. As a nation, Botswana must decide whether it should continue to accept dramatic disparities in income and wealth. The government has the means to ensure that the benefits of growth can be distributed equally. The government's commitment to investments in the social sector is rooted in this reality. There are many critical areas in which the government has a role, and is expected by most persons to have a role, that directly affect the quality of life of every citizen. These include the provision of social and physical infrastructure for development, the provision of education and public health, including safe water and sanitation facilities. Equally important is the empowerment of women by ensuring equal participation of all in the process of economic development.

The interests of the rural population, especially farmers, should not be neglected. We have, however, seen a significant slowing down in agricultural growth in recent years. We believe that government should commit itself to giving a “New Deal” to the rural sector in Botswana. Agriculture must receive the priority attention it deserves. Public and private investment in agriculture should be greatly increased. The government is addressing the issues directly by pursuing policies that promote agriculture and rural development, such as improving farmers’ access to affordable credit and new agricultural technology. Agricultural research, training and extension also require greater attention. There should be a sharper focus on expanding opportunities for gainful employment in agriculture and in off-farm rural activities.

We also believe that the country needs a new health policy. While government has been improving health facilities, there is a need for reforming public health and public hospitals to make them more efficient and accessible, through public-private partnership aimed at offering affordable and humane health care. The country needs community-based and public health oriented solutions to tackle communicable diseases and epidemics, especially HIV/AIDS, and for disability management. The educational system should help people to acquire the training and skills that can make them self-reliant. The people of the country need modern and relevant education aimed at making them concerned, capable and caring citizens of Botswana, in line with Vision 2016.

Finally, though the growth of the government sector over the years has served as a stimulus for the development of a wide range of social and economic activities in the economy, it needs to be mentioned that this cannot continue indefinitely into the future. Economic development that is based on the central role of government is not sustainable. The private sector has to be given the key role to move the economy forward. Judging by the experiences of other advanced countries of the world, this appears to be the best way to create a well-diversified and outward-looking economy, on which the attainment of Botswana’s Vision 2016 can be based. In more recent times, therefore, the need for the diversification of the economy away from an over-dependence on minerals and the government sector has been taken as an explicit policy objective by the Government of Botswana. As will be found in other chapters of this volume, this policy objective has been vigorously pursued in the country in the last one decade or so.

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Chapter 2

National Development Plans in Botswana

B. K. Acquah

Introduction

National development (economic) planning has been described as a “deliberate government attempt to coordinate economic decision making over the long run, and to influence, direct, and in some cases even control the level and growth of a nation’s principal economic variables (income, consumption, employment, investment, saving, exports, imports, etc.) in order to achieve a predetermined set of development objectives” (Todaro, 1985). Thus, a development (economic) plan is considered to be a set of quantitative economic targets to be achieved or reached in a given period of time. The aspirations of a number of developing countries to “catch up” with the advanced countries have led them to see development planning as an important tool to help them to accelerate the pace of economic growth.

The government of Botswana from the onset has made clear its belief in the need to plan the social and economic development of the country (Republic of Botswana, 1966). The rationale for planning, as stated by the government in 1970, was that the country’s available resources were few and the problems facing the country were so great that it was only by careful planning that these resources could be put to their most effective use. Decisions in the plan, according to the government, could affect the quality of life in Botswana for generations, and therefore it was imperative that the right decisions were made in the allocation of resources for effective economic development (Republic of Botswana, 1970).

The Rationale for Planning in Developing Countries

National development planning has been widely accepted in many developing countries as a tool for helping to achieve high economic growth rates in the process of economic development. The rationale for the acceptance of national development plans includes the following (Todaro, 1985):

The Market Failure Argument

Commodity and factor markets in most developing countries are imperfect in their structure and operations. Therefore producers and consumers are faced by market signals that are distorted or incorrect. The failure of the market to correctly price factors of production results in disparities in social and private valuations in alternative investment projects. In the absence of any government intervention in the form of planning to correct the price distortions, this may result in the misallocation of resources which may not in the long run be in society’s interest. The involvement of government in the form of planning helps to provide the relevant incentives to producers and consumers to help in the proper allocation of resources for the effective development of a nation.

The Resource Mobilisation and Allocation Argument

Productive resources are generally scarce in developing countries, and therefore these countries cannot afford to waste such scarce resources on unproductive ventures in the course of development. Investment projects therefore need to be chosen not only on the basis of the private profit motive, but also in the context of an overall development programme that takes into account external economies and other national objectives. Economic planning therefore helps to modify the handicap of limited resources through the channeling of investment resources in such a way as to get the highest returns out of them. Competitive markets, it is argued, tend to generate less investment, and will also direct such investment into low priority areas such as the production of goods for the rich, while disregarding the additional benefits to be obtained through a well planned long term investment programme.

The Attitudinal or Psychological Argument

It is often assumed that a detailed statement of national economic and social objectives in the form of a specific development plan can have an important psychological impact on a diverse and often fragmented population in most developing countries. A coherent and generally accepted development plan may succeed in rallying and uniting the people behind the government in a campaign to eliminate poverty, ignorance and disease, and in a common quest for widespread material and social progress.

The Foreign Aid Argument

The formulation of detailed development plans with specific sectoral output targets and carefully formulated and designed investment projects has often been a necessary condition for the receipt of bilateral and multilateral foreign aid. Some people have argued that the real reason why most developing countries go through the rigors of preparing development plans is to secure foreign aid. With a 'shopping list' of projects, the governments of less developed countries are better equipped to solicit foreign assistance and development aid.

Externalities Argument

Less developed countries also plan in order to remove or reduce externalities. Externalities occur when economic decisions create negative or positive effects for people other than the decision-taker (individual or organization) (Griffiths and Wall, 2000, p 466). Externalities are negative when private benefits are greater than social benefits, and they are positive when private benefits are less than social benefits. Pollution by farmers, industries or even by government agencies, for example, results in negative externalities. Costs of preventing or cleaning up the pollution are often not included in producer's cost estimates.

The Emergence of National Development Planning in Botswana

At the time of Independence in 1966, Botswana was small and poor. It faced unique problems that were described by the first President of Botswana, Sir Seretse Khama, as consisting of some of the following (NDP 2, 1968): a lack of independent access to the sea; overshadowed by powerful neighbours with domestic problems that were radically different from those of Botswana; the lack of a national currency; and the inability of the country to impose its own customs tariffs. Given some of the problems stated above, it was thought appropriate by the government to give direction to the path the economy was to follow in order to harness the

country's resources for effective economic growth. Another reason given by the government was the fact that the government could justify its need for foreign assistance if this assistance was used for maximum effectiveness, and this could be done more effectively through a development plan. The Head of State, having stated his belief in sound planning, gave impetus to this belief by pushing through the establishment of a Ministry of Development Planning one year after Independence, to help in the formulation and implementation of development plans.

Development plans in Botswana were at the onset meant to describe the direction the nation was heading. The Plan at the same time was meant to outline national policies and development objectives to be adopted during the initial period after Independence. The Plan was intended to explain the objectives and policies that were meant to guide the government in attaining the stated objectives and policies. The first Plan, published in 1966 at the time of Independence, was known as the "Transitional Plan for Social and Economic Development". The objective of the government at that time was to achieve a dynamic and self-sufficient economy. The Plan also listed the projects to be undertaken by the government during the first three post-Independence years (Republic of Botswana, 1966).

In order to incorporate the process of consultation with non-governmental institutions in the formulation and implementation of national development plans, the government decided to establish the National Economic Advisory Council, which consisted of representations from the private sector. The Council was set up under the chairmanship of the Vice President, and it was to meet once every six months. The Council was to ensure that national development plans in Botswana were "truly national plans and not simply programmes of Government expenditure" (Republic of Botswana, 1968).

Planning in Botswana involves the participation of people at all levels of society, from the Economic Advisory Council to the Village Development Committee. In order to ensure meaningful participation and effective implementation of decisions at all levels, the government improved communication between central government agencies and local government machinery. This was also done to ensure better coordination of central government agencies at the district level. The relationship between local government and central government institutions was also improved in the interests of both democracy and administrative efficiency. The experience with planning in Botswana is that "Botswana has always taken a fundamental approach to planning in which Government's expenditure plans are based on projections for the economy as a whole, and on projections of the financial and manpower resources available. In this approach, explicit account is taken of major developments that are already in motion and realistic assumptions are made regarding other important aspects of the economy" (Republic of Botswana, 1991).

Framework, Objectives and Structure of Development Plans in Botswana

Introduction

A development plan may contain the following features (Urrutia and Yukawa, 1988):

- A survey and diagnoses of the present economic situation;
- Policy objectives, especially as related to the future development goals of the country concerned;

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- A set of strategies by which the objectives should be achieved; and
- A macroeconomic projection for the whole economy.

National development plans in Botswana have generally followed the above format.

National Principles and Planning Objectives

Development plans in Botswana address the national principles of:

- Democracy;
- Development;
- Self-reliance;
- Unity; and
- *Botho*, which is a Setswana expression recently added to the original four principles, used between the third National Development Plan (NDP 3) and up to the ninth National Development Plan (NDP 9). *Botho* is “associated with being well-mannered, courteous and highly disciplined in one’s endeavours to achieve full potential, while encouraging social justice for all” (Republic of Botswana, 2003).

The above principles have their roots in the traditional culture of Botswana. When they are applied together in practice, they are designed to help achieve *kagisano*, that is, social harmony (Republic of Botswana, 1985).

In addition to the national principles above, development plans in Botswana also seek to attain the planning objectives of:

- Sustained development;
- Rapid economic growth;
- Economic independence; and
- Social justice.

The above planning objectives are not ranked in order of priority. They are equally important. It is recognized, however, that some of the objectives may conflict with each other, although not by design. Rapid economic growth as a national objective, for example, may sometimes involve increased use of machinery in production and hence less employment opportunities, which may run counter to opportunities in the objectives of sustained development and social justice. Government’s priorities are therefore spelt out in the Plan, and wherever conflicts arise in objectives, mitigating actions are provided for and carefully monitored.

Structure of the Plan

A general view of the country and its development since Independence is the first item presented in the Plan (Republic of Botswana, 1996). This is followed by a section on the long-term development prospects of the economy, including some basic policy implications. Recent economic performance of the country is then reviewed in detail, with a comparison of the various economic aggregates against the previous Plan's forecasts. This review forms the basis for a forecast of the likely economic developments during the Plan period and the resource implications for the development programme of the Government. The development of Government's expenditure strategy and the "Base Case Economic Forecast" is based on this review. A description of the government's development strategy is presented in a pivotal chapter (Chapter 4 in NDP 7, 8 and 9). The national principles and the planning objectives as stated above are then presented. These are then followed by a section on the general approach and the specific policies, programmes and development projects that will be pursued in order to achieve the objectives of the Plan.

The Plan then expands on government policies in the major sectoral categories: public sector expenditure and manpower; finance and banking; trade and industry; works, transport and communications; energy; agriculture; mineral development; water resources; wildlife, national parks and tourism; environmental management; education and training; health; land management, housing and settlement; culture and social services; public sector management; local government; law, justice, security; and foreign relations. The coverage on a sector is contained in a chapter, and each chapter starts off with a detailed review of the situation in the sector and the sector's performance during the previous Plan period. There is also some elaboration on the sector's future policies with regard to the general strategy of the Plan and with regard to specific projects that will be undertaken in the sector during the coming Plan period.

The second part (Part II) of the Plan dwells on development projects that the government intends to carry out during the duration of the Plan. The descriptions of the projects and project summaries provide important details on what the government intends to carry out during the Plan period.

The Planning Process in Botswana

The Role of Planning in Botswana

The planning process in Botswana "is intended to ensure that maximum benefit is derived from the limited financial resources available to Government by prioritising policies, programmes and projects. Planning also allows Government to set targets against which its performance can be objectively evaluated" (Republic of Botswana, 1998). In order to create a conducive environment for the participation of all stakeholders in the national development process, especially the private sector, government has structured its expenditure in such a way as to promote a balanced, stable development that does not crowd out the private sector.

The following are some of the roles that planning in Botswana seeks to achieve (Republic of Botswana, 1998):

- Respond adequately to the observed needs of the majority of Botswana at the national, district and community levels, and ensure that they are aware of the goals and strategy of the Plan;

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- Base prospective developments on what is realistically possible given resource, time and capacity constraints, as well as allow adequate opportunity for consultations with various stakeholders;
- Ensure that development is consistent with long-term objectives by, among others, keeping a fair balance between consumption and investment expenditure; between the productive use and conservation of natural resources; between the needs of the present and future generations; between urban and rural development; between creating new infrastructure and maintaining existing infrastructure; and between ensuring national security and achieving rapid development;
- Ensure coordinated implementation of various policies;
- Create favourable conditions for the expansion, diversification, and dispersion of productive activities in the private sector;
- Identify windows of opportunity, regionally and internationally, in order to take advantage of investment and trade opportunities;
- Be adaptable to unexpected and sudden developments, such as natural calamities or other unfavourable developments in the national or international scene that may affect the economy; and
- Provide the opportunity for continuous government self-evaluation, and bring to the attention of decision-makers, in a timely fashion, the need for policy change and the rapid implementation of modified or new policies.

The Planning Process

There are six characteristics of comprehensive planning that are common to most developing countries (Todaro, 1985):

1. A development plan starts from the political views and goals of the government, and attempts to define policy objectives as they relate to the future development of the economy;
2. A development plan sets out a strategy through which the objectives stated in 1. above may be achieved. These objectives are normally translated into specific targets;
3. The development plan is set out as a centrally coordinated, internally consistent set of principles and policies, which are chosen as the optimal means of implementing the strategy and achieving the desired targets;
4. Plans are usually comprehensive in nature, and they capture the major components of the national economy;

5. The comprehensive plan makes use of macroeconomic models that are generally used to project the intended future performance of the economy; and
6. A typical development plan usually covers a period of five years, and it is usually considered a medium-term plan document, which may, however, incorporate a longer term perspective plan supplemented by annual plans.

Desirable features of policy objectives include the following:

1. Policy objectives should be clearly stated and possibly quantified. Where the objectives are primarily political, their economic implications should be clearly understood;
2. The time phase for the attainment of the objectives should be clearly stated. There is the need to separate medium-term plan objectives from long-term plan objectives. The medium-term plan objectives may be derived from the framework of the perspective plan; and
3. The elimination of inconsistencies in policy objectives, or the harmonization among and between policy objectives given certain constraints, is a desirable feature in the formulation of policy objectives. An example of a conflict among policy objectives is a situation in which there is a policy of self-sufficiency in food production while at the same there is a policy on the liberalization of food imports.

The scope and nature of planning involves a hierarchy of objectives, set out as follows:

- Social goals or objectives;
- Macroeconomic objectives;
- Sectoral objectives; and
- Transformation of sectoral objectives into policy objectives.

The social goals or objectives make up the starting point, and are transformed into macroeconomic objectives. If society, through the government, wants a reduction in hunger and disease and hence a reduction in levels of poverty, for example, these societal goals are translated into macroeconomic objectives through monetary and fiscal policies contained in the Plan. These macroeconomic objectives are in turn related to sectoral objectives that also get transformed into policy objectives.

Preparation of the Plan in Botswana

There are five steps involved in the preparation of the National Development Plan in Botswana (Republic of Botswana, 1998):

1. The preparation of the National Development Plan commences with the preparation of the Keynote Policy Paper by the Minister of Finance and Development Planning (MFDP),

which identifies the theme of the next Plan as well as indicating the preliminary resource position and major issues for discussion and resolution. This is followed by the preparation of Sectoral Keynote Policy Papers (SKIPs) by Ministries, Local Authorities and other interested parties. The Local Authorities will at this time be engaged in consultations with their various constituencies and Ministries on projects to consider for the next Plan. A meeting of Local and Central Planners will be called to discuss how national projects are distributed across various local authority boundaries.

2. A meeting of the National District Development Conference (NDDC), which includes representatives of Local Authorities, Ministries, the private sector and NGOs, is called to debate the issues raised by the various SKIPs. The resolutions of the NDDC and comments by various Ministries and organisations are consolidated into a Major Issues Paper by the MFDP for presentation and discussion by the Economic Committee of Cabinet, where the final resolution of the issues is taken. The Economic Committee of Cabinet consists of His Excellency the President as the Chairperson, together with all Ministers and their Permanent Secretaries, who consider in-depth all the major policy proposals and their various sub-divisions on the socio-economic development of the country before formal submission to Cabinet.
3. Following a detailed macroeconomic forecast by MFDP, a Draft Macroeconomic Outline is prepared and circulated for comments to Ministries, Parastatals, Local Authorities and other interested organizations. The Macroeconomic Outline presents the underlying economic environment for the next Plan period, as well as setting out the expenditure and manpower ceilings, on the basis of which the Ministries can draft their sectoral chapters. The Paper also provides a preliminary version of the macroeconomic chapters of the next Plan document.
4. A meeting of the Economic Committee of Cabinet is convened again to make a final resolution about resource allocation between various Ministries and organisations, as well as to settle any outstanding policy issues before Ministries and Local Authorities commence in earnest to prepare their sectoral chapters. A draft NDP document is normally available in advanced stages of editing for consideration first by the Economic Committee of Cabinet, then by Cabinet, before it is presented to Parliament in draft form during the Budget Sitting of the first year of the Plan.

The NDP is discussed during the June/July sitting of Parliament, where a resolution on its adoption is proposed. If it is accepted, final editing and layout is done before the new document is ready for publication in August of the first year to which it applies.

Coordination and Implementation

Policies and programmes formulated during the planning process need to be implemented and coordinated during the implementation phase of the Plan (Republic of Botswana, 1991).

The implementation of the Plan is as follows (Republic of Botswana, 1996):

1. The Plan is implemented by Government Ministries and Departments, Parastatals and Local

Government Authorities when they carry out the policies and projects for which they are responsible, and through the influence of the government's actions in the private sector.

2. Stakeholders are made to adhere to the Plan through the following four mechanisms:
 - a. Control of the Recurrent and Development Budgets and of lending funds for Parastatals and local authorities by MFDP, and through human resource allocations by MFDP and the Directorate of Public Service Management;
 - b. Evaluation of projects and other proposals by the Division of Economic Affairs;
 - c. Interministerial committees (e.g. Wages Policy Committee and Taxation Review Committee) and tripartite consultative bodies (e.g. Rural Development Council, National Employment, Manpower and Incomes Council, and Regulations Review Committee), which have specific planning or policy implementation functions. These are bodies established with long-term roles. However, other bodies are established when the need arises to address specific problems or issues; and
 - d. Revenue generation measures, such as sales and income taxation, interest charges, user fees and charges, and sales of assets by MFDP and other Ministries.

Since coordination is a very important link between planning and implementation, government has established specialized institutions to help with coordination in various fields. The Rural Development Council (RDC), for example, coordinates rural development activities that cut across different Ministries. The RDC is chaired by the Minister for Finance and Development Planning. The RDC reviews all plans for rural development. It also receives quarterly reports from the implementing Ministries. Membership of the RDC includes most Permanent Secretaries and representatives of District Councils, Brigades, the Botswana Confederation of Commerce, Industry and Manpower, and the Botswana Federation of Trade Unions. The Rural Development Coordination Division, which is located in the MFDP, services the RDC.

The National Employment, Manpower and Incomes Council (NEMIC), with representation from government, parastatals, employers, employee organisations and the rural sector, and chaired by the Assistant Minister - MFDP, is a consultative body that advises on the formulation and implementation of policies concerning human resources, employment and incomes.

The Regulations Review Committee, which is chaired by the Permanent Secretary (Development) in the Office of the President, reviews existing and proposed regulations to determine their effect on economic development, and to make recommendations on their repeal or amendment of provisions if they unnecessarily restrict private sector activity. The Committee also monitors progress made in the dismantling of regulations considered to be undesirable or impeding private sector activity. The purpose of the monitoring process is to ensure a conducive atmosphere for private sector development.

The coordination and implementation of development programmes at the district level are the responsibility of District Councils. However, a number of projects in the districts is under the authority of the Central Government.

The government aims to increase the involvement of Non-Governmental Organisations (NGOs) and community institutions in the coordination of rural development activities. It is

recognized that the active involvement of the rural population in the implementation and coordination of rural development programmes is a prerequisite for the success of these programmes. Thus, rural institutions are likely to have increasing roles in skills training, assistance with credit and its supervision, project evaluation, and other services which support private sector initiatives in the rural areas.

The MFDP, and especially the Division of Economic Affairs, plays a pivotal role in the coordination and implementation of development programmes. Staff from the Division of Economic Affairs are seconded to Ministerial Planning Units, which are responsible for project identification, preparation and evaluation. The staff also provide advice on project appraisal and project implementation, sectoral policies, human resource planning, macroeconomic policies and planning, population, and contingency planning.

For effectiveness in coordination and implementation of the Plan, there is a need for adequate implementation capacity and hence for appropriate human resources with the right skills to monitor, evaluate and provide appropriate feedback to the appropriate authorities at the right time. This enables the planning authorities to adopt appropriate intervention measures for successful coordination and implementation of the Plan.

Performance of National Development Plans in Botswana

Introduction

This section examines the performance of national development plans in Botswana using information contained in the various Plan documents. Apart from the first development plan, most plans contain a review of what was achieved in the previous development plan. The Mid-Term Reviews of the various development plans also provide information on the performance of the plans themselves. The assessment of the performance of national development plans presented here covers the first National Development Plan (NDP 1) up to the eighth (NDP 8). Some information is also presented on what is hoped to be achieved in the ninth National Development Plan (NDP 9).

Assessment of the Performance of the National Development Plans

The First National Development Plan (NDP 1) 1966-1969

The first development plan (NDP 1) was known as the Transition Plan for Social and Economic Development. It was published at Independence in 1966. The Plan outlined national policies and development objectives to be adopted in the initial period after Independence. It also contained a list of the projects to be undertaken by the government during the first three years of independence. The long-range objective of government policy was a more equitable distribution of income among the people, whilst the immediate goal was to increase the number of job opportunities within the country. Another prime objective of government policy was the expansion of the industrial base, which was very small at the time of Independence. Fundamental to the plans and policies of the government was a determination to make the country a financially viable entity in the shortest possible period. This according to the government was because there is no politically independent nation that should depend, for any length of time, on grants to meet its ordinary recurrent expenditure on existing services. Such was the plight of Botswana at the time

of Independence and the government planned that the affairs of the country should be handled in such a way as to expedite the reduction of dependence on foreign assistance for ordinary budget purposes.

The number of development projects completed during NDP 1 included agricultural development projects, the establishment of medical facilities, and water supply projects including water storage and reticulation.

Balance of Payments

In 1965, estimated exports of Botswana totaled R11,320,000. They were made up mostly of livestock and livestock products; other agricultural produce including groundnuts, citrus, and cotton; minerals including manganese and gold; and asbestos. Estimated imports of Botswana in 1965 totaled R16,591,000. The composition of imports included food and non-alcoholic beverages; alcoholic beverages and tobacco; livestock and livestock feed; clothing and textiles; building materials; machinery and equipment; fuels, chemicals and drugs; and miscellaneous items. Thus, the balance of payments was a deficit of R5,271,000.

The Second National Development Plan (NDP 2) 1968-73

The Second National Development Plan was in many ways a continuation of the first. The objectives and policies, and the strategies for attaining the objectives, were virtually the same. A more equitable distribution of income among the people continued to be the long-range objective of government policy. The immediate goal of government policy was to increase job opportunities and to encourage private initiative. The expansion of the industrial base was also a prime objective of government policy. Another long-term objective was budgetary self-sufficiency.

The scope of NDP 2 was guided by the range of development projects capable of being implemented within its two year period. The choice of projects to be included in the Plan was guided by government policies and priorities while the size of the development programme was defined by considerations regarding available trained manpower and the physical capacity of the economy to undertake immediate development. Since a long-term objective was also budgetary self-sufficiency, emphasis had been given to infrastructural development that would enable productive investment to take place.

Sources of funds for financing development projects included U.K. Government grant-in-aid and the mobilization of local resources, such as the investment of Post Office Savings Bank funds in the National Development Bank. The commercial banks were also expected to contribute larger amounts for development than in the past. The remainder of the funds needed for development projects was to be sought from external sources (Republic of Botswana, 1968). The government was also seriously thinking of mobilizing local savings through the issuing of either Government or National Development Bank Bonds to raise a government loan, and the issuing of Treasury Bills (Republic of Botswana, 1968).

The Third National Development Plan (NDP 3) 1970-75

National Principles and Objectives

The national principles were the same in this Plan as those stated earlier. The national objectives were, however, expanded to include:

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- Social justice;
- Equality of opportunity; and
- Persuasion rather than compulsion in order to achieve change in a democratic and constructive way.

The above national objectives were rooted in the four cardinal principles recorded previously (Republic of Botswana, 1970).

Economic Goals of the Plan

The economic goals of the Plan were:

1. To secure the fastest possible rate of economic growth in a manner designed to raise the living standards of the great mass of the inhabitants of Botswana;
2. To achieve budgetary self-sufficiency in the shortest possible time consistent with rapid economic growth;
3. To maximize the number of new job opportunities; and
4. To promote an equitable distribution of income, in particular by reducing income differentials between the urban and rural sectors through rural development.

Performance of the Plan

Employment

Employment in the formal sector (excluding self-employment) grew by about 30% during the period 1972 to 1975. Some of the reasons given for the moderate increase in employment generation include the fact that traditional sector employment, self-employment and migrant labour have been excluded from the statistics. Another explanation for the low level of employment growth is that there was an expansion of high capital/low employment industries, especially in mining. It is also to be noted that, despite the reasons given above for the low level of employment generation, about 20% of those who qualified for jobs could not secure employment (Republic of Botswana, 1977).

In terms of sectors, the highest employment growth of 40% during the period 1972 to 1975 was in the government sector, which included education. Within the mining, manufacturing and construction sectors, employment had increased by about 27% in each sector, while employment increased by only 4% in the large-scale farming sector. The share of agricultural employment during the period declined from 11 to 8% (Republic of Botswana, 1977).

Financial Development

A major national target from the time of Independence was to build an economically viable sovereign state, which implied the need to be free from a reliance on recurrent budgetary grants-in-aid from the United Kingdom. The economic fortunes of Botswana improved rapidly during the Plan period, leading to Botswana attaining budgetary self-sufficiency before its end (Republic of Botswana, 1977).

The Fourth and Fifth National Development Plans (NDP 4 and NDP 5) 1976-81 and 1982-86

National Principles and Planning Objectives

The national principles that formed the basis for the government's policies were the same as stated earlier.

Performance of the Plans

National and Sectoral Output

Botswana's real GDP grew by 79% between 1977/78 and 1982/83. This translated to an average annual growth rate of 12.4%. Per capita GDP over the same period grew from P689 to P996. However, there were considerable variations in the rates of growth, with rates of 4.3% in 1981/82 and 20% in 1982/83. The growth of the economy was spearheaded by growth of the minerals sector, which grew by 31.7% and 47.7% in 1977/78 and 1982/83, respectively. The agricultural sector, however, saw a decline in GDP growth from P86.8 million in 1977/78 to P57.6 million in 1982/83, a fall of 33.6% over the period (Republic of Botswana, 1985).

Employment

The growth of formal sector employment of citizens went from 65,000 in 1978 to 100,600 in 1983. This represented a growth rate of 7.7% per annum. There was rapid employment growth between 1978 and 1981, but this slowed down in the following two years. Employment of non-citizens showed an insignificant increase over the period 1977/78 and 1982/83, with an average employment of about 4,000 over the period. During this period, the agricultural sector showed negative growth in employment and output at -2.9% and -7.9%, respectively (Republic of Botswana, 1985).

Balance of Payments

A steady rise in imports and a steep decline in exports led to a substantial trade deficit of P61 million in 1981. Due to the deficit, the government instituted measures that included a cut in the budget, a freeze in salaries and wages, a rise in interest rates, devaluation of the Pula, and the imposition of ceilings on commercial bank lending. These measures proved effective, as the balance of payments became positive at P161 million in 1984 (Republic of Botswana, 1985).

The Sixth National Development Plan (NDP 6) 1985-91

National Principles, Planning Objectives and Themes of the Plan

The national principles and planning objectives were the same as stated earlier. Two key themes of NDP 6 were productive employment creation and rural development.

Performance of the Plan

National and Sectoral Output

During NDP 6, growth of GDP was 65% above the 4.8% that had been predicted (Republic of Botswana, 1991). This extraordinary performance of the economy was attributed to the very high revenues that were generated from diamond exports. The unanticipated increases in diamond revenues were attributed to the strengthening of the international diamond market, leading to diamonds being sold at higher prices; the ability of Botswana to sell off accumulated stockpiles of diamonds as a result of the strengthening of the international diamond market; increases in the

volume of diamond production above what had been predicted; and increases in the Pula value of diamond earnings as a result of the depreciation of the Pula by about 12% against the major currencies, such as the US dollar and the pound sterling (Republic of Botswana, 1991).

The non-mining sector of the economy grew in constant 1991/92 prices from P2,912 million in 1985/86 to an estimated P5,113 million in 1990/91. This represented an increase of 75.6% over the Plan period. Non-mining GDP was expected to total more than P23.8 billion in constant 1991/92 prices. This represented more than 67% above the forecast.

Employment

Formal sector employment in NDP 6 was estimated at 176,300 in March 1989. This represented an increase of 51% in the first year of NDP 6. Very large increases in employment were recorded in construction, manufacturing, trade and government. Due to the strong growth of the economy over the NDP 6 period, employment growth began to exceed annual additions to the labour force. Government employment by 1989 was almost 9,000. This figure was 15.6% higher than the projected figure (Republic of Botswana, 1991).

Balance of Payments

The rapid growth of the economy in NDP 6 resulted in larger increases in incomes and imports than forecast. The cumulative sum of imports was expected to total more than P17.9 billion, which was about 67% more than the forecast. Despite the large scale of imports, the balance of payments recorded surpluses, with foreign exchange being in excess of the forecast in NDP 6. Real foreign exchange reserves in 1990, measured in 1991/92 prices, were more than 23% of the forecast (Republic of Botswana, 1991).

The Seventh National Development Plan (NDP 7) 1991-97

National Principles and Planning Objectives of the Plan

The national principles and planning objectives were the same as stated earlier.

Performance of the Plan

National and Sectoral Output

Real GDP growth over the Plan period 1991/92 to 1996/97 was expected to be 4.5% compared to the projected annual average growth rate of 4.7% (MFDP, 1998).

Table 2.1 shows GDP at current prices by broad sectoral categories for the period 1991/92 to 1995/96. The table shows that GDP at current prices increased from P8,372.5 million in 1991/92 to P14,631 million in 1995/96, resulting in a growth rate of 15.0%. The average annual growth rates for broad sectoral categories, namely agriculture, mining, industry, government and services, were 11.6, 11.7, 12.0, 18.1 and 20.0%, respectively.

Table 2.2 shows real GDP at constant 1985/86 prices by broad sectoral categories for the period 1991/92 to 1995/96. The table shows that, in real terms, GDP grew by 3.5%, from P4,521.9 million in 1991/92 to P5,184.8 million in 1995/96. The economy experienced a slow-down in the first four years of NDP 7. The rates of growth of GDP in percentage terms for the years 1991/92, 1992/93, 1993/94, 1994/95 and 1995/96 were 6.3, -0.1, 4.1, 3.1 and 7.0, respectively. These rates of growth have been described as being among the slowest in Botswana's economic history (Republic of Botswana, 1998, p. 50). The slow growth rates in the economy have been attributed to factors that included the world recession which occurred at that

time, the severe drought of 1991/92 and its after effects, the drastic decline of the textile industry and its serious effect on the manufacturing sector, and the slow-down of the construction sector, especially within the Botswana Housing Corporation, which is a major player in the construction sector (Republic of Botswana, 1998).

Table 2.1. GDP at current prices by broad sectoral categories (Pula million), 1991/92-1995/6.

GDP by Economic Activity	1991/92	1992/93	1993/94	1994/95	1995/96	Average Annual Growth Rate (%)
Agriculture	366.2	443.9	455.2	520.6	563.1	11.4
Mining	3125.9	3042.3	3932.3	4086.3	4859.0	11.7
Industry	1481.0	1584.5	1796.5	2057.9	2326.4	12.0
Government	1307.6	1565.3	1846.7	2159.0	2544.5	18.1
Services	2091.8	2490.0	3044.3	3706.5	4338.0	20.0
Total	8372.5	9126.0	11115.0	12530.3	14631.0	15.0
Growth Rate (%)	12.0	9.0	21.8	12.7	16.8	

Note: Industry includes manufacturing, water and electricity, construction, transportation and communications. Services include trade, hotels and restaurants, finance and business services, social and personal services and the dummy sector.

Source: Republic of Botswana (1998). National Development Plan 8, p.50.

A look at the broad sectoral categories shown in Table 2.2 indicates that, between 1991/92 and 1995/96, the agricultural sector contracted in size, with a negative growth rate of 1.8%. The mining and industry sectors achieved modest growth rates of 2.0% and 1.8%, respectively. For mining, in particular, the world recession slowed down the demand for diamonds, while soda ash and copper/nickel also faced recession-induced demand problems, resulting in the need for financial support for the soda ash plant and the copper/nickel mine. The manufacturing sector had expanded rapidly between 1985 and 1991 as a result of growth in the textile industry and other industries manufacturing items other than products of the Botswana Meat Commission. (BMC) (Republic of Botswana, 1998). However, the sector faced problems of marketing during the first two years of NDP 7 that adversely affected the industry's performance. After experiencing a slow growth in the first two years of NDP 7, the sector recovered from 1995/96 onwards, with diversified markets for textile products and exports of new products like assembled motor vehicles. Due to the slow growth in the first two years of NDP 7, the growth rate of manufacturing for the period 1991/92 to 1995/96 was therefore only 2.1% compared to a projected rate of growth of 6.5% (Republic of Botswana, 1998). During the period 1991/92 to 1995/96, the government and service sectors achieved growth rates of 5.2% and 6.2%, respectively. This is in contrast to the projected figures of 13.8% and 5.1%, respectively (Republic of Botswana, 1998).

Employment

Between March 1991 and March 1996, formal sector employment achieved an average annual growth rate of only 1.1%. Given that the population growth rate was 3.4%, the unemployment rate is estimated to have grown from 14% in 1991 to 21% in 1994. (Republic of Botswana,

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Table 2.2. GDP at Constant 1985/86 prices by Broad Sectoral Categories (Pula million), 1991/92-1995/96.

GDP by Economic Activity	1991/92	1992/93	1993/94	1994/95	1995/96	Average Annual Growth Rate (%)
Agriculture	202.6	200.7	198.5	189.4	188.6	-1.8
Mining	1577.1	1503.9	1579.1	1555.4	1709.4	2.0
Industry	852.5	835.9	841.3	877.4	914.8	1.8
Government	727.7	753.2	787.9	836.0	892.8	5.2
Services	1161.9	1222.4	1293.6	1389.3	1479.2	6.2
Total GDP	4521.9	4516.0	4700.5	4847.5	5184.8	3.5
Rate of Growth (%)	6.3	-0.1	4.1	3.1	7.0	
Growth Excluding Mining (%)	8.9	2.3	3.6	5.5	5.6	
Growth Rate of Mining GDP (%)	1.9	-4.6	5.0	-1.5	9.9	
Per Capita GDP	3343	3260	3310	3330	3475	1.0

Note: Industry includes manufacturing, water and electricity, construction, transportation and communications. Services include trade, hotels and restaurants, finance and business services, social and personal services and the dummy sector.

Source: Republic of Botswana (1998). National Development Plan 8.

1998). Formal sector employment is reported to have grown from 222,800 in September 1991 to 235,400 in March 1996. The private sector, with a share of 57.0% of total formal employment, was the largest formal sector employer, followed by the government (37.1%) and parastatals (5.9%).

Balance of Payments

Between 1991/92 and 1995/96, exports and imports constituted 51.2% and 31.2% of the GDP, respectively. The average annual growth rate of exports was 2.6%, while imports of goods and services were negative at -5.2% over the same period (Republic of Botswana, 1998). For the whole of 1995, diamonds formed 67.2% of total goods exports, while vehicles and parts formed 16.1% and other mining made up 5.8%. Their respective shares in 1991 were 78.6%, 0% and 8.5%. Imports were made up as follows: vehicles and transport equipment (18.6%), food and beverages (15.9%), and machinery and electrical equipment (15.7%). Their respective shares in 1991 were 16.0%, 13.6% and 17.0% (Republic of Botswana, 1998).

As a result of a good international trade performance, foreign exchange reserves increased from P7.7 billion in December 1991 to P18.0 billion in November 1996. It is estimated that the foreign exchange reserves in November 1996 were sufficient for 30 months of estimated 1996 imports of goods and non-factor services.

Inflation

The determinants of inflationary pressures in Botswana include the rate of inflation in trading partners, especially South Africa; the value of the Pula against other trading partner currencies;

fiscal and monetary policies; and other developments in the domestic economy, such as cost recovery policies (Republic of Botswana, 1998).

Inflation in Botswana between March 1991 and March 1996 averaged 12.5% per annum, compared to a projected rate of inflation of 10% per annum. Factors that are thought to have contributed to the rate of inflation include the drought of 1991-1993, the increase in cost of services such as health fees, and changes in the exchange rate of the Pula vis-à-vis other trading partner currencies. A comparison of inflation rates in Botswana and South Africa during the period 1991-1996 shows that Botswana's annual rate of inflation peaked at 17.9% in July 1992 and maintained a downward trend until it reached 10 and 11% in 1994 and 1996, respectively. The depreciation of the Pula during the second half of 1991 led to higher inflation rates during the first part of 1992. South Africa's inflation, on the other hand, reached a peak of about 17.0% in October 1991 and then took a downward trend thereafter, reaching a low point of about 4% in April 1996. The rate of inflation in South Africa was below that of Botswana during most of the period between January 1991 and September 1996. However, the rate of inflation in Botswana was above 10% most of the time until it decreased to 9.6% in December 1996, while that of South Africa increased to about 9.4% in December 1996. (Republic of Botswana, 1998).

Exchange Rate

Between August 1991 and May 1994, there was an increasing trend of the real exchange rate index of the Pula against the Rand, which was an indication of a loss of competitiveness in South African markets. Between February and March 1966, the Rand fell rapidly against the Pula as a result of a significant outflow of foreign portfolio investment from South Africa. The real Rand per Pula exchange rate began to fall from the end of August 1996 as a result of differential price trends in the two countries.

The real exchange rate of the Pula appreciated against the Zimbabwean dollar as a result of a large devaluation of the Zimbabwean dollar in 1991. For most of 1992, there was an improvement in competitiveness for Botswana's exports in Zimbabwean markets (Republic of Botswana, 1998).

The Eighth National Development Plan (NDP 8) 1997/98-2002/03

National Principles, Planning Objectives and Theme of the Plan

The national principles and planning objectives were the same as in the earlier Plans. The NDP 8 theme was Sustainable Economic Diversification

Performance of the Plan

National and Sectoral Output

GDP in current prices rose from 18.2 billion at the end of NDP 7 to P38.6 billion at the end of NDP 8. This showed an increase of 13.3% per annum. In constant 1993/94 prices, GDP was expected to increase from P13.0 billion to P18.4 billion over the same period. This showed a growth rate of 6.38% in that period. Incomes per capita rose from P11,615 in 1996/7 to P21,309 in 2002/03. There was thus almost a doubling of per capita GDP between 1996/97 and 2002/03. GDP per capita rose from P8,317.5 million in 1996/97 to P10,508.0 million in 2002/03. This showed an average growth rate of 3.30%. The initial Plan projection was for GDP to grow at

5.2%. However, the actual growth rate was expected to be around 6.4% (Republic of Botswana, 2003)

In terms of sectoral output, most sectoral categories apart from agriculture performed very well. In constant 1993/94 prices, the average sectoral GDP growth rates ranged between 9.37% for the government sector to 0.83% for the agricultural sector (Republic of Botswana, 2003).

Employment

There was a substantial improvement in employment in NDP 8. Employment opportunities during NDP 8 rose from 345,400 in 1996 to 483,400 in 2000. This constituted an average annual growth rate of 8%. Most of the increases in employment were attributed to employment opportunities in the informal sector. During the same period the labour force increased from 439,000 in 1996 to 574,000 in 2000. This constituted an increase of 5.5% per annum. This state of affairs helped in reducing unemployment from 21.5% in 1996 to 15.8% in 2000. Employment in the private and parastatal sectors achieved an average annual growth rate of 6.5% during the period 1997 to 2002. Employment in government, in contrast, grew at only 2.7% per annum from September 1997 to September 2002 (Republic of Botswana, 2003).

Balance of Payments

There was strong growth in import demand during NDP 8 as a result of increased construction activity in both the private and the public sectors. With the exception of 1998, there was a sharp rise in export earnings from 1997, resulting in a very favourable foreign exchange position during NDP 8. Available data shows that the level of foreign exchange reserves increased from P19.1 billion (US \$5.2 billion) at the end of 1996 to P41.2 billion (US 5.9 billion) at the end of 2002. This represented a small fall in actual and revised estimates of import cover from 33.1 months in 1997/98 to 32.1 months in 2002/03 (Republic of Botswana, 2003).

Inflation

The NDP 8 forecast of inflation for the years 1997/98, 1998/99, 1999/2000, 2000/2001, 2001/2002 and 2002/2003 in percentage terms were 9.2, 9.1, 8.1, 8.1, 7.1 and 7.0, respectively. The actual and revised estimates of inflation for the same years were 7.7, 6.7, 8.4, 8.0, 6.0 and 9.0, respectively. The inflation performance has been attributed to the low inflation situation in the major trading partner countries of Botswana, especially South Africa, which supplies about 80% of Botswana's imports. The actual lower inflation rates are also attributed to lowered global inflation rates and by tight monetary policy. The tight monetary policy was meant to restrain credit growth. The lower inflation is also attributed partly to a lower government expenditure, which fell from 42.1% of in 1998/99 to 38.3% in 2000/01 (Republic of Botswana, 2003).

Exchange Rate

During NDP 8, the Pula continued to be pegged to a basket of trading partner countries' currencies. The basket is composed of the South African Rand and Special Drawing Rights (SDR) of the World Bank. The SDR itself is made up of the US Dollar, the Pound Sterling, the Euro and Japanese Yen (Republic of Botswana, 2003, p. 45). During the first five years of NDP 8, the Pula appreciated strongly against the Rand. It rose from R1.28 at the end of 1996 to R1.72 at the end of 2001. This represented an increase of 34.4% over the period.

The Ninth National Development Plan (NDP 9) 2003/04-2008/09

National Principles, Planning Objectives and Themes of the Plan

The national principles and planning objectives were the same as in the earlier Plans. The theme of the Plan is *Towards realization of Vision 2016: Sustainable and Diversified Development through Competitiveness in Global Markets*.

During the presentation speech on the Draft National Development Plan 9 by the Minister of Finance and Development Planning, the Honorable B. Gaolathe, in November 2002, he stated that the choice of the theme for NDP 9 was "...guided by the fact that NDP 9 provides the first opportunity for the various Ministries and other stakeholders to integrate Vision 2016 goals and objectives into the national development planning process. The theme also recognizes the importance of competitiveness in global markets, which is an essential prerequisite for the sustained high rate of economic growth called for by the Vision" (Republic of Botswana, 2002).

Major Policy Thrusts of NDP 9

The major policy thrusts of NDP 9 include economic diversification, employment creation and poverty reduction; continued macroeconomic stability and financial discipline; public sector reforms; environmental protection; rural development; human resource development, including the fight against HIV/AIDS; and disaster management (Republic of Botswana, 2003). These major policy thrusts are briefly elaborated on in the following text.

Economic Diversification and Employment Creation

The mining sector, especially the diamond industry, has been the major contributor to GDP, export earnings and government revenue since the early 1980s. There has been an expressed desire of the government to diversify the economy away from its dependence on the diamond industry. The reasons for diversification are that diamonds are a non-renewable resource, and their prices are determined by an unpredictable world market. In addition to this price uncertainty, there has been a slow-down of the global economy that has led to a dampening of international demand for diamonds, as has the international campaign against trade in "conflict diamonds", which may affect to some extent the international trade for Botswana's diamonds.

Sectors with potential for diversification of the economy include agriculture, manufacturing, tourism and financial services. In the case of agriculture, the National Master Plan for Arable Agriculture and Dairy Development (NAMPAADD) offers opportunities for investments in the sector to enable it to make positive contributions to the national economy. The agricultural sector also has several linkages with the rest of the economy, and therefore its development is likely to impact upon the national economy in a very positive way in terms of income and employment generation. The development of the non-mining sector, especially manufacturing, also offers an important avenue for both investment and income and employment generation. The importance of tourism as an area for diversification within the national economy cannot be overemphasized. The tourism potential in Botswana has not been fully exploited. The possibilities for investment in boarding, lodging and other facilities for tourists, and the associated revenue and employment generation emanating from tourism, are yet to be fully tapped.

Poverty Reduction

One of the major challenges facing Botswana is poverty. During NDP 9, it is planned that efforts aimed at the reduction of poverty will continue to be a priority in line with the Vision 2016

aspiration of eradication of absolute poverty by the year 2016, with no part of the population living with an income below the national poverty datum line.

While economic diversification, education and other training programmes are to be offered as part of the long-term solution strategies for poverty eradication, short-term programmes aimed at poverty alleviation, with special emphasis on vulnerable groups, are to continue to be implemented, monitored and reviewed where necessary during NDP 9

Macroeconomic Stability and Financial Discipline

The role of government in the process of diversification of the economy during NDP 9 is to include the provision of a conducive environment for private sector development. The government also intends to continue to maintain conducive macroeconomic conditions, such as competitive exchange rates, low tax rates, an environment free of foreign exchange controls, improved access to credit, and price stability. The successful implementation of these strategies is likely to help to improve the economy, especially in the creation of employment (Republic of Botswana, 2002).

The successful implementation of NDP 9 will require financial discipline. The government therefore intends to monitor expenditure in order to ensure budget sustainability. Other efforts to maintain financial discipline include the review of the tax structure to ensure its suitability to the country's needs, and the raising of government revenue through cost recovery measures after consultation with stakeholders.

Public Sector Reforms

A number of public sector reforms that were initiated during NDP 8 will continue to be implemented during NDP 9. The Performance Management System (PMS), for example, is expected to be fully implemented in all Ministries during NDP 9. The PMS which was introduced in all Ministries and Departments in 1998/99 is a change and quality management process that facilitates a comprehensive management of performance at all levels. It includes retooling and re-engineering the public service leadership, preparation of clear visions, mission statements and values by all Ministries and Departments. It also entails the development of strategic plans for implementation by all Ministries to effectively manage their strategic plans, Ministries and Departments are to measure their performance and review progress quarterly. In this regard, Permanent Secretaries and their Deputies are to sign performance contracts whereas the rest of the public service are to operate the performance-based reward system (PSRS). To date, all Ministries and independent Departments have developed their strategic plans and annual performance plans (APPS). Other reforms that are expected to be implemented include the computerization and decentralization of personnel management in government. The Public Enterprise Evaluation and Privatisation Agency (PEEPA) is expected to focus on government's privatization implementation strategy as well as specific strategies to reform public enterprises and government departments. The aim of these reforms is to increase private sector participation in the economy and to transform "Government from the role of a provider and regulator to that of a facilitator" (Republic of Botswana, 2002).

Environmental Protection

It has been maintained in NDP 9 that economic growth cannot be sustainable in the absence of a healthy environment. Therefore it is intended in NDP 9 to integrate environmental issues, including environmental impact assessments, into development projects. Appropriate legislative

frameworks and the relevant institutional reforms are therefore to be put in place, enforced and monitored in order to help protect the environment. Other issues to be addressed in the effort to protect and achieve a sustainable use of the environment during NDP 9 include efficient, productive, fair and sustainable natural resource utilization.

Rural Development

Rural development has remained a high priority area for government over the years and continues to be so during NDP 9. The rationale for the emphasis on rural development is the perceived need to achieve social justice for rural inhabitants through improved access to income generation opportunities for rural dwellers. In the effort to enhance rural development, a comprehensive review of the previous Rural Development Policy was completed during NDP 8, which resulted in the Revised National Policy for Rural Development. Under the Revised Policy, the following thematic areas were identified: promotion of sustainable rural livelihoods, land and natural resources management, social protection, and re-sharpening the institutional framework and capacity for implementing rural development initiatives.

Concerns and issues that have been identified within the thematic areas, and which would be the basis for the implementation of rural development programmes, include the following:

- A diversified approach to rural livelihoods, including non-agricultural sources in various regions of the country, and those that emanate from the provision of infrastructure, markets and demand for rural products that can be sourced locally;
- Provision of infrastructure in production areas, especially those with the highest potential;
- Creation of conditions to make agriculture an attractive economic pursuit, particularly for the youth;
- Removal of constraints to the speedy acquisition of land, including change of use and other related matters;
- Strengthening of property rights in Tribal Land, including especially the security of tenure, facilitation of use of land as security, and enhancing the value and utilization of land as a productive asset in rural areas; and
- The provision of a more diversified economic land-use system.

The main thrust of rural development during NDP 9 is the implementation of the Revised National Policy for Rural Development and the associated strategies as incorporated in the sectoral policies.

Human Resource Development

The importance of human capital in facilitating the economic development process has been recognized by government. Human resource development holds considerable promise for the reduction of unemployment and poverty. Therefore, during NDP 9, it is planned that human resource development will take the form of creating a human resource base with appropriate skills, attitudes and values, and which will result in increased productivity and competitiveness.

Disaster Management

Botswana is susceptible to a number of national disasters, the most frequent being drought. The government has therefore put in place the relevant structures to help improve coordination and effectiveness in disaster management in the country. Disaster management is also to be integrated into the planning process to ensure its consistency with the nation's planning objectives. The integration of disaster management into the planning process is also meant to ensure that it is implemented at local, district and national levels in the context of overall national development, and within the framework of existing financial and human resources in a cost-effective manner.

In order to facilitate the activities of disaster management during NDP 9, a disaster management policy incorporating elements of preparedness, mitigation, response, recovery and development, and which is consistent with other government strategies and policies, has been put in place. This policy will be monitored and reviewed to ensure its consistency with similar policy documents during NDP 9.

Vision 2016 as Long-term Planning for Botswana

Introduction

During the commemoration of the thirtieth anniversary of Independence, the *Framework for a Long-Term Vision* of the country was launched by the then President of Botswana, Sir Ketumile Masire. This framework has since been developed into another document, titled "*Long Term Vision for Botswana (Vision 2016): Towards Prosperity for All*", published in September 1997. The need for Vision 2016 came out of the realization that the world is undergoing rapid change and Botswana was part of this change. Therefore, there was the need to adapt to the changing and increasingly competitive world without losing or sacrificing the positive aspects of Botswana's culture and values. The architects of the *Framework for a Long-Term Vision* noted that the alternative to not adapting to the change going on in the world was "stagnation and international isolation, an unattractive outcome that we should strive to avoid".

The Structure of Vision 2016

National Principles and Objectives of National Development

The four national principles of democracy, development, self-reliance and unity, which have been the principles guiding the formulation of national development plans, were also the guiding principles for Vision 2016. However, a fifth principle, *Botho*, which refers to "a state of being humane, courteous and highly disciplined", a principle drawn from Botswana's cultural heritage, has been added to the original four. The four objectives of national development applicable in other plans thus also apply to Vision 2016.

Framework for a Vision

The elements of Vision 2016 as outlined by the Presidential Task Group (1997) are in the form of challenges and opportunities Botswana should be

- An educated, informed nation;

- A prosperous, productive and innovative nation;
- A compassionate, just and caring nation;
- A safe and secure nation;
- An open, democratic and accountable nation;
- A moral and tolerant nation; and
- A united and proud nation.

The Strategy for Making the Vision a Reality

The strategy for making the vision a reality is outlined briefly as follows:

Building an educated, informed nation. There is a need to move quickly towards universal and compulsory education up to secondary level. Vocational and technical education must be made available to all as an alternative to strictly academic study.

The quality and accessibility of the educational system must be improved and geared towards the needs of the country and the job market. The disabled must be catered for, and there must be no gender discrimination in the education system.

There is also a need to introduce a Freedom of Information Act to protect the rights of citizens to obtain and use information held by government and civil service.

Building a prosperous, productive and innovative nation. Existing development policies must be implemented, and monitoring mechanisms need to be strengthened. All initiatives must be given quantifiable targets and implementation schedules if the average income per person of the equivalent of US \$8,500 envisaged in Vision 2016 is to be achieved.

Botswana must improve its work ethic and productivity in all of its organisations, both private and public. The principle of rewarding good performance must form part of working conditions, particularly in the public service.

Environmental and natural resources must be preserved in a sustainable way for the benefit of present and future generations. Conservation efforts must be strengthened throughout the country. This also implies that both livestock and wildlife must be sustainably managed to avoid overgrazing and subsequent degradation of the environment.

Building a compassionate and caring nation. Income distribution must be equitable so that more people can share in the country's prosperity through the creation and promotion of sustainable jobs, especially in small-scale enterprises.

The capabilities of poor people must be improved through education and the provision of better social services to help them to escape from poverty. Thus, support for single parent households and people in remote areas will be needed.

Poverty must be eradicated and social safety nets put in place where necessary to enable people to meet their basic needs. The destitute policy must be reviewed to improve its equity, coverage and effectiveness, and to serve as a safety net for the very poor.

Health facilities must be improved, with particular attention given to halting the spread of AIDS and alleviating the suffering caused by the disease.

Building a safe and secure nation. This must be done by minimizing crime through the equipping and training of the police at the local and national levels to deal effectively with criminal activities. Major campaigns, stiffer penalties, more innovative approaches to crime

deterrent, and education must be implemented to eradicate crime, violence and corruption.

Parents of young children committing crimes must be held accountable for such crimes, and abuse of children must be eradicated.

Road safety must be improved through improved driving quality and education, better road design, and fencing to control livestock straying onto the roads.

National defence must be enhanced through good policies, accountability and cost effectiveness nationally and within the region.

Building an open, democratic and accountable nation. The tradition of open government in Botswana must be continued. Policy debate must be both free and well informed. Laws that discriminate against women and the disadvantaged in society must be repealed, and public education is needed to enable all Batswana to know and understand their rights.

Building a moral and tolerant society. The need for civic duty and the inculcation of self-reliance within society must be emphasized. There is also a need to preserve moral values and eliminate the tendency towards dependency on government for handouts. *Botho* must be built into a national principle and be taught at home, school, and in community life and the work place.

Building a united and proud nation. The family unit in Botswana needs to be strengthened, supported and encouraged through various development policies and programmes. The strong family unit will act as a force against many social problems, such as teenage pregnancies, the spread of HIV/AIDS, and the abuse of alcohol. All languages in Botswana must be equally developed and all forms of cultural expression must be encouraged in order to help to mould the cohesiveness of the country into a united and proud nation.

The Future of Vision 2016

Vision 2016 will become a reality if all Batswana are active participants in its implementation. Government, communities, farmers, business people, employers, employees and various stakeholders must play their respective roles in the pooling of their resources to ensure a successful implementation and coordination of the Vision. Key national institutions, both public and private, are to play their part in the successful implementation of the Vision.

The incorporation of the goals of the Vision into National Development Plans and the mid-term reviews of Plans will help to sustain the spirit of the Vision in future national policies and programmes. The maintenance of stable and prudent policies and the necessary macroeconomic environment conducive to private sector and foreign participation in the economic development of the country will help to facilitate the realization of Vision 2016 within the allotted time period.

Conclusion

Development planning in Botswana has become an important instrument for giving direction and purpose to the economy, and has helped in promoting development and national integration. The Minister of Finance and Development Planning, in a statement on the need for effective planning and especially adherence to the Plan, has stated that "adherence to effective planning has contributed to Botswana's transformation from one of the poorest countries at Independence to a middle income country, with a per capita GDP of P17,000 (or US \$3,000). This dramatic

transformation has changed Botswana from being essentially a cattle-rearing and rural-based economy to one of the consistently fastest growing economies in the world. It is, therefore, important that we recognise the role played by the planning system in the past and future development of this country” (Republic of Botswana, 2002). Thus, the Government of Botswana has recognized the contribution of the planning system to effective development of the country, and has therefore committed resources to the development and effective use of the planning system in the future development of the country.

Over time, steps taken in putting National Development Plans together have become more and more sophisticated as additional resources have become available. The Plans have become more detailed with improved projections. While it is true that projections have in some cases deviated from actual situations, the projections have helped to put things in perspective to mobilize the relevant resources in order to achieve the stated objectives of the Plans.

The major problems that have been encountered in development planning in Botswana have included imperfections in data on Botswana’s economic situation, and delays in the implementation of projects resulting in cost overruns. The problem with data has impacted negatively in making forecasts. The situation is compounded by uncertainties in the future development of the country (Republic of Botswana, 1985). The problems of delays in the implementation of projects, with their attendant cost overruns, partly have their roots in inadequate implementation capacity. Despite improvements in implementation capacity - especially in government - implementation of projects on time continues to be a problem, which results in large financial losses to government.

Despite the achievements made in development planning in Botswana, a lot still needs to be done in integrating district, urban and village level plans into the national plan in order to improve the cohesion of objectives and the strategies for achieving those objectives. While the political will at the national level may be evident, it is important that the vision for the Plan is also captured at the district, urban and village levels for effective implementation and coordination of national development plans.

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Chapter 3

Macroeconomic Policies for Development in Botswana

L. Setlhare

Introduction

Macroeconomic policies are very important in any economy, whether developed or developing. Governments of different countries use these policies to manage their respective economies in order to achieve specific national macroeconomic goals. This does not negate the fact that these policies may have different roles in developed countries than in developing countries: differences in economic needs and priorities of policymakers will translate into different national macroeconomic goals in the two groups of countries. In developed countries, macroeconomic policies are mainly used for short-term stabilization purposes, but in developing countries, the policies are devoted mainly to the promotion of economic growth and development (Hossain and Chowdhury, 1996).¹ That is, in developing countries, the focus is more on the long-term effects of policy.

In Botswana, reference to various National Development Plans indicates that macroeconomic policies have been conducted on the basis of two main objectives - achieving sustainable economic growth, and diversification of the economy away from dependence on mineral-led and government-led economic development. The current National Development Plan (NDP 9) features a third main objective - sustainable and diversified development through competitiveness in global markets. In line with these objectives, the Government of Botswana has been seeking to promote non-traditional exports (goods other than diamonds and beef) and growth of the non-mining and non-government sectors. In this regard, macroeconomic policies have been geared toward the achievement of macroeconomic stability in the economy - specifically, the government believes that macroeconomic stability can be attained by using appropriate policies with respect to wages, taxation, exchange rates, interest rates, credit, etc.²

The approach of this chapter is to briefly discuss each macroeconomic policy and highlight its contribution to Botswana's strategy for economic growth and economic development. Section 2 discusses monetary policy with Section 3 discussing fiscal policy. This is followed by a discussion of foreign exchange and exchange rate policy in Section 4, and incomes policy in Section 5. Section 6 concludes the chapter.

1. Hossain and Chowdhury's point was made specifically in reference to monetary and financial policies. However, the generalization we make in this chapter should not be contentious since, in general, it has been believed that the most important concern of policymakers in developing countries relates to medium- and long-term growth and not short-term stabilisation (see Jha, 1994).

2. For details, see NDP 8 and Bank of Botswana Annual Report (1993).

The Conduct of Monetary Policy in Botswana

Monetary policy is conducted by the Bank of Botswana, acting as an agent of the Government of Botswana. The Bank of Botswana's policy is based on the provisions of the Bank of Botswana Act, 1996, which sets out the aims and objectives of the Bank (the 1996 Act replaced the first Bank of Botswana Act, adopted in 1975). The Act prescribes the responsibility of the Bank of Botswana to promote and maintain monetary stability; to promote an efficient payments mechanism, and to ensure the liquidity, solvency and proper functioning of a soundly based monetary, credit and financial system; and, in so far as it is not inconsistent with those first objectives, to facilitate monetary, credit and financial conditions that will promote balanced and sustained economic development of the country. The objectives of the Bank of Botswana are similar in both the 1975 and 1996 Acts.

Given the provisions of these Acts, the monetary authorities have used both financial and monetary policies to promote economic growth and development. Prior to financial liberalisation in 1989, the monetary authorities pursued a low interest rate policy in order to mop up excess liquidity in the banking system, as well as to influence the supply of domestic credit (Tlhase-Kayira, 1991; Clarke, 1992), in order to achieve faster economic growth (see Ablo and Hudson, 1983; Clarke, 1992; Hermans, 1996; and Moloji, 1996).

In 1989, the monetary authorities commenced the process of financial liberalisation. The reform package was mainly implemented between 1989 and 1991 (Bank of Botswana Report, 2001). The package entailed the removal of controls on interest rates; the licensing of additional commercial banks; the introduction of a financial instrument, the Bank of Botswana Certificate (BoBC), to conduct open market-type operations; and the removal of exchange controls. In addition, the monetary authorities embarked on a strategy of increasing interest rates to levels that would achieve positive real interest rates.

The policy of positive real interest rates was adopted in order to achieve two goals: to mobilise greater volumes of saving, particularly by the household sector, thereby reversing the negative effects of the low interest rate policy; and to encourage productive investment. In the process of mobilising savings, the financial sector promotes investment and hence, economic growth (Bank of Botswana Report, 2001). In response to the policy of positive real interest rates, households, which had been net borrowers with the banks, have been increasing their holdings of savings assets (contractual) faster than the increase in their deposits in the banking system. In fact, by 2001, household savings had already become the main contributor to the growth of the banking system (*ibid*).

In response to the government's financial sector development strategy, the number of banks in the banking system has risen. Although the banking sector is characterised by an oligopoly market structure, an increase in the number of participants in the banking sector could mean that competition in the supply of banking services has risen. The main sign that competition has increased in the banking sector is that banks have been engaged in a process of innovation (Bank of Botswana Report, 2003). Innovations have taken the form of widening and refining the range of new products and/or services offered by banks. These include the availability of Automatic Teller Machines (ATMs), debit and credit cards, on-line and telephone banking, flexible mortgage facilities, and rapid processing of loan applications (*ibid*).

The conjecture that competition has increased in the banking sector seems to be confirmed by the proxy indicator of competitiveness, such as the Concentration Ratio (CR). In its 2003 annual report, the Bank of Botswana has calculated individual market shares, using the CR concept, for the largest three commercial banks (Barclays Bank, Standard Chartered Bank and

First National Bank, together with the combined market share for the other banks (i.e. smaller commercial banks and merchant banks). A cumulative distribution of these banks is then plotted, with the market shares added in declining order for three years: 1994, 1999 and 2003. The picture that emerges shows that, in 1994, the combined CR of the big three commercial banks (CR3) was 91%. Of this 91% CR, the two oldest commercial banks (Barclays and Standard) accounted for 77%, implying that the share of FNB was 14%. However by 2003, CR3 had fallen to 83%, but the share of FNB, the smallest of the big three banks, had risen to 22%. The fall of CR3 from 91% to 83% suggests that the market share of smaller banks has been increasing. The fall of CR3, coupled with the rise of the market share of FNB, implies that equality across the market has been on the increase - i.e. the original pattern of a duopoly (comprising Barclays and Standard Chartered Bank) has been eroded over time. Both of these phenomena can be interpreted to mean that competitiveness has been increasing in Botswana's banking system.

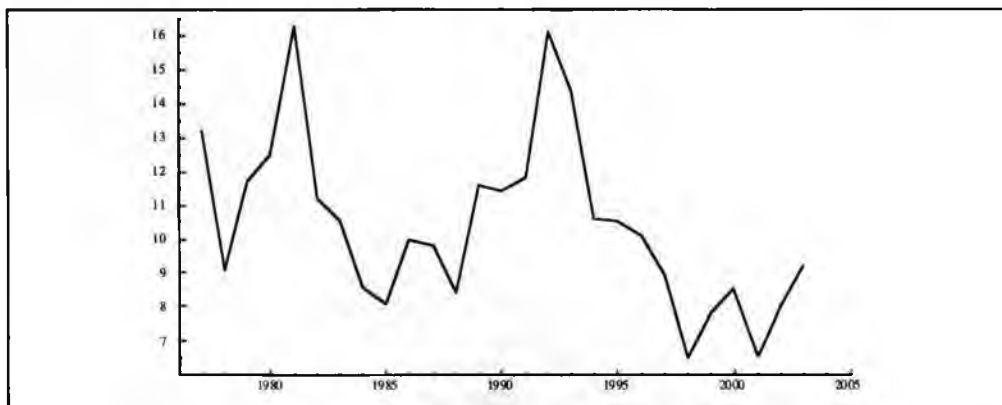
The increase in competition in the banking system is an important development. We have noted that a likely effect of competition was a widening of products and/or services offered by banks. At the same time, these innovations lead to an increase in the efficiency of the payments mechanism. Both of these factors have made an important contribution towards the process of growth of the economy. The more sound and efficient the financial sector generally, and commercial banks in particular, the greater the degree to which they can fulfil their intermediation role and facilitate the operations of the payments mechanism. Similarly, the more robust and efficient the financial sector, the more confident economic agents will be in utilising financial institutions for purposes of saving and effecting payments (Bank of Botswana Report, 2001). Thus, it can be argued that Botswana's financial policy has, to some extent, supported the country's strategy for economic growth and development.

Although the financial sector reforms of 1989-91 can be seen as supportive of the country's strategy for economic growth, the structure of the financial sector is dominated by commercial banks (Bank of Botswana Report, 2001). This means that most loans have short-term maturity. This probably explains why the share of credit allocation to the manufacturing sector has remained small, while credit allocations to other sectors - such as that of households and business services - have been rising. In fact, the share of lending to manufacturing generally fell during the 1990s (*ibid*). Given that the manufacturing sector has been given a high priority in Botswana's strategy for economic diversification, there is a need for a shift in the structure of the financial sector towards capital market institutions.

The monetary authorities in Botswana use monetary policy as a strategy to promote long-term economic growth and development by using it to control inflation. High and variable inflation distorts price signals and creates uncertainty about the future value of money, thus encouraging economic agents to hold their wealth in the form of physical assets and not financial assets. The effect of these is a negative impact on saving and investment decisions and economic growth. The control of inflation obviates the need to hold financial savings mainly in the form of physical assets as a hedge against inflation. Consequently, savings become available to finance investment. In addition, by maintaining a low and stable inflation rate, monetary policy contributes to the promotion of domestic and external monetary and financial stability. It has been argued that Botswana's monetary policy has performed well in controlling inflation. For about a decade, in the 1980s, the economy experienced an unparalleled boom. Yet, in spite of this, policymakers managed to avoid chronic inflation (Setlhare, 2004). Annual inflation in Botswana has never exceeded 20% since the inception of the Bank of Botswana. A comparison of the inflation performance of Botswana with that of other developing countries in general, as

has been done in Cowan (1998) for the 1976-95 period, shows that Botswana has performed better than a broad range of African countries. He finds that, within SACU, Botswana has had one of the lowest average Consumer Price Index (CPI) inflation rates during 1976-85. Cowan also finds that Botswana had the lowest average CPI inflation rate during 1986-95, as well as the lowest average inflation during the entire period. In addition, Botswana has had the most stable average CPI inflation rate compared to the rest of the SACU countries (Cowan, 1998).

Figure 3.1 presents a time plot of average annual CPI inflation for the period 1977-2003. As can be seen, average annual inflation has never reached 17% throughout the whole period. Another feature to note is that, since the Bank of Botswana gained operational control over monetary policy in 1991, average inflation has been brought down substantially through the introduction of an open-market type operation. Furthermore, since 1997, average annual inflation has been kept at single-digit levels, even in 2002 and 2003, after the introduction of Value Added Tax, whose effect on prices contributed to inflationary pressure. Perhaps this outcome can be attributed mainly to the success of the current monetary policy strategy, whereby the Bank commits itself to achieving inflation within a pre-defined target range, and to a lesser extent, supportive fiscal policy.



Source: Central Statistics Office bulletin 1999, Bank of Botswana Report 2003.

Figure 3.1. Annual CPI inflation.

The Conduct of Fiscal Policy in Botswana

Fiscal policy is conducted by the general government sector. In Botswana, this government sector comprises all units of central and local government, and all non-market non-profit institutions that are controlled and mainly financed by government units, such as the development banks; public corporations owned by government units are excluded. This description implies that financial transactions within the sector (such as transfers from central to local government) are not viewed as fiscal policy.³

In the post-Independence era, most African governments adopted the strategy of intervening heavily in the operation of their economies. For example, in Zambia, many production

3. See Acocella (1998) for details.

ventures and financial institutions were nationalized after Independence (Banda, 2003). This strategy fell apart in the early 1980s. Donor countries blamed these governments for the poor performance of their respective economies, and put pressure on them to liberalise their economies and reduce the size of government involvement in their economic activities. But since the 1990s, economic policy has now shifted back to advocate for strong government involvement in the management of market-oriented economies, albeit with the proviso that the governments themselves be more democratic and accountable. The Government of Botswana has consistently pursued this economic policy now being advocated for developing economies.⁴

The Tools of Fiscal Policy and Fiscal Policy Strategy

The tools of fiscal policy used by the Government of Botswana, are as in any other country, taxation and government expenditure. It can be argued that fiscal policy has been conducted pursuant to Botswana's two main underlying objectives of sustainable economic growth and the diversification of the economy. As mentioned above, the current National Development Plan (NDP 9) adds another objective - enhancing Botswana's competitiveness in global markets.

Government's strategy has been to avoid spending (using its large diamond export revenue) in a manner that is not consistent with the absorptive capacity of the economy. Over-spending could cause macroeconomic instability. In contrast, Botswana's policy approach has been to accumulate foreign exchange reserves and government cash balances with the intention of running them down in bad years. The idea has been for fiscal policy to maintain a fairly constant growth in real expenditure from year to year, independent of what is happening to the real growth of the government's domestic revenue.

This policy strategy means that the government has to insulate the growth rate of real expenditure from the cyclical behaviour of its real domestic revenues. For example, government had to insulate its expenditures in 1981-82, when the government's domestic revenues declined significantly because of the decline in its mineral royalties and dividends arising from an unexpected fall in export earnings from the diamond sector (Tlhase-Kayira, 1991).⁵ In spite of this, the government maintained expenditure levels (ibid), with only a slight reduction in expenditures (Harvey, 1985). Confirming this claim, Lewis and Mokgethi (1983) argue that the government maintained expenditures by running down its Revenue Stabilisation Fund, since the level of domestic revenue for the government was lower than indicated in the budget. As summarised in the Bank of Botswana Annual Report (1995, p. 75) "...Government must accumulate adequate savings during the good years to maintain a steady development programme".

Table 3.1 shows the government's revenue, recurrent expenditure, recurrent surplus/deficit, appropriations from revenue, government budget surplus/deficit, and development expenditure for each year in the period 1979-2001. The evidence in the table shows that, over time, as government revenue increased, the government did not respond by increasing its expenditure. Rather, the government responded by increasing its savings.

As can be seen in Table 3.1, out of the whole period of 23 years, the government budget experienced a deficit only on five occasions - 1980/81, 1981/82, 1994/95, 1998/99 and 2001/02.

4. For more details, see Harvey (1993).

5. The resultant decline in the foreign exchange reserves was large enough to cause a deficit in the country's balance of payments (Bank of Botswana Annual Report, 1993).

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Table 3.1. Government revenue and expenditure (millions of Pula).

Year (1)	Total Revenue (2)	Recurrent Expenditure (3)	Recurrent Surplus/Deficit(-) (4)	Revenue Appropriations (5)	Overall Surplus/Deficit(-) (6)	Development Expenditure (7)
1979/80	213.4	128.6	84.8	—	n.a.	99.4
1980/81	270.7	170.3	100.4	112.4	(12.0)	121.4
1981/82	282.8	205.9	76.9	99.5	(22.6)	121.3
1982/83	370.1	233.6	136.5	65.5	71.0	160.4
1983/84	511.4	297.9	213.5	156.0	57.5	140.7
1984/85	755.9	378.0	377.9	244.4	133.5	209.7
1985/86	1085.3	472.4	612.9	282.3	330.6	247.5
1986/87	1461.0	608.3	852.7	648.2	204.5	407.4
1987/88	1757.5	723.7	1033.8	709.3	324.5	558.1
1988/89	2432.6	933.8	1498.8	1026.3	472.5	797.3
1989/90	2672.4	1190.0	1482.4	1355.0	127.4	827.6
1990/91	3560.8	1473.1	2087.7	1892.5	195.2	1090.1
1991/92	3973.6	1862.5	2111.1	1254.1	857.0	1098.0
1992/93	4369.2	2273.9	2095.3	1904.7	190.6	1207.0
1993/94	5351.4	2800.0	2551.4	1279.0	1272.4	1558.3
1994/95	4312.8	3097.7	1215.1	1648.4	(433.3)	1377.8
1995/96	5282.8	3550.8	1732.0	1475.0	257.0	1672.0
1996/97	7164.0	4117.0	3047.0	1682.0	1365.0	2239.6
1997/98	7991.4	4974.8	3016.6	2642.5	374.1	2695.5
1998/99	7422.2	6369.8	1052.4	2962.0	(1909.6)	2934.5
1999/00	11632.3	7711.4	3920.9	3559.0	361.9	3869.2
2000/01	12808.7	8581.9	4226.8	3335.0	891.8	3627.2
2001/02	13398.0	9673.9	3724.1	5160.0	(1435.9)	4709.4

Notes: (i) Values in parentheses reflect deficit.

(ii) Recurrent surplus/deficit equal column (2) minus column (3).

(iii) Overall surplus/deficit equal column (4) minus column (5).

(iv) Appropriations from revenue in column (5) represent funds taken out of total revenue (after recurrent expenditure has been met) to finance development expenditure.

(v) — means the data value is not available.

Source: Statistical bulletins, Central Statistics Office, various years.

This means that, in these five years, although the government's revenues were more than sufficient to cover recurrent expenditure (the recurrent budget shows a surplus in each of the five years), revenues were not sufficient to finance the level of development expenditure desired by the government. Thus, the government had to run down the cash balances that it had built in the past in order to sustain steady expenditure levels, consistent with a steady development programme.

This policy strategy has achieved at least two things: 1. it has avoided the occurrence of the "Dutch disease", and 2. it has avoided the emergence of white elephant projects. The former occurs when the appreciation of the real exchange rate caused by one booming (usually a natural resource) sector makes the goods of other sectors uncompetitive in international markets. It should be noted that if the government had gone into excessive spending, domestic costs would

have risen faster than those of Botswana's trading partners. If not offset by exchange rate devaluations, this would have caused an appreciation of the real exchange rate. A real exchange rate appreciation would harm the manufacturing sector and reduce export diversification (see Harvey and Lewis, 1990). The concept of white elephant projects occurs when boom conditions lead to the construction of structures that cannot be sustained after completion, and hence turn out to be useless sunk-cost items.

To a large extent, Botswana's fiscal policy has been complementary to other macro-economic policies introduced to achieve the main macroeconomic goals. As stated in NDP 9, the main objective of fiscal policy has been to support price stability and promote international competitiveness by keeping public sector demand for resources in line with the constraint imposed by the availability of resources. In fact, in NDP 9, the strategy of fiscal policy will be to ensure budget sustainability and to maintain a healthy growth of government expenditure, the underlying reason being to ensure a conducive environment for the private sector to become the major engine of growth. In this regard, the formulation of fiscal policy is not in conflict with that of monetary and exchange rate policies.

Government has also used its tax policies in an effort to create a positive investment climate for the private sector. One way in which the government used the tax policy in this way was by adhering to the principles of a clear, simple, stable, transparent and fairly applied tax system. Another way entailed a shift towards lower tax rates, a trend that has recently been followed by both developed and developing countries. Implementation of this strategy calls for reforms that include a significant reduction in income tax rates, efforts to broaden the tax base, and a shift from a heavy reliance on direct taxes to a mix of both direct and indirect taxes. In pursuing this strategy, Botswana's tax structure has been modified as follows (not necessarily in this order): the mix of tax instruments has been changed from direct to indirect taxes, the tax rates for both individuals and companies have been reduced, and the government has made efforts to broaden the tax base (which also represents a shift towards indirect taxes) by introducing the Value Added Tax in 2002.⁶

At operational level, the government has identified key sectors through which to achieve the objective of economic diversification - the agricultural, manufacturing, tourism, and financial services sectors. To ensure competitiveness in these sectors, and to maintain that competitiveness in global markets, government will invest in research and development in science and technology (NDP 9). To achieve economic diversification, the role of government will be limited to that of being a facilitator - the government will provide a conducive environment for private initiative and innovation to occur.

In the past, government's implementation strategy involved designing many schemes to support the process of economic diversification. These schemes included, among others, the Financial Assistance Policy and the Small, Medium and Micro Enterprise scheme, which were introduced to provide financial assistance to potential investors. This assistance has now been reformulated and reconsolidated into the newly established Citizen Entrepreneurial Development Agency (CEDA). CEDA is an empowerment scheme that assists potential citizen investors not just financially (through highly subsidised loans) but also through training, monitoring and mentoring, and through the provision of a Venture Capital Fund. The Venture Capital Fund provides equity capital to citizens and joint ventures between citizens and foreign investors, reserving the subsidised loans for citizens only. Under CEDA, the emphasis is for assisted

6. See NDP 9 for details.

enterprises to develop supporting mechanisms in order to achieve sustainability and thereby reduce dependence on government assistance.

The other part of government's role in economic diversification is to ensure continued existence of conducive macroeconomic environment in terms of low tax rates, competitive exchange rates and interest rates, an environment free of exchange controls, access to credit, and price stability (ibid).

Foreign Exchange Reserve and Management Strategies

By statute, the Bank of Botswana is responsible for managing the country's international reserves. However, the Bank has decided to manage only part of the reserves internally, with the remainder being managed by external fund managers appointed by the Bank of Botswana. The funds managed by the Bank are invested in six markets or foreign currencies - United States (Dollar), Germany (Euro), Canada (Canadian Dollar), United Kingdom (Pound Sterling), Japan (Yen), and South Africa (Rand).

Total foreign exchange reserves are divided into two segments: the Liquidity Portfolio and the Pula Fund. These funds are held in various financial instruments that range from demand deposits to time deposits. The liquidity portfolio is used by the central bank as a buffer against short-term trade and capital account (investment) fluctuations. On the other hand, the Pula Fund portfolio is a long-term investment fund (invested in longer-term assets) that is used to generate revenues for future generations.⁷ The Pula Fund is "designed to ensure that Botswana's national savings, broadly defined, contribute as much as possible to sustainable national economic development" (Bank of Botswana, 1998, p. 10).

The Conduct of Exchange Rate Policy

For purposes of achieving macroeconomic stability, and thereby providing a conducive environment for potential investors, the monetary authorities in Botswana have aimed to maintain exchange rate stability and convertibility (NDP, 8). The box below explains the rationale for Botswana's choice of exchange rate regime.

Prior to 1989, policymakers used the exchange rate as an instrument to curb imported inflation and to ensure the competitiveness of tradable goods. In particular, the Rand/Pula exchange rate was managed to control imported inflation from South Africa and to ensure the competitiveness of Botswana's non-traditional exports (exports that do not include beef and minerals) in the South African market. Emphasis was placed on the Rand/Pula exchange rate rather than any other bilateral exchange rate because South Africa is Botswana's main trading partner.

But the success of the exchange rate policy in simultaneously pursuing these conflicting objectives depends crucially on the nature and timing of linkages between the nominal exchange rate, prices and inflation (see Mannathoko, Siwawa-Ndai, Jefferis and Atta, 1995). The monetary authorities in Botswana were aware that changes in South African prices and the Rand/Pula exchange rate actually pass through to Botswana prices. However, it was believed that the "pass-through" occurred over a period of time, and that in the short-term they could take

7. For details, see Bank of Botswana (1998) and Moloi (1999).

Choosing the Exchange Rate Regime

Botswana has adopted a pegged - as opposed to a flexible - exchange rate system. In particular, Botswana follows an adjustable peg system. As is well known, an adjustable peg system entails defining the par value and the band within which the exchange rate can fluctuate, along with a condition that the par value will be changed periodically as necessary to correct balance of payments disequilibrium.

Botswana opted for a pegged system in order to curb fluctuations in the effective Pula exchange rate, for fear that a flexible exchange rate system would subject the exchange rate to wide swings, especially in view of the thin market for the Pula. Further, given the nature of the demand and supply of foreign exchange in Botswana, a floating exchange rate system would not determine an exchange rate level that is consistent with the country's economic development and diversification objectives. Under a floating exchange rate, the effect of the huge stocks of foreign exchange reserves that Botswana has been accumulating would have been an appreciated exchange rate, along with the attendant problems of the Dutch disease.⁸ Botswana managed to avoid the Dutch disease by opting for the pegged exchange rate system. The government has been achieved through the strategy of accumulating excess supplies of foreign exchange reserves, and thereby not allowing the exchange rate to appreciate.⁹

Source: Bank of Botswana Report, 1994, p 39.

advantage of the adjustment lag to influence export competitiveness (see Bank of Botswana Annual Report, 1994).

The existence of lags in the pass-through has been empirically confirmed in studies of Leith (1992) and Mannathoko *et. al.* (1995). These studies have shown that the pass-through from South African prices and the Rand/Pula exchange rate is not instantaneous, rather it occurred with lags of up to several months.

However, in 1989, the use of the exchange rate as a tool to fight inflation was discontinued. This action was based on the following. The effects of revaluations or devaluations of the Pula, except those justified by divergent inflation rates, have tended to be short-lived (Hermans, 1996). Coupled with this was the realisation that "the diversification of the economy depends on increasing non-traditional exports, and hence, greater weight must be given this objective than to the inflationary effect". Since 1989, the monetary authorities have adopted a strategy of maintaining a stable real exchange rate with the Rand. The goals of the new exchange rate policy are to reduce inflation differentials with Botswana's trading partners, particularly South Africa, and to "encourage investment in non-traditional export industries and economic diversification" (Hermans, 1996). With the conflict in the goals of the exchange rate policy resolved, the success of the new strategy seems to have become apparent even as early as 1996 - Harvey (1996, pp 70-71) remarks that "indeed, non-traditional exports to South Africa, mainly manufactures, increased substantially in the 1990s".

8. The demand for and supply of foreign exchange in Botswana is characterized by discrete large jumps due to the following reasons: the main source of foreign exchange is mineral exports (especially of diamonds), which are subject to large fluctuations in world demand and prices, and thus resulting in lumpy sales. The country's development programme, which determines the demand for foreign exchange, entails large, discrete infrastructural projects.

9. The exchange rate policy is ultimately the responsibility of the President, as per the recommendation of the Minister of Finance, after consultation with the Bank (see Leith, 1996).

Conclusions

Botswana's macroeconomic policies have been broadly complementary to each other and geared towards supporting price stability (to achieve macroeconomic stability and create a positive investment climate for the private sector) and the international competitiveness of locally produced goods.

With respect to financial and monetary policies, it can be argued that the policies have contributed in a tangible way to the process of economic growth and development of the country. Government's financial sector development policy has led to an increase in the number of participants, and in competition in the financial sector in general - and banking sector in particular, which is seen in the widening of products and/or services offered by banks and the increase in the savings of the household sector. The effect of these developments is to facilitate economic growth and diversification. Thus, the financial sector development policy can be seen as having been supportive, to some extent, of the country's strategy for economic development. The findings that the structure of the financial sector is dominated by commercial banks, and that the share of total credit to the manufacturing sector (which is regarded as a vehicle of economic diversification) has stagnated, imply that this policy has not fully supported the country's development strategy. The financial policy is still useful, and hence should be continued. However, the policy needs to place more emphasis on the development of the financial markets, particularly as capital market. This is crucial, particularly as government lending through the Public Debt Service Fund (PDSF), which provided long-term loans to parastatal enterprises, has been terminated. The sale of the PDSF loan book to a private company, which will then securitise the loan assets by issuing bonds, will provide an important impetus for further development of the financial market in general and capital market in particular.¹⁰ Development of the financial market is essential in order to provide a broader range of financial instruments to meet the needs of both savers and investors, and to ensure that markets have breadth and depth. Further development of the financial market is needed until such time that markets are deep enough to allow monetary policy interventions to be carried out in the secondary market.¹¹

In the case of monetary policy, the strategy followed by the monetary authorities has been successful in achieving low and stable inflation. Low and stable inflation, by preserving the value of the currency, promotes financial savings and investment and hence promotes economic growth and diversification. Furthermore, low and stable inflation contributes to a stable real effective exchange rate - this helps, among other things, local producers to achieve international competitiveness. Given its success in curbing inflation, it could be argued that monetary policy, in conjunction with other macroeconomic policies, does foster macroeconomic stability, which is a precondition for achieving sustained economic growth and development, high rates of employment and rising standards of living (Bank of Botswana Report, 2001). Thus it is argued that Botswana's monetary policy strategy has fully supported the country's strategy for economic growth and development, and should be continued into the future.

Turning to fiscal policy, it is observed that this was implemented in order that the country could maintain a steady development programme. Furthermore, government expenditure levels were controlled sufficiently to avoid the occurrence of the Dutch disease. Hence, fiscal policy was consistent with the country's strategy for economic growth and development. However, in

10. The Government Bond issues of 2003 provide the main impetus for the development of the financial market, particularly the capital market.

11. At the present moment, open market operations mainly occur in the primary (or issue) markets for BoBCs (Bank of Botswana Report, 2002).

several of its annual reports, the Bank of Botswana indicated that the growth rate of government expenditures was found to be inconsistent with the inflation objective. In fact, in some instances, monetary authorities failed to achieve their inflation objective due to unsupportive fiscal policy (Monetary Policy Statement, 2000). This suggests that fiscal policy has not been fully supportive of the country's strategy for economic growth and development. Thus in future, fiscal policy would need to be more complementary to monetary policy to achieve inflation objectives. It should none the less be pointed out that, in the recent past, the thrust of fiscal policy has been found to be in the desired direction (Monetary Policy Statement, 2001; Bank of Botswana Report, 2002).

Concerning the foreign exchange management and exchange rate policy strategies, it is observed that the foreign exchange reserve policy has been supportive of the country's strategy of sustainable development. First, foreign exchange reserves have been allowed to accumulate in surplus years and were not allowed to lead to an appreciation of the exchange rate, which would cause the Dutch disease. Second, the reserves have been invested in different markets to generate revenues that are used to ensure sustainable national economic development. Similarly, the exchange rate has been supportive of the country's strategy for economic growth and development. The exchange rate, in conjunction with monetary policy, has been used "to maintain competitiveness of the Pula, by keeping the nominal effective exchange rate stable and Botswana's inflation rate no higher than the weighted average of the inflation rates of major trading partners" (Bank of Botswana Report, 2001, p. 54). The success achieved with these policies (explained above) suggests that policymakers should continue their use.

Thus overall, Botswana's macroeconomic policies were appropriately formulated to achieve the main objectives of sustainable economic growth, economic diversification and competitiveness of the country's producers in foreign markets. It is no surprise that both domestic researchers (c.f. Harvey and Lewis, 1990) and international observers (c.f. IMF, 2002) have partly attributed the success story of Botswana, both in terms of achieving impressive growth rates and macroeconomic stability, to sound macroeconomic policies (Setlhare, 2004).

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Chapter 4

Financial Sector Development in Botswana

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Introduction

This chapter examines the importance and role of the financial sector in economic development in Botswana. It is divided into three sections: Finance and Development: Theoretical underpinnings and Botswana's experience; Bank of Botswana: A Historical Perspective and its Role in the Financial Sector Development of Botswana; and Saving-Investment Flows and Financial Sector Development.

Finance and Development: Theoretical Underpinnings and Botswana's Experience

Financial intermediation plays an important role in economic activity. A healthy banking sector has been assumed to contribute to the growth of an economy. But it is also true that poor performance by the financial sector can be very costly for the society. For example, banking crises in various countries in the 1970s and 1980s, provoked by deregulation of banks, exacted a high cost - perhaps more than 10% of gross domestic product in some cases.

Let us look at the rationale of the traditional credit role of banking in the economic literature. In their analysis, Gurley and Shaw (1960) have shown that financial intermediaries transform bonds and stocks issued by firms into demand deposits or saving deposits for households. They help transform savings into investments by repackaging wealth and transforming capital and information. Individual investors might not be able to afford securities issued by firms, especially if these cannot be divided into small affordable units. By pooling together the funds of many small savers, financial intermediaries overcome this indivisibility of a firm's securities. Thus, financial intermediaries improve the efficiency of the economy by letting savers invest in large projects and by making more of these projects possible. Another important way in which intermediaries benefit small savers is by making riskier investments available to them via what is called the risk-pooling mechanism. Although higher-risk projects tend to yield higher returns than lower-risk projects, individuals might not want to take on much risk when their available funds are too small to effectively insure themselves. Intermediaries can provide the risk-reducing benefits of diversification by holding a portfolio of loans to many entrepreneurs of all different types of risk, and thus diluting depositors' risk. An intermediary helps investors further by providing access to long-term projects through liquidity management. Some projects require a long-term commitment of capital because they can take a long time before yielding results, yet savers have short-term and uncertain time horizons - they prefer to have investments which are liquid. Intermediaries can provide liquidity for these investments by pooling together savers with different liquidity needs. Pooling provides financial economies of

scale by reducing the cost of illiquid investments, and efficiency is enhanced because more investments will occur in long-term projects.

A final way in which an intermediary can improve investors' access to worthwhile investments is by means of the so-called screening mechanism. Savers themselves usually have too little time and income to inform themselves about all good and bad investment opportunities. Doing so would require searching, collecting and then processing information on firms, managers, economic conditions and so on. Because of economies of scale, financial intermediaries can collect large amount of information, and can provide expertise in evaluating, screening, and monitoring firms' actions at lower cost than individuals can. By economizing on information costs, financial intermediaries help capital move to its highest value, thus improving allocative efficiency (see Diamond *et. al.* 1983).

Financial intermediaries also help in resolving (or at least reducing) incentive frictions between firms and savers. It is not always in a firm's best interest to reveal all information, and savers typically have less than complete information about firms. With asymmetric information, conflicts of interest are possible. Thus, if financial contracts were to apply equally to different types of firms, adverse selection might occur in that only firms of lower quality would demand those contracts; higher quality firms would stay away from the contracts because they would not get terms that reflected their higher quality. Financial intermediaries can help reduce problems associated with asymmetric information or moral hazard by offering financial contracts that are otherwise not available in markets, and by providing economies of scale in monitoring and control.

But one has to note that markets in which there are economies of scale do not always work well because, by nature, they tend to be imperfectly competitive. With economies of scale, larger firms tend to be more efficient or have lower average costs than smaller firms, so there is a tendency for firms to grow larger relative to the size of the market. The scale economies also imply market power and non-competitive pricing. Market power may also arise through specialization by financial intermediaries. For example, private or "inside" information can also allow financial intermediaries to differentiate themselves from rivals. Markets with economies of scale and product differentiation may still work relatively efficiently, however. Baumol *et. al.* (1982) show, for example, that when barriers to entry are low, markets are contestable in the sense that the threat of potential competition will force existing firms to act competitively. However, entry into the financial services sector is made difficult by the costs of required investments in structures and equipment, and more importantly by investments in obtaining proprietary information, developing or hiring expertise in monitoring and making loans, and establishing a good reputation. Diamond *et. al.'s* (1983) analysis shows that new banks are implicitly discouraged from entering the market by the fact that larger banks can do a better job of diversifying risks than smaller banks. Sussman and Zeira (1995), on the other hand, model another potential barrier in showing that banks gain local economies of scale with advantages for monitoring the closer they are to clients, advantages especially in making loans to smaller businessmen.

Perhaps more importantly than scale economies, legal constraints and government regulations affect the efficiency of financial intermediaries. Governments have intervened in the banking markets on the grounds that intervention would reduce frictions in the markets and lower the probability of banking failures. Historically, however, through legal restrictions on entry and allowing collusive activities, governments have made banking markets less contestable and less competitive. In many developing countries, governmental controls on interest rates and

credit allocation have been very severe, and economists since McKinnon (1973) and Shaw (1973) have worried about the costs of repressed financial sectors¹ on growth and efficiency.

The Financial Sector in Botswana

The financial services sector in Botswana comprises the Bank of Botswana (the central bank), commercial banks, merchant/investment banks, insurance companies, leasing finance institutions, a development bank, a savings bank, a building society, a development finance company, a stock exchange, stockbrokers, pension funds, asset management companies, collective investment undertakings (CIU) and microlenders.

The first commercial bank established in Botswana, Standard Chartered Bank, opened its first branch in Francistown in 1897, but operated for only a few years. It also operated for a few years during the 1930s. Standard Chartered Bank and Barclays Bank then set up agencies in the 1950s. In 1975, they both set up fully fledged subsidiaries that were incorporated in Botswana. A few more commercial banks were established in the 1990s, whilst some of the non-banking financial institutions were established in the 1960s and 1970s.

The financial sector in Botswana is dominated by commercial banks. These banks accounted for 89% of both total deposits and total advances by deposit taking institutions. In the 1980's, Botswana's financial sector was under a controlled and regulated regime. The Bank of Botswana exercised a considerable degree of direct control over the operations of commercial banks, especially with respect to maximum lending and minimum deposits rates. Until 1986, interest rates had to be set in line with the central bank's directives. The only indirect instrument of control was the Bank rate. Other features of the financial sector prior to its reform include exchange controls on capital transactions – especially on off-shore borrowing and overseas investment by residents. During the 1980s, the financial sector was repressed, in McKinnon's terms. Real interest rates were low or negative, since interest rate policy was focused on encouraging investment by maintaining low lending rates. Deposit rates were generally negative in real terms, and therefore tended to discourage the accumulation of financial savings. Yet money supply and credit were totally ignored as targets of monetary policy during this period. Consequently the liquidity of the banking system was high, possibly reflecting a lack of profitable opportunities.

Significant financial sector reforms took place between 1989 and 1991. These wide-ranging reforms included the introduction of Bank of Botswana Certificates (for influencing interest rates as a means of indirect monetary control), the diversification of the institutional infrastructure through liberalisation of licensing requirements for commercial banks, reforms of non-banking financial institutions (NBFIs), enhancement of prudential supervision, and improvements in the payments system.

There has also been considerable expansion in the range of banking outlets during the 1990s. At December 2000, the four commercial banks had between them 59 branches and sub-branches, 17 agencies, 6 encashment points and 112 Automated Teller Machines (ATMs) countrywide. The introduction of ATMs has been a major advance in the provision of banking

1. The financial repression school attributes under-developed and inefficient financial systems to excessive government control and intervention. In such a regime, interest rates are deliberately kept low to channel savings to government and to selected sectors in the economy, which results in deposit growth being less than the optimum. A number of investment projects would be competing for these scarce savings, and credit would then have to be rationed.

services. Out of the 59 branches and sub-branches, 43 were in urban areas and the remainder in major villages and rural areas. While this partly reflects increasing urbanisation, one may also be concerned with the fact that substantial segments of the population living in rural areas do not enjoy effective access to banking services.

The average deposits of the commercial banks as a percentage of gross domestic product (GDP) was around 22% in 1991, and it had only slightly increased to 24% by 2001. There has been a decline in deposits to GDP ratio between 1991 and 1995. This trend is applicable even to the broad money definition M3 (see notes under Table 4.1 for definitions of M1, M2, M3 and M4). The broad money (M2) to non-mining GDP declined in the first half of the 1990s, but rose steadily between 1995 and 1999 before falling back in 2000. Why this ratio has not increased significantly during this period needs further investigation. On the one hand it may suggest the limited development and deepening of the financial sector in Botswana. If this were to be the explanation, it may be argued that the banking sector in Botswana is characterised by imperfect competition, and banking services are under-supplied. However, on the other hand, this lack of increase may reflect the financial disintermediation process, which is characteristic of a mature financial development, where banking deposits are replaced by primary securities and bonds, supplied by the corporate sector. For example, the broader definition of money M3, which is M2 plus non-banking holding of BoB certificates, shows an increasing trend during this period.

The ratio of private sector business credit to non-mineral GDP (NMGDP) was 13.2% in 1991. After a downward trend from 1995 to 1997, when it reached 10%, this ratio had risen to about 20% in 2001. This is a reflection of increased financial intermediation by the banking sector in Botswana.

Table 4.1. Selected financial intermediation and monetisation ratios.

Ratios	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
M2/NMGDP	32.2	30.8	29.5	29.1	25.6	26.3	28.5	32.1	35.1	32.1
M3/NMGDP	40.4	40.2	36.5	35.5	37.6	41.4	42.5	45	50	45.2
M4/NMGDP					39.9	44.2	46.4	51.4	56.5	51.6
Bank Advances/NMGDP	19.9	23.1	22	22.7	18.9	16.6	15.2	19.9	24.6	26.5
BoBCs/ Banking Assets		43.3	47	49.4	64.6	77.9	72.5	51.1	54.4	45.5
Banking Assets/NMGDP	36.7	37.8	36.9	37.3	33.5	35.5	38.2	43.9	48.1	45.9

Notes: M1: currency outside banks plus demand deposits;
M2: M1 plus call, savings, notice and time deposits;
M3: M2 plus Bank of Botswana Certificates (BoBCs);
M4: M3 plus Foreign Currency Accounts (FCAs)

Source: Bank of Botswana Annual Report 2001.

The information presented in Table 4.1 - monetisation ratios - and in Table 4.2 - deposits and advances of the financial sector - also clearly corroborate the hypothesis of increasing financial intermediation by the banking sector. Compared to the 1980s, there has also been a surge in banking productivity growth in the 1990s in Botswana. Productivity is measured by the ratio of output to input (total earnings, i.e. net interest income plus non-interest income, as a proportion to total non-interest expenses).

Table 4.2. Financial sector advances and deposits.

DEPOSITS (P Million)	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Commercial Banks (C)	1574.4	1750.1	2005.8	2217.6	2465.3	2972.1	3841.2	5423.8	6756.5	6912.3
Building Society (B)	117.1	167.9	170.3	174	175.8	186.1	193.8	209	224.4	242.4
Finance lending Cop (F)	178.8	96.1	86.5	47.7	55.2	62.9	69.7	87.3	96.8	103.1
Savings Bank (S)	n/a	33.6	39.7	41.8	46.4	60.4	69.5	87.6	100.9	105.8
Market share of deposits										
(C)	84.2	85.5	87.1	89.4	89.9	90.6	92	93.4	94.1	93.9
(B)	6.3	8.2	7.4	7	6.4	5.7	4.6	3.6	3.1	3.3
(F)	9.5	4.7	3.8	1.9	2	1.9	1.7	1.5	1.3	1.4
(S)	-	1.6	1.7	1.7	1.7	1.8	1.7	1.5	1.4	1.4
Advances										
(C)	1032.9	1397.7	1560.1	1784.7	1731.7	1743.9	1838.6	2922.1	4076.7	4872.3
(B)	191	243.5	261.3	252.1	237.3	214.8	220.7	223.4	259.2	310.9
(F)	207.9	250.3	265.1	57.2	62.7	70.8	76.6	91	106.8	114.9
(S)	-	26.8	26.5	25.6	30.5	35.7	47.4	63.2	64.2	75.7
Market share of Advances										
(C)	72.1	72.9	73.8	84.2	84	84.4	84.2	88.6	90.5	90.7
(B)	13.3	12.7	12.4	11.9	11.5	10	10.1	6.8	5.8	5.8
(F)	14.5	13	12.5	2.7	3	3.4	3.5	2.8	2.4	2.1
(S)	-	1.4	1.3	1.2	1.5	1.7	2.2	1.9	1.4	1.4

Source: Bank of Botswana (2001) Annual Report.

Table 4.3. Commercial banks income, expenses and productivity (P Millions).

	(1) Interest Income	(2) Interest Expenses	(3) Net-Interest Income	(4) Non-Interest Income	(5) Non-Interest Expenses	(6) Productivity (3)+(4)/(5)
Year						
1995 March	86.3	43.2	43.1	23	43.8	1.51
1996 March	103.5	50.7	52.8	29.9	48.9	1.69
1997 March	118.5	56.6	61.9	30.6	48.8	1.9
1998 March	145.8	74.2	71.6	39.3	55	2.02
1999 March	189.5	97.1	92.4	45.1	68.2	2.02
2000 March	251.3	125.7	125.7	51.3	77.9	2.27
2001 March	284.5	146	138.6	75.6	91.3	2.35
2002 March	325.3	160.4	165	94.8	126.4	2.06
2003 September	368.4	174.1	194.3	104.1	135.4	2.2

Source: Bank of Botswana (2002) Annual Report.

From Table 4.3, it may be noticed that banking productivity increased in the late 1990s, stabilised by 2001, and declined thereafter. Much of the re-organisation of the banking structure and rationalization of manpower in the banking industry might have already taken place in 1990s.

From the foregoing, it may be said that the banking sector has contributed to the economic development of Botswana through its intermediation. Compared to the 1980s, there has been a significant improvement in intermediation in the 1990s.

Bank of Botswana: An Historical Perspective and its Role in the Financial Sector Development of Botswana

A Monetary Preparatory Commission was appointed by the President in 1973, chaired by Mr H.C.L. Hermans, the Permanent Secretary in the Ministry of Finance and Development Planning (MFDP). The Commission came to the conclusion that monetary independence offered Botswana more policy options than remaining within the Rand Monetary Area (RMA). The Commission was aware of the fear expressed in many quarters including the IMF that the extreme openness of Botswana's economy and likely fluctuations in the balance of payments would require Botswana to hold a large amount of foreign exchange reserves, which might be difficult given the country's economic prospects then. But the Government of Botswana felt that the need for monetary independence was high, and the announcement of the withdrawal from the RMA was made by the President, Sir Seretse Khama, on 6th September 1974. He outlined plans to introduce a national currency, and establish a central bank responsible for currency issue as well as for monetary policy formulation. The Bank of Botswana came into existence in July 1975, with the enactment of the Bank of Botswana Act. The principal objectives of the Bank of Botswana as prescribed in Section 4 of the original Bank of Botswana Act are to promote and maintain monetary stability, an efficient payment mechanism, and the liquidity, solvency and proper functioning of a soundly based monetary, credit and financial system.

The Rand ceased to be legal tender in Botswana on 23rd August 1976. The Pula was initially pegged to the United States Dollar at a rate ($P1=US \$1.15$) that was also meant to yield the desired parity with the Rand. On 30th April 1977, less than a year after Botswana had left the RMA, the Pula was revalued by 5% against the US Dollar. The currency exchange had gone better than anticipated, and the level of foreign exchange reserves was continuing to rise, providing an early opportunity to demonstrate that, contrary to the gloomy warnings of international organisations and the business community, the Pula would not be the weak currency which they had predicted. It was also hoped that the small appreciation of the Pula would soften the impact of imported inflation.

In 1979, when the Rand was floated, the Pula remained pegged to the US Dollar, and therefore experienced some volatility as the Rand fluctuated against the US Dollar. To maintain a more stable relationship with the Rand, the peg with the US Dollar was dropped in June 1980, in favour of pegging to a basket of currencies consisting of the Rand and the IMF's composite unit of account, the Special Drawing Rights (SDRs). The external value of the Pula has been determined in relation to a trade-weighted basket of currencies ever since. The Pula was revalued by a further 5% on 7th November 1980. This trend had to be reversed abruptly when Botswana faced its first major economic crisis since Independence, resulting from the slump in diamond sales in 1981 and 1982. The Pula was devalued by 10% on 6th May 1982, falling below one US Dollar for the first time since the currency was introduced. Further devaluations, by 5% on 7th July 1984 and 15% on 9th January 1985, were considered necessary to compensate for the continuing appreciation of the Pula against the Rand during a period when the Rand was depreciating rapidly against the US Dollar.

There have been high rates of inflation in Southern Africa throughout the 1980s. The Pula was revalued by 5% in June 1989; but this was reversed in 1990 by means of a 5% devaluation. The Pula was devalued again in August 1991 by 5% to restore competitiveness. The Bank's policy has been to maintain a stable real exchange rate with the Rand in the hope that this will lead to the convergence of inflation rates, and encourage investment in non-traditional export industries and economic diversification.

Financial Sector Responsibilities and Developments

The Bank of Botswana has played an important role to license, regulate, and supervise banks and other institutions. Initially, the financial sector comprised two privately owned commercial banks, and four other specialist parastatal financial institutions. During the late 1970s and for most of the 1980s, the Bank adopted a highly protective and regulatory stance towards the domestic banking system, and restricted competition.

The bank abandoned this restrictive approach in 1987 by introducing a market oriented licensing policy. The new policy sought to stimulate competition between financial institutions within a deregulated environment. It provided that banking licences could be issued to any bank or group of investors, foreign or local, which met certain minimum conditions. Among the specified conditions were high minimum initial capital requirements, proven managerial capabilities, and the provision of retail banking services through a reasonable number of branches or agencies outside Gaborone.

The expansion of the number of privately owned financial institutions following the deregulation of the banking sector increased the banks supervisory responsibilities and provided greater competition within the banking sector. In Botswana, the primary legislation covering the supervision and regulation of licensed financial institutions is the Banking Act, 1995. This legislation has been brought through various phases of development since first promulgated as the Financial Institutions Act, 1995. Important elements of the Banking Act, 1995 are: explicit provisions for the licensing and authorisation process that give the Bank of Botswana powers to regulate market entry; guidelines for the management and/or restructuring of banks in distress; the powers to establish prudential supervisory standards and policies with respect to capital adequacy, liquidity, restructurings on large exposures, loans to insiders and quality management; and rules governing accounting, auditing and disclosure of information. Prudential supervision by the Bank of Botswana is essential to provide external incentives for management and owners of banks to rectify inadequacies in governance and impose controls where market behaviour could lead to imprudent conduct that could have adverse systematic repercussions. The Bank for International Settlements (BASLE) Accord for banks specifies capital adequacy standards on the basis of risk-weighted assets, and recently also on the basis of market risk of the balance sheets. BASLE also specifies income recognition standards on the basis of the quality of the assets. The evaluation of the financial soundness of institutions is achieved by assessing Capital Adequacy, Asset Quality, Management, Earnings, Liquidity and Market Risk Components (referred to as CAMELS), and adherence to statutory prudential limits in each of these areas. Many banks are also implementing the integrated risk management systems and procedures encompassing credit risk, market risk, liquidity risk, operations risks, etc.

Administration of Exchange Controls

The Bank of Botswana, after passing the Exchange Control Act, 1975, has been charged with the responsibility for the administration of exchange controls. The banks that have become authorised dealers have been free to buy and sell foreign exchange from customers after filling necessary forms. These forms have become the first source for compiling balance of payments statistics. As Botswana had been designated by the IMF as an Article XIV country since Independence, entitling it to impose restrictions on current account transactions, the scope of Botswana's exchange control transactions was initially very wide. Exchange controls remained in force in Botswana during much of the 1980s. But some of the other African countries began to accept the obligations of the IMF Article VIII, which prevent restrictions on current account transactions. Public opinion in Botswana began to strongly support the removal of exchange control restrictions. Botswana finally accepted the obligations of Article VIII of the IMF Articles of Agreement with effect from 17th November 1995, thereby phasing out the exchange restrictions on capital account transactions.

Saving-Investment Flows and Financial Sector Development

The government sector in Botswana has been a major net saver in the economy, whereas the household sector the net borrower. However, very recently (2001) the household sector became marginally a net saver. In most high-growth countries, households generally make a large contribution to gross national savings and thus to investment capital. Households should eventually become the major source of net-savings in Botswana, or at least that should be the objective of economic policy and planning.

Even though the simple Keynesian framework (Keynes, 1936) takes savings as residually given from income growth, the classical school and most growth theorists believe that savings are needed for growth, unless foreign savings can be sufficiently attracted to the country. When it comes to the determinants of savings, economists differ on the magnitude of the interest elasticity of the savings function. But the consensus is that savings in the form of financial assets can be promoted by the proper and healthy development of the financial markets, and when financial repression is avoided (McKinnon, 1986). Individuals choose between present and future consumption according to their intertemporal preferences. The sum of all individual decisions in a particular economy would thus represent the optimal savings rate if there are no distortions or restrictions on individual decisions. But in Botswana private sector housing, cars and cattle appear to be important assets in household savings portfolios, especially for high income groups. Savings held as physical assets are sometimes deemed undesirable from a policy point of view, especially for capital accumulation and investment.

Flow of Funds in Botswana

The flow of funds traces the financial flows between surplus and deficit units. The uses of funds are the flows from savers used to acquire assets, and the sources of funds are the flows to borrowers leading to increased liabilities.

In 2000, total flows between different sectors amounted to P14,294 million, of which P7,135 million represented flows from savers (See Table 4.4). Flows into the domestic financial sector from savers amounted to P6,300 million (P835 million flowed from savers to the Rest of the World). But out of the flows to the financial system from savers, the bulk was the government

Table 4.4. Sources and uses of funds (P Millions) for 2000 year.

	Domestic Sectors					Financial Institutions								13 Row	14 Total
	1 HH	2 Firms	3 NFP	4 Govt	5 Total	6 BoB	7 Banks	8 NBFIs	9 PFs	10 PDSF	11 Total FIs	12 Total domestic			
Sources/Uses															
(1) HH			435	49			484	484	39	523					
(2) Firms							323	128			451	451	150	601	
(3) NFP							-65			-48	-113	-113	300	187	
(4) Govt							76				76	76	108	184	
(5) 1+2+3+4							769	177		-48	898	898	597	1495	
(6) BoB		24	-187		4541	4378	-299	5			-304	4074	71	4145	
(7) Banks	772	-182	509	76	1175							1175	71	1182	
(8) NBFIs	22	162			184		14				14	198		198	
(9) PFs		563			563							563	-30	533	
(10) PDSFs															
(11) Total FIs*	1381	-207	509	4617	6300		-285	5			-290	6010	48	6058	
(12) Total															
Domestic*	1381	-207	509	4617	6300		484	172		-48	608	6908	645	7553	
(13) ROW	68	110	196	461	835	6028	689		189		5906	6741		6741	
(14) 12+13:															
Total	1449	-97	705	5078	7135	5028	1173	172	189	-48	6514	1349	645	14294	

HH: Households; NFP: Non Financial Parastatals; BoB: Bank of Botswana; NBFIs: Non Bank Financial Institutions
 PFs: Pension Funds and Insurance Companies; PDSF: Public Debt Service Fund; FIs: Financial Institutions
 ROW: Rest of the World; BoBCs: Bank of Botswana Certificates

(11)* 6+7+8+9+10 Total FIs

(12) 5+11: Total Domestic*

Source: Bank of Botswana (2001) Annual Report.

deposits of P4,541 million at the Bank of Botswana. Households had created new deposits of P772 million as their savings flows to the commercial banks. Households' savings had flown to Pension funds and insurance companies to the tune of P563 million. It has to be noted that the household sector has now become the second net-saver in Botswana, whereas the household sector was a net-borrower a few years back (1989-1992, households had zero net-savings).

The largest single use by the financial intermediaries was the accumulation of foreign exchange reserves by the Bank of Botswana (P5,028 million) which - when combined with foreign flows from the banks and pension funds - led to a total of P5,906 million flowing offshore from financial intermediaries. The sources of funds available for domestic borrowers were only P1,495 million of the P1,922 million flowing into domestic financial intermediaries, excluding the Bank of Botswana. Less than half of these funds were provided as credit to domestic private sector borrowers. This is a reflection of both a lack of domestic absorptive capacity related to the funds generated, and also to the fact that developments of the financial markets are not complete. Even though one may note with satisfaction that there has been some diversification of savings sources, notably with households increasing in importance, the intermediation of those savings to domestic borrowers has to improve.

During the 1980's, savers appear to have preferred to hold short-term deposits (current, call and savings) at commercial banks, as these grew much more rapidly than long-term deposits (See Table 4.5).

Table 4.5. Average annual nominal growth of commercial banks deposits by type.

	Pre-reform Period	Reform Period	Overall	
	1980-89	1990-00	1980-00	2000
Current	23.8	13.3	17	7.1
Call	41.7	27	39.4	-4.2
Savings	21.8	11.9	18.2	12.7
Notice	7.3	15.2	14.5	-33.1
Fixed	3.9	27	22.2	28.8

Source: Bank of Botswana (2001) Annual Report

However, this changed in the 1990s, when the share of long-term deposits grew from 9% in 1980 to nearly 20% in 2000. Another interesting development has been the decline in the proportion of deposits held in current accounts (which are non-interest bearing) from almost half of total deposits in the 1980s to 22% in 2000. These developments are most likely a response to interest rate policy adopted in the early 1990s, which encouraged positive real interest rates.

Contractual Savings Institutions (Pension Funds and Life Insurance Companies)

Contractual savings institutions encompass pension funds and life insurance companies. Given the long-term nature of their liabilities, coupled with their relatively stable cash flows, these institutions are an ideal source of long-term savings as they generally cater for the long-term requirements of savers. As savers acquire more financial assets and become more sophisticated, they demand long-term investments yielding higher returns as compared to those offered by the banking sector. Contractual savings institutions offer savers an alternative to banking sector products, and hence they provide an opportunity to diversify national savings as well as to assist with the developments of capital markets. By the end of 2000, there were 159 pension funds and four life insurance companies registered in Botswana. In 1988, total assets under management in the contractual savings sector were P64 million. By 2000, the total was around P3.2 billion. In 1988, pension and life assets were equivalent to only 8% of the assets of the commercial banks, but by 2000 this has risen to over 30%. Also, in 1988 pension and life assets were equivalent to 35% of deposits held by households in the banks, whereas by 2000 pension and life assets were larger.

Pension Reforms

The Civil Service Pension Scheme, which was an unfunded defined benefit scheme, was replaced in 2001 by a fund defined contribution scheme. The government makes a contribution of 15% of the employees' salary to their pension accounts, while the employees are required to make a further minimum contribution of 5%. A Botswana Public Officers Pension Fund (BPOPF) was established to hold these pension accounts, and an independent Board of Trustees

was appointed to manage the money in the Fund on behalf of the employees. Under the current reformed pension scheme, it requires the current budget to make full provision for future pensions of currently employed workers. Further, it gives the employees the opportunity to manage their own money through the Board of Trustees. In addition to making monthly contributions to the employees' pension fund, government decided to transfer to the Fund accumulated pension liabilities in respect of all serving employees who opted to join the new scheme as of their respective dates of joining. On the one hand, it is introducing greater neatness and transparency in government's fiscal accounts, since government is now paying off its accumulated liability to its employees. On the other hand, these transfers to the BPOPF are creating very large invisible funds in the private sector in Botswana that are looking for domestic investment outlets, since the current law requires all pension funds to hold a minimum of 30% of their portfolios in domestic assets.

The Botswana Stock Exchange (BSE)

The Botswana Stock Exchange is a stock market that specialises in equity (stock), bond, and money markets. It was initially organised in 1989 as the Botswana Share Market, and became the Botswana Stock Exchange in 1995. By the end of 2000, the number of listed domestic companies rose from 5 to 16, the domestic companies index rose from 100 to 1,454, and market capitalisation rose from P120 million to P5,245 million. Six corporate papers were also issued. The amount of money raised through share and bond issues was, however, relatively small compared to the amounts raised directly from financial intermediaries such as households and Non-bank Financial Intermediaries (NBFIS).

An examination of some of the conventional stock market parameters (Table 4.6) reveals that market capitalisation in Botswana increased relative to nominal GDP between 1991 and 2002. This development is comparable to that of any other African country and the developing countries in Asia. Moreover, it can be observed that the value of shares traded has not increased significantly over the same period. This means that people and institutions have been buying shares and holding on to them, and there has not been much trading taking place. This, in turn, reduces the liquidity in the market, which is also reflected in the low turnover ratio (turnover

Table 4.6. Botswana Stock Exchange.

	(1) Value of Shares Traded (P.Million)	(2) Market Capitalisation (P Million)	(3) Turnover Ratio (1)/(2)	(4) Market Capitalisation/GDP (2)/GDP	(5) Domestic Index June 1989=100	(6) Foreign Currency Index
1991 March	1.7	545.4	0.3	6.5	271.7	
1996 March	1	1189.8	0.08	6.7	352.2	
1998 March	10.5	3225	0.33	14.98	946.7	219
1999 March	7.5	3375.7	0.22	13.31	990.3	306.9
2000 March	19.6	5127.1	0.38	17.47	1470.8	375.6
2001 March	14.4	6263.2	0.23	21.84	1732.7	552.3
2002 March	36	9571.2	0.38	29.91	2633.9	707.4
2002 Sept.	16.7	9185.4	0.18	28.7	2479.6	496.2

Source: Bank of Botswana (2002) Annual Report.

ratio is the total value of shares traded divided by the market capitalisation). Low liquidity may retard the deepening of the stock market. Stock market liquidity is important in promoting economic growth. However, one can also see a positive point in the BSE, namely that the volatility of share prices has been negligible, and the Domestic Price Index has been slowly increasing over time.

Financial incentives have been provided in many countries to promote the growth of share markets, and Botswana is no exception. For instance, in the 1991 Budget Speech, there was a provision to the effect that companies which sell 25% of their share capital to the public will receive a deduction against taxable income. The government also abolished double taxation of dividends by stipulating that they will be taxed only once as corporate income, and be distributed to shareholders as net dividends. The enactment of the Botswana Stock Exchange Act in July 1994 strengthened the legality and transparency of the business and conduct of the exchange, thus providing much needed confidence to investors. The public enterprises and parastatals when privatised can also add to market capitalisation and liquidity. Also stock-brokers can also play a positive role in encouraging liquidity in the market. Foreign Institutional Investors (FIIs) can similarly bring into the stock market the best international practices. Derivative instruments like Futures and Forwards, Options, and Swaps should be introduced in the stock market of Botswana to increase the liquidity of the shares.

The Lending Activities of Various Financial Institutions

For many years, government was the largest credit provider in the economy through the Public Debt Service Fund (PDSF). However, its share has fallen over time and the share of commercial banks has increased. By 2000, the banks accounted for 61% of credit compared to 41% in 1990 and 46% in 1982. Similarly the share of NBFIs is also increasing. The growth rate of lending by commercial banks and NBFIs has increased over the reform period from 1990 (Table 4.7).

Table 4.7. Growth rates and levels of lending by all financial institutions.

	Growth of Institutional Lending				Levels of Institutional Lending (P.million)			
	Pre-reform	Reform	Overall					
	Period	Period	1982-00	2000	1982	1989	1990	2000
	1982-1989	1990-00	1982-00	2000	1982	1989	1990	2000
Total Financial Sector								
Lending	21.4	18.8	19.9	10.9	309.8	1334.7	1844	8122
Commercial Banks	19	23.9	21.8	17.7	142.4	529.5	755	4933
NBFIs	20.4	24	22.5	10.5	44.1	123.3	174	1106
PDSF	27.6	12.3	18.8	-2.2	123.3	681.9	915	2084

Source: Bank of Botswana (2001) Annual Report

Apart from the simple Keynesian framework, where savings are residually derived, the main-stream view is that savings are needed for capital accumulation and growth. The government sector has been the prime generator of net savings and growth in Botswana. This is, of course, due to the revenues which the government has been able to generate from diamonds. But the insight from economic theory is that the foregoing situation may not necessarily continue, for more than one reason. Firstly, diamond revenue may fluctuate from time to time; and secondly,

the government's social and political commitments may necessitate a deficit financing policy at times. For example, to fight the widely spreading HIV virus, anti-retroviral treatment on a massive scale may be needed. Therefore the household sector, as elsewhere, should be the net-saver, and those net-savings should be intermediated to the investment needs of Botswana. However, here again a large part of the savings are going offshore and not being invested in Botswana. In other words, Botswana is supplying capital to the rest of the world. This is due to two factors: firstly, the absorptive capacity of Botswana is less than the funds it earns; and secondly, the financial markets are not fully developed.

As a backdrop to the aforementioned factors, one can also notice with satisfaction the positive developments taking place, especially during the reform period after 1990. Households have become the net-saver. During the pre-reform period, households preferred to hold short-term deposits (current, call and savings) at commercial banks. This changed in the 1990s, when the share of long-term deposits grew to nearly 20%. This is presumably due to interest rate policy, which encouraged positive real interest rates and savings. In the 1990s, the contractual saving institutions have become more important in mobilising the savings of households. In the year 2000, out of the new financial assets acquired (P1,449 million), P563 million were assets from pension funds and insurance companies. By 2000, pension and life assets have also grown phenomenally. Households have become net-savers now in the financial system, mainly because of their increase in savings in pension and insurance companies. Households have even become net borrowers from the banking system.

Market capitalisation through the Botswana Stock Exchange (BSE) has been fairly impressive in terms of nominal GDP growth. But the lack of liquidity may discourage deepening of the stock market. Policy measures have to be initiated to improve market liquidity. Financial derivative instruments, (Option, Swaps, Forwards and Futures,) need to be introduced in the BSE to improve market liquidity. The Government Bonds markets and the money markets also will need to be developed in Botswana.

Lastly, the role of commercial banks and NBFIs in lending and providing credit to the economy increased during the reform period. By 2000, the commercial banks' share of total credit had increased to 61%. This means that commercial banks need to increase their deposit-taking.

Government Bond Market

A notable development in the Botswana financial sector is the issue of government bonds, which was initiated in March 2003. All the bonds have been substantially oversubscribed. The effective yield-to-maturity for the March and April 2003 issues were 13% for the two-year bond, 12.65% for the five-year bond and 11.5% for the twelve-year bond. These rates indicate a downward sloping yield curve, revealing the market's expectation that short-term interest rates will fall over time. The bonds are listed on the Botswana Stock Exchange (BSE) and made accessible to a wide range of investors, thereby boosting secondary market activity in them. This is expected to add to the liquidity of the stock exchange. At present the liquidity, which is measured as the ratio of total value of stocks traded during a year to average market capitalisation, is only about 11 to 12%, much below the standards of developed capital markets. The linking of a substantial volume of government bonds in the exchange is therefore expected to bring about a significant improvement in the liquidity of the market. The availability of government bonds in an active market is also expected to fulfil the need for a risk-free long-term asset for institutional investors

like pension funds and insurance companies, whose liabilities are of a long-term nature. Further, the government bond issue will help neutralise part of the expansionary consequences of the new pension scheme by absorbing back into the exchequer a sizeable chunk of that part of the money transferred to the Public Officers Pension Fund that is invested domestically.

International Financial Services Centre (IFSC)

The Botswana International Financial Services Centre (IFSC) was established in June 2000. The types of financial services targeted for the Centre are: international banking and financing operations, including treasury operations and corporate advisory services; fund management, including management, administration and custodial services for Mutual Funds, Unit Trusts, and other investment undertakings; financial intermediation services for group operations; and insurance and reinsurance services. An amendment to the Income Act in 1999 provided a special tax regime for IFSC companies, which includes a 15% corporate tax rate guaranteed until 2020; exemption from withholding taxes of all kinds for payments to non-residents; no capital gain tax; and a growing network of Double Taxation Agreements already in place with countries like the United Kingdom, South Africa, Sweden, France and Mauritius. The benefits that Botswana expects to derive from the IFSC include achieving greater economic diversification through growth and development of the financial sector while forging greater integration with the international community. Companies set up in the IFSC are expected to generate good employment for citizens, create additional income, transfer skills and technology, and contribute to government revenue. As of June 2003, ten companies were operational in the Botswana's IFSC.

Conclusions

In this chapter, it has been noted that the financial services sector can positively contribute to economic development in Botswana. In the 1990s, liberalisation helped in the deepening of the financial markets, and there has been a significant improvement in financial intermediation since then. Furthermore, examination of the sources and uses of funds accounts reveals that the intermediation of domestic savings into domestic investments needs to be improved in Botswana. The absorptive capacity of the domestic economy, in terms of more investments, needs to increase to absorb domestic savings. The role of the Bank of Botswana is undergoing tremendous changes in terms of monetary, exchange rate, and financial policy formulations. In the 1990s, the real savings of the household sector in Botswana increased, as did the market capitalisation through the Botswana Stock Exchange. However, the liquidity of the stock exchange needs to be improved. The introduction of financial instruments such as Options, Swaps, Forwards and Futures, may help to improve that liquidity. Day-traders and brokers need to be encouraged to improve the liquidity in the stock exchange by increasing its turn-over. A Term Money Market needs also to be developed in order to have liquid and deep money and government bond markets. Towards this end, the introduction of the Government Bond market is expected to play a positive role. The introduction of the International Financial Services Centre is expected similarly to lead to more diversification of the economy and the promotion of employment.

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Chapter 5

Fiscal Systems and Policy in Botswana

C. Mupimpila

Introduction

This chapter discusses fiscal systems and policy in Botswana. In essence, fiscal systems refer to the trends and patterns of government finance and expenditures in a given country. The chapter consists of three main parts. The first part focuses on sources of government revenue. To gauge fully the prospects and problems of government finance in Botswana, this section begins with the developing country context in general before analyzing the specific case of Botswana. The experience of Botswana shows how the pattern of government finance in a country changes with changing circumstances, and how the diamond boom has generated considerable benefits for Botswana.

The second part of the chapter is about the pattern of government expenditure. A key purpose is to shed light on the role of government expenditure. This tilt in presentation is significant because one of the hotly debated issues in Botswana, as in any mixed economy is: what should be the proper role of government in the economy? The third part of this chapter examines this question in detail by focusing on budgetary policy and fiscal reforms in Botswana. The section ends with a survey of major fiscal reforms since 1990, including reforms regarding taxes on personal and company income, as well as the value-added tax. The chapter concludes by reiterating the thesis that the greatest challenge for Botswana is how to sustain the level of economic activity built on high diamond prices.

Sources of Government Revenue

Studies about government revenues in developing countries tend to focus on internal revenues in general and tax revenues in particular. This is because problems of external debt-servicing and the inflationary bias of domestic borrowing discourage reliance on external sources and domestic borrowing in financing development. On the other hand, the willingness and the ability to respond to the need for tax revenues has been held to be an important determinant of the capacity of developing countries to pursue development while maintaining economic stability (e.g. see Chelliah, 1971). The question then arises, in practice, on the extent to which a country can raise more taxes without causing a serious "burden" on the taxpayers. What is more, the pattern of taxation itself changes with changing circumstances (Harberger, 1990). It is in the light of these issues that researchers have conducted cross-country studies on taxation in developing countries (see Chelliah, 1971; Chelliah *et. al.*, 1975; Lotz and Morss, 1976, 1970; Plasschaert, 1962; Tanzi, 1987; Weiss, 1968; Williams, 1961). These studies have employed various methods to assess tax effort in developing countries, the main approaches having been:

1. The ratio of tax revenue to national income, i.e., the tax/GNP ratio; and

2. The elasticity of tax revenue, i.e. the percentage change in tax revenue for a given percentage change in national income.

From several studies conducted, the general observations made concerning tax revenue in developing countries have been:

1. Tax revenues have been growing faster than GNP, resulting in a rise in tax ratios;
2. Due to the relative fall or stagnation in the prices of staple agricultural and mineral exports on the world market, developing countries have reduced reliance on international trade taxes; consequently there has been a rise in the share of production and income taxes in total government revenues;
3. In spite of the general increase in tax levels in developing countries, the average level of taxation in these countries continues to be much lower than that in the developed countries; and
4. In accordance with the experience of developed countries, it is expected that the share of direct taxes in the revenue of developing countries will rise over time, with a shift from property and personal taxes to taxes on incomes of individuals and corporations.

It has been observed that, with the growth of the economy and the rise in incomes, direct taxes become significant in government finance. High per capita income levels lead to high tax ratios because of both the corresponding capacity to pay taxes and the high income elasticity of demand for public goods. These factors, however, seem to exert a decisive influence only after per capita income has risen above the level of bare subsistence or rather, after the entire economy has been transformed or modernized. In brief, three major factors are considered to influence the ability of countries to tax: 1. the degree of "openness" of the economy, 2. the level of development and income, and 3. the economic structure or composition of income.

Tax Revenues in Botswana

Several studies have established mining to be a very important determinant of the tax ratio in developing countries. The studies show that mineral-rich developing countries, like Venezuela, Chile, Trinidad and Tobago, all tend to rank high in terms of tax/GDP ratio. Similarly, Botswana's tax/GDP ratio conforms to the pattern of mineral-rich developing countries, as the ratio is relatively high. It has consistently been above 30% and was as much as 38% in 1987 and 1999. Table 5.1 depicts Botswana government revenue and grants for selected years during the period 1980-2000. From the data, the following pattern is discernable:

1. Tax revenue is by far the major source of government finance in Botswana. This source accounted for 89% of the total revenue and grants in 1980, 76% in 1990 and 86% in 2000;
2. Prior to the mineral boom, customs and excise duties were the major sources of government revenues in Botswana. In 1980, for instance, customs and excise duties, i.e. Botswana's share of Southern African Customs Union (SACU) revenues, accounted for 38% of the

Table 5.1. Government revenue and grants (percentage) of GDP.

	1980	1985	1990	1995	2000
Customs and Excise	37.7	13.2	12.9	15.2	15.5
Mineral revenue	18.9	51.3	53.6	47.4	59.3
Non-mineral income taxes	32.7	8.3	7.7	6.5	6.6
Taxes on property	-	0.1	0.1	0.1	0.1
Taxes on motor vehicles	-	0.2	0.0	0.3	0.3
General sales tax	-	0.6	1.6	4.0	3.7
Non-tax revenue	-	22.7	20.8	25.8	14.0
Grants	-	3.6	3.2	0.7	0.0

Source: Calculated from BoB Annual Reports and CSO Statistical Bulletins.

country's total revenue and grants. The second major sources of revenue during this time were non-mineral income taxes, which in 1980 were 33% of the total revenue and grants;

3. Because of the mineral boom, mineral revenue has, over time, come to be the major source of government finance in Botswana. This source contributed only 19% in 1980, but by 1985 it was 51% of total revenue and grants;
4. While mineral revenue has, over time, gained in significance, there has been a significant decline in the relative contributions of customs and excise duties, as well as non-mineral income taxes. For instance, the contribution of non-mineral income taxes has declined from 33% in 1980 to only 7% of total revenue and grants in 2000;
5. The contribution of the general sales tax to government finance has risen appreciably from a mere 0.6% in 1985 to 4% in 1995 and 3.7% in 2000. This is a significant development given that, in July 2002, the sales tax was replaced by the value-added tax (VAT) in order to enhance revenue collection and diversify the sources of revenue; and
6. The relative contributions of taxes on property and motor vehicles are not only very small but have been static over time.

Clearly then, Botswana's experience shows that the pattern of government finance in a country changes with changing circumstances. Tax "handles" change in as much as the ability to pay taxes changes. It is often said that during the pre-industrial stage, taxes on property were, in many countries, the major source of government finance because property ownership was the measure of the ability to pay taxes. However, as trade became more significant during the industrial stage, customs duties were more important than property taxes as sources of government revenue. The point is simply that taxation changes with changing circumstances. The experience of Botswana proves this to be the case.

Furthermore, the pattern of government finance depicted in Table 5.1 confirms the fact that the diamond boom has generated considerable benefits for Botswana. Mineral revenue is now by far the major source of government finance. This is one side of the story and, as they say,

there are always two sides to a story. The other side is that the current pattern of government finance poses three major challenges for the country:

1. Diamonds are an exhaustible resource, and therefore mineral revenue is not a sustainable source of government revenue;
2. The world price of diamonds is volatile and this transmits instability to the government budget; and
3. There are only three major sources of government revenue, and therefore there is a need to broaden and diversify the sources of revenue.

Let us closely examine each of these issues and see how the government has addressed them. Concerning the first challenge, the benefits to Botswana generated by the discovery and exploitation of the country's diamonds are well documented by now. However, in equal measure, the point is often made that diamonds are a non-renewable resource and therefore they are exhaustible. Mining and use of a non-renewable resource sets in a motion a process of depletion. Thus, for non-renewable resources like diamonds, efficient resource use is about determining the optimal depletion path.

Over time, economists have developed some principles on the determination of the optimal depletion rate for exhaustible resources. Examples of such principles include Hotelling's rule on the economics of exhaustible resources and Hartwick's rule for the reinvesting of revenues from non-renewable resources (Hotelling, 1931; Hartwick, 1977). The relevant details for Botswana from these principles are:

1. The rent from diamond mining should be captured by government through taxes. Economists define rent as the earnings from minerals in excess of extraction costs, with adjustment to reflect the scarcity value of the resource; and
2. The rent recovered by government through taxes should, according to the Hartwick rule, be invested in alternative activities that can provide sources of income and employment after the minerals are depleted.

Botswana has been successful to date on both accounts. Because of the importance of minerals in the economy of Botswana, there is a Ministry of Minerals, Energy and Water Resources, while mining activities are regulated by the Mines and Minerals Act of the Laws of Botswana (see Chapter 8). Prospecting operations are carried out under license or permit, and the actual extraction of minerals is performed under agreement with the Government of Botswana. Through these institutions, the Government of Botswana now owns more than 50% of Debswana, the country's diamond mining company. Since the year 2002, Debswana has 100% ownership of the four diamond mines of Orapa, Letlhakane, Jwaneng and Damtshaa, as well as 100% ownership of the Botswana Diamond Valuing Company, Teemane Manufacturing Company, Morupule Colliery, Masedi Limited, West End Property Company Limited, and Sesiro Insurance Proprietary Limited. Debswana also owns 50% of Peo Limited. Through these companies, the government has a significant sway on the optimal extraction and use of the country's mineral wealth. The government benefits in the share of the profits, i.e. dividends on

the government's equity holdings in Debswana. The government also gains through the company income taxes paid by Debswana and through royalties on diamond output. The company income tax consists of a 40% tax on company profits and a 15% withholding tax on remitted dividends. The royalties are 15% of the output or sale of diamonds. These measures combined have made the government succeed in rent capture. For instance, after the July 1975 agreement between the government and De Beers, it is estimated that, through the foregoing measures, the government obtained 65% to 70% of the total profits of Debswana (Tsegaye, 1993).

All mineral extractive industries in Botswana operate under agreements with the government, and are subject to the terms of agreements under Section 55 of the Income Tax Act. In the case of mining, a tax agreement determines the tax liability of a company engaged in mining under license from the Ministry of Minerals, Energy and Water Resources. The Ministry grants a license for mineral extraction only after a comprehensive Mining Agreement has been entered into, and by law, a tax agreement is always a companion agreement to the mining agreement.

In 1998, a new non-negotiable mining taxation formula was introduced in Botswana. The new formula replaced the old system whereby income tax negotiations were made after the discovery of a mineral deposit. Under the new system, there is a pre-specified formula designed to ensure that government revenue rises with mining profitability. The new tax formula provides for a tax rate which varies annually, according to profitability, between a minimum of 25% and a maximum of 55%. These new tax arrangements apply to new mining projects other than diamond mining. For diamond mining, negotiated agreements prior to 1998 are still in force.

It is also important to note that Debswana is one of the major diamond producers in the world by volume and the largest diamond producer by value. In 2001, Debswana participated in the buy-out of De Beers, as a result of which Debswana now owns 10% of De Beers of South Africa. In addition, Debswana owns 11% of Central Investments, which, in turn, owns 45% of De Beers. This simply means that the Government of Botswana gains from the world-wide operations of De Beers International, as well as the activities of Debswana.

Furthermore, the government realizes the importance of utilizing mineral reserves for investment purposes. Consequently, in 1994 the government adopted two aggregate measures designed to monitor the extent to which mineral revenues are invested productively. These measures are the Sustainable Budget Index (SBI) and the Accumulated Investment Surplus (AIS) (see Government of Botswana, 1994; Wright, 1997; BIDPA, 2003). The SBI is the ratio of recurrent expenditure to recurrent revenues. Recurrent expenditure is essentially non-investment, consumption spending while recurrent revenues are the remainder of deducting the value of asset sales, mainly mineral revenues, from total revenues.

In a given financial year, the SBI should, ideally, be less than or equal to unity. If the SBI exceeds unity, this means that some of the recurrent expenditure is being financed by non-recurrent revenues, i.e., asset sales, or by government borrowing. Thus an SBI above unity is a signal to the government that some of the mineral revenues are not being used optimally (see Figure 5.1). On the other hand, the AIS deals with the unspent revenues from asset sales. Since these revenues are productive investment, the AIS principle requires that any unspent asset revenues should not be used later for recurrent expenditure.

Figure 5.1 shows the SBI from 1981 to 2001. From the trend, it is clear that the SBI was below unity during 1981-93, except for the period 1987-89 when the index was about unity. However, after 1993, the SBI has consistently been above unity. This shows that after 1993, some of the recurrent expenditure has been financed by non-recurrent revenues.

The SBI is, of course, a retrospective assessment because the government does not operate

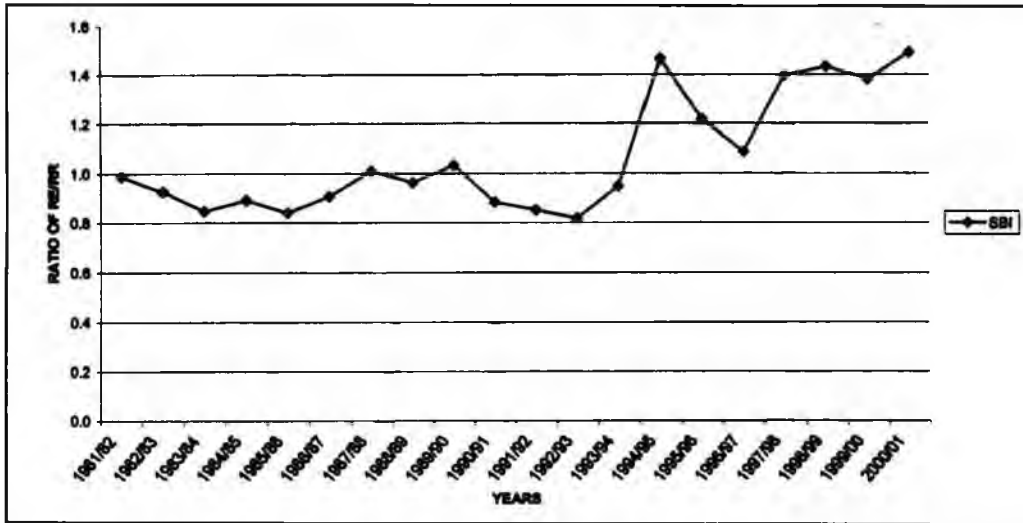


Figure 5.1. The Sustainable Budget Index (SBI), 1981-2001.

a cash budget with specific revenues targeted for specific line-item expenditures. A cash budget is simply one in which no expenditure is undertaken unless there is revenue in the treasury. Targeted expenditure means specific revenues can only be spent on specific line-items. However, when the SBI is consistently above unity, it should prompt us to closely examine the pattern of recurrent rent expenditure.

Table 5.2 depicts the pattern of recurrent expenditure in Botswana during 1980-2000. In this case, it is evident that during the 1990s, social services accounted for the largest portion of recurrent expenditure. This trend continues and is rising. Within this sector, recurrent expenditure is mainly on education. Overall, education in the past two decades has accounted for the largest share of recurrent expenditure - about 25% of the government budget.

Table 5.3 shows the pattern of development expenditure in Botswana during 1980-2000. In this case, it is clear that economic services have accounted for the largest share of development expenditure. This trend continues but is declining. The data also shows that social services have received the second largest portion of development expenditure and this trend has been rising. Therefore, from Tables 5.2 and 5.3, it is evident that in Botswana, government expenditure is greatest on socio and economic services. In other words, through its expenditure programme, the government is creating the socio-economic infrastructure necessary for development. BIDPA (2000, p 4) summarizes this policy strategy as follows:

While Botswana has no significant comparative economic advantage apart from diamonds, the income stream from diamonds makes it possible for the government to create a comparative advantage, by developing a trained and educated workforce. Research shows consistently that successful exporting, of both services and manufactured goods, is strongly correlated with above-average levels of education.

A well known World Bank study on this subject is entitled *Oil Windfalls: Blessing or Curse* (Gelb, 1988). In another World Bank (1997) publication, specific recommendations were made

ECONOMIC DEVELOPMENT OF BOTSWANA

Table 5.2. Recurrent expenditure (percentage).

	1980	1985	1990	1995	2000
General services, including defense	37.3	35.4	32.6	31.8	29.8
Social Services	34.3	31.0	34.9	40.2	45.5
Education	22.6	20.6	22.4	23.8	27.9
Health	6.1	5.2	5.8	6.4	6.3
Food & social welfare programmes	0.3	0.6	0.8	0.1	3.6
Housing, urban & regional development	3.8	3.2	4.0	7.9	5.5
Other community & social services	1.5	1.4	1.9	1.9	2.3
Economic services	18.2	17.5	15.8	11.9	10.6
Agriculture, forestry & fishing	9.2	7.2	7.0	5.5	4.5
Mining	1.0	0.9	0.7	0.5	0.6
Electricity and water supply	2.3	2.0	2.0	1.7	1.9
Roads	1.9	3.2	3.4	2.7	1.8
Others	3.8	4.2	2.7	1.6	1.8
Transfers	10.2	16.1	16.7	16.1	14.1
Interest on public debt	3.0	6.1	3.6	2.6	1.0
Deficit grants to local authorities	6.9	8.8	11.5	11.5	11.7
FAP grants	0.3	1.2	1.5	2.1	1.4

Source: Calculated from BoB Annual Reports and CSO Statistical Bulletins.

on the investment of natural resource rents. This is again quoted here because of its relevance to Botswana. The World Bank (1997, p 15) asserts that:

The level of gross domestic investment is influenced both by the willingness of the private sector to invest which is again closely tied to macroeconomic policies – and by public investment programmes. The investment of natural resource rents, collected through government royalties, is a central issue in this regard. In addition to the quantity of public investment, quality is also a critical factor; this is one of the central lessons of the Oil Windfalls study. Investments in human capital represent in many countries some of the highest quality outlets for public investments.

Human capital is essentially a country's population. In effect then, the World Bank says that one of the best ways to invest rents from natural resources is by investing them in the people of the country. This may sound obvious but is not when there are concerns about the growth of government expenditure in Botswana. When experts and government officials worry about the rapid growth in government spending, we must ask the question: which is the biggest expenditure item of government?

Clearly then, the government is laying the conditions for sustained economic growth in Botswana, and diamonds are instrumental in the economic development of Botswana. While, for

Table 5.3. Development expenditure (percentage).

	1980	1985	1990	1995	2000
General services, including defense	13.8	11.9	18.1	19.5	24.3
Social services	34.1	29.3	37.0	37.1	37.1
Education	14.5	8.4	10.9	19.7	15.9
Health	2.8	3.2	2.5	1.9	3.1
Food & Social welfare programmes	-	5.2	0.2	7.5	3.8
Housing, urban & regional development	15.9	11.6	23.0	7.0	9.5
Other community & social services	0.9	0.9	0.4	0.9	4.8
Economic services	52.2	56.8	44.9	43.4	38.6
Agriculture, forestry & fishing	8.1	12.4	6.1	5.5	3.2
Mining	12.1	0.9	4.4	14.5	0.9
Electricity and water supply	5.3	16.4	3.7	12.5	13.2
Roads	10.7	9.0	7.4	7.2	13.6
Others	16.0	18.1	23.3	3.7	7.9
Transfers	0.1	2.0	0.0	0.0	0.0
Interest on public debt	-	-	-	-	-
Deficit grants to local authorities	0.1	0.2	0.0	0.0	0.0
FAP grants	-	-	-	-	-

Source: Calculated from BoB Annual Reports and CSO Statistical Bulletins.

instance, there were once only three secondary schools in the country, there are now over 300, and these provide twelve years of free education for all pupils. This is a remarkable achievement by any standard.

The second challenge concerning government finance in Botswana is that minerals, just like agricultural commodities, face world price instability which is transmitted to the local economy. In the case of diamonds, there is now an additional source of instability arising from the global concern over conflict diamonds, and - for Botswana - the adverse publicity regarding the relocation of Basarwa from the Central Kalahari Game Reserve. Among other things, volatile world prices destabilize tax revenues, and this has been a problem for Botswana in recent years. The challenge for government in this case is how to dampen the oscillations in tax revenues triggered by volatile world prices. Here, we cite two schemes that have been employed elsewhere in other mineral-based economies, and then consider the specific case of Botswana.

The first scheme we draw attention to is that of a fund operated by the Federation of Rhodesia and Nyasaland (1953-63), modern-day Malawi, Zambia and Zimbabwe. The Federal economy was dependent largely on world prices for primary products, principally that of copper, over which the Federal government had no control. The government also realized that the high copper prices of 1955 and 1956 would not always be maintained, and that a fall in prices would bring budgetary problems. Therefore, in 1956 the Federal government instituted a scheme whereby all revenue accruing from copper sold at a price of more than £240 per ton would be

deposited in a specific fund, called a Loan Account (see Brelsford, 1960 p. 686). The copper revenue deposited in the Loan Account was a buffer or reserve fund designed to insulate the federal budget from the effects of oscillations in the world price of copper.

The second example is that of a buffer fund operated by Papua New Guinea in the 1970s (Newbery, 1987). In this case, the mineral revenue from copper was deposited into a reserve fund, from which - using a specific formula - some of the past revenues were transferred to the government budget. As a result, the volatility in tax revenue was reflected in fluctuations in the reserve fund and not in the government budget.

In Botswana the government operates a *de facto* buffer fund through the Bank of Botswana. When Botswana has a surplus balance of payments, the country accumulates foreign exchange reserves. The accumulated foreign exchange reserves are invested and the returns on this investment are deposited in the Bank of Botswana for use by the government in its budget. Admittedly, this scheme may not fit the ordinary, garden variety definition of a buffer fund, yet it is still a buffer fund. And to the extent that the scheme exists, concerns about volatility in tax revenue are a non-issue. If the diamond price trend is cyclical, then what goes around comes around, and good times follow bad times. Volatile world prices of diamonds are not a problem as such; it is the absence of a mechanism to dampen the effects of the oscillations which is the problem. Since such a mechanism exists for Botswana, the concern about fluctuations in diamond prices is sometimes overstated. The debate should rather be on how to fine tune the buffer fund.

Thus, when all the challenges concerning government finance in Botswana are considered, the most daunting one is that of broadening and diversifying the sources of revenue. In 1980, three sources - customs and excise duties, mineral revenue, and non-mineral income taxes - accounted for 89% of all revenue and grants in Botswana (Table 5.1). Twenty years later in 2000, three sources - customs and excise duties, mineral revenue and non-tax revenue (Bank of Botswana revenue), accounted for 89% of the total. What has changed over time is the composition of the three dominant sources, namely non-mineral income taxes having been replaced by Bank of Botswana revenues. Diversifying the sources of revenue seems to be compounded by the fact that, in a booming economy, it can be difficult to convince the general public that they should increase their contribution to financing the cost of government. In this case, indirect taxes may have an advantage over direct taxes. Thus, in Botswana the general sales tax was replaced by the value added tax (VAT) in July 2002 as a means of diversifying the sources of government revenues.

Non-tax revenue and Grants in Botswana

Besides taxes, the other sources of government finance in Botswana are Bank of Botswana revenue and grants. These sources are shown respectively as the last rows of Table 5.1. Clearly, Bank of Botswana revenues are a significant source but have declined since the mid-1990s. As shown in Table 5.1, non-tax revenues accounted for 26% of total government finance in 1995 but the share was only 14% in 2000. Furthermore, Table 5.1 shows that the share of grants in the total government budget has declined significantly, from 3.6% in 1985 to only 0.7% in 1995. This is good because grant elements of this type cannot be very large. For sustainability, it is better for the government to rely more on internal than on external sources of finance.

The Pattern of Government Expenditure

The basic theory of public expenditure growth, originally developed by Adolph Wagner, is that the share of public expenditures in national income increases as per capita income rises (see Burkhead and Miner, 1974; Musgrave, 1969; Peacock and Wiseman, 1979). The growth of public expenditures is said to be the result of economic development itself. This is often referred to as Wagner's law and is the starting point to explain the growth of public expenditures in developing countries. From the seminal work of Martin and Lewis (1956), several studies have analyzed the growth of government expenditures in developing countries (e.g. Goffman and Mahar, 1971; Lotz, 1970; Thorn, 1967; Enweze, 1973). It is therefore possible to make the following general observations about the case of developing countries:

1. Government expenditures increase as a share of national income because of increased expenditure on social welfare as development proceeds. Increased expenditure on social welfare is, in turn, a function of urbanization, a phenomenon which for the most part is due to rural-urban migration.
2. The openness of the economy, through the export sector, can have a significant impact on spending patterns in developing countries. This is due in part to the "demonstration effect", i.e. the impact of high standards of living enjoyed by developed countries on the expectations and standards of consumption in developing countries.
3. Growth in military expenditure is, in some cases, the largest single source of growth in government spending. The causes of increased military spending are explained below.

According to Enweze (1973), for instance, the growth in military spending is the most significant source of growth in government spending in developing countries. The heavy burden of defense spending on the meagre resources of developing countries can be traced to two factors. First, the balkanization of developing countries, especially in Africa, during colonial rule meant that after independence, every one of them, however small, has had to spend large sums of money to build its own army as a symbol of national sovereignty. Secondly, increased military spending is designed to mitigate the effects of a host of destabilizing factors which have often characterized these countries, such as coups d'etat, civil wars, border conflicts and external aggression.

Concerning the growth of expenditures in Botswana since 1980, it can readily be shown that there was a greater percentage increase in total expenditure during 1980-1990 than during 1990-2000. In 1980, total expenditures were P291.8 million, but were P3,538.9 million in 1990 (at constant 1980 prices). This reflects an increase of P3,247.1 million or 1,112.8% over the 1980 level. In 2000 total expenditures (at 1980 prices) were P18,607.4 million, an increase of P15,068.5 million or 425.8% over the 1990 figure. It is evident, therefore, that there was a greater percentage increase in total expenditures during 1980-90 than in 1990-2000.

To understand the forces behind this trend in Botswana's expenditures, two things are required. Firstly, we need to look at the ratio of recurrent to development expenditure in the total government budget. Secondly, we must examine, in detail, the pattern of recurrent and development expenditure.

In the past two decades, the recurrent/development expenditure ratio has tilted sharply in favour of recurrent expenditure. In 1980, recurrent expenditure comprised 58.4% of total expen-

ditures, but in 2000 it was 73.7% in real terms. Meanwhile, the proportion of development expenditure has fallen from 41.6% in 1980 to 27.2% of total expenditures in 2000. Clearly, there has been a noticeable change in the ratio of recurrent to development expenditure in Botswana.

The Pattern of Recurrent Development and Expenditures in Botswana

Over time, there has been a significant rise in recurrent expenditure in Botswana, more so since the 1990s. In 1980, recurrent expenditure amounted to P170.4 million, but by 1990 it was P1,702.6 million in real terms. This represents an increase of P153.2 million, about 90% over the 1980 level. However, the most significant growth in recurrent expenditure occurred after 1990. In 2000, recurrent expenditure was P13,714.8 million, at constant 1980 prices. Thus, the increase in recurrent expenditure between 1990 and 2000 was P12,012.2 million or 705.5%, which is much greater than the corresponding figure of 89.9% during 1980-90.

What, then, are the factors responsible for the exponential growth in recurrent expenditure in Botswana? Some of these factors can be drawn from Table 5.2, which shows the pattern of recurrent expenditure in the country during 1980-2000. Other factors are evident from Table 5.3, which depicts the pattern of development expenditure during the same period. In other words, to have a complete picture of the phenomenal rise in recurrent expenditure since the past decade, it is important also to consider trends in development expenditure because development expenditure inevitably effects recurrent expenditure. Based on the data in Table 5.2, the following observations can be made about recurrent expenditure in Botswana:

1. Social services account for the largest and rising share of recurrent expenditure. They were 34.3% of recurrent expenditure in 1980, 34.9% in 1990 and 45.5% in 2000. Furthermore, the rise in the share of social services in recurrent expenditure is most significant since the 1990s.
2. Within the social sector, education accounts for the largest and rising share of expenditures on social services. The proportion was 22.6% in 1980, 22.4% in 1990, and 27.9% in 2000. In this case too, the rise in the share of education in total social services expenditure is most significant since the 1990s.
3. General services, including defense, comprise the second largest share of recurrent expenditure. This proportion fell from 37.3% in 1980 to 32.6% in 1990, but remained about 30-32% during 1990-2000.
4. Economic services comprise a declining proportion of recurrent expenditure. The proportion has declined consistently from 18.2% in 1980, to 15.8% in 1990 and 10.6% in 2000.

However, the order in development expenditure (Table 5.3) is different from that of recurrent expenditure. In development expenditure, the priorities are as follows:

1. Economic services account for the largest but declining share of development expenditure. The share of economic services in development expenditure has consistently declined from 52.2% in 1980, to 44.9% in 1990 and 38.6% in 2000.

2. Social services comprise the second largest share of development expenditure. At 37.1% in 2000, the share of social services is now only slightly below that of economic services.
3. Within the social sector, education again accounts for the largest share of the expenditures on social services.

As indicated earlier, education has, overall, been the largest component of the government budget in Botswana. The expenditure on social services has been given top priority by the government, partly to make up for the colonial legacy, and partly because of the government strategy of trying to create a comparative advantage in the region. This point is cardinal in the current climate in which some observers are calling for a reduction in the rate of growth of government spending.

Furthermore, the changing pattern of government expenditure in Botswana shows that, during 1980-90, it was development expenditure which had proportionately a greater increase, in real terms (979.2%), than recurrent expenditure (89.9%). In other words, during 1980-90, the priority was to provide the infrastructure for development, such as roads, schools and hospitals. However, once it was established, the infrastructure required maintenance and staffing allowances in the form of recurrent expenditure. Thus, the exponential rise in recurrent expenditure since 1990 can be seen as a rise in the maintenance and operation of the existing stock of capital.

It seems, therefore, that the concern about the growth of expenditures in Botswana should focus on the role of general public services, including defense. This item is second largest proportion of recurrent expenditure after social services. For example, the trade-off in this case, as elsewhere in the world, can be between the security derived from increased defense spending vis-à-vis the security from job-creation, for example when the private sector is provided support services by the government. The fact that manufacturing and agriculture continue to underperform in Botswana should not detract the government from its incentives to the private sector.

To summarize, the concern about the rapid growth of government expenditure in Botswana should not be with the pattern of expenditure but with the fact that revenues are not growing as rapidly as the growth in expenditures. There should also be concern about the fact that growth in spending induces demand for goods and services at a faster rate than the productive capacity of the economy can provide them. As a result, there may be a rise in imports and inflation. Precisely, the concern is about the sluggish performance of agriculture and manufacturing in Botswana. The relative contribution of agriculture to the country's GDP has declined over time. It was 12.5% in 1980, 5.2% in 1990 and 2.6% in 2000 (Central Statistical Office, 1990; Bank of Botswana, 2002). Meanwhile the contribution of manufacturing to the GDP has remained at about 5% in two decades. It is these trends which are of great concern when expenditures grow rapidly.

If we discount the implementation capacity constraints in agriculture, the main problem in this sector is that of erratic rains. The erratic rainfall pattern makes it difficult to grow rain-fed crops in Botswana. The government is now examining the alternative of irrigated crops. All told, a team of experts from Israel recently conducted a survey in Botswana and concluded that the agricultural potential in Botswana is ten times that of Israel. Therefore the challenge for Botswana is how to make the desert bloom in order to keep the factory mills spinning.

Budgetary Policy and Tax Reforms

In 1998/99, Botswana registered the first budget deficit in 16 years. At P1.5 billion, the deficit was about 6.5% of GDP, and was due to a fall in government revenue without a decline in expenditure. Figure 5.2 shows the trends in total revenue and grants, total expenditure, as well as the overall surplus/deficit.

It can be seen from Figure 5.2 that, during 1981-2001, Botswana consistently had budget surpluses, except for 1998/99. This situation distinguishes Botswana from other African countries, which have had persistent budget deficits. Furthermore, even when, as happened in 1998/99, Botswana registers a budget deficit, the government does not have to resort to borrowing in order to finance the deficit. The government can finance the deficit by running down its accumulated funds at the Bank of Botswana. In 1998/99, for instance, when the deficit was P1.5 billion, the government's buffer fund at the Bank of Botswana amounted to P18 billion (BIDPA, 1999, p 1).

However, despite the sound financial position of the government because of the buffer fund, there are problems that call for budgetary reform in Botswana. These problems include implementation capacity constraints in the public sector and the issue of public service salaries.

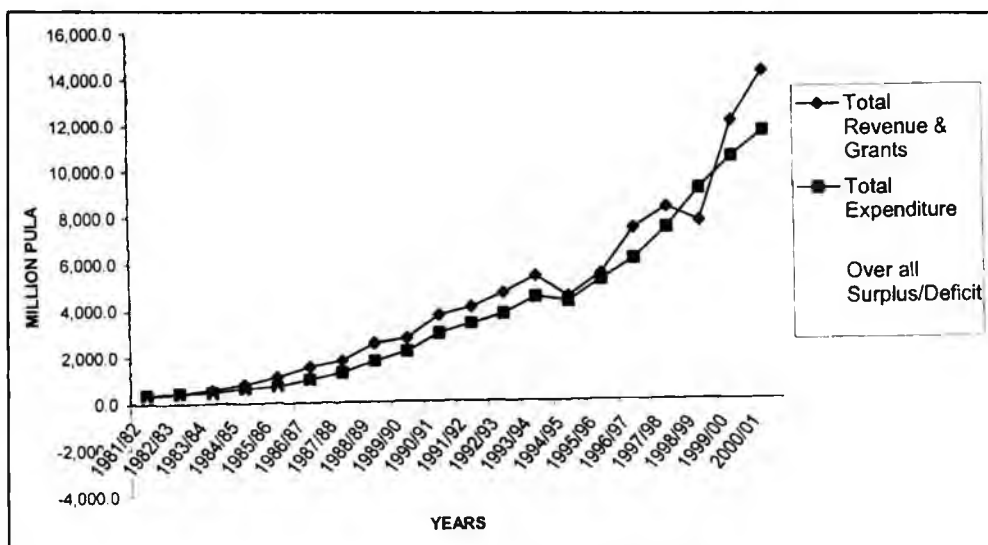


Figure 5.2. Government budget, actual figures, 1981-2001.

As was stated by the Minister of Finance and Development Planning in the 2001 Budget Speech, implementation capacity constraints are the root cause of the under-spending of budgetary allocations in a given fiscal year. In 1999/2000, for instance, there were under-expenditures of 5% of the recurrent budget and 10.8% of the development budget. The actual unspent allocations were P388 million and P418 million for the recurrent and development budget respectively. Overall, total under-expenditures in fiscal year 1999/2000 amounted to P984 million. Given these implementation capacity constraints, budgetary reform calls for synchronizing spending allocations with the capacity of the implementing agencies and institutions.

The other case where there is a need for budgetary reform in Botswana is that of civil service salaries. The National Employment, Manpower and Incomes Council (NEMIC) considers and recommends to the government whether or not an adjustment in civil service salaries should be made. NEMIC usually meets in January and the government states its position during the budget speech in February of each year. This has been the pattern over time. As a result, the annual budget speech has come to be associated with a pronouncement on civil service salaries.

The problem in this case is not the salary adjustments but the timing of the announcements for the adjustments (See Mupimpila, 2002). When the announcements for salary adjustments are made during the budget speech, it dilutes the effectiveness of the budget as an instrument of economic policy. This is because the budget is the government's annual plan of revenues and expenditures. The budget also functions as a means of control and management of public resources. Thus, universally, the three functions of budgeting are: control, management and planning. In the annual budget cycle, the budget speech marks the beginning of the budget cycle and should not be overshadowed by the issue of civil service salaries. What is required, in this case, is to de-link announcements about salaries from the budget speech.

Admittedly, budgetary reform is a much broader agenda than the act of tinkering with one budget item, namely salaries. Budgetary reform involves a transition from one budget form to another - for example, from a line-item budget to a programme or performance budget (see Burkhead, 1956; Harlow, 1973; Mupimpila, 1981; United Nations, 1958, 1965). Currently, Botswana uses a line-item budget. This is a type of budget where the item or object of expenditure appears on a separate line in the budget. Each item or group of items is listed and the amount to be spent is put beside the item. This is the system of budgeting used in many countries.

The advantage of a line-item budget is that it allows good control because it clearly specifies the object and the amount to be spent. Therefore, the person in charge of spending is controlled by having to follow the planned expenditure. However, a line-item budget has two major disadvantages. First, a line-item budget tends to provide incremental budgeting. What is incremental budgeting? This is a situation in which the largest determining factor of the size and content of this year's budget is last year's budget. This form of budgeting is not comprehensive. Secondly, a line-item budget does not state the broader purposes of expenditure. A line-item budget does not show the objectives government intends to achieve in its expenditure programme. This is the reason a programme budget is superior to a line-item budget - a programme budget shows the goals or purposes of government expenditure. And once a programme budget is understood in this manner, it is then possible to define a performance budget as a programme budget plus expected output. In other words, a performance budget is a budget which shows both the purpose of expenditure and the output or service to be obtained from the planned expenditure. Clearly, there is more to budgeting than most of us realize.

Further, it is in the annual budget speech that the treasury outlines planned fiscal reforms for the country. These reforms are vital for the economic development of Botswana because they are aimed at attracting investment by providing incentives to domestic and foreign investors, and at improving the country's competitiveness in the region. It is on account of these reforms that Botswana now has some of the lowest tax rates in southern Africa. This point is illustrated below in a survey of the fiscal reforms in Botswana since 1990. The reforms have mainly been about taxes on personal and company income, and on consumption (value-added).

Personal Income Tax

Personal income tax is a tax levied on personal emoluments. The tax liability is a function of the level of income: the higher the income, the higher the tax liability.

In Botswana, recent reforms in personal income tax have been designed to counteract what is known as "bracket creep." This is a situation in which a rise in inflation pushes people into higher tax brackets. Inflation also erodes the real purchasing power of income and, unless marginal tax rates are adjusted, the burden on the taxpayer rises with inflation. Thus, the reforms in Botswana have been as follows:

1. In 1994, personal income tax was adjusted. The top marginal rate for individual income tax was reduced from 40% to 35%. The tax threshold was increased from P9,000 to P10,000. The bands in the income tax were widened from P10,000 to 12,500.
2. In 1995, personal income tax was again adjusted. The top marginal rate for individual income tax was reduced from 35% to 30%. The tax threshold was increased from P10,000 to P15,000. The bands in the income tax were broadened from P12,500 to P15,000.
3. In 1997 personal income tax was adjusted by reducing the top marginal rate for individual income tax from 30% to 25%. The tax threshold was raised from P15,000 to P20,000. However, the bands in the income tax remained at P15,000, as set in 1995.
4. The most recent revision in personal income tax was in 2001. As a result of the changes in 2001, the top marginal rate of 25% is on income of P100,000 per annum, instead of P80,000 per annum as was the case previously. The tax threshold is now P25,000 instead of P20,000 as set in 1997. The bands in income tax have been broadened from P15,000 to P18,750.

Since personal income is generally considered to be the best index of the ability to pay, a tax on personal income is therefore regarded as the most equitable of all major taxes. However, in Botswana, as in other developing countries, personal income tax is not a major source of government revenue. One reason for this is that the tax usually has exemptions. Before 1999, for instances, gratuities for expatriate workers in Botswana were exempt from personal income tax. Given the significant size of the expatriate community in Botswana, and that, on the average, expatriates earn higher incomes than citizens, the government forfeited substantial revenues by the non-taxation of the gratuities. Thus, in 1999, the government amended the relevant legislation so that gratuities earned by expatriates at the end of their contracts are now taxable, just as gratuities paid to citizens.

The other reason, that personal income tax is not a significant source of revenue, is that the tax is difficult to administer in the traditional, agricultural sector, unlike the case in the modern, urban areas. It is therefore the case that a significant portion of the economy remains unaffected by personal income tax. For detailed analyses of why income tax is not a major source of revenue in developing countries, see Lewis, Jr. (1984) and Newbery (1987).

Company Income Tax

Company income tax is a tax levied on business entities. It is usually assessed as a percentage of the profits earned in a financial year. In Botswana, recent reforms in company income tax have been:

1. In 1994, the company income tax was reduced from 30% to 25%. The company tax rate was kept at 10%, consequently the effective tax rate became 35%.
2. In 1995, the effective company tax rate was reduced from 35% to 25% in general, and 15% for manufacturing firms and the Botswana Meat Commission (BMC).
3. In 1998, a new non-negotiable mining taxation formula was introduced in order to replace the old system where income tax negotiations were made after the discovery of a mineral deposit. The new formula ensures that government revenue rises with mining profitability; the tax rate varies annually according to profitability, between a minimum of 25% and a maximum of 55% (see section 5.1 of this chapter).
4. Besides the tax on profits, any company declaring dividend to its shareholders is required by law to deduct, as withholding tax, an amount equal to 15% of the dividend paid. This legislation came into effect in 2003. Before 2003, withholding tax was not applicable to what are known as associated companies (see Government of Botswana 2003 p 34). However, in 2003 the withholding tax on dividends was broadened to include all dividends, even those of associated companies.

The company income tax has been a source of great controversy in several countries. One of the hotly contested issues is whether or not the incidence of company income tax is shifted forward to consumers. Incidence shifting in this case can be manifested by a rise in consumer prices. For this reason, the Government of Botswana maintains lower company tax rates so that companies can have higher after-tax profits. This is an inducement to firms to meet their operating costs and thereby increase producer prices at a slow rate.

Value-Added Tax

A value-added-tax (VAT) is a multiple-stage sales tax that applies only to the value added at each stage in the production and distribution channel. It has been adopted by many countries in the world, especially members of the European Union.

In Botswana, VAT was introduced in July 2002 as a replacement for the General Sales Tax. The VAT was set at a uniform rate of 10%, applied to a wide range of goods and services, except for things like education services, financial services, accommodation in dwellings, and services by a public medical facility. Table 5.4 shows how VAT works. The example is a hypothetical case of the production and distribution channel whereby wheat is eventually transformed into bread. The example is simplified by assuming that the farmer depends on family labour and own inputs and therefore the farmer's input purchases are zero.

Table 5.4: The concept of Value-Added-Tax (P'000).

Producer	Purchases	Sales	Value-Added	VAT at %
Farmer	0	900	900	90
Miller	900	1600	700	70
Baker	1600	2100	500	50
Grocer	2100	2500	400	40
	4650	7100	2500	250

Source: Adopted from Harvey S. Rosen (1999), Table 20.2.

As is shown in Table 5.4, the value-added is the difference between the value of input purchases and output sales. The last column in the table shows the VAT liability at each stage of the production and distribution channel. The VAT paid by the miller, for instance, is 10% of the miller's value-added, i.e. P70,000. The total revenue created by the VAT is found by summing up the amounts paid at each stage (P250,000).

Here then is a key element of VAT. The total revenue of P250,000 generated by VAT can be realized by levying a 10% sales tax at the retail stage; that is, by a tax of 10% on the value of sales made to consumers by the grocer. Thus, VAT is just an alternative method of collecting the retail sales tax.

However, there are several reasons why VAT is implemented instead of a retail sales tax; these reasons have been well-documented, for example by Motau (2001). One of the overriding reasons is that VAT improves revenue collection. Gillis (1990) cites this to have been the case in Indonesia, and Diaz (1990) also states that VAT improved revenue collection in Mexico. In turn, improved revenue collection under VAT is due to the fact that VAT has built-in mechanisms to control tax evasion. Under the invoice method of collecting VAT, and using the example in Table 5.4, the miller would calculate his/her gross tax by applying the 10% tax rate to the total sales ($1600 \times 10\% = 160$). The miller would then claim a credit against this tax of P160,000, an amount equal to the tax already paid by the suppliers of the miller's inputs, in this case the farmer. Since the VAT paid by the farmer is P90,000, then the VAT liability of the miller is 160 minus 90 or P70,000. The miller is entitled to a tax rebate of P90,000, payable upon showing that the farmer has already paid this VAT. Thus, the miller will only do business with the farmer if the farmer keeps good records.

VAT generally improves tax collection because it has mechanisms for self-policing among firms and for cross-auditing by tax officials. In Botswana, six months after the introduction of VAT, there were more than 8,300 enterprises registered for VAT, significantly more so than under the Sales Tax system (Government of Botswana, 2003, p. 33). All businesses in the country with an annual turnover of more than P250,000 are required by law to register for VAT.

Since VAT requires an honest and efficient administrative system, the current momentum in Botswana can only be sustained by continued improvements in skills. The experience of the European Union proves that VAT can be implemented successfully.

Summary and Conclusions

The pattern of government finance in Botswana shows that tax revenue is by far the major source of government funding in the country. Prior to the mineral boom, customs and excise duties were the major sources of government revenue, but because of the boom, mineral revenue has become the major source of government finance. As a result of that boom there has been a significant decline in the relative contributions of customs and excise duties as well as non-mineral income taxes. This chapter has examined in detail the challenges which this changing pattern of government finance poses for the country, and how the government has attempted to meet these challenges to date.

Since diamonds are an exhaustible resource, sustainable development requires that mineral revenue should not be used to finance non-investment, consumption expenditure. Rather, mineral revenue should be invested in alternative economic activities that can provide sources of income and employment after the diamonds are depleted.

The chapter has also analyzed the patterns of recurrent and development expenditure in Botswana. In this case, social services account for the largest (and rising) share of recurrent expenditure while economic services are the largest (but declining) share of development expenditure. Within the social sector, education accounts for the largest (and rising) share of expenditure on social services. Overall, the changing pattern of government expenditures in Botswana shows that during 1980-90, development expenditure had a proportionately greater increase, in real terms, than recurrent expenditure. Clearly, the priority during 1980-90 was to provide infrastructure for development. Since 1990, however, there has been an exponential rise in recurrent expenditure. This disaggregated pattern therefore shows that the current concern about growth in government expenditure should focus on the forces behind the recent growth in recurrent expenditure.

Since expenditure on the social sector has been the driving force behind the growth in recurrent expenditure, the concern about the rapid growth of government expenditures in Botswana should not be about the pattern of expenditure per se but about the fact that revenues are not growing as rapidly as the growth of expenditures. It should also be about the fact that growth in spending induces demand for goods and services at a faster rate than the productive capacity of the economy can satisfy those demands. Therefore the greatest challenge for Botswana is how to sustain the level of economic activity built on high diamond prices. As we stated earlier, the challenge for Botswana is how to make the desert bloom in order to keep the factory mills spinning.

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Chapter 6

The Roles of the Public and Private Sectors in Botswana

I. Mogotsi

Introduction

The mix and respective roles played by the public and private sectors has become a focus for debate, in both developed and developing countries of the world. Conventional reasoning for state involvement in the running of economies is market failures and externalities, which create a divergence between private and social costs and benefits. In the early stages of the development process, the need for development of infrastructure, both physical and social, as well as the provision of welfare and social services necessitates a predominance of the public sector. Arguments have, however, been made that this predominance tends not to decline with increasing incomes, that is, there is a tendency for the share of government spending to rise with rising incomes, so that the need for government regulatory activities, as well as provision of welfare and social services, is income elastic. This has been referred to as Wagner's Law (Weis, 1995) in the economics literature.

Despite the seemingly inevitable involvement of the state in economic activity, at the forefront of debates on state participation in economic activity is the argument that the public sector, whether the central (and local) government or the state-owned enterprises (SOEs), tends to operate inefficiently. A number of factors have been identified that can explain these inherent inefficiencies, including:

- Multiple and sometimes contradictory objectives of government departments and SOEs. While private sector companies seek profit maximization as their primary objective, with SOEs the objectives could include the provision of social services, even where this is incompatible with the maximization of profits.
- Lack of autonomy by managers of SOEs - they may have to consult and seek government approval and sanctioning every time they need to make decisions. Because of government bureaucracy, this not only wastes time while issues go through the bureaucratic processes, but can also be discouraging.
- Separation of ownership from management. This is another reason why SOEs tend to be inefficient: the managers of SOEs often do not share in the profits of their enterprises, and they therefore tend not to be motivated to strive for profit maximization. The owners, as proxied by the government, are often not in a position to make an accurate assessment whether poor performance is due to a lack of sufficient effort on the part of management, or to factors beyond their control. This problem does not arise in the case of the private firm,

even if the manager is not the owner, because of closer ties between the manager and the shareholders, as well as clearer rules for accountability. (Weis, 1995)

As a result of the potential inefficiencies of public enterprises, contemporary debates focus on privatization and/or public sector reforms. The arguments are that, if a service can be provided by the private sector, it should be hived off, as there is bound to be greater efficiency. Privatization ranges from full divestiture - where the whole enterprise is sold to the private sector - to outsourcing some of the activities of the enterprise to the private sector while maintaining ownership in the public sector. Nevertheless, privatization is seen not as a panacea: it has its inherent problems, some of which are job losses as private employers trim the newly acquired enterprise, perhaps in an effort to run it more efficiently. Privatization has also been criticized on the grounds of transferring 'the family silver to foreign hands'. This can be a problem, especially in a situation where there is low capacity for local entrepreneurship.

The Botswana Government adopted a Privatization Policy in 2000. The main objective of this policy was to improve efficiency and therefore the international competitiveness of Botswana products. Unlike in most other developing countries, where privatization is undertaken for fiscal purposes (to reduce government obligations as well as generate revenue from asset sales), privatization in Botswana is being implemented for other reasons. The questions that need to be addressed relate to whether the government sector is growing too big too fast, such that it is becoming cumbersome to effectively deliver services; and to what extent the public sector provides services that could easily and perhaps more effectively be provided by the private sector. Other related questions could also be whether the current environment in Botswana is conducive for privatization, and what the potential losses may be expected from the privatization exercise (that is, what social contributions of state enterprises would potentially be lost if and when the enterprises pass from public to private hands).

This chapter examines the public sector in Botswana - its growth and structure, the relative roles of the public and private sectors in the development of the economy, the environment or pre-conditions for privatization and public sector reform as a substitute or as a complement to privatization for enhanced efficiency.

The Public Sector in Botswana: Growth and Structure

The public sector in Botswana is made up of general government (comprising the central and local government) and the parastatals. The services offered range from core government services to public utilities and financial as well as non-financial (housing, air transport) parastatals. Some of these parastatals operate very much like commercial enterprises.

The Central and Local Government: Growth and Importance in Economy

The growth and importance of general government can be analyzed by examining government consumption relative to gross domestic product (GDP), as well as trends and growth of government development expenditure. Development expenditure includes expenditure on the building of infrastructure, both social - education, health, etc. - as well as physical - roads; and the provision of other economic services such as water, electricity, etc. Table 6.1 presents such trends, at ten-year intervals from 1971/72, and annually for the five years from 1997/98, when

the government set up the Privatization Task Force after having identified a need to reduce the public sector.

Table 6.1. Growth of general government: ^a 1971-2001.

Gov. Final Consumption	1971/72	1981/82	1991/92	1997/98	1998/99	1999/00	2000/01	2001/02
As % of GDP at current prices	15.6	27.0	24.1	27.0	30.6	30.2	30.5	33.0
% Growth rate p.a.	-	19.4	9.2	15.7	20.6	14.4	16.8	20.7
GDP % growth rate p.a.	-	0.34	9.3	13.7	6.8	15.9	14.9	11.6
Gov Dev. Expenditure P mill.	12.25	121.1	1097.6	2695.5	2847.5	3450.8	3134.6	3698.2

a. Government sector comprises only Central and Local Government, but excludes parastatals.
Source: Bank of Botswana Annual Reports, several.

The table shows that, in the 30 years from 1971/72 to 2001/02, the share of the general government sector in gross domestic product (GDP) increased substantially. While in 1971/72 the share of the government sector in GDP was about 16%, 30 years later this share had more than doubled to 33%. This is in line with Wagner's Law as stated above. To further demonstrate this increasing share in GDP, the table also shows that, for most of the years, the growth rate of the government sector was higher than the GDP growth rate.

As argued above, at early stages of economic growth there is a need for government sector participation because of the need to develop of infrastructure, which is a precondition for economic development. Government participation in the building of infrastructure in Botswana can be identified by government development expenditure. Table 6.1 shows that development expenditure increased from P12 million to P1,097 million at current prices, during the first 20 years (1971/72-1991/92), a growth rate of more than 400%. The next decade to 2001/02 saw a growth rate of 24%. This is clearly an indication of the role the government played in preparing the economy for growth and development through the building of infrastructure.

The Public Enterprises and Institutions

As stated above, the public sector is composed of the general government and the public enterprises and institutions. Before discussing the growth and contributions of this sub-sector in Botswana, a look at the various concepts defining public enterprises and institutions would be appropriate in order to distinguish parastatals from public enterprises. We also distinguish between financial and non-financial public enterprises.

Public Enterprises

Public Enterprises (PEs), also referred to as State-Owned Enterprises (SOEs), are entities in which government owns more than 50%. Although government controlled, they earn a major part of their revenue from the sale of goods and services, they are self accounting, and they have a legal entity separate from government (Nellis and Kikeri, 1989). Public enterprises can be

financial or non-financial. According to the Privatization Policy White Paper of 2000, the non-financial public enterprises in Botswana are:

Botswana Power Corporation (BPC);
Botswana Housing Corporation (BHC);
Botswana Telecommunications Corporation (BTC);
Water Utilities Corporation (WUC);
Air Botswana (AB - currently undergoing privatization);
Botswana Post (BP);
Botswana Agricultural Marketing Board (BAMB);
Botswana Railways (BR);
Botswana Meat Commission (BMC); and
Botswana Livestock Development Corporation (BLDC).

One enterprise in Botswana that has both public and private sector ownership is Debswana, Botswana's diamond mining company. The Botswana Government holds a 50% free equity with the other 50% owned by De Beers, the international diamond mining company. The 50% share by government was negotiated up from 15% in 1978, after it was discovered that the minerals were more profitable than initially envisaged. Debswana, although co-owned by the Government of Botswana, is not considered a public enterprise (Jefferis, 1994).

Financial Public Enterprises

Financial Public Enterprises (FPEs) are those that, to varying degrees, operate like commercial banks - they may mobilize savings by receiving deposits from the public, or even operate as lending institutions. This is the main distinguishing feature of the financial PEs from the non-financial PEs above, such as the BHC or the BTC. Financial PEs in Botswana are:

Botswana Savings Bank (BSB);
National Development Bank (NDB);
Bank of Botswana (BOB);
Botswana Development Corporation (BDC);
Botswana Building Society (BBS); and
Botswana Motor Vehicle Insurance Fund (BMVIF)

The characteristic common to both is that the financial as well as the non-financial PEs raise revenue from the sale of goods or services.

Parastatals

These are public entities created by an act of parliament, for a specific purpose, whether economic or social. They need not generate their revenue by selling goods and services, in which case they are financed by government budget allocations. This, therefore, marks the difference between a parastatal and a PE: the parastatal does not have to generate revenue from selling goods or services. Thus, while all PEs are parastatals, not all parastatals are PEs (Privatization Policy Draft White Paper, 1998). Non-PE parastatals in Botswana are:

University of Botswana (UB);
Botswana National Productivity Centre (BNPC);
Botswana Export Development and Investment Authority (BEDIA);
Institute of Development Management (IDM);
Rural Industries Promotion (RIP);
Botswana Technology Centre (BTC)
Food Technology Research Services (FTRS);
Botswana College of Agriculture (BCA);
Botswana Vaccine Institute (BVI);
Botswana Bureau of Standards (BBOS); and
Botswana Accountancy College (BAC).

Contribution and Performance of Public Enterprises and the Private Sector

The multiplicity in the goals of the Public Enterprises (PEs) makes it difficult to measure their performance, and/or compare this with the performance of the private sector. The commonly used measure of profits as an indicator of efficiency or as a means of comparison would not be appropriate, because the goal of PEs is not always profit maximization. In addition, PE managers tend not to have autonomy to raise prices in response to market conditions, or to reduce costs. For example, reducing employment levels tends to become a political issue, even if the same level of output could be achieved by doing so. Thus PEs tend not to be able to maximize profits even if they wanted to (Weis, 1995)

However, to the extent that employment creation is one of the major facets of economic development, employment by the public enterprises is a measure that can be adopted to examine the role or contribution of the public sector in economic development. The question is the extent to which the PEs have contributed to economic development through employment creation. In addition, other indicators of the relative contribution of the public sector to economic growth and development include Gross Fixed Capital Formation (GFCF) of the public and the private sectors, and relative contribution to total value added.

Employment, Fixed Investment and Value Added of General Government, Parastatal and Private Sectors

Table 6.2 presents trends, at 5-year intervals from 1977, in the relative contributions of the public (general government as well as parastatals) and private sectors. The analysis undertaken is of the relative contributions of the government and non-government sectors to employment creation, gross fixed capital formation and value added.

Due to the unavailability of the relevant information, the analysis of investment and value added has only been undertaken for the general government relative to the national average, which gives a comparison with the non-government sector. Although the public sector comprises of government as well as parastatals, as indicated by data on employment, parastatals constitute a small proportion of the total public sector.

As Table 6.2 shows, the public sector appears to contribute substantially in terms of employment creation to total employment, although this declined relatively over the 25-year period considered. In fact, the government sector has always been the biggest single employer in the economy. Growth of employment for the period 1987-2002 was almost 100% for the general

Table 6.2. Economic indicators: General government, parastatals and the private sectors: 1973-2002.

	1977	1982	1987	1992	1997	2001/2
	Employment					
General Government	20,900 ^a	34,400	52,800	72,200	88,003	105,156
Parastatals			8,700	13,400	13,787	13,564
Private			88,700	134,500	135,760	155,062
Total	41,300	100,100	150,200	227,500	237,550	273,782
Employment: Gov/Total (%)	50.6	34.4	35.2	31.7	37.0	38.4
	Fixed Investment - GFCF (Pmill.)					
General Government	41.1	123.4	588.9	1067.1	3194.5	
National GFCF	110.1	320.3	1081.8	2618.8	5170.1	7743.3
GFCF: Gov/National (%)	37.3	38.5	54.4	40.7	61.8	
	Value Added (P mill.)					
General Gov.	63.2	191.5	562.9	1431.5	2918.6	5264.1
National (GDP)	412.1	1153.1	3795.6	9119.2	20162.6	31999.9
Value Added: Gov/National (%)	15.3	16.6	14.8	15.6	14.5	

a. Data for 1978.

Source: Bank of Botswana Annual Reports, several; National Accounts of Botswana, 1987/88, 1993/94-2000/01.

government sector, while the parastatals showed a growth of 55% over that period. However, the public sector as a whole registered growth of employment of 93% over that period. This compares with growth for the private sector of almost 75%. Therefore it can be argued that, as far as employment creation is concerned, the public sector, in particular the general government sector, has continued to play a significant role in the economy. Nevertheless, whilst in 1977 the government sector employed roughly 50% of the total, by 2001 this proportion had declined to 38%. This is an indication of the growing importance of the private sector in employment creation.

With respect to fixed investment, Table 6.2 shows that while the proportion of gross fixed capital formation (GFCF) by the general government sector to the national GFCF was 37% in 1977 this had increased to more than 60% by 1997. Much as the private sector seems to have played a significant role in its contribution to employment creation, in terms of gross fixed capital formation its relative contribution was declining. The combined effect of a relative decline in employment creation with an increase in the relative contribution to fixed investment for the public sector indicates an increase in capital intensity as compared to the private sector.

The growing importance of the public sector in terms of fixed investment and employment creation begs the question of the relative role this sector played in value added in the economy. Table 6.2 shows that, except for the early years when the data reveals a low ratio of 10% for 1973, there was relative stability of the general government sector in value added over the period 1977-97, at around 15%.

A question that needs to be addressed is that of the relative efficiency of the public versus the private sectors, that is, while the government seems to play a significant role in fixed

investment, has it also been efficient in its use of resources? The answer to this question is provided in the following analysis.

Efficiency of Government and Public Enterprises versus Private Enterprises

Government departments and public enterprises have been accused of inefficiency for several reasons, as stated above. Generally, efficiency increases if there is an increase in output without any increase in inputs, or if lower inputs are used to produce a given level of output. This is termed 'technological efficiency'. Thus, productivity of factor inputs must increase for the enterprise to be said to be experiencing efficiency gains.

Figure 6.1 shows trends in output per unit of capital for the general government and non-financial parastatals as compared to national averages. Due to data limitations, comparison is made taking the general government and the non-financial parastatals to represent the public sector;¹ no data were available to compare directly with the private enterprises. Comparison with the private sector is therefore made by deduction: divergence of the public sector from the national average indicates an even wider divergence from the private sector. Output is measured by value added for the public enterprises (as represented by the non-financial parastatals) and general government. Capital is measured by using gross fixed capital formation as a proxy. The Output-capital ratio (Q/K) is computed and used as a measure of efficiency - a higher Q/K ratio therefore represents a higher level of efficiency. Similarly, an increase/decrease in the Q/K ratio is used to indicate an increase/decrease in efficiency.

As Figure 6.1 shows, the output-capital ratio of both the general government and the non-financial parastatals is much lower than the national averages. Given that the national output-capital ratio is higher than that of the public sector, by deduction that means that the ratio for the private sector is much higher than that of the public sector. Not only is there a clear divergence between the public sector as compared with the national average and thus with the private sector in terms of efficiency, but there is also an indication of a declining trend of the Q/K ratio for the government sector, while the trend seems to be indicating a rise in the Q/K ratio for the national average. It could then be said that, while the government sector seems to be experiencing a decline in efficiency, the national average - and from that the private sector - seems to be experiencing efficiency gains.

One explanation that can be advanced for the inefficiency of the public sector is that public enterprises tend to have a multiplicity of objectives. While they may be expected to be self-sustaining, which means striving for *making* (not necessarily *maximizing*) profits, their operations may be incompatible with the maximization of profits. An example would be the provision of public utilities in remote areas at a price that does not reflect opportunity costs. PEs also tend to operate in activities that are strategic, i.e. that have strong positive externalities, for example, where there is a need for manpower development or the provision of health facilities. Private firms would be unwilling to invest in such activities unless there are adequate compensatory subsidies, such as tax incentives. Nevertheless, to the extent that some activities provided by these public enterprises *can* be provided by the private sector (and with greater efficiency), it can be argued that the inefficiencies that sometimes characterize the production of these goods and/or services are unjustified. In addition, the allocation of public resources for the provision of

1. Financial parastatals are excluded because available data combines public with private financial institutions. This data is not used because the contrast sought is private versus public.

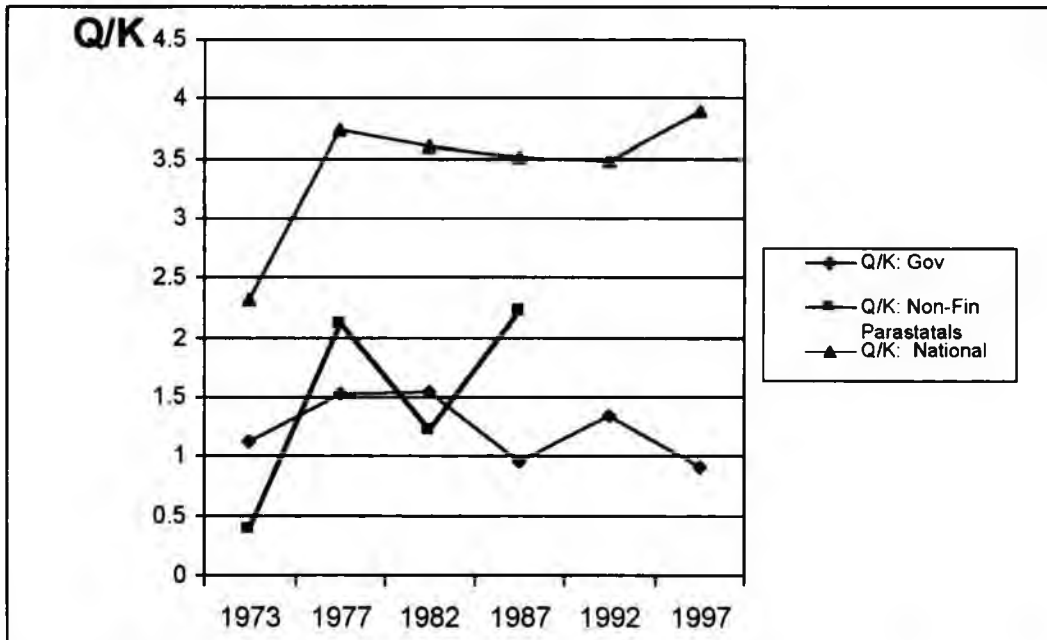


Figure 6.1. Trends in productivity of capital: Public sector vs total national.

these goods and/or services also becomes unjustified, especially in so far as such allocative inefficiencies have the potential to crowd out the private sector.

Financing of Public Enterprises in Botswana: The Public Debt Service Fund vs. Private Sources

The Public Debt Service Fund (PDSF) and the Revenue Stabilization Fund (RSF) were created by the Government of Botswana in 1973 in order to provide financing to parastatals on softer terms than those available commercially. The original purpose of the PDSF was to generate income for the government to service future public debt obligations (BOB 1993, p 24), and not so much to act as a source of credit for the parastatals and local authorities. The RSF, on the other hand, was established to create a reserve of funds during periods of unusually high revenues, to be drawn down during times of low recurrent revenue. This was meant to allow for the smooth growth of government spending, irrespective of the revenue situation. These two funds came to be the major source of funding for the parastatals, which borrowed at interest rates below market rates. Table 6.3 shows the relative importance of the PDSF/RSF funds in total outstanding credits. Up to 1998, total outstanding PDSF/RSF loans were higher in absolute terms than total outstanding loans by the commercial banks. This on its own is an indicator of the relative importance of the role that the public sector played in the credit market.

According to Table 6.3 and Figure 6.2, interest rates charged by the government on PDSF loans were consistently lower than prime market rates of interest until 1993. From 1994, interest rates on PDSF loans rose above prime rates. Due to the increase since 1992 in nominal interest rates on PDSF loans, and the fact that from 1994 interest rates on PDSF loans were less than

favourable (Table 6.3), PDSF loans started to decline in absolute terms and as a proportion of total government spending. From 1997 therefore, PDSF loans constituted less than 1% of total government spending, down from a high of 15% in earlier periods.

Table 6.3. The PDSF and RSF and lending to parastatals.

	PDSF/RSF Loans (pmill)	PDSF loans as % of Total Gov. exp & net lending	Interest rates (nominal)	
			PDSF Loans	Prime
1983	52.7	11.5	10.00	13.00
1984	68.9	11.2	10.00	11.50
1985	49.1	6.8	10.00	11.50
1986	47.5	4.7	8.50	10.00
1987	76.1	5.8	8.50	10.00
1988	110.4	6.2	7.50	7.50
1989	303.5	13.7	7.50	8.00
1990	454.2	15.4	8.00	9.00
1991	506.8	15.0	9.50 ^a	12.50
1992	417.2	11.1	12.00	14.50
1993	281.3	6.3	14.60	15.00
1994	103.0	2.4	14.60	14.50
1995	113.4	2.2	14.60	14.50
1996	103.9	1.7	14.60	14.50
1997	68.1	0.9	14.60	14.00
2001	30.0	0.2	16.25	15.75

Notes: Starting 1991, a two-tiered interest rate structure was introduced, with financial PEs getting the lower rates. The rates reported here are for the non-financial PEs i.e. the higher rates.

Source: Statistical Bulletins; Bank of Botswana Annual Reports, several.

It can be argued that, by making PDSF loans easily accessible and at softer terms than the dictates of the market, the government was crowding out the commercial banks from the credit market. Parastatals were not only cushioned against competition for credit with other private enterprises, they also had access to cheaper credit. However, as the cost of PDSF loans approached and even surpassed that of commercial bank loans, there was a substantial decline in demand for PDSF loans, again in response to prices.

Figure 6.2 indicates the role that competitive market pricing can have in allocating resources. As PDSF interest rates approached and even surpassed market interest rates, government lending to parastatals declined, which left them to compete with other private enterprises in the market for credit.

Public Sector Reform and Privatization

If we accept the argument that the public sector, both the general government and the public enterprises, are inherently inefficient, then it could be said that the greater the participation of the public sector in the economy the greater the inefficiencies, and therefore the lower the

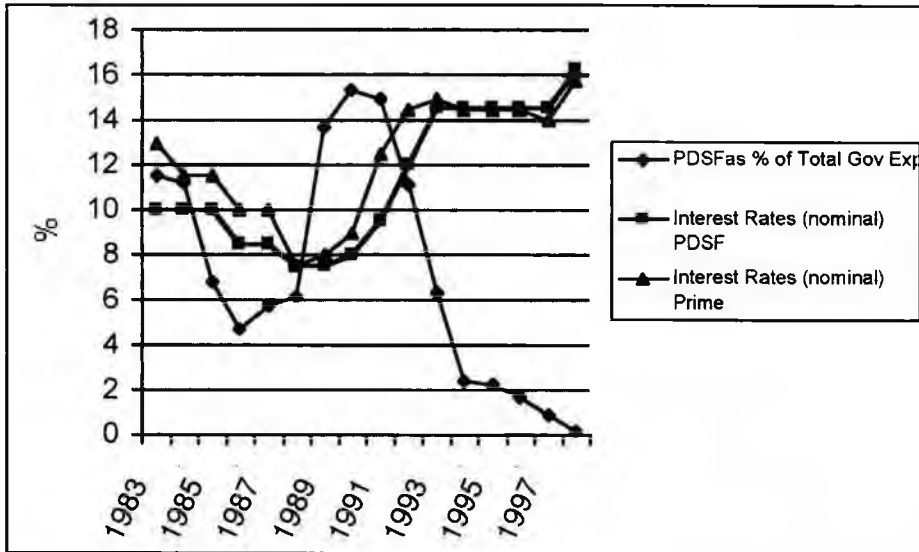


Figure 6.2. PDSF loans in government spending: Role of interest rates.

competitiveness of that economy. The question then arises as to whether to reduce those inefficiencies through public sector reforms, or through a reducing in the size of the public sector through privatization.

Due to the burden that public enterprises in general tend to place on the public coffers, reforming and/or privatizing them has been seen as an imperative especially in developing countries. The following section examines the reform process of the government sector, in general as well as that of the PEs in Botswana.

Improving the Performance of the Civil Service and Local Government in Botswana

Several methods were adopted by the government in an effort to improve on productivity and efficiency of government employees. Basically, the methods revolved around using persuasive means to motivate government employees to work harder. To the extent that government output is not easily measurable, it is difficult to assess the relative roles played by any or all of these initiatives in improving the efficiency of the public sector. Nevertheless, suffice it to say at this point that recognition of the need for improvement in the performance of the public sector seems to be a step in the right direction.

Job Evaluation

Job evaluation was introduced in 1988, with the aim to align job responsibility and/or output with remuneration. In other words, this was an effort to realign the wage rate with the marginal product of labour. Needless to say, it had the potential to raise wage rates of some cadres, but also to reduce others. As a result, the Job Evaluation exercise was misunderstood by most of the civil service, who by and large had perceived it as a salary review exercise, and who, therefore, had expectations of only the upward movement of salary scales. The system has not been

evaluated since its inception (NDP 9, p 372). The evaluation exercise was to be carried out during NDP 9.

Parallel Progression

In 1993 the Government of Botswana adopted what was referred to as *parallel progression*. The purpose was to motivate personnel - especially at senior levels - by allowing them to reach higher grades in the remuneration hierarchy without having to leave their professional cadre. For example, a medical doctor was enabled to be at par with a Permanent Secretary without having to strive to become a Permanent Secretary in order to advance. Implementation of parallel progression is still on-going.

Performance Management System (PMS)

The latest and most comprehensive method to improve the productivity of government employees is the Performance Management System (PMS). Basically, PMS centres on each government ministry and department, setting up their individual strategic plans in line with Vision 2016. Emphasis is placed on goals and plans that are measurable; these are then periodically measured so as to gauge performance against the set targets. Departments and ministries, through their heads or Permanent Secretaries, then periodically report to the Permanent Secretary to the President, and to the Economic Committee of Cabinet.

The Botswana National Productivity Centre (BNPC) has been given the task of facilitating this exercise. It has been given from 1999 to 2004 to assist the ministries and departments in setting up the PMS and ensuring that it runs; thereafter the ministries and departments are expected to operate along the lines set by the PMS.

The success and effectiveness of the PMS in enhancing productivity of the government sector can only be gauged after several years of its use. In particular, an evaluation can best be made whether the targets set within the National Development Plan 9 (NDP 9) were delivered *on time*, and *within the budget*.

Improving the Performance of the Public Enterprises

While efforts are continuously underway to improve quality in service delivery in the government sector, in order to improve efficiency of the public sector for enhanced competitiveness, it is also necessary to reform the public enterprises. Reforming public enterprises involves the following (Weis, 1995):

- Clarifying and simplifying the objectives of the PEs;
- Establishing appropriate evaluation and incentive schemes; and
- Establishing a competitive environment where market forces predominate.

The multiple and often conflicting objectives of PEs make their operations rather complex. A PE may be imposed upon to provide a service in a remote area, even if this compromises profit maximization. Or a PE may be expected to create employment, or political bottlenecks may prevent it from shedding off redundant employees; again these interventions compromise profit maximization. Such conflicting objectives need to be removed if PEs are to be efficient; a PE needs to be able to operate like a commercial private enterprise and allowed to maximize profits. In such cases, the government may have to step in such that, while the PE continues to provide

the service in the remote area, for example, it receives a subsidy clearly targeted at bridging the gap between social and private costs. This will provide for the welfare of the consumers without compromising the commercial operations of the PE. It may be better sometimes to offer the goods or services at subsidized prices directly through government budgets, rather than allow the PE to run losses just so that it can meet its social objectives.

The objectives of employment creation could be addressed directly by generating employment through programmes specifically targeted at the poor, and thus avoid having PEs that operate inefficiently in the misconception that inefficiency is unavoidable due to the multiplicity of objectives imposed on them. The point is that the PEs should be allowed to operate like commercial enterprises without necessarily compromising on the welfare of the consumers or the employees.

Regarding evaluation and incentive schemes, a starting point could be to set targets (for example profits) and to reward the achievers. Those who over-achieve (i.e. who surpass the targets) could further be motivated by having the marginal tax rate on the excess profit lowered.

A further incentive to successfully achieve set targets could be the establishment of a competitive market environment, where those who do not achieve the targets face a real threat of closure and/or privatization. This involves removing expectations that losses will be automatically covered by the government. Operating in a competitive environment also involves allowing market forces to prevail in employment, i.e. allowing wage rates to be market determined such that scarce skills can be retained by removing wage controls. In addition, PEs should be allowed to retrench if and when it becomes necessary, by removing restrictions that may exist on retrenchments.

Privatization in Botswana: What is it, and Why?

Efforts at improving efficiency and competitiveness may sometimes entail changing ownership from public to private hands. Efforts at reforming public enterprises may still not achieve the efficiency levels of the private sector; when this happens privatisation is justified.

Privatization, in the narrow sense, involves the transfer of ownership from the public to private sector. This is referred to as divestiture, to distinguish it from other forms of privatization. Other forms include outsourcing or contracting out, whereby certain activities within the enterprise are contracted to the private sector, while maintaining ownership within the public sector; management contracts, whereby management of the public enterprise is given to private hands (i.e. the managers are not part of the PE); and commercialization, whereby the enterprise, although still a public entity, is run along commercial lines, which would involve eliminating controls on how it is operated. To a large extent, these latter forms of privatization amount to public sector reform processes as discussed above. But it is important to include them as part of privatization because, for one thing, they may constitute the preparatory stages for divestiture; yet they may also be an end in themselves. This is especially relevant where divestiture may not be appropriate, for example in small economies where, because of market size, some of the PEs, especially the public utilities, are natural monopolies (see above). Divestiture may also not be appropriate where capital markets are still undeveloped for citizens to effectively participate in the buying of shares of these enterprises when they are floated on the stock market.

The Government of Botswana set up a privatization policy in 2000. The sole purpose of going through the exercise of privatization was to improve on efficiency and therefore competitiveness. Arguments have been made in the past that Botswana did not need to undertake

a privatization exercise. Reasons given were that Botswana's PEs were not, by and large, incurring losses, an indicator of relative productive efficiencies; that, unlike in most of the other sub-Saharan African countries, they were small relative to GDP; and that the small market size makes some of them, especially the public utilities, become natural monopolies (Jefferis, 1994). In addition, the Botswana economy has performed at levels that are higher than most developing countries, especially in Africa, having had one of the highest growth rates even by world standards; and it has not been subjected to the Structural Adjustment Programmes that other developing economies have had to undergo as a condition for financial assistance from the international financial institutions, such as the IMF.

These arguments continue to be adhered to. The economic situation is still healthy by international standards, especially in comparison with sub-Saharan Africa. Botswana has high economic growth and a low debt situation, and there is therefore no pressure from international financial institutions to privatize. The Government of Botswana has chosen to undertake the privatization exercise not for reasons similar to those of its contemporaries, but rather to improve efficiencies and therefore competitiveness. This has become more important in the new era of globalization.

What to Privatize, and How?

A rule of thumb on what to privatize should be that, in cases where a good or service that is provided by the public sector can be provided by the private sector, such goods or services should be hived off. However, a number of points should be taken into consideration. Privatization should not be undertaken for its own sake, without considering the consequences on the economy, the employees, the consumers of the product of that enterprise, etc.

The success of a privatization programme depends to a large extent on the reasons and/or strategies adopted for implementing it. For instance, in cases where it is undertaken for fiscal reasons, e.g. to reduce the fiscal burden on the government or to reduce the burden of operating loss-making enterprises, it is possible that privatizing these enterprises may not solve their problem - they may continue to make losses. The tendency is for loss-making enterprises to retrench employees in an effort to improve their performance. Thus the retrenchments would be seen as a direct result of privatization, when in fact it could have been avoided had the enterprise been making profits in the first place. Retrenchments would then create further antagonism towards the privatization exercise. Therefore, one of the rules of thumb should be: do not privatize a loss-making enterprise. Rather reform it first, to create a potential for it to thrive in the market.

Preparing For Privatization

In order to increase the chances for success in privatization, thorough preparation is required. Experience in Africa suggests that privatization has had limited success as evidenced by, among others, the length of time it took to implement it. Some of the conditions identified as pre-requisites for privatization (Bouin, 1992) are:

- The creation of a privatization body with independent legal status;
- The adoption of a law specifying the modalities for the transfer of ownership to private hands;
- and

- The adoption of provisions for the resolution of possible disputes resulting from the privatization operations, including modalities on how to deal with employees of the enterprises being privatized (the main anti-privatization concerns are its impact on employees).

In Botswana, the creation of the privatization body, the Public Enterprise Evaluation and Privatization Agency (PEEPA), was the first step in the process. However, as stated in the Draft Competition Policy, there is still a need for a Privatization Law. Other preparatory mechanisms and instruments may be contained in the Privatization Master-plan still being considered by government. Emphasis is placed here on the latter item, which is to have mechanisms in place for post-privatization safeguards and safety-nets for employees.

Once the above preparatory environment is in place, privatization requires preparation of the private sector. Some reform measures may need to be undertaken in order for the environment to be conducive for greater private sector participation in the economy. These may include some of the following:

- Developing and/or strengthening the capital market;
- Reducing or removing bottlenecks in access to credit; and
- Creating an environment of competition in the market place by developing or strengthening the policy on anti-competitive behaviour.

Developing a Capital Market

Developing countries are known for their weak capital markets. Removing ownership of an enterprise from the public to private hands may lead to a concentration of wealth in the hands of a few individuals. One way to mitigate against that is to have a vibrant capital market, in which citizens can easily participate in the buying and selling of shares.

Another problem in developing countries is a lack of information and knowledge. Even though shares may be floated on the stock exchange, and even though these may be affordable to many, a lot of people may not participate because of a lack of understanding. Therefore there is a need for public education on how the stock exchange operates, for information whenever new shares are floated, and for information on how to participate. Providing these will have the potential to create acceptance of the privatization programme: the knowledge that ordinary citizens can become co-owners of the enterprise, not just the rich few, will broader support for privatization.

Greater Access to Credit

In Botswana, one of the problems with credit is that it tends to have short term maturity. In 1991, total loans and advances by commercial banks with a maturity of more than five years were only 9.6% of the total (Bank of Botswana, 2002). Although this proportion increased to around 18% by 2002 (44.6% had maturity of between one and five years), this was still low, and it needs to be increased further if domestic investment is to be enhanced.

Competition and Competition Policy

While arguments have been advanced on the inefficiencies of public enterprises, the counter-argument that it is not the *ownership* that is the cause of the inefficiencies but the *market structure* can also be made. Efficiency may be seen more as a result of competition rather than whether the enterprise operates as a public or private sector entity. Therefore, whether an enterprise is publicly or privately owned is not the issue: rather, it is whether it operates in a competitive environment, or whether it enjoys monopoly market power. Ownership is thus seen as only one of a number of factors influencing performance (Weiss, 1995). Microeconomic theory demonstrates the superiority of competitive market structure over monopoly: the former produces more, employs more factors (e.g. labour) and charges lower prices than monopoly firms (Binger and Hoffman, 1988, p 384).

Arguments of market structure as opposed to ownership as the determinants of performance would therefore advocate a Competition Policy as a necessary tool in a developing country that needs to improve efficiency in its economy. A competition policy would guard against anti-competitive behaviour, such as mergers and acquisitions that lead to market dominance. It would also protect consumers against unfair business practices, such as colluding in order to operate as a monopoly and restrict output through quotas, or charging excessive prices. Such a competition policy is vital in creating a conducive environment for privatization in order to achieve its goal of enhanced efficiency and therefore competitiveness in global and domestic markets. Without a Competition Policy and Competition Law, privatization could lead to takeovers of public enterprises and eventual mergers and/or other anti-competitive behaviour, which would work against the very spirit and essence of privatization.

Competition Policy is still being drafted in Botswana. This policy is intended to prepare for, amongst others, the privatization programme yet to be launched. The primary objectives of the Competition Policy and Law are to enhance efficiency in resource use, protect the freedom of economic action of firms, and to promote consumer welfare (Draft Competition Policy, February 2004).

In terms of the privatization of public monopolies, the above entails examining the possibility of separating any natural monopoly elements of public enterprise from the potentially competitive elements. An example is the separation of the main grid electrical transmission from the "connectivity, marketing, distribution and transportation" of the Power Utility, by leaving the former as a public monopoly whilst subjecting the latter to unbundling and privatization under a competitive market structure (Draft Competition Policy). Whilst the natural monopoly elements would be subjected to regulation, for consumer protection purposes amongst others, the privatized elements would be subjected to the Competition Law.

The point can be made, however, that it is not just having a Competition Policy that is vital, but also implementing it. The government, as the watchdog of its people, has to be active in guarding against anti-competitive behaviour, especially in an economy such as that of Botswana, where many citizens and small indigenous firms do not possess information and knowledge about what is allowed or not allowed. It is for this reason that the government is considering a Competition Authority, which will oversee the operation of the Competition Policy and use the Competition Law to protect producers and consumers against anti-competitive practices.

Regulation

As argued above, despite the advocacy for competition over monopoly market structures, most public enterprises in Botswana are natural monopolies. Even where scope for unbundling exists, the potential for unbundling may only be appropriate for some elements of the enterprise. This is principally because most operate under increasing returns to scale, which makes it difficult for them to be split or fragmented (some partially, others completely) to create a competitive environment. The main reason for this is limited market size, which would make fragmentation cause these enterprises to be even more inefficient than they already are. Another reason is that it may not be commercially profitable to provide some services in remote areas, thus such activities would not be attractive to private investors if these were to be subjected to privatization. Nevertheless, efficiency is still an important element even for such activities, if the economy is to promote and maintain competitiveness. The answer in such a case is therefore regulation. This would also protect the consumer from exploitation if a public monopoly is privatized, since potential is created by the privatization exercise for exploitation of the consumer, especially where the commodity produced is a strategic one such as the provision of a utility.

Therefore, to the extent that it may sometimes be unavoidable to operate an enterprise as a monopoly (even where the public enterprise is privatized), regulation becomes imperative. Regulation entails monitoring an enterprise to ensure that it operates in a manner that does not compromise its efficiency, and that it does not exploit the consumer through, for example, excessive pricing or poor quality of the product. Regulation can be internal - i.e. when a public enterprise is internally regulated (by a public regulator) - or external, where a private monopolist is regulated by the public regulator.

It is easier to regulate a monopoly that is in the public sector than to externally regulate a private monopoly (through, for example, the supervision of prices or profits, or even output control). The external regulator may not have the capacity or expertise to carry out such a task. More importantly, it may not have access to correct information. If regulatory capacity is weak, as is likely to be the case in developing countries, then keeping the monopoly in public hands would be preferable to transferring it to the private sector. This is one case where privatization is not a solution to the problems of inefficiencies in the public sector. The challenge for the Government of Botswana is whether to have a multi-sector regulator, or have sector-specific regulators. The advantage of the former is that it avoids excess or idle capacity that may exist if each sector had its own regulator; further, the financial and human resource capacity may simply not exist to have regulators for each and every sector. The advantage of the latter option is that some sectors require highly technical expertise that is industry-specific, and therefore the result would be greater efficiency in the operation of the sectors. Government is still considering the merits and demerits of each of these options.

Summary, Conclusion and Policy Recommendations

The private sector has been seen to be taking up an increasingly greater role in Botswana. The public sector, which consists of the general government and the parastatals, is still the biggest employer, however, and is increasingly becoming the biggest investor. The growth of the public sector has been identified with increasing inefficiencies in the use of resources. Therefore, the government has embarked on a privatization programme. No public enterprises have yet been

privatised, but a number of initiatives must be put in place if the privatization exercise is to be successful in terms of realizing the goals of increased efficiencies, and greater public acceptance.

Privatization is not a panacea; it could end up causing greater welfare losses if public enterprises transfer to private hands, only to become private monopolies. There is thus a need for a strong Competition Policy that closes all possible loopholes that could lead to the exploitation of the consumer.

Because of the small size of the market in Botswana, coupled with the fact that it may not be commercially viable to provide some of the services in remote areas, some enterprises may have to continue to operate as public enterprises. They would have to undergo reforms in order to improve their performance and enhance their competitiveness, however, even though they are not in competition. A fundamental aspect of the reform process is to make clearer the objectives of the enterprise - to remove or reduce the multiplicity of objectives. Where social objectives are fundamental for the welfare of the people (consumers or employees), the government could step in to provide subsidies that would enable the enterprise to operate like a commercial enterprise. This has the advantage that it removes the 'hiding behind the social objectives' function of the enterprise, which tends to be used as a justification for failure to realize profits or provide acceptable service.

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Chapter 7

Agriculture and Rural Development in Botswana

P. M. Makepe

Background

Botswana is a country with a relatively small population of about 1.7 million people (2001 Census Report). Almost half of the population resides in rural areas, where they derive most of their income from agriculture. The country has a semi-arid climate with a mean rainfall ranging from 650 mm in the northeast to less than 250 mm in the southwest. Most soils in the country are poor in organic matter and nutrient quality. Vegetation types range from tropical savanna to savanna grasslands, and support an extensive system of livestock farming and wildlife. Low, erratic rainfall and endemic droughts seriously constrain farming because water availability is low and unreliable.

The climate and agroecological conditions therefore diminish the ability of the agricultural sector to meet the country's objectives of food security, rural poverty alleviation, increased agricultural output and productivity, employment creation, and resource allocation efficiency achieved within a sustainable environment. Despite significant government investment to promote agriculture, the sector continues to perform poorly (Ministry of Agriculture, 2000). Nevertheless, the country's climate does support other activities, such as livestock and wildlife farming, that provide alternative ways through which government can seek to improve and diversify rural incomes and alleviate rural poverty.

Agriculture in the Botswana Economy

When Botswana gained its Independence in 1966, the agricultural sector's contribution to Gross Domestic Product (GDP) was about 40%. Since then, agriculture's contribution has declined drastically to about 3% (Ministry of Agriculture, 2000). Table 7.1 shows changes in the structure of GDP in Botswana for selected years since Independence.

The decline in agriculture's share of GDP has been largely attributed to the rapid growth of the mining sector and slow growth in the agricultural sector. Between 1981 and 1996, the agri-

Table 7.1. Changes in the structure of GDP in Botswana for selected years (percentage).

Activity	1966	1976/77	1986/87	1996/97	1999/00
Agriculture	39.0	24.0	4.0	3.4	2.6
Mining	0.0	12.0	47.0	38.9	33.1
Other	61.0	64.0	49.0	57.7	64.3

Source: Statistical Bulletin (various years).

cultural sector had 14% growth in GDP. In contrast, other sectors of the economy grew by 60 to 85% over the same period (Ministry of Agriculture, 2000).

Despite the decline of the agricultural sector in aggregate terms, its role in Botswana's economic development has not diminished. Agriculture continues to provide direct and indirect linkages to both the rural and national economies, and remains an important source of food, income, employment and capital formation for most people residing in the rural areas. Half of the rural population depends on arable farming for its income. Approximately 25 to 30% of the economically active rural population is engaged in agriculture (Ministry of Agriculture, 2000). Therefore, it is in the long-term interest of the nation for government to continue to promote productive investment in agriculture in order to improve the living standards of the rural populace.

The Structure of Agriculture

Agriculture in Botswana is characterized by the duality or the coexistence of traditional and commercial production systems in the arable and livestock sectors. The major differences between traditional and commercial production systems are based mainly on land tenure, the level of technology adoption and the degree of market integration. Any strategy aimed at enhancing overall agricultural productivity must take into consideration the characteristics, prevailing conditions and constraints within each production system, so that only targeted and appropriately designed strategies are implemented.

Organization of the Arable Sector

The arable sector consists of traditional and commercial subsectors. The traditional subsector relies on rainfall and operates mainly on communal land. On the other hand, the commercial subsector has some irrigation and operates mainly, but not solely, on leasehold and commercial land.

Table 7.2. Crop statistics: Sorghum, maize, millet, beans or pulses, sunflower and groundnuts (2001).¹

Crop	Total area planted (ha)	Total area harvested (ha)	Total production (metric tonnes)	Average yield per hectare planted (kg)	Average yield per hectare harvested (kg)
Sorghum	23,204	13,409	1,583	68	118
Maize	47,637	24,977	4,976	104	199
Millet	3,352	1,709	472	141	276
Beans/Pulses	14,699	8,251	1,280	87	155
Groundnuts	1,464	526	147	100	279
Sunflower	962	734	150	156	204
Other crops	2,843	523	8,962	3,152	17,136

Source: Agricultural Statistics (2001).

1. The figures for 2001 are only available for the traditional sector. Data for the commercial sector is still yet to be finalized.

The main crops grown are sorghum, maize, millet, beans or pulses, sunflower and groundnuts. The production of high-value crops like cotton and horticulture tend to be the domain of the commercial subsector. Table 7.2 shows various crop statistics in terms of the total area planted, total area harvested, total production, and average yield per hectare planted and harvested for each crop in 2001.

Five distinct types of farms have been identified in the arable sector (Fidzani, *et al.*, 1997). The first type of farm is small, having an average farm size of five hectares, and is draught-power deficient (Ministry of Agriculture, 2000). Farming practices include broadcast sowing with no chemical applications. Very low yields are obtained here. Just enough sorghum and maize is produced for subsistence purposes, although in good years a surplus may be produced. Nevertheless, the marketed surplus is minimal because the lack of draught power dramatically limits output. Molapo farming (farming on receding flood plains) is one example of this type of farming system. About 63,200 farms fall into this category in the traditional sector, of which only 112 farms have a size exceeding 150 hectares (Ministry of Agriculture, 2000).

The second type of farm consists of subsistence farming with access to draught power. The average holding is between six to fifteen hectares, with limited access to tractors and other improved technologies. A sizeable marketed surplus is produced in good years as draught power is no longer a major limiting factor, enabling farmers to take advantage of early rains.

The third type of farm is the commercial dryland farm found on both communal and freehold land. This type of farm is found mainly in the eastern and southern parts of the country. The focus here is on commercial grain production. Farmers in this group use better farming techniques in the form of mechanized conventional tillage and planting, better seed varieties, apply chemicals and use improved management practices. The average area planted is about 149 hectares, and this farming system accounts for about 35% of total food grain production.

The fourth type of farm is the commercial dryland leasehold farms. The Pandamatenga commercial farms fall within this category. These farms receive higher rainfall and have better soils than those in other parts of the country. These farms are fully mechanized, applying chisel rather than conventional mould-board ploughing, and use advanced crop protection methods and professional management. Average sorghum yields are higher here than anywhere else in the country.

Finally, there are the medium and large scale commercial irrigated farms. Most of these farms are located in the Tuli Block area. Production here is mainly devoted - but not restricted - to the cultivation of high value crops such as vegetables and fruits.

Differences between the Traditional and Commercial Arable Subsectors

The traditional and commercial subsectors differ in several ways that place the commercial subsector in a better competitive position. First, most of the traditional farms are small in size, large in number, are widely dispersed throughout the country and have poor access to credit, inputs and infrastructure. In comparison, commercial farms are larger in size, smaller in number, are less dispersed and have better access to credit, inputs and infrastructure. Consequently, commercial farmers tend to be more organized and well-informed about improvements in technology and farm management practices because they face lower transaction costs than their traditional counterparts. Second, traditional farms tend to be located on land that is of lower quality, while commercial farms tend to be located in areas of the country that are relatively more suitable for arable production. This factor contributes to higher yields on commercial farms

compared to traditional farms. Third, in the traditional subsector, risk-averse and resource-poor farmers use indigenous farming techniques like broadcasting, which are tried and tested methods of production guaranteed to give households at least some output even in bad years. Therefore, traditional farmers follow a risk minimization strategy and produce mainly for subsistence. In contrast, commercial farmers who have more resources at their disposal use more modern farming techniques, aim for profit maximization and produce for sale. Nevertheless, the traditional subsector dominates in terms of area cultivated and the cultivation of cereal crops, mainly sorghum. The commercial farms dominate the arable sector in terms of high value crops cultivated, such as vegetables, fruits, sunflower and cotton.

Organization of the Livestock Sector

The most dominant form of land use in Botswana is livestock production, for which the country has some advantages (Hubbard, 1987). The livestock sector's contribution to agriculture's share of GDP is around 70% in good years (Fidzani *et. al.*, 1997). Livestock production is the main source of informal employment, a store of wealth and a means of intergenerational transfer of wealth. Livestock are also held for socioeconomic and cultural reasons.

The most commonly found livestock reared in Botswana are (in order of importance) cattle, goats, sheep and chicken. Table 7.3 shows the different animals by year for the traditional and commercial sectors for the period 1998 to 1999.² From the table, it can be seen that the cattle population makes up more than 50% of the total livestock population.

Table 7.3. Livestock population: Cattle, goats, sheep and chicken (1,000).

Year	Cattle		Goats		Sheep		Chicken	
	Traditional	Comm.	Traditional	Comm.	Traditional	Comm.	Traditional	Comm.
1998	2,181,507	163,114	2,168,962	29,703	376,760	15,188	767,962	8,450
1999	2,466,799	114,411	1,900,990	5,284	357,649	11,753	869,631	4,179

Source: Agricultural Statistics Report (1999).

The goal of most livestock owners is to build their herd sizes, an accomplishment made easy by the free access to communal range land prevalent in Botswana. But livestock production is also hampered by frequent droughts endemic in the country. The lack of surface water has to some extent been eased by the introduction of borehole technology in the 1950s and 1960s, which enabled livestock production to spread westwards to areas previously inaccessible because they lack surface water (White, 1993; Peters, 1994).

The size of the national cattle herd in Botswana has increased over several decades. From a cattle population of about half a million in the 1920s, the national herd increased to one million in the early 1950s. Around 1970, the livestock population had doubled again to two million. The all-time record of just below three million herd was reached at the onset of the 1982-87 drought period (Harvey *et. al.*, 1990). By 1993, the cattle population stood at 1.8 million and increased further to about 2.46 million by 2001 (Statistical Bulletin, 2001).

 2. Figures reported here are for 1999 because this is the latest year for which there is data for both the commercial and traditional sectors.

Over the years, access to borehole water has become the main determinant of access to grazing. Hence, cattle ownership has gradually become skewed towards the wealthier households that can afford to invest in borehole technology. Table 7.4 shows the unevenness in cattle ownership in the traditional sector for selected years during the period 1981 to 1995. From the table it can be seen, that almost half of the farming households within the traditional sector do not own any cattle. Of the households that do own some cattle, the majority have herd sizes of less than 40 cattle. Only 10% have a herd size greater than 100 cattle.

Table 7.4: Cattle ownership in the traditional sector from 1981 to 1995 (percentage).

Cattle per farming household	1981	1990	1993	1995
No cattle	32	38	47	49
1 to 40 cattle	41	38	36	25
41 to 100 cattle	18	18	11	16
> 100 cattle	9	6	6	10
Total	100	100	100	100

Source: Agricultural Statistics, 1981-1995.

Consequently, smallstock like goats and sheep have gradually become important to rural livelihoods. This is particularly true for poorer households with no cattle, such as those farming households that are headed by women.

The livestock sector is also comprised of traditional and commercial subsectors. Although livestock within the commercial sector is kept on freehold and leasehold ranches, 86% of the national herd is raised on communal land (Ministry of Agriculture, 2000). Hence, the traditional subsector plays a significant role in livestock rearing. The traditional subsector production systems vary, ranging from small herders who aspire to become cattle barons to large herders who have already achieved this goal.

Three main groups of herders have been identified following the classification used by Fidzani *et al.*, (1997). The first group consists of small herders with herd sizes ranging from one to 40 and accounts for 34% of the national herd. Within this group, there is a greater reliance on the animal to meet the herders' subsistence needs. These herders place greater value on the live product they obtain from the animal in the form of milk, draught power and security that the herd provides, rather than on revenues from animal sales. Hence, this group does not keep animals for commercial purposes even though these herders ultimately desire to own larger herd sizes.

The second group consists of medium-sized herders with herd sizes ranging from 40 to 100 animals. This group accounts for 25% of the national herd. Within this group, production is commercially oriented and animals are sold regularly to meet household expenditure and herd maintenance costs.

Finally, there are the large sized herders that have herd sizes greater than 100, accounting for 42% of the national herd. This group is commercially oriented. Herd size, travel expenses, wages, borehole drilling and herd maintenance costs dictate that a large number of cattle be sold on a regular basis. Table 7.5 shows cattle ownership according to herd size in 1999 for the traditional sector.

Table 7.5. Cattle ownership according to herd size (1999).

Herd size	Cattle holdings	Cattle population	Total cattle herd	% of total cattle herd size
1 - 40	51,673	833,131	2,466,799	34
40 - 100	10,112	605,616	2,466,799	25
100>	5,177	1,028,052	2,466,799	42

Source: Agricultural Statistics (1999).

Performance of the Agricultural Sector

The performance of the agricultural sector is evaluated in terms of the productivity indicators from the arable and livestock sectors, and the ability of each sector to meet its production target.

Productivity in the Arable sector

In the arable sector, productivity on commercial farms is higher than on traditional farms. Traditional farmers account for more than 80% of the area planted to all crops. Specifically, they account for more than 95% of the area planted to sorghum, maize, millet, and beans and pulses. However, their contribution to total national crop production is less than 80% for nearly all crops (Government Statistics, 2000). Table 7.6 below shows the productivity ratios for the traditional and commercial sector based on the planted and harvested areas in 1993.

Table 7.6. Productivity ratios based on area planted and area harvested in 1993.

Crops Grown	Proportion of production over proportion of planted area		Proportion of production over proportion of harvested area	
	Traditional	Commercial	Traditional	Commercial
Sorghum	0.68	8.75	0.71	4.38
Maize	0.71	15.00	0.74	6.00
Beans/pulses	0.97	4.00	0.98	2.00
Groundnuts	0.81	2.55	0.91	1.33
Sunflower	0.42	3.82	0.54	1.76

Source: Environment Statistics (2000).

As can be seen from Table 7.6, the ratio of the proportion of production to the proportion of planted area, and the ratio of the proportion of production to the proportion of harvested area, are all greater than one for all crops grown on commercial farms. The same variables are less than one for all crops grown on traditional farms. This observation confirms the claim that productivity on commercial farms is higher than productivity on traditional farms.

Furthermore, yields in the traditional sector are very low compared with those of the commercial farms. The average yield for cereal crops (maize, sorghum and millet) was 500kg/ha for the commercial sector (with Pandamatenga commercial farms recording average yields of 750kg/ha), while that for the traditional sector was only 200kg/ha (Government of Botswana,

2003). On average, differences between the two sectors amount to 700% for sorghum, 3000% for maize, 1200% for millet and 1000% for beans (Ministry of Agriculture, 2000).

In terms of cereal production, the arable sector has consistently failed to meet the nation's total cereal requirement, providing less than 10% of the total amount required between 1997 and 2002. Table 7.7 shows the annual balance sheet for Botswana between 1997 and 2002. During this period, the country was not able to meet its production requirement for cereals.³ The food deficit was met through imports, mainly from South Africa.

Table 7.7. Annual cereal balance sheet 1997 to 2002.

Year	Maize or sorghum ('000 metric tons)		
	Requirements	Gross harvests	Deficit
1997/98	230.50	28.40	-202.10
1998/99	214.50	10.20	-204.30
1999/00	218.90	18.70	-200.20
2000/01	209.00	20.70	-188.30
2001/02	181.00	11.20	-169.80

Source: Botswana National Early Warning Unit, 1997/98 - 2001/02.

Performance in the horticultural sector is also generally very low. Currently, less than 1000 hectares are cultivated to vegetables and fruit. The supply from the existing horticultural farms only allows the country to meet about 20% of its current demand for vegetables and fruits. The rest is imported from South Africa.

Productivity Indicators in the Livestock Sector

Table 7.8 below shows the productivity indicators for the livestock sector⁴ in Botswana.

Yet again the productivity indicators for the livestock sector are better for the commercial sector than the traditional sector. Specifically, the traditional sector has a higher incidence of diseases and mortality rates than the commercial sector. Calving rates, offtake rates and cold dressed weight have also been consistently lower for the traditional sector compared with the commercial sector. These variables are indicative of better management practices in the commercial sector that translate to higher technical efficiencies.

Table 7.8. Livestock productivity indicators in percentage (beef production).

Sector	Cattle Number	Calving	Mortality	Offtake	CDW*	Measles
Traditional	86	50	12	8	200	15
Commercial	14	60-70	5	17	220	-15

* CDW = cold dressed weight measured in kilograms.

Source: Department of Animal Health and Production.

3. In fact, the arable sector has never been able to generate enough cereal output to satisfy the nation's cereal requirement.

4. Data reported here is for the beef production sector only.

The productivity indicators for the dairy sector are also very low. Botswana has about 100 dairy farms, with an average herd size of 15 to 20 milking cows. The total annual milk yield on the farms is very low at 2,000 litres. With proper management and adequate care of animals, local milk production could be raised to 6,000 litres (Ministry of Agriculture, 2000). As it currently stands, local milk production is only able to meet about 20 to 30% of the national demand. The deficit is met through imports.

Constraints to Agriculture in Botswana

Seven primary factors have been identified as the main constraints to improved agricultural performance and productivity in the Botswana. They are:

1. The poor agro-climate;
2. Low input agriculture;
3. Risk-averse and resource-poor farmers;
4. The changing demographics and age distribution of the farming population;
5. The gradual 'feminization' of the agricultural sector;
6. The current welfare-oriented agricultural assistance programmes; and
7. The lack of technically oriented and qualified extension staff.

First, poor agro-climatic conditions, endemic droughts and high summer temperatures severely hamper arable production. Consequently, there is a wide variability in the area planted or harvested, as well as in the production levels of the main cereal crops, over time.

Second, traditional farmers practice low input agriculture on small farms, which does not accord them the same economies of scale enjoyed by their commercial counterparts. Traditional farmers generally do not use row planting techniques or agrochemicals, and they do not follow proper cultivation calendars. Crop rotation is rarely practiced and most of the farmers grow the same crop mix every year. Effectively, this practice mines the soil of essential nutrients, which contributes to the impairment of soil fertility and quality. Consequently, traditional farmers have lower yields in comparison with their commercial counterparts.

Third, traditional farmers are risk-averse and resource-poor. They face high input costs, have limited access to credit, and have no agricultural insurance schemes available to them to mitigate the risk and uncertainty they face in trying out new and improved farming technologies. Consequently, traditional farmers have low levels of technology adoption, which impacts negatively on their ability to increase agricultural productivity. The lack of the necessary supporting marketing, road and telecommunications infrastructure, which could enable them to commercialize production, also does not work in their favour. These factors, combined with the poor institutional environment in which farmers have to work, has contributed to declining agricultural productivity and performance over the years.

Fourth, the changing demographics and age distribution within the traditional rural farming household also contributes to an overall decline in agricultural performance and productivity. In Botswana, the farming population has been found to be aging, with an average age of 57. Over the years, younger people have left agriculture and moved to the urban areas in search of what they perceive to be a more secure urban-based livelihood. As a result, older and less literate farmers who are less able to adopt new technologies have been left to farm.

Fifth, there has also been a gradual 'feminization' of the rural farming household, as more

and more households become female-headed. More often than not, female-headed households tend to have lower incomes than male-headed households, making them less likely to invest in agriculture.

Sixth, the welfare-oriented agricultural assistance programmes implemented by the government to assist farmers with agricultural productivity improvements are perceived as entitlements by their recipients. Instead of improving agricultural productivity, these programmes have engendered an excessive and counterproductive dependence of farmers on freely given services that they could perform for themselves.

Finally, there is a serious lack of the critical mass of technically oriented and qualified staff and scientists in the country that are accountable to individual farmers. Such trained manpower is vital because it is necessary to develop or adapt existing agricultural technologies to the specific agroecological conditions that prevail in certain parts of the country. Once this has been achieved, still more manpower is needed to assist farmers in adopting these new techniques. The current lack of accountability to individual farmers has diminished the farmers' ability to adopt the new and improved technologies that are crucial to raising agricultural productivity.

Tomich, *et. al.*, (1995), attributes low labour productivity in agriculture to rural poverty. Agricultural households differ in terms of the quantity and quality of farmland they control, their farm and non-farm activities, and their options for the use of their time and skills. Wealthier agricultural households control more resources - namely land, labour and capital. Therefore, they tend to be commercially oriented and readily adopt modern and improved farming practices. This enables them to raise their marketed surplus and incomes, some of which is reinvested in agriculture, further raising productivity on such farms.

In contrast, poor agricultural households with some family labour have limited access to other resources. Therefore, expenditures on fertilizers, improved seed varieties, hired labour, farm tools and other goods are constrained by the poor household's limited cash receipts. Limited cash receipts impact negatively on the farmer's ability to adopt improved technology and farming techniques that are essential to produce a surplus that can then be sold. Hence, resource-poor farmers are more likely to continue to use traditional farming techniques and varieties on soil which has low average nutrient levels, because they accommodate the farmer's limited ability to finance input purchases, while keeping financial risks and yield fluctuations within generally acceptable ranges. This phenomenon is observed on traditional farms in Botswana. In order to address the problem of low agricultural performance and productivity it is also necessary to combat rural poverty. Given the limited scope of agriculture to alleviate rural poverty on its own, poverty alleviation is also likely to come through non-farm rural income diversification.

Agricultural Assistance Programmes

In light of the constraints outlined above, and the need to improve the productive capacity of resource-poor farmers in the arable sector, government implemented a number of agricultural development programmes with the sole aim of promoting the sector through the provision of an enabling environment for farmers and producers. Programmes that were targeted toward the arable sector included the Arable Land Development Programme (ALDEP) and the Accelerated Rainfed Agricultural Programme (ARAP). Other programmes, like Services to Livestock Owners in Communal Areas (SLOCA), the bull subsidy scheme, and artificial insemination were targeted toward the livestock sector. In addition, huge investments were made in providing

agricultural extension and marketing infrastructure for grains and beef, which were the principal commodities at the time.

Agricultural Assistance Programmes: Arable Sector

The first programme implemented to assist farmers in the arable sector was ALDEP. ALDEP was introduced in 1982, in order to increase agricultural productivity on small traditional farms. Its major objective was to provide subsidized agricultural inputs (fencing material, draught power, ploughs and cultivators), and marketing and distribution systems, to resource-poor farmers. This was meant to increase national food production so the country could achieve a higher degree of self-sufficiency in food staples (this was the agricultural sector policy objective at the time). ALDEP was also intended to improve rural development and welfare by raising arable incomes through improved agricultural productivity and by creating employment in the lands so as to absorb the rural unemployed and reduce rural - urban drift. Furthermore, ALDEP included measures meant to improve the extension services offered by the Ministry of Agriculture, reinforce the marketing of produce and improve storage facilities.

ALDEP was very successful in terms of package distribution. During the period from 1982 to 1995, 55,029 on-farm investment packages were distributed to benefit 39,446 resource-poor farmers; 45% of these beneficiaries were female-headed households (Government of Botswana, 1998). Under the programme, farmers were encouraged to adopt improved farming practices such as row planting and soil conservation techniques.

In terms of crop production, ALDEP-aided farmers achieved higher yields in comparison with non-aided farmers, due to an increase in areas planted and harvested. The main constraints to the programme was the drought experienced during the implementation phase, a weak extension system, and competition from parallel programmes such as drought relief programmes for arable farmers.

The second agricultural programme intended to assist farmers was ARAP. Introduced in 1985, ARAP was essentially a cash subsidy to farmers to assist them with drought recovery. The programme provided farmers with a cash subsidy for destumping, ploughing and weeding. Several evaluations of the programme were critical of the fact that the programme created incentives to increase the cultivated area and yet did nothing to promote higher productivity. Large farmers benefited the most from ARAP. According to Eskiel, (1989) ARAP had a detrimental effect on the environment because it supported the destumping of fields which were then left bare and exposed to soil erosion.

In summary, both programmes did little to improve agricultural productivity. Instead, ALDEP and other similar schemes designed to assist small farmers encouraged them to hang on to their land when they could have otherwise leased it out to larger and more efficient producers. As such, the success of these programmes in transforming the agricultural sector to meet agricultural policy objectives was minimal. There was a lack of clear and monitorable sector-wide strategies and plans. Subsidies were poorly targeted, and the performance of farmers was poor. The unfavorable agro-climatic conditions, characterized by low and erratic rainfall and endemic droughts, make agriculture in Botswana risky. In the face of such adversity, traditional farmers were reluctant to try out new and improved technologies, and continued to pursue a risk minimization production strategy. As a result, no significant improvements were made in improving agricultural productivity in the arable sector.

Agricultural Assistance Programmes: Livestock Sector

For communal farmers engaged in livestock production, the government implemented SLOCA to improve the productivity of the livestock sector. Under Services to Livestock Owners in Communal Areas (SLOCA), small cattle owners were encouraged to improve their methods of livestock production. Heavy infrastructural investment subsidies were made in the form of free vaccines and drugs, extension, price-supported stock feed, bull subsidy and free artificial insemination schemes, and boreholes drilling subsidies. Indirect subsidies also came through subsidized loans from the National Development Bank (NDB). All these programmes served to make the livestock sector extremely lucrative and encouraged the over-expansion of the cattle sector, perhaps at the expense of other more productive sectors of the economy.

As livestock numbers have grown, so have concerns about livestock productivity and overstocking on communal rangelands. Despite gaining a niche in the European Union (EU) market and a reputation for producing high quality meat reared on chemical-free rangelands, Botswana has never been able to meet (let alone exceed) its EU export quota. Livestock productivity indicators, such as calving percentage, mortality rates and commercial off-take, continued to be low. All these problems have been blamed on the traditional system of land tenure which came under tremendous strain. The traditional system was seen as being inadequate for promoting higher levels of commercial off-take, limiting stock numbers to the carrying capacity, or preventing land from being overused (Lane, *et. al.*, 1995).

Granting herders private property rights was seen as a way of granting them the incentive to adopt commercially oriented approaches to livestock production. This was done under the Tribal Grazing Lands Policy (TGLP) of 1975, and later reinforced by the fencing component of the 1991 agricultural policy. Under the TGLP, individuals with large cattle holdings were required to move their herds from the communal lands to commercial leasehold land, drill boreholes and develop ranches. Each individual was given a 50 year lease which gave him usufruct rights to the ranch. Several studies show that TGLP did not achieve any of its set goals (Carl Bro International, 1982; Tsimako, 1991; White, 1993).

The main problem with the TGLP had to do with the poor manner in which it was conceptualized and implemented (Tsimako, 1991; White, 1993). The proposed zoning of land was based on the false premise that vast tracks of empty land existed, that could be divided into ranches. As it turned out, most of the land which was habitable was already occupied or provided valuable resources to populations within its vicinity. Any land that was bare often did not have any water and hence, could not sustain life.

The lease agreements themselves had loopholes. While leasees were supposed to develop their ranches, no minimum requirement was set for ranch development. Rents were set at sub-economic levels and leasees were not required to pay immediately (Arntzen, 1990; Peters, 1994). Consequently, leasees had no incentive to improve management on the ranches and many ranches continued to be managed as cattle posts (Tsimako, 1991).

The actual size of the ranches was fixed. This aspect did not consider the difficult ecological conditions in areas where the ranches were located. Fixed ranches plus the fencing requirement eliminated the flexibility cattle owners needed to their boundaries and possibly meant the end of seasonal migration. In addition, cattle owners remained reluctant to sell part of their herd as evidenced by the low levels of cattle off-take. Rather than sell part of their herd, they would divert animals back on to the communal range, where they placed added pressure on the remaining communal land (Tsimako, 1991). This practice was made possible by the legal system, which allowed dual grazing rights - the right to retain rights to the commons after

gaining exclusive usufruct rights to ranches. As a result, low levels of commercialization and output productivity continued in the livestock sector.

Agricultural Policy in Botswana

At Independence, a policy of food self-sufficiency at the household and national level was adopted. This arose out of a major concern over the country's inability to produce enough food to feed itself and a continued reliance on food imports to meet the nation's food needs. The government's broad agricultural strategy was to provide adequate incentives and assistance to raise overall agricultural output. Agricultural policies geared towards the arable sector and livestock sector are discussed consecutively in the following section.

Agricultural Policy: Arable Sector

The arable sector had been neglected prior to Independence. Resource-poor farmers, who were also risk-averse, were unable to purchase much needed inputs and improved seed varieties that were critical to raising agricultural productivity. The crop allocation mechanism was left completely to the vagaries of nature and market forces. Given the erratic and unreliable nature of rainfall in the country, there were wide and frequent fluctuations in market prices.

Price instability sent mixed signals to farmers. In the midst of such adversity and uncertainty farmers had little incentive to produce beyond their subsistence needs. What they produced and how they produced it depended solely on the amount of rainfall that fell on their fields. High rainfall areas produced surpluses and received low prices for their produce, and low rainfall areas produced deficits and received high prices for their produce. Prices were usually at their lowest following the harvest period. Consequently, not only did prices vary by location, they also varied between and within seasons depending on the amount of product that was available at any point in time. The absence of storage facilities, and in some cases the use of low quality storage facilities, meant that farmers could not hold stocks of produce in order to sell them later when prices were more favourable to them.

Wide fluctuations in price coupled with poor marketing infrastructure provided an avenue through which middlemen could exploit farmers. Middlemen offered farmers very low prices and made huge profits off the sale of grains elsewhere. This practice provided enough incentive for farmers to smuggle grain out of the country to South Africa in efforts to take advantage of price differentials. Therefore, the neglect of arable agriculture promoted the status quo, and little was done to encourage farmers to move from subsistence production to a more commercially oriented production.

In response, the Botswana Agricultural Marketing Board (BAMB) was established in 1974. BAMB was essentially a centralized crop allocation mechanism charged with purchasing all scheduled produce offered to it for sale by local producers, whilst ensuring that adequate supplies existed for sale to consumers at reasonable prices. The marketing board was also established to act as a supplier of farm inputs. BAMB was charged with fixing and guaranteeing producer prices, thus eliminating the uncertainty around producer prices: these were now announced prior to the planting period, enabling farmers to plan production accordingly.

Initially, government instituted pan-territorial pricing and pan-seasonal import parity pricing as Botswana is a net importer of grains. All grains produced in the country were given a price equivalent to the cost of imports at Pitsane, the first port of entry into the country from

South Africa. This proved to be expensive to maintain. Effectively this policy subsidized farmers' transportation costs, and farmers close to BAMB facilities profited at the expense of those in areas further away who were taxed by the policy. One result of this policy was that BAMB became less competitive and less economically viable than its competitors. In 1981, BAMB pricing policies were restructured and a new pricing policy was introduced. Since all food producing areas were food deficit areas, the guaranteed producer price for each production zone was based on the c.i.f. (cost of import and freight) price plus the cost of transportation to that zone. This pricing mechanism provided a more appropriate signal since deficit areas received higher prices than surplus areas.

Agricultural Policy: Livestock Sector

In contrast with the arable sector, Botswana's livestock sector has been a traditional source of valuable foreign exchange gained from the export of beef to the lucrative (EU) market. For this reason, the beef industry has enjoyed strong government support in the form of high prices for meat and input subsidies.

The export of Botswana beef has been well established under the auspices of the Botswana Meat Commission (BMC). Essentially, the BMC has a statutory monopoly on the exportation of beef, its by-products, processed meat and live cattle. The BMC is obliged to purchase animals for sale from all producers in the country. Once its operation costs and capital charges have been paid, the BMC is required to pay all its proceeds to cattle producers who sold cattle to the BMC in that financial year in the form of a bonus.

The pricing structure used by the BMC has four distinct features. First, the BMC uses seasonal pricing to induce farmers to sell cattle during the dry season as well as during the wet season. Second, a grading system, which is biased towards younger animals, is used by the BMC to encourage farmers to sell their animals when they are still young. Young animals are the most preferred in overseas markets, since they have the highest quality meat. Such animals are placed in the super grade, which gets the highest price and leads to higher earnings for the country. Third, the aspect of conformity is built into the grading system. There exists a prescribed body structure based on the breed type that animals must conform to. This is meant to provide an incentive for farmers to buy and use improved animal breeds. Finally, there is cross-subsidization that exists across regions. As a consequence of foot and mouth disease, which has been endemic in some parts of the country, some regions are not eligible to sell to the EU while others remain eligible. On social justice and equity considerations, the government uses cross-subsidization to ensure that farmers get the same price for their animals regardless of the area from which their animals come (Fidzani, *et. al.*, 1997).

As international trends toward free trade continue, prices for beef within the EU market will inevitably fall. To this end, contingency planning for diversifying the country's export markets is essential. The trend towards free trade also means that Botswana beef will have to compete with beef from other countries as it may lose its guaranteed share of the EU market. Efforts will have to be directed at enhancing competitiveness and productivity of the beef sector. To make the livestock sector less vulnerable to the world markets, government intends to diversify exports away from beef and explore the possibility of exporting small stock, poultry and game. In fact, an ostrich export abattoir has been established in the country for the sole purpose of exporting ostrich meat abroad.

From Food Self-sufficiency to Food Security, Agricultural Diversification and Sustainability

In a country like Botswana, with poor climatic and agro-ecological conditions that severely limit the potential for crop production, the food self-sufficiency objective was a noble one. The policy proved to be costly, however, because of the huge financial and capital outlays that were required for such an undertaking, while the benefits would be realized only in the long term. Amongst other things, the strategy resulted in higher producer prices for staples compared with the prices of similar commodities in neighbouring countries with comparative advantages.

This realization led to a shift from food self-sufficiency to a food security policy in 1991. Food security emphasized access and availability of food to all people in the nation. In this way, the policy shift encompassed the supply side as well as the demand side of the food equation. Food security also served to shift the focus to household incomes in terms of the possible ways they could be increased and diversified, rather than solely focusing on raising food production to meet a household's food needs, as was the case under the old policy. In addition to the food security objective, the current agricultural policy includes the following objectives: diversification of the agricultural production base; increased agricultural output and productivity; increased employment opportunities for the fast growing labour force; provision of a secure and productive environment for agricultural producers; and finally, the conservation of scarce agricultural and land resources for future generations. The latter objective stemmed out of growing concern in recent years over the need to use resources, during the development process, in a sustainable way so that future generations would also be able to use them. The following section describes the overall strategy currently being followed by government to achieve all the above objectives.

The National Masterplan for Arable Agriculture and Dairy Development (NAMPAADD)⁵

NAMPAADD is a broad agricultural development strategy intended to restructure arable agriculture and dairy development programmes to address existing government policy objectives of food security, poverty alleviation and the economic empowerment of rural people. The strategy was launched by the Ministry of Agriculture in 2002.

The strategy differs from previous agricultural programmes because it specifically targets the requirements of both active traditional and commercial farmers. NAMPAADD is geared toward the transformation of traditional farms into viable commercial enterprises. For commercial farmers, the strategy aims at providing a facilitative environment that will enable them to upgrade current technologies and management levels to world standards.

Previous agricultural development programmes did not seek any type of assistance or involvement from other sectors of the economy; the entire burden was borne by government. Under NAMPAADD, the private sector and civil society will be encouraged to take a more active role in farming as well as in the provision of essential support services, a critical aspect to the new development strategy that was absent in past efforts at promoting agricultural development. It is expected that the establishment of agribusinesses, like agro-processing plants, will be encouraged and will attract entrepreneurs into the industry, in the process creating additional employment opportunities in rural areas.

5. This section draws from the NAMPAADD Government White Paper No.1 of 2002 released by the Ministry of Agriculture. Gaborone, Botswana.

Another aspect of NAMPAADD that was absent in previous development strategies is the provision for a contributory insurance scheme that will be made available through private sector involvement, covering agricultural production losses in specific regions declared as eligible for compensation. It is expected that such a scheme is likely to reduce risk-aversity amongst some farmers who will now be in a position to try out and possibly adopt new and improved farming technologies.

Unlike previous government programmes that were meant to promote agricultural development, NAMPAADD will not offer financial grants or subsidies to farmers. Instead NAMPAADD will encourage farmers and other participating entrepreneurs to access finance from the Citizen Entrepreneurial Development Agency (CEDA), NDB and other private financial institutions. Nevertheless, government will continue to develop much needed infrastructure such as roads, telecommunications and electricity to support agricultural development in production areas.

The new agricultural development strategy will focus on the development of three critical farming systems, namely 1. rainfed, 2. irrigated, and 3. dairy farming.

The following crops have been identified under NAMPAADD as being suitable for rainfed farming: sorghum, cowpeas, groundnuts, millet, sunflower, maize and cotton. First, NAMPAADD will promote the establishment of large cultivation units or fields of at least 150 hectares by encouraging farmers to form production groups and by enabling the acquisition of long-term leases for land in areas suitable for rainfed farming. This will enable traditional farmers to enjoy economies of scale previously enjoyed by their commercial counterparts. The strategy will also promote the establishment of service centers to provide cultivation, harvesting, and spraying advisory services, as well as seeds, fertilizers, and spare parts. Mechanized farming will be promoted by encouraging farmers to form machinery user groups rather than rely on animal draught power, which has in the past proven to be inefficient. The following investment opportunities have been identified in the area of rainfed agriculture: the establishment of service centres, post-harvest facilities, the provision of credit, bulk transportation, agro-processing plants, and input supply (e.g. seed, fertilizers and spare parts). These investment opportunities will be made known to interested entrepreneurs, who can then provide employment opportunities in the rural areas.

For irrigated agriculture, NAMPAADD has identified the following vegetables, fruit, as being the principal crops that need irrigation: cotton, wheat, sunflower, green mealies, lucerne and other fodder crops. For these irrigated crops, NAMPAADD will establish demonstration and pilot farms to demonstrate advanced technologies of irrigated farming to farmers. Small horticultural producers will be encouraged to work in groups or clusters around anchor projects (a nucleus farm with an advanced production unit of 20 hectares) to address the problem of fragmented horticultural production units. In addition, farmers will be encouraged to coordinate the production of four main vegetables crop (cabbage, tomatoes, potatoes and onions) through agreed cropping programmes and marketing plans. Extension services will be improved by placing well-trained and equipped extension officers near the production clusters. Farmers will also be shown ways to use treated waste water for irrigation to produce fruits and fodder. New horticultural produce collection and marketing outlets will be established in addition to the existing ones. The following investment opportunities have been identified in irrigated agriculture: input supply such as seedling production; plant protection services; marketing services; and agro-processing, packaging and transportation services.

Within the livestock sector, NAMPAADD will be focused mainly on the dairy industry,

which has previously been neglected. Specifically, NAMPAADD aims to ensure the importation of high quality dairy animals by supervising their selection and procurement. Farmers will be encouraged to improve the management of their dairy herd by providing proper housing and feeding for milking cows in line with each cow's bodily requirements during lactation to optimize production. It is expected that milk output will be increased from the current average of 2,000 litres per lactation per cow to 6,000 litres. Farmers will also be encouraged to increase the herd size of milking cows per farm from the current average of 15 to a commercial herd of at least 50. Milk quality test laboratories will also be established in line with the expansion of the dairy herd and milk production, thus upgrading milk hygiene and quality. Quality standards for dairy feeds will also be established to reduce the problem of the sale of substandard feeds to dairy farmers. Demonstration and pilot farms have been established to train farmers and extension staff on advanced technologies in dairy farms. Finally, NAMPAADD has identified the following investment opportunities in dairy development: individual entrepreneurs can become actively engaged in the production and provision of quality dairy cows; fodder production and feed supply; refrigerated milk transport; the sale and maintenance of dairy equipment; the provision of milk collection and cooling centres; and milk processing and distribution services. All these activities are expected to generate much needed employment and rural income diversification.

Rural Development in Botswana

Rural development is a process of modernization aimed at raising the living standards of rural communities as well as enhancing a variety of social welfare services geared towards self-reliance and sustainable development (Government of Botswana, 2002). The three primary goals of Botswana's rural development policy are to reduce poverty; to provide opportunities for employment, income generation and involvement in economic activities; and to enhance popular participation in development planning and implementation processes as a basis for broad-based, balanced sustainable development.

In order to realize these rural development goals, eight key thematic areas deemed critical to the achievement of the above objectives were identified. Possible strategies were then developed in accordance with each thematic area. The key thematic areas identified by the policy are:

1. Sustainable livelihoods;
2. Land issues and property rights;
3. Social protection;
4. Institutional and capacity issues;
5. Local level policy formulation and strategic planning;
6. Women, youth and other special groups;
7. HIV/AIDS; and
8. Environmental and natural resource issues.

In the area of sustainable livelihoods, the policy recognizes that, in recent years, Botswana have become increasingly dependent on other forms of income and transfers than agriculture. Although it remains important for those who have no alternative sources of income, arable agricultural production on communal land has been declining. Arable agriculture is also being shunned by the youth, who view it as being backward. Consequently, farming has gradually

become the charge of an increasingly aging population, which is a major limitation in terms of the sustainability and transformation of the sector. Given that the youth are a critical resource in development and that many of them are unemployed, increasing their involvement in agriculture is one way in which they could earn a living. To this end, government will seek to facilitate efforts to transform and commercialize arable agriculture to make it attractive to the youth. Given the poor agro-climatic conditions prevalent in the country, which have severely limited the sector's output, the government advocates for rural non-farm income diversification as a way to improve, raise and sustain rural livelihoods. In particular, such diversification efforts will be focused on the economic realities of the particular region in question. Differences in the potential of the regions and the access they have to various supportive resources and institutions will be taken into account. In this way, it is expected that the current development strategy will offer a more integrated and diversified approach to rural development, with an increased focus on comparative advantage, economies of scale, and varying potential of the various geographic areas in the country.

In the area of land and property rights, the government will work to ensure the timely acquisition of land, authorization of change of land use, and effective land markets as well as land use planning and management. In this way, it is expected that the value, utility and productivity of land as a resource will be promoted.

In the area of social protection, the strategy will be to continue to assist poor and vulnerable groups in the rural areas, including those affected by drought, the elderly, orphans, people with disabilities, destitutes and remote areas dwellers. However, improvements will be made to the current assistance programmes in the areas of targeting, adequacy, efficiency and effectiveness. In-built mechanisms will also be developed so as to enable those who no longer need assistance to graduate from dependence on government social protection programmes.

In terms of the institutional framework and capacity to carry out the strategies laid out above, the government's process of decentralization will continue. The technical and administrative capacities of local authorities will be strengthened with a view to expanding their functions and mandate, and enhancing their accountability to the electorates over local development concerns. In addition, the need for stakeholder involvement and participation in rural development efforts will be promoted and emphasized. This is important because the local community has to feel that they 'own' the ideas and strategies being used to help them for it to be successful. If they feel that they 'own' the idea, then they are also more likely to be involved and participate in rural development programmes in their local areas at the village level.

Within the local level policy formulation and strategic planning arena, the rural development strategy will be to invest in local human capacity building so that the varying potentials and diversity in the country can be utilized for maximum socioeconomic return. An essential part of the rural development strategy will be to continue to meet the specific needs of women, youth and other special groups. To this end a programme and framework for the formulation and implementation of sectoral interventions aimed at addressing these special needs will be provided, thus ensuring that these groups are not left out of the rural development process.

The HIV/AIDS scourge continues to inflict devastating social and economic setbacks in rural areas. The situation is exacerbated in rural areas by the loss of a breadwinner, as it aggravates the incidence of poverty. To ameliorate this problem, government will target greater assistance to the rural areas given that they are often the final destination for the terminally ill and orphaned children.

Regarding the environment and natural resources, the aim is to increase the effectiveness

of the use and management of natural resources so as to maximize the benefits and minimize unintended side effects.

Owing to the multifaceted nature of rural development, which cuts across several sectoral responsibilities, no special agency or ministry has been set up to implement the above strategies. Instead, the intersectoral nature of the rural development challenge has necessitated the establishment of a Rural Development Council. The Rural Development Council, located in the Ministry of Finance and Development Planning, is a centrally located high level authority charged with ensuring effective interministerial cooperation and coordination, which will ensure that multisectoral programmes are implemented as efficiently as possible in a way that avoids duplication. Essentially, the Rural Development Council acts as a watchdog from the standpoint of a planning coordinating ministry in ensuring that there is effective implementation of the rural development policy by all sectors including local authorities. In this way it is expected that the country will be able to improve living conditions in the rural areas.

Conclusion

Despite significant investments by the government in various agricultural programmes intended to raise agricultural output and productivity over the years, Botswana's agricultural sector has been in steady decline. Factors which have seriously constrained the development and structural transformation of Botswana's agricultural sector are the poor agro-climate; risk-averse and resource-poor farmers; low input agriculture; the lack of a diversified production base; the changing demographics and age distribution of the farming population, as well as the gradual feminization of the sector; lack of technical expertise; poorly targeted government programmes; and a welfare-oriented approach to agricultural assistance that has encouraged farmer dependency on government providing services that they could perform for themselves.

The new agricultural development strategy is designed to reverse the agricultural sector's decline. Specifically, the new strategy will broaden arable agriculture's production base to include the production of high value crops in addition to cereal staples. In the livestock sector, the focus will no longer only be on beef production, but will include improvements in dairy production and game farming that were neglected by previous policies. By highlighting areas for investment and entrepreneurial opportunities in agribusiness, activities that will involve the greater civil society, the new agricultural development strategy will work in conjunction with the rural development strategy through employment creation via farm and non-farm income diversification. The involvement of the greater civil society in achieving these goals will ease the budgetary burden of government. Instead, government assistance will be focused mainly on the provision of transport, marketing, communications infrastructure, and the development of human capital through the funding of training, research and development. In this way, it is hoped that the agricultural sector will become more attractive and productive, allowing it to make its full contribution to the development of the rest of the economy in terms of food, inputs, employment, capital and foreign exchange.

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Chapter 8

Growth and Performance of the Mining Sector

J. Sentsho

Introduction

This chapter discusses the contribution of the mineral sector to Botswana's economic growth and development. It starts by looking at the prospects and challenges of mineral-led economic growth in mineral-based economies. On the basis of these, it assesses Botswana's mineral-led economic development to see how the country has taken advantage of the opportunities for economic growth offered by mineral wealth, and how it has worked to overcome the challenges of economic growth faced by mineral-based economies. The chapter concludes by drawing some lessons for other mineral-based economies.

Mineral-led Economic Growth and Development: Opportunities and Challenges

A country's economy is said to be mineral- or resource-based if the share of minerals in GDP is 8% or more, and in total merchandise exports is 40% or more (Gelb, 1988; Auty, 1993; and Nankani, 1979). These countries are interesting for our analysis, not only because Botswana is a mineral-based economy (MBE), but also because they possess unique characteristics that are important for understanding the opportunities and challenges to economic development facing policy makers in mineral-based economies (MBEs).

A country with a sizable mineral endowment, such as oil or hard rock minerals, is supposed to be better off than its non-mineral counterparts at a similar level of income and economic development. This is because, first, mineral revenue is supposed to overcome the foreign exchange gap that inhibits development in Least Developed Countries (LDCs) through capital goods constraints (Chenery and Strout, 1966). The foreign exchange earned is supposed to provide development funds for the provision of infrastructure, health care, education and the importation of human skills where these happen to be lacking. Second, with increased exports, a country should be able to overcome its balance of payments problem, and thus have a strong currency that allows it to import capital goods needed for industrial development. Third, this would imply that such a country would have no need to go into unmanageable foreign debts, since development finance can be raised locally. Fourth, the booming mineral sector provides direct employment opportunities in the sector and indirect employment opportunities through the backward and forward linkage and the service industries that emerge in the country because of the sector. Fifth, and perhaps most important, the booming sector provides funds for government to initiate industrial development through the provision of financial and economic incentives. Ideally, all these opportunities and strengths should lead to sustainable economic growth and development.

However, contrary to these expectations, critics of economic development based on

mineral exploitation have argued that many MBEs have on average experienced the opposite - their economic performance has in most cases been actually worse than that for countries without a mineral export windfall (Auty, 1993:1). Some of the characteristics of MBEs that have influenced critics to view them this way are discussed in the following.

First, because the mining sector generally lacks both backward and forward linkages, MBEs are said to be susceptible to enclave development (Radetzki, 1977; Hirschman, 1989). Enclave development occurs in the case where the booming mineral sector has limited influence on the development of the rest of the domestic economy, while at the same time it employs the best skilled local and foreign personnel who are very productive relative to workers elsewhere in the economy. As a result, these are paid the best salaries in a country generally characterized by low wages and high unemployment, thus creating an island of affluence in the midst of poverty.

Second, mineral booms are generally said to lead to a phenomenon called the "Dutch disease," which explains the observed complex tendency for a booming mineral sector to retard growth in other sectors of the economy (Corden and Neary, 1984; Roamer, 1995; Davis, 1995). The "Dutch disease" affects the domestic economy in two ways. First is the spending effect: this comes about because expenditure on the non-tradable sector causes the sector's prices to increase, which leads to real exchange rate appreciation. The latter causes the exports of the non-booming sector to become uncompetitive in world markets, leading to the sector's decline. The second effect of the "Dutch disease" is called the resource movement effect. This effect comes about because, in most cases, wages in the booming sector are higher than in the rest of the economy. As a result, labour moves from the rest of the economy to this sector. The combined effect of real exchange rate appreciation and the resource movement effect which generally affects both the industrial and the agricultural sector, initiates a process of de-industrialisation and de-agriculturalisation in the non-booming sectors. The Dutch disease has affected both developing and developed countries alike. However, because economies of developed countries are now diversified and thus less affected by the phenomenon, the focus on the impact of the "disease" has, in recent years, been on developing countries.

Third, MBEs are said to be generally characterized by an ever widening wage-productivity gap, which is due to intense labour bargaining for government to close the gap between wages of those employed in the booming sector, mainly expatriates and a few citizen elites, and those of other sectors of the economy. This creates a wage-followership trend in which all other sectors of the economy demand their wages to resemble those of the booming sector. Thus, wages on average increase at a rate which cannot be justified on the basis of productivity. The spending mechanism that ensues from this process adds to and worsens the "Dutch disease" problems of de-industrialisation and de-agriculturalisation discussed above.

Fourth, it is also often pointed out that, because of the limited number of firms in MBEs as well as the abundance and availability of government subsidies on easy terms to these firms, firms in these countries do not generally use government subsidies productively. Instead they choose to use these proceeds in unproductive lobbying for continued protection and subsidization, which results in widespread rent-seeking (Lane and Tornell, 1995) and a failure to achieve the desired economic diversification in these countries.

Fifth, because of limited citizen entrepreneurship, most businesses in these economies are owned by foreign investors, which poses a problem of sustainability, especially in times of economic recession and political instability. The abundance of wealth that accrues to those in the

booming sector, and in other sectors whose wages are influenced by the sector, has in most cases retarded the development of citizen entrepreneurship.

Sixth, most MBEs are small in terms of both GDP and population size. Consequently, they are not able to take advantage of economies of scale unless they produce for export markets (Briguglio, 1998). The implications of this are that the domestic economy does not generally allow industrialization through import substitution; as a result, most of these economies are narrowly specialized on the mineral resource both in terms of geographical markets and product variety; their dependence on the foreign sector is very high (most of such economies have a ratio of trade (exports and imports) to GDP of over 50% (Streeten, 1993)); and the openness of the economy means that they are susceptible to external shocks, so that their macroeconomic policy is highly influenced by the external policies of their main trading partners.

This section outlined the prospects and challenges for economic growth and development in MBEs on the basis of theory and the experience of countries around the world. A major question we now have is whether Botswana has taken advantage of the benefits of its mineral boom or allowed the problems associated (cited above) with resource exploitation to be prevalent and dominant in the economy. This question will be the main focus of the remainder of this chapter.

Botswana's Experience with Mineral-led Economic Growth

Mineral Resources and Mineral Policy in Botswana

Even though Botswana's other sources of revenue, such as foreign aid, the Southern African Customs Union (SACU) and beef exports, have contributed significantly to the country's economic growth over the years, minerals were and continue to be the most important source of Botswana's economic growth and development. Minerals were discovered mainly after independence and include copper/nickel at Selebi-Phikwe; diamonds at Orapa, Letlhakane, Jwaneng and Damtshaa; coal at Morupule; and soda ash at Sowa. The most important of these are diamonds, which have since become the main engine of growth for the economy.

The agreement to exploit diamonds at Orapa was signed in 1969. This agreement, which was signed hurriedly, gave De Beers Mining Company 85% of the shares while Botswana got only 15%. Fortunately, the agreement had a clause which stated that, "should conditions change so that one party was severely disadvantaged, the two parties will meet to work out how to correct things" (Harvey and Lewis, 1990). When it became evident that the diamond mine was more profitable than initially envisaged, government invoked this clause to renegotiate her share in 1975. Under the new arrangement, government shares in diamond proceeds are derived in three ways (Gaolathe, 1997). First, government receives equity shares of 15% of the mining proceeds. Second, government has purchased an additional 20% of the shares as part of the agreement for the state to reserve the right to purchase optional equity shares in diamonds. This option has not only allowed the country to increase its shares in diamonds, but has also given the country an opportunity to have direct representation on the Board of Debswana Mining Company, a local subsidiary of De Beers Mining Company. This has the advantage of strengthening the country's bargaining position when negotiating with Debswana because this gives government negotiators first-hand information on how the country's diamond mines are run. Botswana is one of the few, if not the the only, country among LDCs to have this kind of

representation in a strong multinational like De Beers (Kempton and Du Preez, 1997). Thirdly, the country receives an additional 15% of the shares as royalty.

Overall, the country's current equity shares are diamonds - 50%, copper/nickel - 33%, soda ash - 50%, coal - 0% (although the option to have equity remains), and small minerals - 15% (Gaolathe, 1997). The question that remains now is, "What has been the contribution of this mineral sector to Botswana's economic growth and development?"

The Contribution of Minerals to Botswana's Economic Growth

The previous sub-section showed how Botswana has progressively increased her share of the mineral proceeds over the years. Our focus in this section is to find out how this growth in the proceeds of mineral wealth has affected the rest of the economy. The analysis is based on Table 8.1, which shows the sectoral shares of the different economic sectors of Botswana.

The Table shows that the share of minerals dominates all the sectors of the economy except employment. For instance, minerals account for the largest share in real GDP. In 1980, the share of minerals in real GDP was about 30%. This increased, reaching a maximum of about 51% in 1984, before declining to about 33% in 1997. In contrast, the share of manufacturing remained almost constant at an average of 6% of real GDP over the sample period. The mineral sector also dominates government revenue, where its share grew from about 33% in 1980 to about 57% by 1997. As a percentage of total exports, the mineral sector accounts for well over 70%.

These percentage contributions of minerals to the economic sectors of Botswana show that minerals, in particular diamonds, are the main engine of growth in the country. The mineral wealth is able to cover recurrent and development expenditure as well as economic incentives for industrial development. In addition, Botswana has been able to accumulate foreign reserves of many months of import cover.

Interestingly, despite their sectoral dominance, the last column of Table 8.1 shows that the contribution of the mineral sector to total employment has averaged around 4 to 5% over the years. The main sources of employment are the government sector, which employs an average of 35% of the labour force, followed by the services sector at around 30%.

Figure 8.1 summarises the contribution of Botswana's mineral sector to the country's economic growth. The Figure shows that Botswana's economic growth has been positively correlated with export growth, which, as we have seen previously, is dominated by the mineral sector. While export growth fluctuated significantly in response to changes in global demand, economic growth has generally been positive and stable over time. In fact, Botswana's economic growth has been positive and averaged about 11% over this sample period. This raises the questions: "Why has Botswana's mineral boom led to sustained positive economic growth while economic growth of other MBEs in the region has been either negative or stagnant? Why is Botswana's mineral wealth a blessing while mineral wealth is described as a 'resource curse' in other countries? Has Botswana escaped the development problems of MBEs? These questions will form the focus of the section that follows.

Critique of Botswana's Mineral-led Economic Growth

The previous section showed the dominance and influence of the mineral sector on the various sectors of the economy of Botswana. Botswana appears to have achieved a positive and

Table 8.1. Comparative contribution of minerals to real GDP, real government revenue, real export earnings and total employment in Botswana.

Year	Real GDP (P'million) 1985/86 prices	% of Real GDP				Govt Rev.* (P' million)	% of Govt Revenue		
		Agric	Gen. Govt	Manufac	Mining		Minerals	C-Pool	Grants
1979/80	1380.0	11.7	14.2	4.1	29.7	609.63	32.9	33.2	12.3
1980/81	1511.0	10.5	13.2	6.7	35.1	571.94	23.9	32.3	12.3
1981/82	1623.8	9.9	13.3	7.7	38.7	598.44	25.3	29.0	12.0
1982/83	1884.10	7.5	12.6	6.1	48.8	824.22	34.4	27.9	8.6
1983/84	2101.20	5.8	12.5	5.7	50.7	1025.97	46.9	19.4	4.9
1984/85	2251.90	5.3	13.4	4.2	48.8	1300.06	51.3	13.2	3.6
1985/86	2420.60	5.5	13.5	5.1	46.8	1,507.11	54.6	12.4	4.4
1986/87	2636.10	4.7	14.9	5.6	46.5	1,987.37	56.7	12.8	5.8
1987/88	3038.70	6.7	16.2	6.3	41.5	2,764.44	59.0	11.4	4.3
1988/89	3702.50	5	14.9	6.5	40.5	2,683.60	58.0	12.8	1.5
1989/90	3911.30	4.9	14.6	6.5	37.1	2,506.50	53.6	12.8	3.1
1990/91	4252.40	4.7	14.6	6.4	37.3	2,646.76	46.4	18.7	1.7
1991/92	4521.90	4.5	16.1	6.4	34.9	2,814.29	40.1	21.5	2.2
1992/93	4516.00	4.4	16.7	6.3	33.3	2,890.78	42.5	15.3	3.5
1993/94	4700.50	4.2	16.8	6	33.6	2,303.87	52.5	15.9	1.7
1994/95	4847.50	3.9	17.2	6	32.1	2,393.83	47.4	15.2	0.7
1995/96	5184.80	3.6	17.2	6	33	3,060.00	49.2	12.1	1.1
1996/97	5,544.30	3.4	17.3	5.9	32.6	2,664.85	56.5	13.7	2.2

Notes: Agric = Agriculture; Gen. Govt = General Government; Manufac = Manufactures; Rev. = Revenue; Expt = Export

* Real Government Revenue and Real Export Earnings converted from nominal to real figures using GDP deflator.

Source: CSO: Statistical Bulletins, various years.

sustained mineral-led economic growth rarely found in most resource-based economies of Sub-Saharan Africa. As noted above, this raises the questions: "Why does mineral-led growth appear to have succeeded in Botswana than elsewhere? Has Botswana overcome the problems of mineral-led economic growth?" These questions will form the focus of a critique of Botswana's mineral-led economic growth.

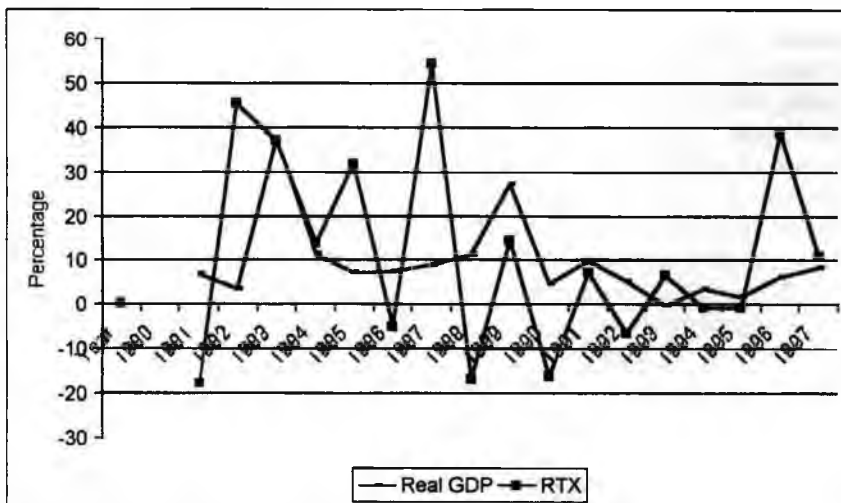
Why has Botswana Prospered?

This sub-section highlights some of the critical factors that have resulted in Botswana's sustained mineral-led economic growth. These include good governance, prudent financial management and macroeconomic stability.

CHAPTER 8 - GROWTH AND PERFORMANCE IN THE MINING SECTOR

Table 8.1. Continued.

Year	Expt Earn.* (P'million)	% of Export Earnings			Employment Modern Sector	% of Total Employment				
		Beef	Diamonds	Manufacs		Agric	Govt	Manufac	Mining	Services
1979/80	1040.32	7.20	60.70	11.36	83400	5	36	7	8	22
1980/81	654.00	18.20	40.60	17.25	97400	5	34	6	7	26
1981/82	873.68	17.00	52.00	17.17	100200	4	34	6	7	28
1982/83	1469.54	11.30	66.60	12.62	100500	4	37	7	7	27
1983/84	1603.50	7.30	71.90	13.00	110000	5	36	9	7	29
1984/85	2,241.58	7.00	75.70	8.60	116800	3	39	8	6	28
1985/86	2,130.19	7.40	74.50	10.50	123500	4	40	9	6	27
1986/87	2,909.83	3.10	84.60	7.90	140200	4	37	10	5	30
1987/88	2,905.15	4.20	73.90	8.10	160800	4	35	10	4	30
1988/89	3,644.20	3.60	76.40	7.40	176200	3	35	12	4	30
1989/90	2,224.00	3.20	78.70	9.90	198500	3	32	12	4	26
1990/91	2,431.23	3.30	78.70	10.10	222800	3	31	11	3	31
1991/92	2,223.09	2.90	78.90	10.40	227500	3	33	10	4	31
1992/93	2,303.64	3.80	78.20	12.90	226200	2	37	9	4	32
1993/94	2,557.56	3.70	74.90	16.20	231200	2	36	10	4	32
1994/95	2,602.83	3.00	67.00	24.40	231300	2	38	10	3	32
1995/96	3,369.13	2.50	70.30	21.70	234116	2	38	10	4	32
1996/97	3,197.78#	2.20	73.80	19.50	237550	2	37	10	4	32



Note: RTX is total export growth.

Figure 8.1. Real GDP growth and real export growth: 1980 to 1997.

Good Governance

Good governance in Botswana is anchored on the country's four national principles of democracy, development, self-reliance and unity. These principles are based on the Tswana culture of consultation, consensus and social harmony. These ideals of democracy accord to individuals the rights and privileges of equality of franchise; freedom of press, speech and assembly; secret ballot; and the rule by elected representatives. To this end, there are multiparty general elections every five years. Because of the pursuit and practice of these democratic principles, Botswana has managed to have continued peace and stability since Independence. This peace and stability has been significant for the country's continued economic growth over the years.

Prudent Financial Management

For many developing countries, an increase in government revenues from the mineral sector has led to problems of unsustainable public expenditure, a condition which has been termed the 'resource curse' (Auty, 1993; Davis, 1995). To avoid this pitfall, Botswana's economic planning is based on two scenarios about diamond prices. First is an optimistic scenario of expected increase in real diamond prices. Under this scenario, government assumes more revenues from the sale of diamonds so that expenditure may be increased without running down the country's reserves. It suggests no need to restrain government expenditure. In contrast, the second is a pessimistic scenario which assumes an expected decline in real diamond prices so that government receives more limited revenues from diamond sales during the plan period. Generally, Botswana has followed the pessimistic scenario over the years in order to restrain both public sector salaries and public expenditure in general. By so doing, the country has been able to minimise the deadly effects of the Dutch disease emanating from excessive increases in public sector expenditure.

Macroeconomic Stability

In contrast to the experience of many LDCs, where the macroeconomic environment is hostile to private sector-led economic development, Botswana's macroeconomic environment has been found to be friendly to private sector investment in that inflation, budget deficits, the current account balance of payments, and exchange rates are kept at sustainable levels for profitable business initiative. For instance, Sentsho (2000) compares Botswana's macroeconomic environment to that of South Africa and Singapore, and concludes that Botswana's macroeconomic environment is generally comparable to that of Singapore and better, in many respects, to that of South Africa. Botswana's macroeconomic environment, in particular the control of inflation and the setting of an appropriately valued exchange rate, must have significantly minimised the risks of the Dutch disease in the country.

Export Orientation

Botswana chose a private sector-led export oriented development strategy at Independence in 1966. This choice was motivated in part by the smallness of the country's domestic market, because the country's population (which today stands at around 1.7 million), was then less than a million. Therefore, it was hoped that exporting would enlarge domestic production so that

firms would be able to achieve economies of scale and thus lower unit costs. Furthermore, exposure to international competition is expected to result in increased efficiency, as firms adapt modern technology and best practice management styles to meet quality standards in international markets. This policy has helped Botswana to overcome the market problem for the manufacturing sector; nevertheless much still has to be done to develop the sector.

Has Botswana Overcome the Problems of Mineral-led Economic Development?

This is a pertinent question for a country whose economic growth has been significantly driven by mineral proceeds over almost four decades. From the discussion in the previous sub-section, it is evident that Botswana has only partially overcome the problems of mineral-led economic development. For instance, it is clear that Botswana has minimised the problems of the Dutch disease and excessive increases in public sector expenditure as well as overcoming the smallness of the domestic market. However, a number of the problems associated with mineral-led economic development remain.

First, Botswana has not overcome the “enclave” nature of mining. As we have seen in Table 8.1, the mining sector still dominates all the other sectors. In essence this means that the mining sector has developed very small and limited forward and backward linkage industries with the rest of the economy. This lack of economic diversification has revealed another weakness of mineral-led economic development, namely the high incidence of unemployment and poverty. Government sources indicate that the level of unemployment has been rising over the years. It rose from about 10% in 1981 to about 14% in 1991, and by 1994 it had risen to about 21%, before declining somewhat to 19% in 2000 (Budget Speech, 2000). Current estimates put the figure at about 23.8% (Household Income and Expenditure Survey, 2002/03).

Likewise, the overall percentage of households living in poverty was 48% in 1985/86, and declined slightly to 37% in 1993/94 (Jefferis and Kelly, 1998). The United Nations Human Development Report (2001) estimates that 33.3% of the population live below the poverty datum line. This poverty is found to be higher among female-headed households (50%) than among male-headed households (44%) (Grener *et al.*, 2000). Even though Botswana has many social programmes like drought relief and income allowance for the elderly, this high incidence of poverty is a bad reflection on Botswana’s mineral-led economic growth and development.

The second problem is a lack of citizen entrepreneurship. For Botswana, this problem may be traced to the initial conditions of Botswana’s economic development at Independence. At that time Botswana had very few manufacturing industries. Consequently, the country had very few people with the necessary business skills and experience to go into manufacturing and other business ventures. Further, because of the limited number of educated people, all government-sponsored graduates were required to work for government for many years. As we shall see next, when these problems are coupled with resource abundance and opportunities for rent seeking, the development of citizen entrepreneurship was significantly retarded.

The third problem is widespread rent-seeking. Apart from the lack of entrepreneurship due to limited industrial experience and skills at Independence, the education system has generally not provided training in these areas. In addition, the Financial Assistance Policy (FAP), which was the first major economic incentive for industrial development, collapsed mainly because, as a grant, it was open to widespread abuse and fraud. In 2001, the FAP was replaced by the Citizen

Entrepreneurial Development Agency (CEDA). Even though CEDA provides interest subsidized loans to viable citizen-owned firms, there are indications that some recipients still regard it as some form of a grant like the FAP, and thus engage in activities of rent-seeking.

Conclusions and Policy Recommendations

This chapter assessed the contribution of Botswana's mineral sector to the country's economic growth and development. The chapter showed that the mineral sector, in particular diamonds, has dominated the country's economy over the last three decades. Further, the chapter showed that Botswana has experienced sustained high rates of economic growth rarely found in most developing countries. The factors behind Botswana's economic success, which may be emulated by other MBEs, include good governance, prudent financial management, an appropriate macro-economic environment and an export-oriented development strategy. Furthermore, the country has overcome some of the development problems of mineral-led economic development, namely the Dutch disease, de-industrialisation and de-agriculturalisation, loss of control over public expenditure, and the smallness of the domestic market. On the other hand, some other problems of mineral-led economic development are still a major setback for the country's economic development. These include the enclave nature of mining, which manifests itself in an undiversified economy, and the concomitant problems of unemployment and poverty. There are also problems of a lack of citizen entrepreneurship and persistent rent-seeking, both of which retard industrial development and economic diversification. These issues, together with the emerging problem of implementation capacity within both the government and private sectors, will remain the focus of policy makers for the foreseeable future.

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Chapter 9

Industrial Development in Botswana

S. M. Kapunda and Oluyele Akinkugbe

Introduction

Concepts and Definitions

Industry or industrial sector as a concept is usually defined in economics literature in either a narrow or broad sense. Industry is narrowly defined as the manufacturing sector, while the broad definition includes manufacturing plus other supporting sectors, such as mining, construction and public utilities (electricity, water and gas) (Clarke, 2000:7; Siwawa-Ndai, 2001:335; Kapunda *et. al.*, 1989:147 and Sutcliffe 1971:16). Botswana's ninth National Development Plan (NDP 9) defines the industrial sector in Botswana as "business or individuals engaged in the transformation of raw material inputs into semi-finished or finished products for domestic sale or for export e.g. manufacturing, construction".¹

In this chapter the narrow definition of industry has been adopted. However, unless otherwise stated, whenever the broad definition is applied it excludes the mining sector due to its dominant nature in Botswana. The mining sector deserves its separate treatment, which is given elsewhere in this book. Industrial development is regarded as economic development with reference to the industrial sector as defined above. Industrial development is an essential component of economic development. Industrialisation may simply be viewed as the process by which a non-industrialised country becomes an industrialised one. This definition, although somewhat tautological, raises important questions, such as: Why industrialise? What are the strategies or approaches to industrialisation? How is industrialisation measured? When should a country be regarded as industrialised? The next sub-section attempts to answer these questions.

Industrialization

Industrialisation is one of the key strategies of development adopted by many developing countries of the world. The emphasis under this strategy is that the rapid expansion of the manufacturing sector will be the vehicle for achieving sustainable growth and development. The immediate concern therefore is not the short-run efficiency in the allocation of resources but an acceleration of the aggregate rate of growth of gross domestic product. This is typically achieved by a strategy of industrialisation in one of three ways: 1. by producing manufactured consumer goods largely for the domestic market, usually behind high tariff walls; 2. by concentrating on the development of the capital goods industries, usually under the direction of the state; or 3. by deliberately orientating the manufacturing sector towards export, usually under some combination of indicative planning and either direct or indirect subsidies.

Industrialisation strategy in practice tends to place more emphasis on raising the level of

1. Republic of Botswana (2003:111).

capital formation, on introducing modern technology (which is often capital intensive), and - by extension - on promoting the growth of a small number of large metropolitan areas. Urbanization and the industrialisation strategy tend to go together. Government intervention in pursuit of its objectives usually is advocated and justified on the grounds that it will result in faster growth through increases in production.

Approaches to Industrialisation

There are three distinguishable approaches to industrialisation, particularly in developing countries. The first and the most commonly adopted approach is to concentrate on replacing imports of manufactured consumer goods by domestic manufactures. This is the well-known strategy of import-substitution industrialisation. The strategy has been implemented within the context of a mixed economy, and although direct state investment in industrial enterprise is not uncommon, most investment in manufacturing has been undertaken by the private sector. The role of the state has been to create a set of incentives that guides private initiatives in the desired direction. In practice, governments have tended to provide indiscriminate protection to manufacturing rather than to attempt to be selective or to identify individual "infant industries" for specific encouragement.

The second approach is one that is designed to enable a country to industrialise under conditions of stagnant growth or slowly growing exports. Under such conditions, the foreign exchange needed to import capital goods to sustain a high rate of investment is not available, and consequently the country must either reduce its growth ambitions to the rate permitted by export earnings or it must develop its own capital goods sector. Unlike import-substituting industrialisation, which proceeds by supplying already established markets for consumer goods, a strategy based on promoting the capital goods sector does not enjoy the advantage of a domestic market ready to absorb the output of the new industries. Consequently, capacity has to be built ahead of demand in the expectation or hope that demand will materialize as growth occurs. In a large country, such an expectation is perhaps reasonable, but in a small country there will be a danger of widespread excess capacity in the capital goods sector. This will make it impossible to exploit economies of scale, average costs will tend to be high, and firms might be forced to operate at a loss for long periods of time. Private industrialists are unlikely to be willing to bear the risks of building far in advance of demand or of carrying large losses for long periods. The strategy therefore implies that the state will have to play a leading role in establishing and running the capital goods enterprises. Small scale, light manufacturing of consumer goods can be left to the private sector, which can be granted protection as under an import substituting strategy; but the main thrust of industrialisation under this strategy would come from publicly financed investment in state enterprises. The country would of course have a mixed economy, but compared to a pure import substitution strategy, the mix would be tilted toward the public sector.

The third approach to industrialisation is to design the strategy of development around exports of manufactured goods. This is a hard way to industrialise, but some countries such as Hong Kong and Singapore had gone this way most successfully. Similarly, for such countries like South Korea and Taiwan (ROC), the import-substituting phase of industrialisation was relatively short and policy soon switched to an emphasis on exporting. It has been argued that the import-substituting phases were vital for the success of the subsequent exporting phases, but this is difficult to demonstrate conclusively, even though the cases of South Korea and Taiwan are good success stories in this regard.

Gauging the Degree of Industrialisation

Two main criteria are usually employed in gauging the degree of industrialisation of a country: the percentage contribution of the industrial sector to GDP, and the industrial percentage contribution to total employment or population. Measurement may include other criteria, such as the industrial contribution to total exports.

Sutcliffe (1971: 18), for instance, used some of these criteria in defining arbitrarily an industrialised country as a country where 25% of GDP arises in the industrial sector, of which at least 60% is in manufacturing, and at least 10% of its population is employed in industry.²

If the criterion of industrial contribution to GDP alone using the broad definition of industry is applied to Botswana, the country would be declared highly industrialized as its industrial contribution to GDP is about 50% (double the minimum 25% suggested by Sutcliffe). However, the manufacturing sub-sector contributes only about 8% to industrial GDP (compared to the 60% level suggested by Sutcliffe). The rest of the contribution comes from other sub-sectors, predominantly mining. Furthermore, and as noted in this chapter, only 4% of the country's population is employed in the industrial sector.³ Thus Botswana is very far from being an industrialised country. Therefore, more effort should be made by Botswana in the direction of industrialisation given the great role of the industrial sector in economic development as outlined in the next sub-section.

The Central Role of the Industrial Sector in Diversification and Economic Development

The role of the industrial sector in any given economy is to provide essential goods; that process then acts as an incentive to consumers and investors to further industrial development. Since industrial development is an essential part of economic development, the performance of the latter is usually reflected significantly through the functioning of the former.⁴

For many years the industrial sector has been viewed as the central hope of economic diversification in Botswana. This is possibly due to the following arguments:⁵

Firstly, diversification away from primary commodities and towards manufactured goods and service would reduce risks and vulnerability to the long-term deteriorating trend in the terms of commodity trade and their associated loss in real income.

Secondly, industrial investment will tend to have more forward and backward linkages with other sectors; especially the primary sector. The richness in inter-linkage explains the high growth elasticities of the industrial sector and its increasing contribution to GDP in the long run.

Thirdly, industrialisation has great possibilities for technological transfer and the adoption and creation of technology.

Fourthly, industrialisation leads to additional advantages, such as expansion of employment, if the right techniques are chosen.

Lastly, industrialisation ensures economic independence based on own manufactured goods together with goods and services from other sectors. This is in line with the argument for stability of balance of payments, income tax and receipts arising from industrialisation.

2. Sutcliffe considered the broad definition covering manufacturing, mining, public utilities and construction. The contribution is dominantly from mining.

3. See Central Statistical Office (CSO) 2002/2003 data. For further illustration, see Table 9.1 to 9.3 below.

4. For further details, see Kapunda *et al.* (1989: 147-157).

5. See Kapunda (2003: 8) and Bank of Botswana (2000: 75).

It should, however, be stressed that sustainable economic diversification cannot be accelerated by the industrial sector alone. As the Mid-Term Review of NDP 8 clarifies the argument for Botswana, sustainable economic diversification should be achieved primarily through accelerated growth of the non-mining sectors of the economy, (especially manu-facturing), along with agriculture, tourism and (financial) services.⁶

How Best to Foster Industrialisation

The question on how best to promote industrialisation hinges squarely on two main issues: the roles of the state and the market, and the approach to industrialisation-import substitution versus export-orientation. Many economists acknowledge the role of the state in the management of economic activity but disagree over what constitutes its optimal management. Two bodies of theory, structuralist and neo-classical, have influenced the debate on this issue. Structuralists tend to emphasize state intervention and protection and hence inward-oriented industrial development. The neo-classical economists advocate market forces and outward-oriented industrialisation.⁷

It should however be noted that the often quoted success story of the East Asian Tigers is essentially based on the invisible hand of the market and outward-oriented industrialisation led by the 'visible' hand of the state. Botswana has experienced two main industrial policies since Independence in 1966: the Industrial Development Policy, which was originally introduced in 1984, and the 1998 Revised Industrial Development Policy. The former mainly focused on import substitution industrialisation while the later aimed at developing an efficient and competitive export-oriented industrial strategy. This is elaborated further in subsequent sections of this chapter.

Policies and Strategies of Industrialisation in Botswana

Background Information

Since Independence in 1966, Botswana's economy has been propelled mainly by the primary sector (initially agriculture and currently mining). At Independence, the agriculture sector dominantly contributed about 40% to GDP while the mining sector's contribution to GDP was quite insignificant. The narrowly defined industrial sector contributed 6% to GDP. At that time beef production was the mainstay of the economy in terms of output and export earnings. Thus the need for economic diversification in Botswana has existed since Independence.

Effective efforts to diversify the economy started in 1982. These include, among others, the Financial Assistance Policy (FAP), the Selebi-Phikwe Regional Development Programme, the Botswana Development Corporation (BDC) projects, and - in recent years - tourism and financial services. FAP provided capital and labour grants to new or expanding industrial and other productive activities and 'linking sectors'.⁸ FAP was replaced by the Citizen Entrepreneurial Development Agency (CEDA) in 2001. These efforts were to be further reinforced by the release of Government Paper No 2 of 1984, which published the 1984 Industrial Development Policy for Botswana.

6. For details, see Republic of Botswana (2000: 1, 36).

7. For further details, see Siwawa - Ndai (1997: 335)

8. For details, see Siwawa - Ndai (2001: 338) and Sentsho, J. (2001: 7).

The 1984 Industrial Development Policy

The basic thrust of the 1984 Industrial Development Policy was to diversify the economy away from its dependence on the primary sector (especially mining), using import substitution as the main strategy.

The strategy underlined production for the domestic market and substitution for imports. This strategy was also appropriate for the then closed economies of the southern African region. It became an underlying premise of Botswana's industrial policy and subsequent National Development Plans.⁹ The primary objectives¹⁰ of the policy included:

- The creation of productive jobs for citizens;
- The training of citizens for jobs with higher productivity;
- Diversification of the productive sectors of the economy;
- Growth of value added or GDP accruing to Botswana; and
- Dispersion of industrial activities to rural areas.

The 1998 Industrial Development Policy

The 1998 Industrial Development Policy, presented by Government Paper No 1 of 1998, shifted the emphasis of industrial development strategy to export-oriented growth. The challenge was essentially a reaction to the global competition forces of the 1990s, which affected Botswana and many other countries. Slow industrial growth and the threat of high levels of unemployment and poverty also contributed to the change. However, the major themes underlying the new strategy are the same as those of the previous strategy: the need to diversify the economy away from its dependence on the primary sector (especially mining), the need to foster growth of the private sector, and the need to support the growth of productive employment. Nevertheless, the 1998 Policy puts more emphasis on the need to complement the industrial sector with other sectors (especially the service sector) when it comes to employment creation.

The 1998 Industrial Development Strategy, which is applicable up to the time of writing this book, identifies the major challenge facing industrial development in Botswana as the growing intensity of competition brought by *inter alia* the expected reduction in barriers as a result of the World Trade Organisation (WTO) agreement; the Southern African Development Community (SADC) protocol on trade co-operation; and the rapid introduction of more productive technology and improved work organisations throughout the world.¹¹

In order to achieve the goal of developing an efficient and competitive export-oriented industrial sector, the Policy thrusts include the following:

- Vigorous pursuance of trade negotiations with both bilateral and multilateral bodies to ensure that such negotiations lead to maximum market access for Botswana exports and lowest possible prices for the inputs required by Botswana industry;
- Development of the capacity to utilize international data-banks to locate competitive inputs, identify export opportunities and make such information available to the private sector;

9. Republic of Botswana (1998: 1).

10. See also Mpabanga, (2001: 379).

11. See Galebotswe (199: 3).

- Encouragement to investors and entrepreneurs to use incentive schemes to improve labour productivity and to achieve competitive unit labour costs;
- Establishment of appropriate mechanisms to develop utility rate policies for public monopolies, whether operated by public or private interest;
- Freedom to investors in the trade competitive sectors to make decisions regarding industrial location and technology, guided by areas with a high potential for industrial location; and
- Development and support of programmes by the ministries dealing with commerce and industry, in partnership with private organisations, to assist new and expanding exporters.

The Industrial Development Policy also covers some aspects of small, medium and micro-enterprises, which are discussed in greater details in Chapter 10.

Industrial Sector Performance and Economic Diversification

As noted in the introductory section of this chapter, the narrowly defined industrial sector contributed about 6% to GDP at Independence in 1966. Its recent contribution, however, has declined to about 4%. The contribution to GDP and growth of the broadly defined industrial sector is shown in Table 9.1.

Table 9.1. Industrial and other sectors' percentage contribution to GDP and growth.

Economy Activity	1966	1975/76	1985/86	2000/01	2002/03⁺	Average Growth 1996/97-2002/03
Agriculture	42.7	20.7	5.6	2.6	2.6	0.8
Mining	-	17.5	48.9	36.5	34.8	5.2
Manufacturing	5.7	7.6	3.9	4.1	4.3	5.0
Industry*	14.1	22.7	10.5	12.3	12.6	6.5
Others**	43.2	39.1	35.0	48.6	47.0	7.6
GDP (P million) ***	908.6	2083.5	5708.1	16524.4	18412.0	6.4

* Industry is broadly defined to include manufacturing (narrow definition of industry) plus the main supporting sectors: public utilities/electricity, gas and water) and construction.

** Remaining sectors essentially services.

*** Constant 1993/94 Prices.

+ Provisional.

Sources: Calculated from *National Development Plan 9* (NDP 9) data.

At Independence, the agricultural sector dominantly contributed about 40% to GDP. However, its current sectoral contribution to GDP is only about 3%. The mining sector, whose contribution to GDP was negligible at Independence, started dominating the economy in the second half of the 1970s. As noted earlier, its highest sectoral share to GDP was 52.6% in 1983/84. Mining's recent (2002/03) sectoral contribution to GDP is about 35%.

This falling contribution of the mining sector should not, however, be used to rashly conclude that significant diversification has been achieved in Botswana. Firstly, and as noted earlier, the manufacturing sector, which is expected to play a central role in the diversification process, is not contributing enough to GDP. Furthermore, manufacturing's contribution to total employment and total exports is only 11% and 5% respectively. Even the industrial sector, defined broadly, contributes only 13% and 23% to GDP and total employment respectively. (See Table 9.1 and 9.2)

The second argument is based on the weak performance of the agricultural sector. Since the sector's forward and backward linkages are crucial in the domestic industrialisation process, the weak agricultural sector's performance negatively influences industrial development and economic diversification.

Thirdly, even the contribution to GDP of the important service-oriented sectors is still low. Tourism (reflected through trade, hotels and restaurants) and financial services, for example, each still contributes only about 10% to GDP.

Table 9.2. Industrial contribution to total employment* relative to other sectors (selected years) (percentages).

Economic Activity	1985	1995	1998	1999	2000	2001 ⁺
Agriculture	3.4	2.0	1.7	2.1	2.1	2.2
Mining	6.3	3.5	3.6	3.2	3.1	3.0
Manufacturing	8.5	10.3	9.6	0.9	10.8	11.4
Industry**	19.9	21.0	21.1	22.7	23.0	23.0
Others***	70.4	73.5	73.6	72.0	71.8	71.8

* Paid employees excluding working proprietors and unpaid family workers.

** Defined as in Table 12.1.

*** Remaining sectors as in Table 12.1.

+ Provisional.

Sources: Calculated using Central Statistics Office (CSO) data.

However, the above-mentioned arguments should not be allowed to hide the generally positive industrial trends. As noted in Tables 9.1 and 9.2, for instance, manufacturing's contribution to GDP increased from 3.9% in 1985/86 to 4.3% in 2002/03. Further, general industry's contribution to GDP similarly increased from 10.5% to 12.6% in the respective years. And manufacturing's contribution to total employment increased from 8.5% in 1985 to 11.4% in 2001.

The growth of the broadly defined industrial sector has been higher than that of the mining sector in recent years. The average growth of the industrial sector was 6.5% between 1996/97 and 2002/03 while that of the mining sector was 5.2% over the same period. With respect to industrial diversification, manufacturing output, which mainly consisted of meat and meat products at Independence, has been significantly diversified to other consumer, intermediate and capital goods as shown in Table 9.3.

Table 9.3. Manufacturing structure (percentage).

Sub-Sector	1992/93	1993/94	1994/95	1995/96
1. Meat and meat products	19.7	17.3	14.0	14.0
2. Dairy products	16.9	16.8	13.6	12.6
3. Beverages	13.0	12.8	10.7	10.0
4. Bakery products	4.7	4.9	4.3	4.1
5. Textiles	10.2	9.8	8.1	7.4
6. Tanning & leather products	1.6	1.6	1.3	1.3
7. Chemicals & Rubber products	4.7	4.6	3.8	3.6
8. Wood & Wooden products	1.7	1.6	1.4	1.3
9. Paper & Paper products	6.5	6.9	5.7	5.4
10. Metal products	11.4	13.1	28.4	32.1
11. Other manufacturing products	9.6	10.6	8.7	8.2
1-11. Total (1985/86 prices - Pm)	821.5	863.0	1079.5	1183.9

Source: Botswana Central Statistics Office.

Industry and Trade

Trade Theory and Industrialisation

The literature that links trade theory and industrial economics has two major strands: one that is concerned with modeling the role of economies of scale as a cause of trade, and the other which views imperfect competition as the core of the story.

Economies of Scale as a Cause of Trade

Traditionally, trade was considered to arise due to differences in resource endowments among countries. According to the Heckscher-Ohlin-Samuelson model (or the factor-price equalization theorem) (Samuelson, 1949), trade reflects an interaction between the characteristics of countries and the characteristics of the production technology of different goods. Countries will export goods whose production is intensive in the factors with which they are abundantly endowed - for example, countries with a high capital-labour ratio will export capital intensive goods. The model leads us to expect the following:

- Trade should typically be between complementary countries - capital-abundant countries trading with labour-abundant countries;
- The composition of trade should reflect the sources of comparative advantage; and
- Trade is an indirect way for countries to trade factors of production; hence it should have strong effects on income distribution - when a country trades capital-intensive exports for labour-intensive imports, its workers end up worse off.

This led to the concept of comparative advantage, with the conclusion that countries engage mainly in inter-industry trade. Yet in practice, intra-industry trade takes place. However, empirical work conducted in the 1960s showed that trends in world trade failed to confirm the above expectations. In fact, the largest and rapidly growing part of world trade was among the industrial countries. These countries seemed fairly similar in their factor endowments. The trade was composed of two-way exchanges of fairly similar goods, so-called "intra-industry" trade.

The theory of comparative advantage is based on the assumption of perfectly competitive markets, similar technologies in production, and constant returns to scale, among others. The new theories of trade have found some of these assumptions to be questionable. They base their arguments precisely on questioning the validity of these assumptions.

Since the mid-1960s, researchers have proposed another explanation - trade among the industrial countries was not due to comparative advantage but to economies of scale. Because of economies of scale, there was an essentially arbitrary specialisation by similar countries in the production of different goods, often of goods produced with the same factor intensities. This explained both why similar countries trade with each other and why they exchange similar products.

Economies of Scale and Market Structure

In practice, many individual modern countries are characterized by economies of scale, that is production is more efficient the larger its scale. There are two types of scale economies:

- **External economies of scale** - declining unit costs arise from an expansion of industrial output or for reasons external to the firm. For example, these may arise from advantages of concentration in one location that provides specialized services which support the industry's operations, or provides a larger and more flexible market in specialized kinds of labour; and
- **Internal economies of scale** - declining unit costs as the firm's output expands.

What are the implications of economies of scale on the structure of industry?

- **External economies of scale** - these lead to many small firms that are perfectly competitive. Individual firms may remain small in spite of the advantages of large scale at the level of industry.
- **Internal economies of scale** - these give large firms a cost advantage over small ones and lead to an imperfectly competitive market structure.

Both external and internal economies of scale are important causes of international trade. We start with trade based on internal economies by reviewing the theory of imperfect competition.

The Theory of Imperfect Competition

In a perfectly competitive market, firms are price takers - an individual firm represents a tiny fraction of the global market; in an imperfect competitive market, firms influence prices, since they are only able to sell more by reducing price.

In the case of monopoly, the firm faces a downward sloping demand curve, D and sells more by reducing price. Marginal revenue (MR) is always less than price (and lies below the demand curve), because to sell an additional unit requires reducing the price of all units (not just the marginal one). The firm faces a downward sloping average cost (AC) curve, because of economies of scale. When AC decreases, marginal cost (MC) is always less than AC and lies below the AC curve. These relationships can be written as:

$$1. \quad X = a - bP$$

where X is units of sales, P is unit price, b is the slope of the demand curve

Rearranging equation 1. gives:

$$P = (a/b) - (X/b)$$

Since revenue is $R = P \times X$ then

$$R = [(a/b) - (X/b)] \times X$$

By differentiating with respect to X to get marginal revenue (MR), the following equation then derives:

$$\frac{\partial R}{\partial X} = MR = [(a/b) - (X/b)] - X/b$$

$$2. \quad MR = P - (X/b)$$

Therefore, the gap between price and marginal revenue, that is:

$$P - MR = X/b$$

depends on the initial sales and the slope of the demand curve. A corresponding formula to equation 2. is:

$$3. \quad C = F + cX$$

where F is fixed cost, c is the firm's MC

The fixed cost gives rise to economies of scale; the larger the output, the less is the fixed cost per unit as the fixed cost is spread over a larger output. Then,

$$4. \quad AC = C/X = F/X + c$$

Profit maximisation requires that $MC = MR$, a relation that can be depicted at point "a" in Figure 9.1.

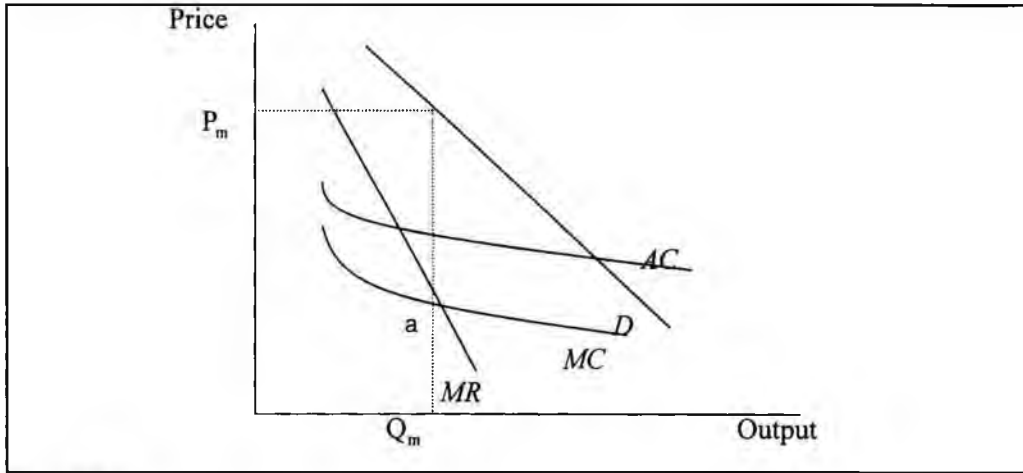


Figure 9.1.

Monopolistic Competition

The usual market structure in industries characterized by internal economies of scale is one of oligopoly - that is, there are several firms, each of them large enough to affect prices but none with uncontested monopoly. Monopolistic competition is a special case of oligopoly. Analysis of monopolistic competition assumes that products are differentiated - each firm has monopoly on its products and is, therefore, somewhat insulated from competition. Further, each firm takes prices charged by rivals as given - it ignores the impact of its own prices on the prices of other rivals; therefore, each firm behaves as if it were a monopolist - hence the name monopolistic competition. And the firm's sales depend on total industry demand, the number of rival firms, the prices of rivals and its own prices. This can be written as:

$$5. \quad X = S[1/n - b(P - \bar{P})]$$

Where X is firm sales, S is industry sales, n is number of firms in the industry, P is price charged by firm, \bar{P} is average price of competitors.

If the demand and cost functions are identical for all firms, then $P = \bar{P}$ that is, at equilibrium, firms charge the same price. Then, equation 5. reduces to:

$$X = S/n$$

that is, each firm contributes a share, $1/n$ of the total industry sale. From equation 4:

$$6. \quad AC = F/X + c = n(F/S) + c$$

Thus, the more firms there are in the industry, the higher the average cost due to declining output/firm ($S/n \downarrow$). The average cost (AC) curve is upward sloping. Equation 5. can be written as:

$$7. \quad X = (S/n + Sb\bar{P}) - Sb\bar{P}$$

Since each firm considers each other's price as given, equation 7. is similar to equation 1., with $(S/n + Sb\bar{P})$ equivalent to a and Sb equivalent to b . Thus, the MR equation 2. becomes:

$$8. \quad MR = P - X/(Sb)$$

Profit maximisation ($MR = MC$) then requires that:

$$MR = P - X/(Sb) = c \quad \text{and};$$

$$P = c + X/(Sb) \quad \text{and since } X = S/n$$

$$9. \quad P = c + 1/(bn)$$

Thus, the more firms there are in the industry, the lower the price each firm will charge, leading to a downward sloping demand curve. Combining equations (6) and (9) gives:

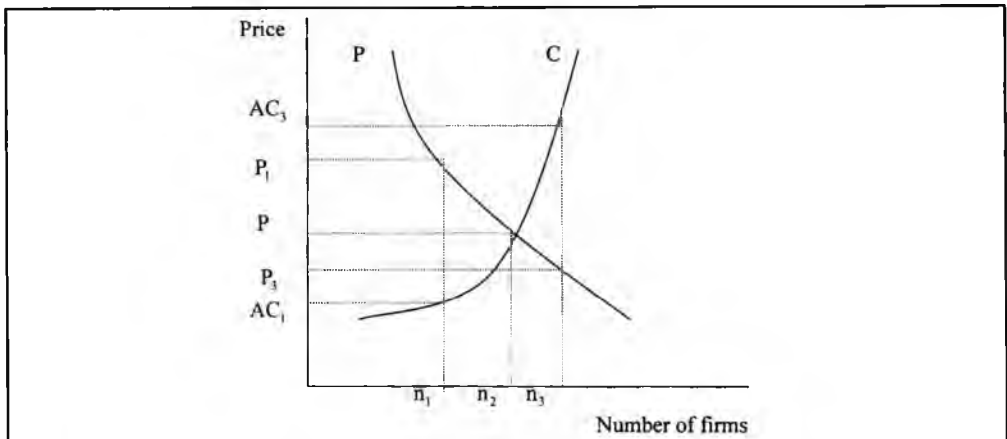


Figure 9.2. Increase in the number of firms leads to decline in the price each firm can charge for their products.

The use of monopolistic competition in trade is based on the idea that trade increases market size. With economies of scale, both the scale of production and the variety of goods may be constrained by the size of the market. Trade offers an opportunity for mutual gain even when countries do not differ in their resources or technology. In terms of the effect of increased market size, equation 6. shows that the average costs per firms increases with the number of firms, since:

$$AC = F/X + c = n(F/S) + c$$

As S increases, average costs decline for a given number of firms. Therefore, a firm with higher sales, S , will have lower average cost (its curve lying below) than one with lower S . Moreover,

equation 9. showed that the size of the market does not affect price that is:

$$P = c + 1/(bn).$$

Therefore, an increase in S does not shift the pp curve. Combining the information from equations 6. and 9. again leads to Figure 9.3.

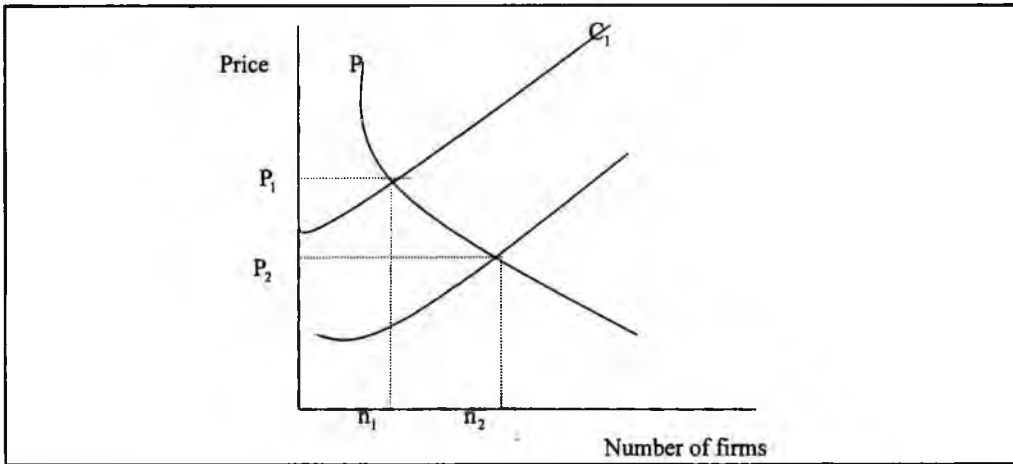
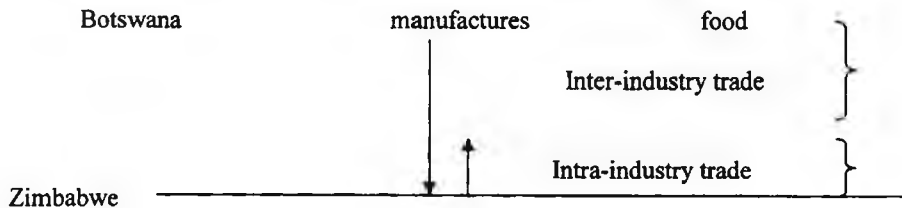


Figure 9.3.

This shows therefore that an expanded market provides greater variety of products at lower price.

Economies of Scale and Comparative Advantage

Supposing there are two countries, Botswana and Zimbabwe; Botswana has a higher K/L ratio than Zimbabwe. Furthermore, let there be two industries, manufactured goods and food; manufactured goods have a higher K/L ratio than food. Due to economies of scale, neither country will produce a full range of manufactured products by itself; although both may produce some manufactures, they will produce other goods as well. Under this monopolistically competitive arrangement, Botswana will be a net exporter of manufactured goods and an importer of food, and Zimbabwe will produce different manufactured products - Botswana prefers a variety of manufactured goods, and although it runs a trade surplus in manufactures, it will also import some manufactured goods from Zimbabwe. The pattern of trade looks as follows:



Therefore, trade in the monopolistic competitive model has two parts - intra-industry trade (exchange of manufactures for manufactures), and inter-industry trade (exchange of manufactures for food). There are four important points to note in this regard: inter-industry trade reflects comparative advantage; intra-industry trade reflects economies of scale; it takes place even for countries with similar K/L ratio and technology; and the relative importance of intra-industry trade depends on the similarity of the trading countries.

Significance of Intra-industry Trade

Experience has shown that industries with high levels of intra-industry trade tend to produce sophisticated manufactured goods, for example chemicals, pharmaceuticals, power generating equipment, etc. These may also be experiencing high economies of scale. Industries with little intra-industry trade are typically labour intensive, for example footwear and apparel. For these industries, comparative advantage is more important than economies of scale. Intra-industry trade is dominant in countries with fairly similar relative factor prices, similar levels of economic development, and where economies of scale and product differentiation are important.

Industrial Economics and International Trade

Trade and foreign exchange policies are the most important policy instruments for industrialisation. During the period of Import Substitution Industrialisation (ISI) in the 1970s, trade and foreign exchange policies were intensively used for industrial development. Trade reforms aimed at eliminating the excesses associated with the ISI syndrome have been initiated since early in the 1980s.

Manufacturing Sector and Trade Relations in Botswana

To what extent have international trade relations stimulated the growth of the manufacturing sector in Botswana? As mentioned earlier, the influence of the Southern African Custom Union (SACU) on the manufacturing sector of Botswana has already been a very widely discussed issue, both in political and academic circles. Over the years, the growth of the manufacturing sector in Botswana has largely been conditioned by strong historical ties with South Africa as well as the participation of Botswana in SACU, within which trade is governed by the SACU Agreement of 1910 (as periodically revised; the latest revision being in 2002). The major issues from the viewpoint of manufacturing relate to the level and form of external protection, the use of excise duties, differential industrial promotional schemes, anti dumping dispute settlement, and institutional development. These issues are best handled in an international economics textbook and we will not attempt to discuss all of them here. Rather our attention is focused only on those issues that have relevance for the growth of the manufacturing sector. As a member of SACU, Botswana does not enjoy the flexibility to freely fine tune its protective measures for the development of domestic industries. The question then arises as to what extent the Government of Botswana has made use of flexibility or manoeuvring within the trade network over the years for the sake of industrial growth and development. The fact is that the government has for a number of reasons been seriously constrained in this regard. The following observation may be a pointer to the actual experience of Botswana.

Article 6 of the SACU Agreement forms the basic industrial policy instrument in SACU.

It permits member countries to levy additional duties to protect infant industries for a maximum of eight years. This protection has been used only infrequently in Botswana, partly reflecting the government's preference for non-tariff protection, and partly because this would have meant that customs duties collected on imports of inputs used by infant industries would have had to be paid into the common revenue pool and shared by all members of the Union. Thus the common external tariff has not given Botswana producers much choice but to source inputs from South Africa, whose range and quality are not comparable to those of inputs from outside South Africa (Siwawa-Ndai, p 42).

The above observation may be taken only as a point of view, not as an excuse for not gearing up the manufacturing sector. Moreover, the situation on the ground has been one in which Botswana has not really been able to fully exploit the opportunities to produce and export manufactured goods. Hence the commodity composition of exports continues to reveal a heavy weighting on diamond and beef exports. Manufactured exports accounted for about 20% of total exports in 2001. The direction of imports did not undergo much diversification over time either - South Africa accounts for over 70% of import and Europe accounts for more than 80% of exports (Bank of Botswana, 2002). The trading partnership has no doubt helped Botswana in exporting traditional non-manufactured commodities. However, in the context of the changing international trade landscape and continued liberalisation of world trade and WTO agreements, competition is likely to increase in the world market for these commodity groups; the cases of textiles and beef are indicative examples (UNCTAD, 2002). Even to take advantage of the preferential terms that are available through the proposed EU Regional Economic Partnership (REPS), SADC, and the Doha Round trade talks, Botswana needs more emphasis on competitiveness. Export market access is a major source for the expansion of the manufacturing sector, and the policy of economic diversification through the development of the export sector critically depends on the degree to which this sector is linked to the manufacturing sector. With the emergence of SADC, an integrated regional market is fast emerging, and pressure on the manufacturing sector to improve and diversify will increase. Can Botswana meet the challenges? An answer to this question depends to a large extent on the existing manufacturing system as already described earlier in this chapter.

Ownership Structure of Manufacturing Industries

An understanding of ownership structures, in particular foreign ownership, appears important mainly because, in the path of the dynamic transformation of newly industrializing countries (NICs), foreign investment and technology transfer has played a dynamic role (UNIDO, 92; UNCTAD, 98; World Bank, 98). What is the level of foreign ownership in the manufacturing industries of Botswana? As discussed earlier, data on the sector-wise distribution of foreign investment, technology transfer, partnerships and alliances is not available for any meaningful analysis of the impact of foreign investment in the manufacturing sector in Botswana. However, we may be able to gather some information from the UNCTAD report (2002) and data available with government departments, on the extent of penetration of foreign investment into the manufacturing sector. The inflow of foreign investment has been highest in the mining sector, accounting for 75% of the stock in 1999; services accounted for another 20%, with only the remaining 5% by the manufacturing sector. Despite liberal financial incentives offered by the government (the FAP), the above-cited UNCTAD report on investment policy has revealed that Foreign Direct Investment (FDI) into the manufacturing sector has mostly been in small scale

consumer goods in response to niches in the domestic and regional markets. Although the quantum of investment has been low, foreign firms are found dominant in several sectors (see Table 9.4). As seen from the Table, in all sectors except meat, foreign-owned companies predominate.

Table 9.4. Share of foreign companies in manufacturing (percentage).

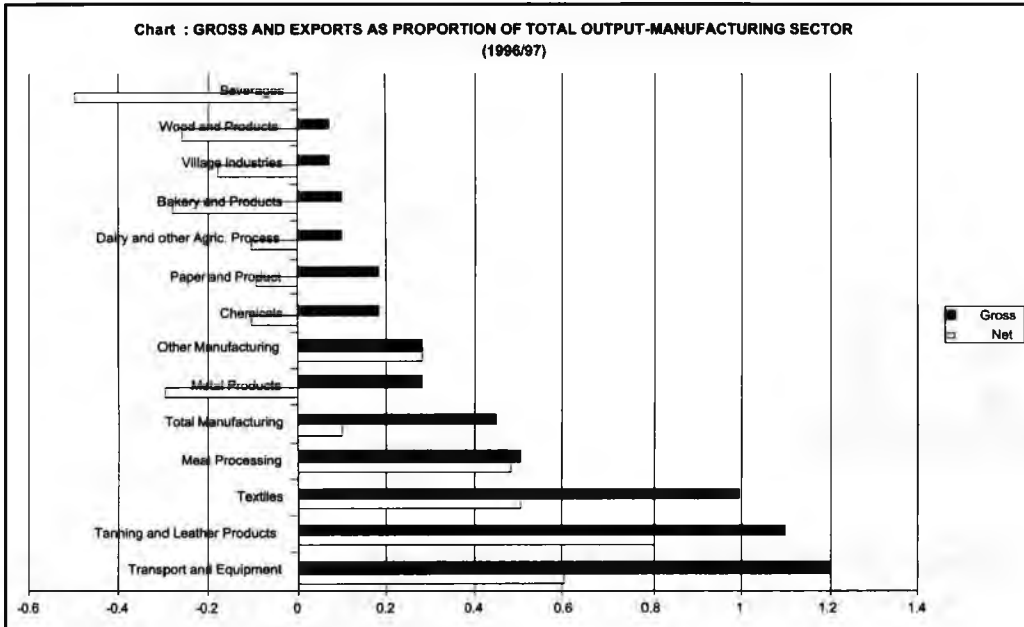
Sectors	Domestic	Sales Exports
Meat and Meat Products	5-10	5-10
Dairy Products	70-85	0
Bakeries	60-65	0
Beverages	90-95	0
Textiles	90-95	90-95
Clothing and other Apparels	55-70	90-95
Leather	70-80	90-95
Wood	70-80	90-95
Paper	80-90	90-95
Chemical	50-65	50-60
Rubber Plastic	80-90	90-95
Metal	70-80	80-90
Others	60-70	70-80

Source: UNIDO-2002.

Also important in this context are the findings of a study conducted by the Bank of Botswana. Using the measure ratio of exports net of imports (net measure) to the sectoral gross output of manufacturing (which may suggest the degree to which export activities of the sub-sector impact on the rest of the economy), it found as shown in Figure 9.4 that, for many product lines like metals, chemicals, paper products, bakery products, wood products and beverages, the net impact is negative. This may suggest a negative contribution of these product lines to the domestic value added in Botswana.

In the context of high participation in manufacturing for export by foreign firms, the low linkages identified above reflect the fact that the manufacturing sector in Botswana could not generate significant technology capabilities for assuring the necessary input linkages for manufacturing and export. As seen in the earlier sections, a number of incentives introduced in the past have had only a minor impact on inter-industry linkages. This may be because linkage was not their primary objective. Therefore, the domestic input generation which demands technological deepening has not made much headway in the course of industrialisation of the country! Botswana's experience may be contrasted with that of Singapore, which achieved vigorous export orientation with the help of foreign firms.

Figure 9.4. Gross and net export as proportion of total output of the manufacturing sector (1996-1997).



Source: Bank of Botswana Annual Report, 2002 p 78.

The Structure of Exports, and the Contribution of Manufacturing to Total Exports

The composition of Botswana's exports between 1991 and 2001 is shown in Table 9.5. The table reveals that, during the period 1995 to 1998, the contribution of manufacturing to total exports increased significantly. This is a reflection of two major issues. On the one hand is a greater diversification of exports away from diamonds, and on the other, the increased exports of motor vehicles with the commencement of operations of wheels of Africa's Hyundai assembly plant in 1995. However in 1999, the motor vehicle assembly operations encountered problems and had to close down, and the share of diamonds in total exports increased once again, whilst the share of manufacturing began to decline (BOB, 2002: pp 71). The implication of this is that greater attention in terms of policy measures will need to be put in place to support the growth and development of the textiles sector, and other non-traditional manufacturing export suppliers, in order to achieve greater industrial diversification of the Botswana economy.

Table 9.5 Percentage distribution of exports by type, 1991-2001.

Year	Diamond	Copper-nickel	Beef	Soda ash	Textiles	Vehicles	Other
1991	78.7	7.9	3.8	0.6	3.3	-	5.7
1992	78.9	7.2	4.1	1.2	2.1	-	6.5
1993	78.2	5.1	4.3	1.2	2.2	2.1	6.9
1994	74.9	5.2	4.3	0.7	3.6	6.1	5.3
1995	67.0	5.5	3.7	0.4	2.5	16.1	4.8
1996	70.4	5.5	2.9	0.8	2.4	14.1	4.0
1997	73.8	4.6	2.6	1.1	2.4	11.4	4.2
1998	69.5	5.0	3.9	1.1	3.5	11.1	6.0
1999	79.4	4.6	2.0	0.9	2.0	5.5	5.7
2000	82.3	6.0	2.2	0.7	1.8	2.0	5.1
2001	84.5	4.2	3.2	0.9	1.3	2.1	4.0

Sources: Bank of Botswana and Central Statistics Office, Gaborone.

Challenges and Prospects of the Industrial Sector

The main challenge of the industrial sector is to play its expected central role in economic diversification, given its current low level of performance. The main constraints to the industrial sector include a low level of technology, limited entrepreneurship and technical skill among local investors, and disincentives to foreign investors (such as the relatively high cost of electricity, water and telecommunication services).

Special constraints on the Small, Medium and Micro-Enterprises (SMMEs) include a lack of access to capital, poor quality of products (hence stiff competition from imports), lack of entrepreneurial and market skills, the bias of the educational system against self-employment, and the negative impact of HIV/AIDS on the enterprises. Chapter 10 discusses in detail the constraints to SMME's in Botswana.

In addition to economic diversification, Botswana faces the challenge of the growing intensity of competition at both regional and global levels. Some of the factors contributing to increased competition include the anticipated reduction of barriers to free trade as a result of SACU, SADC and WTO agreements, and improved global technology and work organisations.

Several problems may arise from regional or world agreements. At SACU level, for instance, the requirement of common policies and strategies on agricultural and industrial development may be in conflict with the interests of an individual country's competitive policy given the different levels of industrial development. Furthermore, the less industrialised countries within SACU are likely to face more and stiffer competition. Botswana faces more competition for industrial goods from the more industrialised South Africa. This makes the development of the manufacturing sector a difficult task. Similar arguments can generally be given regarding other regional or global levels, when less industrialised countries are involved in trade with more industrialised economies.

Botswana is also a member of SADC and has been affiliated with the WTO since 1995. In line with Botswana's policy of improving market access and the sourcing of raw materials from countries in the region, Botswana participated actively in the negotiations for the SADC

Trade Protocol. One of the main objectives of the Protocol is to create a free trade area in the SADC region by the year 2008. This objective is comparable to WTO's objective of liberalizing trade between rich and poor countries. Although the idea may be viewed as an opportunity, it may involve difficulties in less industrialised countries as noted earlier. It also poses a challenge to countries with a low ability to compete through high-quality but low-price products.

Regarding the African Growth and Opportunity Act (AGOA), the USA Government amended the AGOA to accommodate Botswana's and Namibia's request to be classified temporarily as least developed countries, for the purposes of accessing raw materials for textile industries from other countries including those outside Africa. However, domestic enterprises have not availed themselves fully of this opportunity.

At this stage a cautionary remark is in order. Whereas regional co-operation and integration, and international organisations like WTO, have some positive impacts on trade, the interests of individual countries based on various objectives should be considered. These may include the need to assist weak competitor firms like small and medium enterprises which may be very important in a given country; the importance of inter-industrial linkages and the use of local inputs to ensure economic stability; and the need for having some mechanism of controlling unfair competition and "dumping" problems.

The proposal by the USA Government to negotiate a free trade area between the SACU member countries and the United States, with the aim of securing market access for SACU products to the USA market on a more permanent basis, seems to be attractive. However, it is a challenge for Botswana and other SACU members to handle the difficulties which may face the industrial sector, including the ability to trade high quality low-cost products.

Conclusions

This chapter has examined industrial development and trade in Botswana. It has discussed the policies and strategies that have been formulated with the ultimate aim of realizing the objectives of industrial sector diversification and economic development. It has further analysed the theories of trade and industrial organisation before presenting the experience of the Botswana economy.

The chapter argues that, for about two decades, even though the hope of diversifying the economy has been pitched on what the industrial sector can achieve, the sector's performance has not been encouraging. Furthermore, the sector faces some challenges and constraints, such as competition at both the regional and global fronts, disincentives to foreign investments (such as the relatively high cost of public utilities), and limited technology and entrepreneurship skills among local investors. The policy implications and recommendations that derive from this chapter could be highlighted as follows:

1. Despite the emphasis on an export-oriented strategy adopted in the 1998 Industrial Development Policy and on private investment, the role of the government should continue to guide the process of industrialisation, trade and economic diversification.
2. The government should support the industrial sector as a matter of priority. It should, for instance, provide more forms of support to the small and medium enterprises and gradually reduce the support as they reach a point of sustainability, given their importance in poverty alleviation, rural industrialisation and citizen empowerment. The support may involve incen-

tives, such as competition support, subsidized loans and temporary tax exemptions. In general the government is encouraged to implement an effective competition policy centered on fair competition.

3. The government should also intensify, through the respective departments and agencies, investment and export promotion strategies that will promote foreign direct investment and local enterprises. This may be in the form of a reduction of disincentives to foreign investors, such as the relatively high tariffs on public utilities and the time-intensive bureaucratic procedures.

4. Local investors are encouraged to cooperate and participate in joint ventures with experienced foreign investors. This will promote their technical and managerial skills and their ability to produce goods of high quality at low cost.

5. Given the available international trade opportunities, such as AGOA, Botswana should exploit to the fullest bilateral opportunities. This will also enable the country to achieve in no distant future the objective of improving Botswana's competitiveness in the global market. For example, through AGOA, the USA market will serve as a large destination for textile goods. On the other hand, SACU, SADC, COMESA, the proposed SACU-USA FTA and the African common market will provide Botswana with an expanded market for other exportables.

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Chapter 10

The Small and Micro Enterprises and the Challenge of Employment Creation in Botswana

M. S. Mukras and M. Seemule

Introduction

One dimension of the Republic of Botswana that is widely talked about all over the globe is the exceptional performance of its economy over a considerable length of time. A look at past economic statistics suggests that the economy has performed remarkably well since 1966, when the country attained independence. Available empirical evidence records an average annual GDP growth rate of 8.4% between 1966 and 1990.

Although this remarkable growth rate declined in the 1990s, the country's growth has remained enviable within Sub-Saharan Africa as well as in the less developed countries. Compared to other Sub-Saharan economies, Botswana has maintained an annual growth rate that makes it an exception in the region, only comparable to the Newly Industrializing Countries (NIC) of southeast Asia. It must be noted, however, that while the NIC of southeast Asia have recently been engulfed in severe economic distress, the economy of Botswana continues to perform satisfactorily. For example, in 1997/98, the annual growth rate of GDP stood at about 7.5% (BoB, 2002). Although this declined to 6% in 1998/99, by 2000/01 it had increased again to 8.4% (BoB, 2002). The most conspicuous testimony to this exceptional performance of the economy could be found in the social and economic infrastructure sectors - the educational infrastructure made up of schools, colleges and the university; the telecommunication system and the IT development; the roads networks; and the health infrastructure, which had all witnessed dramatic improvements over the period.

Remarkable though the performance of the economy has been over the years, a dimension of that performance that has remained disappointing is the employment sector - the impressive growth rate has not translated into commensurate and parallel employment creation. Despite such an outstanding economic performance, and despite the existence of a relatively small economically active labour force (about half a million), the country is experiencing an unemployment problem that has persisted over a significant length of time. Figures from the Central Statistical Office suggest that the unemployment rate rose sharply from 13.9% in 1991 to 20.9% in 1993. From the 1993 level, the figure rose from 21.2% in 1994 and to 22.2% in 1995, (CSO, 1991, 1993, 1994, and 1995). Although there was an encouraging decline from the 1995 level of 22.2% to 19.6% in 2001, there is certainly no doubt that this level of unemployment is still significantly high and requires urgent remedial measures.

The Challenging Problem of Employment Creation in Botswana

Principal Features of Unemployment in Botswana

In the quest for employment creation in Botswana, a relevant as well as important factor is knowledge of some of the principal features of unemployment in the country. Such knowledge will most certainly be pivotal in facilitating the design of measures directed towards the reduction, if not the elimination, of unemployment in the country. There are four key features of unemployment in Botswana: first, the highest rates of unemployment are to be found among the youth in the age bracket of 15-24 years; second, females have significantly higher unemployment rates than males between the ages of 15 and 44 years, although the situation changes in their favour thereafter; third, urban unemployment rates have consistently been higher than the corresponding rural rates for both females and males for all age groups; and finally, *ceteris paribus*, the education level achieved by the individual is inversely related to the unemployment rate. In other words, educated individuals have higher probability of finding employment than their counterparts with less education. Table 10.1 presents data on unemployment by sex and education. The data are based on the year 2001 Population and Housing census.

Table 10.1. Unemployment by sex and education.

Education	Males	Females	Totals	Per cent		
				Males	Females	Total
Standard 5 - 7	9.327	10.824	20.151	46.3	53.7	100.0
Form 1 - 3	16.923	24.907	41.830	40.5	59.5	100.0
Form 4 - 6	11.489	14.535	26.024	44.1	55.9	100.0

Source: CSO, 2001 Population and Housing Census.

According to the data collected by the CSO, starting from those who had attained Standards 5 to 7 right to Forms 4 to 6, the percentages of unemployed females are significantly higher than those of males. The level of unemployed females stands at 54% for those who attained Standards 5-7, then goes up to 60% for those who attained Forms 1-3, but declines to 56% for those who attained Forms 4-6. The figures suggest that as females gain higher levels of education beyond Form 4, their share of unemployment tends to decline. The reverse is the case with males, whose share of the unemployed tends to move upwards with education beyond Form 4. Table 10.2 presents information on unemployment by age and sex. The figures, which are based on the 2001 Population and Housing Census, seem to suggest that total unemployment declines with age. Of the four age groups, age group 15-24 suffers the highest level of unemployment, being 52.2%. This percentage declines to 31.1% for the age group 25-34 and reaches the lowest level of 5.4% for the age group 45-59. Comparing males and females, the percentages of unemployed females remains higher than those of males for both the age groups 15-24 and 25-34. Beyond the age group 25-34, this balance is tipped over in favour of females. There are only 34.7% unemployed females as compared to 65.3% unemployed males among the age group 45-59. The changes reflected in these statistics may imply that beyond the age of 34 years, females may be more mature, more stable, more committed, have acquired more skills, and are therefore better prepared and more competitive for the labour market than their male counterparts.

Table 10.2. Unemployment by age and sex.

Age	Male	Female	Total	%	Percentages		
					Male	Female	Total
15 – 24	25,148	30,727	55,875	52.2	45.0	55.0	100.0
25 – 34	14,904	18,437	33,341	31.1	44.7	55.3	100.0
35 – 44	6,402	5,691	12,093	11.3	52.9	47.1	100.0
45 – 59	3,749	1,990	5,739	5.4	65.3	34.7	100.0
			107,048	100.0			

Source: CSO, 2001, Population and Housing Census.

Employment Opportunities and the Growth of the Labour Force

An analysis of the 2001 Population and Housing Census suggests that the average annual rate of growth of the labour force between 1991 and 2001 far out-strips the corresponding growth rate of employment for the same period. This implies that the total number of persons looking for work must have risen steadily over that period of time. Table 10.3 presents data on total employment, total labour force, the numbers of persons looking for work, and the unemployment rate for 1991 and 2001. Between 1991 and 2001, the country's total labour force recorded an average annual growth rate of 2.4%. However, the average annual growth rate of total employment was a mere 1.7%, while the growth rate of those seeking employment was 6.1%. It is also clear from the Table that, whereas in 1991, 86% of the total labour force was able to find employment, the figure declined to 80% in 2001. Over the same period of time, the percentage of persons seeking work had risen from 14% of the total labour force in 1991 to 20% in 2001. The unemployment rate had therefore increased from 13.7% in 1991 to 19.6% in 2001. These figures suggest that, in spite of all the efforts that have been made so far, the country is far from winning the battle against unemployment. In the circumstances, it will be helpful to turn our attention to some of the parameters and issues that will need to be addressed in our effort to accelerate the rate of employment creation in the country.

Table 10.3. Employment, labour force and those seeking work 1991 and 2001.

Category	1991		2001		1991-2001 Average annual growth %
	Number	%	Number	%	
Total Employment	379,948	86.0	449,193	80.0	1.7
Persons Seeking Work	60,385	14.0	109,512	20.0	6.1
Total Labour Force	440,333	100.0	558,705	100.0	2.4
Unemployment Rate		13.7		19.6	

Source: Bank of Botswana, Annual Report 2002.

Parameters for Employment Creation

The fact that unemployment has persisted over the years, in addition to maintaining an increasing trend, constitutes a great cause for concern in the country. One must obviously wonder why

unemployment has persisted in spite of the consistent and exceptional performance of the economy over the years.

In the first place, the discovery of diamonds in the early 1970s immediately moved the country towards a heavy dependence on the mining sector for growth, while relying heavily on the public sector for employment. It is, among other things, the realization of this lopsided pattern of development that led the country to adopt a strategy of economic diversification. From Tables 10.4 and 10.5, it could be observed that the mining sector, which accounts for between 34% and 37% of GDP, is responsible for only 3.1% to 3.5% of total national employment in 1997 and 2000 respectively. This disproportionately low rate of employment in the sector is due to its high capital intensity. While the sector has played the important role as an indirect engine of growth over the years, its inability to perform equally well in employment creation simply means that it cannot be relied on, in its current technological structure, to address the country's employment problem.

Table 10.4. Employment in government and the private sector (%).

Sector	March 1994	March 1997	March 2000
Central and Local Government	35.4	38.2	40.0
Mining	3.4	3.5	3.1
Private Sector	55.5	52.7	51.6
Parastatal	5.7	5.6	5.3
Totals	100.0	100.0	100.0

Source: CSO, Labour Statistics 2000.

The next sector that comes to mind is the agricultural sector. In many sub-Saharan African countries, this sector provides employment to a large percentage of the population. In Botswana, however, the role that the sector plays in employment creation is comparatively low. The principal explanation for this is the country's climate, which is characterized with extreme temperatures, and scarcity of rains, with large portions of the country covered with desert and semi-desert conditions, making it very difficult and expensive to engage in any meaningful crop

Table 10.5. GDP (constant 1993/96 prices) percentage shares.

	1992/93	1995/96	2000/01
Agriculture	4.6	4.1	2.6
Mining	35.5	33.9	36.5
Manufacturing	4.7	4.7	4.1
Construction	6.3	6.2	5.8
Commerce	5.1	10.7	10.3
General Government	15.3	15.8	16.0
All the Others	28.5	24.6	24.7
Total	100.0	100.0	100.0

Source: Bank of Botswana Annual Report 2002

farming. The dominant activity in that sector is livestock farming. The unfortunate thing about livestock farming is that it has an extremely low employment potential compared to crop farming. In addition, it is highly sensitive to droughts. It is therefore not surprising that the sector, which accounted for between 3 to 5% of GDP between 1992/93 and 2000/01, contributed only about 2% of paid employment in 1994, 1997 and 2000 (Tables 10.5 and 10.6).

Table 10.6. Employment by sector and economic activity 1994-2000.

Sector/Economic activity	Numbers			Percentages		
	1994	1997	2000	1994	1997	2000
	March	March	March	March	March	March
Agriculture	5,300	5,000	5,800	2.2	2.06	2.33
Mining & Quarrying	7,900	8,400	8,100	3.42	3.46	3.12
Manufacturing	21,700	24,000	29,300	9.39	9.90	11.27
Construction	26,700	23,200	28,100	11.55	9.57	10.81
Commerce	45,900	46,100	44,800	19.85	19.01	17.23
Finance & Business Services	17,600	17,700	17,700	7.61	7.30	6.81
All Others	106,100	118,100	126,200	45.89	48.70	48.54
Totals	231,200	242,500	260,000	100.0	100.0	100.0

Source: CSO, Labour Statistics 2000.

These figures suggest that we have yet to come up with agricultural sector technologies suitable for Botswana's hostile agricultural climate. Such technologies should be capable of transforming the country's agriculture into a productive sector with high potential for generating income and employment. An initiative such as The National Master Plan for Arable Agriculture and Dairy Development (NAMPAADD) is a broad agricultural development strategy intended to restructure arable agriculture and dairy development programmes to address existing government policy objectives of food security, poverty alleviation and the economic empowerment of rural people. The strategy was launched by the Ministry of Agriculture in 2002 (see Chapter 7).

With both the mining and agricultural sectors performing so poorly in terms of employment creation, it is logical to turn to the manufacturing sector, a sector popularly known to be endowed with strong growth potential. Tables 10.5 and 10.6 suggest that, although this sector accounts for about 4.5% of the country's GDP, it accounted for 9.4% of total employment in 1994, and 11.3% in 2000. Although both construction and commerce contributed larger shares of total employment over the whole period under discussion, their shares showed steady declines, unlike the manufacturing sector which enjoyed a steady increase of its share of total employment throughout the entire period. In addition, the high and seemingly promising figures on employment in commerce do not reveal the fact that the sector is heavily dependent on manufacturing and agricultural products from South Africa. This cross-border linkage implies that Botswana income earners create significant employment in South Africa through the commercial sector activities in the country.

The sum total of the arguments we have presented above is as follows: given the nature and scope of agriculture in Botswana, and given the capital intensity of the mining sector, the most promising prospects for future employment creation in Botswana rests with the manu-

facturing sector. However, the manufacturing sector embraces several sub-sectors that are not equally endowed with the potential for employment creation. Since our main objective is that of employment creation in the country, it is logical and rational to choose a sub-sector that has the highest potential for employment creation. For reasons to be discussed in later sections, it is our view that the Small and Micro Scale Enterprises (SMEs) would be the most appropriate sub-sector within the manufacturing sector. Therefore, our discussion in this chapter will focus on the SMEs.

Definitions of Small and Medium and Micro Enterprises (SMME)

The terms “micro enterprise”, “small enterprise” and “medium enterprise” do not have single universally accepted definitions. The definitions may differ from one country to another and within the same country; the definitions may even differ from one institution to the other. However, notwithstanding the apparent differences in the definitions, a close look at the nature and characteristics of the enterprises does suggest that they possess broad characteristics that permit us to categorize them as micro, small or medium. In other words, by carefully examining the enterprises, we can come up with a set of criteria that permits us to draw the distinction between the micro, the small and the medium enterprises. Such criteria are based on the following principal parameters:

- The number of employees in the enterprise;
- The value of paid up capital;
- The value of production equipment; and
- The volume of sales.

For example, a Task Force of the Ministry of Commerce and Industry (MCI) defined micro-enterprises as those ‘enterprises with less than 6 workers including the owner and an annual turnover of less than P60,000’ (MCI Task Force, 1998). According to the same Task Force, a ‘small enterprise is that enterprise employing between 6 and 25 paid employees, and has an annual turnover of between P60,000 and P1,500,000’. As far as the medium sized enterprise is concerned, the Task Force states that ‘an enterprise with between 25 and 100 paid employees and an annual turnover of between P1,500,000 and P8,000,000 is a medium size enterprise’.

In Zimbabwe, the criteria governing the definition of these enterprises are essentially the same. Mlambo (2001) notes that the distinction between micro, small, medium and large scale enterprises is drawn on the basis of a number of parameters, such as the value of the investment in plant and machinery, installed capacity, the number of persons in regular employment, and the location of the enterprise. According to Mlambo, the Government of Zimbabwe defines a micro enterprise as an enterprise with up to 5 employees made up of family as well as hired labour; small scale enterprises as those with between 5 and 20 employees; and medium enterprises as those that hire 20 or more employees, have a capital base of Z\$2 million, have fixed assets valued at below Z\$3 million and an annual turnover of up to Z\$15 million. The Zimbabwe Small Enterprise Development Corporation (SEDCO) defines the small enterprise as one with a fixed capital base not exceeding Z\$500,000 and/or employing between 5-50 employees.

In Kenya, the official government classification of the enterprises is mainly based on the level of employment. According to this criterion, the enterprises are defined as follows: micro enterprises have up to 10 employees, small enterprises employ between 10 to 50 employees, and medium enterprises have between 51 and 100 employees (Ikiara, 2001).

It is clear from the foregoing that there exists a certain degree of variations in the definitions of the SMME's from one country to the other, and from one institution to the next within the same country. This, however, does not pose any problem in the study of these enterprises. To avoid any confusion and misunderstanding, a choice must be made with regard to the particular definition that will be adopted right at the start of the study. Once that is done, the researcher must thereafter be consistent and adhere to the same definition. For the purposes of this chapter, the definition adopted is the one provided by the Botswana Ministry of Commerce and Industry Task Force on SMMEs in 1998.

Apart from adopting the definition of the MCI Task Force, this chapter focuses only on the Small and Micro Enterprises (SMEs). The main reason for the choice of these two categories of enterprise lies in the fact that they are the only ones directly accessible to poorer, low income and unskilled members of the population. In addition, these two sub-sectors employ the largest number of persons in absolute terms. Available statistical evidence suggests that no other single sector is anywhere comparable to the SMEs in terms of the number of persons they employ.

According to Bank of Botswana Annual Report of 1999, the commerce sector, with 40,000 employees in 1997, had the largest pool of employees. The same year, the MCI Task Force on SMMEs estimated that the Small and Micro Enterprises had employed about 100,000 persons. Since most of the employees in these enterprises fall below the Botswana poverty line, the two sub-sectors are therefore important in any efforts directed towards poverty reduction.

The SMEs operate in several sectors in the urban as well as peri-urban areas in Botswana. Our work focuses mainly on two sectors of the economy - the trade and service sector, and the manufacturing sector. These two sectors have the largest concentration of SMEs owing to the low capital as well as low skills and rudimentary technological entry requirements.

The Nature of and the Rationale for Focusing on the SMEs

The Rationale for Focusing on the SMEs

Although there appears to be no clear documented statistics on the presence of SMEs in the country during the early years after Independence, there exist some traces of evidence on the existence of diverse economic activities ascribed to the micro and small enterprise dating back to the 1970s. Mlambo (op. cit.) notes that these enterprises did exist in many parts of Africa in the 1970s, although their importance in terms of income and employment generated for the poor had not been realized. Owing to the monumental importance that economists placed on the large-scale capital-intensive enterprises in the 1960s and the 1970s, the SMEs were regarded to be of marginal importance and were therefore pushed to the background where they were hardly noticeable.

The second half of the 1980s and the start of the 1990s brought a significant amount of interest in SMEs in Africa, Botswana included. The declining global as well as national economic trends of the 1990s, the rapid population and labour force growth, and the declining employment opportunities in both the public and private sectors led to a rapid increase in the numbers of the unemployed. With formal sector employment in Botswana growing at an average

annual rate of 1.7% between 1991 and 2001, and the numbers of persons seeking work over the same period of time growing at an average annual rate of 6.1%, certainly a different avenue must be sought for absorbing the growing pool of the unemployed.

The very nature and characteristics of the SMEs make them an attractive avenue for income and employment generation. First and foremost, these enterprises are known to be resilient (Birch, 1979; Loveman and Sengenbarger; and McPheson, 1991). During times of economic decline, when many larger firms are known to decline and collapse, these enterprises have often survived. Second, the enterprises are highly labour intensive, with admirably low per job capital costs, nowhere paralleled by larger enterprises (Mlambo, op. cit.). Entry and exit into this sector is, by any conceivable standard, easy because of the following factors:

- Low levels of skill requirement;
- Low starting capital and equipment;
- Low levels of operating capital;
- Low levels of technology or technology of rudimentary sophistication;
- Low levels of education;
- Low levels of administrative and managerial know-how;
- Small-scale of operation; and
- In most cases no government license is required for operation, nor does the tax-man levy taxes on the enterprises.

These characteristics have made these enterprises most attractive in addition to being the most suitable for the poor low-income members of the population.

The Types and Characteristics of SMEs in Botswana

In order to provide a detailed analysis of the characteristics of SMEs in Botswana, this chapter focuses on the analysis of the SMEs operating in two sectors: the trade and service sector, and the manufacturing sector. Together, these two groups of SMEs have, by far, the largest number of enterprises as well as the largest number of employees in their respective sectors in the economy. Most of the information used in this sub-section was obtained from a study in 2001 on employment creation in Botswana, with lessons drawn from three selected African countries, (Mukras, M.S. *et. al.*, 2001). The Botswana chapter of the study covered five towns/cities, and 21 villages and urban villages. A total of 906 respondents were drawn from the trade and service sector, while 161 were drawn from the manufacturing sector. The survey revealed a number of interesting as well as useful features that will facilitate the design of recommendations for enhancing the survival of these enterprises as well as their employment and income generating capacities.

Information from the 2001 study was compiled with information from diverse sources

in an attempt to get a clear picture of the SME sector in Botswana. Some of these other sources include two main publications, *Labour Statistics* of 1995 and the *1995/96 Labour Force Survey, Botswana*.

The Numbers of Enterprises and Employees

The precise number of SMEs in the country is not known. Nor could anybody claim to have the exact number of persons employed by these enterprises. Table 10.7 presents available information on the numbers of SMEs and the number of persons they employed as of 1998. These data are drawn from the MCI Task Force report of 1998.

Table 10.7. Numbers of SMEs and their employees, 1998.

	Number of Enterprises			Number of Employees	
	Urban	Rural	Total	Numbers	%
Micro Enterprises	15,000	35,000	50,000	75,000	67.6
Small Enterprises	4,800	1,200	6,000	36,000	32.4
Totals	19,800	36,200	56,000	111,000	100.0

Source: MCI Task Force Report 1998.

Out of a total of 56,000 SMEs, about 65% are located in the rural areas, with only 35% being resident in the urban areas. Comparing the locations of the two types of enterprises, clearly the micro enterprises are predominantly rural, with 70% of their population resident in the rural areas, as opposed to the small enterprises which have 80% of its numbers resident in the urban areas and urban-villages.

The SMEs together employed a total of 111,000 persons in 1998. A total of 75,000 of those employees is accounted for by the micro enterprises. This is 68% of total SME employment. Undisputedly, these data make the micro enterprises the largest employer in the country, unmatched by any sector in the economy.

As noted above, the SME mainly operate in the trade and service sector and the manufacturing sector. Data presented in Table 10.8 present the sectoral distribution of these enterprises.

Table 10.8. Sectoral distribution of SMEs.

	Trade and Service		Manufacturing	
	Numbers	%	Numbers	%
Micro Enterprises	32,500	89.0	17,500	93.6
Small Enterprises	3,960	11.0	1,200	6.4
Totals	36,460	100.0	18,700	100.0

Source: Ministry of Commerce and Industry Task Force Report 1998.

About 65% of Micro enterprises are to be found in the trade and service sector, while the remaining 35% of the enterprises are in the manufacturing sector. The Small enterprises have the

same pattern of distribution: 77 % of them falling within the category of trade and service sector with only 32% of them in manufacturing enterprises. In both these two sectors the micro enterprises are predominant. About 94% of the enterprises in the Manufacturing sector are micro enterprises, while in the trade and service sector the micro enterprises command a share of 89% of the total number of enterprises.

The Education and Training of the Entrepreneurs

It is undisputable that the entrepreneur running any business enterprise is a major determinant of the success of the business. His/her education and training; his/her experience; and his/her technical, managerial and administrative skills are all pivotal in the success of the business. The information presented here were obtained from the survey on employment generation in Botswana (Mukras, *et. al.*, 2001). Table 10.9 shows the educational attainment of entrepreneurs in SMEs in the manufacturing, and trade and service, sectors. A majority of the entrepreneurs in the manufacturing sector have primary education. In the trade and service sector, secondary school graduates constitute about 58% of the totals in both sectors. In addition to education, a good percentage of these entrepreneurs have different types of training, as indicated in Table 10.10.

Table 10.9. Educational attainment of entrepreneurs.

Educational Levels	Manufacturing Sectors (%)	Trade and Service Sector (%)
No Education	6.2	1.2
Primary Education	31.1	23.8
Junior Secondary	29.2	30.6
Senior Secondary	28.6	28.7
College/University	3.1	13.4

Source: Mukras, *et. al.*, 2001.

Table 10.10. Type of training undertaken.

Type of Training	Manufacturing Sector (%)	Trade and Service Sector (%)
1. Hair dressing/Cooking Sewing/Knitting		13.0
2. Electrical, Mechanical, Building, Civil Engineering		13.9
3. Management/Accounting	25.0	24.2
4. Secretarial/Business/Computing/Clerical Studies		18.6
5. Dress Making/Fashion Design	27.0	
6. Others	48.0	

Source: Mukras, *et. al.*, 2001.

The two most popular types of training in the trade and service sector are management and accounting, and secretarial, clerical, business, computing. In the manufacturing sector, dress-making and fashion design top the list.

Sources of Capital

In addition to the level of preparedness of an entrepreneur in terms of education, training and skills, capital plays a pivotal role in the start-up, operation and success of any business enterprise. In many economies, formal sources of capital are hardly available to the micro and small enterprises. Owing to the stringency of the conditions for the acquisition of capital from the formal capital markets, entrepreneurs from the SMEs have almost always failed to satisfy the requirements for eligibility for securing the required capital from those sources. Many such enterprises have, as a result, resorted to informal sources (Chipeta *et al.*, 1998). Table 10.11 lists information on sources of investment capital; this suggests that the most popular source of investment capital is personal savings. In the trade and service sector, 74% of the entrepreneurs obtained their investment capital from personal savings, while 62% of entrepreneurs from the manufacturing sector obtained their investment capital from the same source. The secondary role that commercial banks play as sources of investment capital is due to the collateral and other requirements that entrepreneurs must fulfil before they can qualify for such loans. In addition, the entrepreneurs complain that such loans are relatively too expensive to service.

Table 10.11. Sources of investment capital.

Sources	Manufacturing Sector %	Trade and Service Sector %
1. Personal Savings	62.0	74.0
2. Bank Loan	19.0	15.0
3. Financial Assistance Policy (Government)	6.0	
4. Others	13.0	11.0
Total	100.0	100.0

Source: Mukras *et al.*, 2001.

Awareness of Government Policies

One of the most important determinants of the success of businesses in an economy is an enabling environment. The concept of "enabling environment" is broad and no attempt is being made to define it in this chapter. However, of interest here is the fact that "government policy" is undoubtedly one of the most important dimensions of an enabling environment. An enabling government policy in the SMEs sector can go a long way in strengthening the performance of these enterprises, thereby enhancing their capacities to create both income and employment.

Over the years, the Government of Botswana has spent considerable resources and efforts in the development of policies, programmes and institutions in order to create an enabling environment to facilitate, among other things, the establishment, development and survival of SMEs. The principal ones among these institutions and efforts are the Botswana Enterprise Development Unit, which was formed in 1974; the Rural Industrial Office Cadre Programme and the Business Advisory Services; the Financial Assistance Policy (FAP), which came into force in 1982 and was replaced in 2001 by the Citizens Entrepreneurial Development Agency (CEDA); the Reserved Activity Policy; the Integrated Field Services, which was established in 1987; and the Local Procurement Programme, which was introduced in 1987.

Although these policies were intended, in one way or the other, to promote the SMEs, it

is clear from recent studies (Mukras, *et. al.*, 2001) that, except for the FAP, the other policies were hardly known to the enterprises. Moreover, among those who knew of the FAP and a few of the other policies, there was a significant percentage among them who thought that the FAP was an unsuitable source of finance. Among the reasons listed for unsuitability of the FAP policy were that the grants/loans allocated were too small for the expansion of the enterprises; the period of loan repayment was too short; officials running the loaning institutions were corrupt; and the lending institutions insisted on repayment of loans, whereas the enterprises did not favour the idea of repayment on the grounds that such was difficult (Mukras, *et. al.*, 2001).

Constraints Facing the SMEs

The set of constraints facing SMEs in the economy of Botswana have been well articulated in such reports as the MCI Task Force report of 1998 (MCI, 1998), the Government Paper No. 1 of 1999 on the "Policy on Small, Medium and Micro Enterprises in Botswana"; and the report on employment creation in Botswana by Mukras, *et. al.* (2001). These constraints are discussed in the sub-sections that follow.

Lack of Finance

The problem associated with lack of finance is one of the major constraints facing the SMEs in Botswana. In particular, start-up capital was adjudged as the most serious constraint. According to the Gemini report (Donald, 1994), 53% of the SMEs surveyed in Botswana reported that lack of finance to cover start-up capital was a major problem. In the study by Rempel *et. al.* (1994), 74% of micro enterprises cited lack of finance as the greatest constraint to business development; and in the study on employment creation in Botswana, a total of 20% of the respondent SMEs in the manufacturing sector cited shortage of finance as a major constraint.

Equally important are also the following finance-related problems cited by the entrepreneurs: lack of collateral that is demanded by lending institution as a requirement for eligibility; very short repayment periods; complicated lending procedures; inadequate risk capital; and lack of security.

Lack of Information on Government Assistance Programme

Overall, according to statistics cited in Mlambo (2001), about 7% of the SMEs surveyed by the Gemini study indicated that they were aware of most of the government finance/business assistance programmes. This percentage is so small that one may be tempted to believe that the government is either not adequately aware that such information does not reach the SMEs or, alternatively, it may not be adequately equipped to spread such information among the SMEs. Since access to the information on these assistance programmes will most certainly change the lives of these SMEs for the better, it should take a centre stage in government's efforts to promote the development of the SMEs. In addition, if the data from the Gemini report are reliable, it could be argued that, had the 93% of the SMEs been aware of the existence of the various assistance programmes, most of them would likely have attempted to take advantage of the facility. This would certainly have made a significant difference in their establishment management, operation and general development.

Marketing Problems

The study by Rempel (1998) and Mukras *et. al.* (2001) highlighted “marketing” as one of the major problems facing SMEs in Botswana. The main issue in this respect is the stiff competition the SMEs face from larger enterprises. As a result of such competition, the SMEs have explained that they have neither been able to sell any significant volumes of their products in the market nor won government tenders.

Scarcity of Business Premises

Available information suggests that the lack of business premises has been an acute problem facing the SMEs in Botswana. The IFS “Small Scale Business Profile Survey” reported that 76% of SMEs in the manufacturing sector conducted their business on residential plots. The Gemini report documented a figure of 70% of SMEs operating at home. Although from these data it is clear that residential premises have become popular for commercial use, it is not always done in accordance with the laws of the land. Unless the entrepreneur obtains permission from the authorities for change of use of such residential premises, it is unlawful to use residential premises for business.

The Reliability and Cost of Utilities

Another major constraint faced by SMEs in Botswana is that of the cost and reliability of utilities - electricity, telephone and water. These utilities are relatively too costly when compared with what is provided in neighboring countries in the region. Furthermore, a sizeable number of entrepreneurs argued that the utilities were frequently out of order (Mukras, *et. al.*, 2001).

Excessive and Prohibitive Government Laws and Regulations

SMEs in Botswana also regarded excessive government laws and regulations as being prohibitive to their general development. In particular, most SMEs reported serious concerns with regard to the community of property laws that “discriminate against women; the licensing regulations; and over-rigorous laws governing health and safety” (MCI Task Force report, 1998).

Bias Against the SMEs

Large firms as opposed to SMEs are better placed to obtain import permits for capital equipment, components and raw materials. They also enjoy tariff rebates and duties paid on imported inputs and materials used in the production of exports products, all of which are not available to SMEs. In addition, there is a bias in government procurement policies that discriminate against smaller firms in Botswana.

Recommendations

Several pertinent recommendations immediately come up the when considering diverse constraints facing the SMEs. It should be noted that the recommendations given in this chapter benefited from such sources as Employment Creation in Botswana (Mukras *et. al.*, 2001;

Mlambo *et. al.*, 2001, and Dabee *et. al.*, 2001); Government Paper No. 1 of 1999; and the MCI task Force Report of 1998.

The lack or inadequacy of start-up and working capital has been, by far, one of the most cited constraints facing the SMEs (Rempel *et. al.*, 1994; Mukras *et. al.*, 2001). In this regard, it is recommended that a small - micro credit scheme be established with an initial grant from the government. Financial capital from the banking sector can go a long way in the development of the SME sector. To reduce the bank's exposure to risks of the capital sum that is loaned, it is recommended that of a credit guarantee scheme with funds provided by the government be established. In several instances, an entrepreneur who is contemplating the formation of an enterprise, or an entrepreneur who is already operating an enterprise in the SME sector, may benefit more from financial assistance than taking up a loan. For such entrepreneurs, it is recommended that a restructured FAP would be most suitable.

Access to the market is one of the most important parameters in the success of any business enterprise, the SMEs included. To facilitate such access for the SMEs, it is recommend that a system be established for the promotion of business linkages between the SMEs and larger firms, to facilitate the supply of goods and services by the SMEs to their larger counterparts for mutual benefits. A system of subcontracting could also be established, in which the larger manufacturing firms would enter into contracts with their smaller counterparts in the supply of specific manufactured items. The government could also identify services that can be contracted out to SMEs, and should revise its procurement procedures so as to make more room for SMEs.

Education and training in relevant technical, administrative, managerial and financial areas is undoubtedly an indispensable pillar of efficient production and smooth management of an enterprise. In any business enterprise, both the management and the work force need training in appropriate areas. The recent study on employment generation in Botswana (Mukras *et. al.*, 2001; Ikiara *et. al.*, 2001) provides convincing evidence on the importance of training in the survival of SMEs: 18% of entrepreneurs in the construction sector in Botswana, and 20% in the same sector in Kenya, stated that training is an essential determinant of the success of their SMEs. Further empirical evidence can be extracted from the study by Mlambo on Zimbabwe (Mlambo *et. al.*, 2001). This chapter recommends that the government should encourage the development of private training institutions which will offer short-term training on entrepreneurship and small business management for SMMEs. These will offer courses on establishing a business, financial management, sales and marketing management, general administration and management, and secretarial skills. The current efforts that the government has put into the development and running of technical and vocational schools are commendable. However, there are two further ways that these could be strengthened. Firstly, the private sector should be involved in the periodic review of the curriculum so as to make such curriculum match the requirements and expectations of the labour market. Secondly, the content of the curriculum referred to above, and - more important - the delivery of the content, should be such as to instill a dedicated work ethic and entrepreneurialism into the trainees, rather than a dependence on securing formal employment in government or the private sector.

SMEs face similar problems that can better be handled through group effort rather than dealing with them in isolated ways. To address these, it would be ideal to have SMEs form an association which would serve the purpose of promoting their common interests.

There is no doubt that good infrastructure and reliable utilities are important for promoting competitive private sector growth and lowering the costs of production. Yet many entrepreneurs in Botswana complain of regular shortages of water, frequent interruptions of

electricity, and poor telephone service. These constraints have serious implications for the performance of SMEs and therefore should be attended to by the Government of Botswana.

Conclusions

Empirical evidence presented in this chapter suggests that the SMEs have, by far, the largest number of employees in the country. With a total of 125,000 employees (Government Paper No. 1 of 1999, p.3), the contribution of the SMEs to employment creation is unparalleled. In terms of their contribution to the nation's output, available estimates suggest that the SMEs contributed between 30% and 45% of the country's GDP in 1996 (Ibid.). These figures suggest that, the SMEs play an important role in employment and income generation among the poor. Their strategic position in terms of the welfare and development of the poor cannot be over-emphasized. This means that any set of policies designed to strengthen the SMEs would go a long way in achieving three principal objectives of this economy: 1. employment generation among the poor, 2. income generation among the poor, and 3. poverty alleviation in the country.

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Chapter 11

Human Development in Botswana: Issues and Problems

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Introduction

A close examination of the problems and development paths of countries in Africa, Asia and Latin America today will reveal that many of them have achieved different output levels for similar investments, with real gross domestic product growth rates that range between 3% and 7%. The critical differences among these countries may be explained by such factors as differences in human skills and entrepreneurship as well as in the key institutions that influence economic growth. Yet economists have remained largely preoccupied with investigating issues that relate to the levels of savings and investments, exports and imports, and of course with the most convenient abstraction of all - the gross national product - as the measure of economic growth.

In recent times moreover, it has been realized that people are both the means and the ends to economic development. The development debate has moved from the examination of economic growth alone to the equal consideration of the issues of employment creation, redistribution with growth, and the basic needs of the people - therefore of human development. It is now accepted that a true reflection of development is *human* development and not mere GNP growth (Haq, 1995). This approach assesses investment in human capital - including health, nutrition, and education - entirely in terms of the extra income or output the investment generates, judging it to be worthwhile if the rate of return exceeds the capital cost (A.K. Sen, 1973). The index of human development which incorporates income, education and health shows that the level of human development in Africa is lower than in any other region in the world (World Bank, 2001). Botswana, however, maintains a higher Human Development Index (HDI) when compared to many developing countries of Asia, Latin America and Africa. An attempt is therefore made in this chapter to analyse the level of human development in Botswana and its implications on development.

Importance of Human Development in Economic Development

For any country, it is important to overcome savings and foreign exchange constraints. But more essential in the attainment of higher levels of economic development is human development. Indeed, some advanced countries have demonstrated that they can develop even if they are poor in natural resources. In recent years, faith in development through the accumulation of physical capital has waned, and this has been replaced by focusing on increased investment in human capital. Although the objective of adding to the stock of physical capital still dominates investment decisions, it is now evident that a high priority must also be assigned to investment in

human capital. Improvement in the quality of people as productive agents has become the central objective of development policies of many countries.

Emphasis is placed on human capital because the knowledge embedded in human beings is the basis for achieving an increase in total factor productivity. Land, labour and physical capital may be subject to diminishing returns, but knowledge is not. Human beings are the real end of all economic activities, and development must be centred on enhancing their achievements, freedom, and capabilities (Lewis, A.W., 1962). It is the life we lead that is of intrinsic importance, not the commodities or income we happen to possess. Income, commodities, and wealth do of course have instrumental importance, but they do not constitute a direct measure of the living standard itself. A person's income level, for example, does not reveal what expectations of life that person has, whether he or she is presently healthy, or is disabled and incapable of moving about freely. Even for those features of living standards where the instrumental significance of private income is likely to be greater, such as adequate nutrition, there is enormous variation in converting income into achieved well-being (A.K. Sen, 1987).

There are basic features of well-being which derive from setting people at the centre of all development activity. Enhancing the capabilities of people to fully use their own talents is what lies at the core of human development. The achievements of people, in terms of long life or functional literacy, are valued as ends in themselves. This should be contrasted with more mainstream economic approaches that discuss human development. That human development is seen in terms of their contribution to income generation - as an investment, like any other, in enhancing productive potential.

The Meaning of Human Development

Human development is defined as the enlargement of choices (income is part of such enlargement) and the presentation of options. Thus, the choice of one group should not be enlarged at the expense of others, or the choice of one sector must not mean reduced choice for another. Health, education, self-respect, communal participation and cultural identity are other important aspects of human development. Human development can also be viewed as development of the people, for the people and by the people: of the people means jobs and incomes; for the people means social services; and by the people means communal participation (Streeten, 1997). It is an end in itself, and indeed it is the whole purpose of development. It contributes to higher productivity by not only improving human capabilities and efficiency but also by lowering reproductivity and thereby population growth. The growth of a civil society as a result of improvement in the levels of education, health and other social services on one hand, and democracy on the other, leads to greater social stability. Its political appeal is that it reduces civil disturbances and increases political stability (Knight, J. and Sabot, R., 1990).

Another very important aspect of human development is the acquisition of new knowledge and skills that are needed in order to increase productivity, output and incomes. There are four broad types of skills that can be delineated, namely foundational, basic, occupational, and job-related. Foundational skills are at the base of the skills pyramid, and essentially cover literacy, minimum numerical ability and life skills needed for active citizenship, and other key aspects needed in society. Basic work and livelihood skills include more analytical skills, such as calculation and problem solving, which are fundamental to productivity in all forms and at all levels of employment. Broad occupational skills are those needed for effective job performance for all skilled occupations; these skills have to be acquired through training before taking up

employment. The duration of this pre-employment occupational training varies from one occupation to another. But most training programmes are at least two years in duration and are based on a precisely defined curriculum with clear learning objectives. Job-related skills are directly related to the performance requirements of a particular job. These job-related skills are enhanced by training personnel to perform defined tasks, and are usually for a short duration.

Both foundational and basic skills are needed by the broad mass of the workforce, and are becoming increasingly sophisticated and diverse as the workplace becomes increasingly skills-intensive. Acquisition of these skills also provides the basis for the process of lifelong learning, which ensures that workers keep up to date with new knowledge and skills throughout their working lives. What is particularly new about these skills is that they are both technical and social in nature. As a consequence, the distinction between education and training is becoming increasingly outmoded, and the secondary school curriculum is being increasingly vocation-alised in order to ensure that these basic skills are acquired (basic skills are acquired mainly at secondary school). In the formal sector, secondary education is becoming the minimum educational requirement for most jobs. However, Human Resource Development (HRD) embraces a variety of learning processes and modalities. More weight is given to the provision of formal general education and vocational education and training. But the process of learning by doing is equally crucial. Creating learning organisations in both the public and private sectors is, therefore, a major goal of HRD in the context of globalisation.

The overall gap in educational attainment between the developed and developing countries is huge. The level of educational attainment in the majority of developing countries is very low. Gross enrolment rates are high but actual school leavers' rates are low because of high dropout rates. The situation in rural areas, especially for girls, is worrying. In 2000, the mean years of education for the age group of 15 years and above was exactly 4 times less for females in sub-Saharan Africa than in the Organisation for Economic Cooperation and Development (OECD) countries, and 2.5 times less for males. The gap for females in South Asia was only fractionally less (OECD 2000).

The overall quality of higher education in most of the developing countries is low. It is certainly far from meeting the standards of education of developed countries. Despite the relative, and in some countries absolute, contraction in formal sector employment, the demand for higher education has continued to increase rapidly. This may largely be attributed to continued qualification escalation because, without higher education, the likelihood of securing a good job is remote. Strong social and cultural pressures and obligations to provide the best education for their children are also placed on parents. Despite the policy advice of the World Bank that the funding of higher education should be increasingly borne by individuals, higher education accounts for a larger portion of public education expenditure in the majority of both developed and developing countries.

The first Human Development Report, brought out by the United Nations Development programme (UNDP) in 1990, emphasised that the purpose of development is the fulfilment of human beings' potential. The report presents a composite index consisting of income per capita, life expectancy and literacy rates. To measure human development, a Human Development Index has been used as a more appropriate measure than the income measure. The most important point to make about any measure or index is that the concept of human development is, of course, much wider, deeper and richer than any single measure.

Human development is centred on the notion that human welfare, in addition to GDP per capita, depends on measures of health and education. In conventional measures of economic

output, health and education's contribution is measured essentially by the cost of producing the outcomes, i.e. expenditure on schools and medical facilities (K. Griffin and J.B. Knight, 1990). HDI gives equal weight to three indicators: real GDP per capita (measured at purchasing power parity in constant prices), life expectancy at birth, and educational attainment, (measured by adult literacy at two thirds weight, and combined primary, secondary and tertiary enrolment ratios at one third weight) (UNDP, 2000). The index is valuable in extending the economic concept of welfare, but for many purposes it is more useful to focus on the individual components of the index than the index itself.

However, human development is substantially larger than the three essential capabilities indicated above. It encompasses positive outcomes in human freedom; human security for the individual, the family unit and the community; and the full realisation of fundamental human rights. All these outcomes are essential for people to realize their potential to develop themselves, their families and their communities. Human development is too complex and too rich a concept to be reduced to a single composite index. Nonetheless, significant attempts have been made to capture and measure the concept. Until 1990, GDP per capita was the dominant composite measure of development, despite its obvious limitations. When the first Human Development Report was produced with the HDI, two dimensions were added that reflect human outcomes to per capita GDP in the measurement of human development. Although it covers only three dimensions of human development, it is a useful complement to per capita GDP.

Consequently, complementary measures are used concurrently with HDI. These include the Human Poverty Index (HPI), which measures the distribution of progress in human development by focusing on human deprivation in a multiplicity of dimensions related to the leading of a capable and healthy life. The HPI is a weighted average of three variables: the percentage of people expected to die before age 40, the adult illiteracy rate, and deprivation in overall economic provisioning (public or private). The proxy variable for deprivation in overall economic provisioning is a composite of the percentage of people without access to basic health services and safe water, and the percentage of underweight children. Two measures relating to gender are also used. The Gender-related Development Index (GDI) considers disparities in outcomes for men and women in the same dimensions of human development that HDI covers, and the Gender Empowerment Measure (GEM) examines differential outcomes for men and women. The latter examines women's empowerment in terms of representation in institutions of political and economic decision-making.

The use of the indices that complement HDI - GDI, GEM and HPI testifies to the existence of many dimensions of human development. The inclusion of per capita income in the HDI attests to the importance of income and economic growth in the process of human development.

Human Development in Africa

Although Africa has experienced more improvement in the composite HDI than in GDP per capita since the 1960s, the rise in the HDI during the 1990s has been slower than in previous decades. In fact, some African countries have been witnessing declining HDI since 1995 compared to earlier periods. This is mainly because of the HIV/AIDS scourge in some countries as well as declining benefits of development.

Although it can be useful to consider Africa as a whole, there is considerable variation

in human development within the continent. Tables 11.1 and 11.2 provide rankings of African countries based on their Human Development Indices and GDP per capita. As shown in Table 11.1, Seychelles ranks 36th in terms of HDI yet is the only country in Africa considered a “high human development” country (UNDP, 2003). About one-third of African countries are categorised as having “medium human development”. The remaining two thirds of the countries have “low human development” and low incomes.

Table 11.1. Countries with high and medium Human Development Index in Africa, 2001.

Country & HDI Ranking	Life expectancy at birth (Years) 2001	Adult literacy rate (%) 2001	Combined primary and secondary gross enrolment ratio 2001	Real GDP per capita (PPP US\$) 2001	Human Development Index (HDI) 2001	GDP per Capita Rank minus HDI Rank
High-Human Development						
36 Seychelles	72.7	91	88	17030	0.840	-3
Medium-Human Development						
61 Libyan Arab Jam.	72.4	80.8	89	7570	0.783	2
62 Mauritius	71.6	84.8	69	9860	0.779	-12
91 Tunisia	72.5	72.1	76	6390	0.740	-18
103 Cape Verde	69.7	74.9	80	5570	0.727	-18
107 Algeria	69.2	67.8	71	6090	0.704	-31
111 South Africa	50.9	85.6	78	11290	0.684	-64
118 Gabon	56.6	71	83	5990	0.653	-40
120 Egypt	68.3	56.1	76	3520	0.648	-12
122 Sao-Tomean	69.4	83.1	58	1317	0.639	28
124 Namibia	47.4	82.7	74	7120	0.627	-59
125 Botswana	44.7	78.1	80	7820	0.614	-65
126 Morocco	68.1	49.8	51	3600	0.606	-19
129 Ghana	57.7	72.7	46	2250	0.567	-1
133 Swaziland	38.2	80.3	77	4330	0.547	-34
134 Comoros	60.2	56	40	1870	0.528	4
137 Lesotho	38.6	83.9	63	2420	0.510	-13
138 Sudan	55.4	58.8	34	1970	0.503	-4
140 Congo	48.5	81.8	57	970	0.502	22
141 Togo	50.3	58.4	67	1650	0.501	3

Source: UNDP: Human Development Report, 2003.

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Table 11.2. Countries with Low Human Development Index in Africa, 2001.

Country & HDI Ranking	Life expectancy at birth (Years) 2001	Adult literacy rate (%) 2001	Combined primary and secondary gross enrolment ratio 2001	Real GDP per capita (PPP US\$) 2001	Human Development Index (HDI) 2001	GDP per Capita Rank minus HDI Rank
142 Cameroon	48.0	72.4	48	1680	0.499	1
145 Zimbabwe	35.4	89.3	59	2280	0.499	-18
146 Kenya	46.4	83.3	52	980	0.489	14
147 Uganda	44.7	68	71	1490	0.489	1
149 Madagascar	53	67.3	41	830	0.468	17
151 Gambia	53.7	37.8	47	2050	0.463	-20
152 Nigeria	51.8	65.4	45	850	0.463	13
153 Djibouti	46.1	65.5	21	2370	0.462	-28
154 Mauritania	51.9	40.7	43	1990	0.454	-21
155 Eritrea	52.5	56.7	33	1030	0.446	3
156 Senegal	52.3	38.3	38	1500	0.430	-9
157 Guinea	48.5	41	34	1960	0.425	-22
158 Rwanda	38.2	68	52	1250	0.422	-5
159 Benin	50.9	38.6	49	980	0.411	1
160 Tanzania,	44	76	31	520	0.400	14
161 Cote d'Ivoire	41.7	49.7	39	1490	0.396	-13
162 Malawi	38.5	61	72	570	0.387	11
163 Zambia	33.4	79	45	780	0.386	7
164 Angola	40.2	42	29	2040	0.377	-32
165 Chad	44.6	44.2	33	1070	0.376	-8
166 Guinea-Bissau	45	39.6	43	970	0.373	-4
167 Congo, Dem.	40.6	62.7	27	680	0.363	5
168 Central Africa	40.4	48.2	24	1300	0.363	-16
169 Ethiopia	45.7	40.3	34	810	0.359	-2
170 Mozambique	39.2	45.2	37	1140	0.356	-15
171 Burundi	40.4	49.2	31	690	0.337	0
172 Mali	48.4	26.4	29	810	0.337	-5
173 Burkina Faso	45.8	24.8	22	1120	0.330	-17
174 Niger	45.6	16.5	17	890	0.292	-10
175 Sierra Leone	34.5	36	51	470	0.275	0

Source: UNDP: Human Development Report, 2003.

However, the rankings of the poorest performing two thirds of countries differ substantially according to whether the HDI or GDP per capita is used. Some countries with very low GDP per capita are in the middle of the list when ranked by the HDI. Some countries are in the middle ranked by income but not by human development. This suggests that even given their incomes, countries have some discretion over their degree of human development.

As shown in Table 11.2, almost all of the "low human development" countries at the bottom of the index are in sub-Saharan Africa (30 out of 34); the devastation of the HIV/AIDS pandemic is responsible for the decline in Human Development Index. Life expectancy has fallen dramatically with the increased incidence of the pandemic. South Africa, for instance, fell 28 points from 1990 primarily because more people were dying younger from AIDS-related illness. Declines in indices for Botswana, Swaziland, Zambia and Zimbabwe give a similar picture to that of South Africa. However, Benin, Ghana, Mauritius, Rwanda, Senegal and Uganda have all significantly improved their rankings in 2001 (UNDP, 2003). Life expectancy is more strongly correlated with GDP per capita than either adult literacy rates or gross enrolments. There are exceptions, such as Botswana that has much lower life expectancy than one would predict given its income, and Lesotho where life expectancy is higher than would be expected from its income alone (UNDP, 2003)

As far as economic progress made is concerned, countries like Cape Verde, Mauritius, Mozambique and Uganda averaged per capita income growth of more than 3% per year. Some countries have much better educational indicators than one would expect from their low income. Benin increased its primary enrolment rate from 49% to 70%. Mali and Senegal increased their primary enrolment rate by 15%. Many of the countries in Africa made good progress towards gender equality in primary and secondary education. Mauritania increased the ratio of girls to boys from 67% to 93% between 1990 and 1996. Despite HIV/AIDS, there were some remarkable improvements in child survival in sub-Saharan Africa. Guinea reduced its child mortality rate by 7% and Malawi and Niger by 5 % (UNDP, 2003).

Literacy rates vary enormously across the continent, from less than 20% in Niger and Burkina Faso to over 80% in Mauritius, the Seychelles, South Africa and Zimbabwe. However, southern African countries (with the exceptions of Angola, Botswana and Mozambique) have noticeably higher enrolment rates than would be expected given their income, whilst many countries bordering the Sahara Desert tend to have lower than expected enrolment rates (UNDP, 2003).

Although Africa has taken significant steps in raising literacy and school enrolments and improving health, these gains are lower than those in other developing countries (Behrman, 1993). There is great diversity within the overall average for Africa. The health and education of people in some African countries is far lower than would be expected from their income. Human development is only one factor that accounts for differences in growth rates across countries. While low starting levels of human development may have hindered Africa's economic growth, its poor performance cannot be attributed to a lack of subsequent investment in human capital (African Development Bank, 2000). Even the returns to human capital investment are low due to failure of the policies for promoting the growth of physical capital.

Human Development in Botswana

The promotion of human development has been the focus of Botswana's development strategy. For instance, from the very first National Development Plan (NDP 1), four ideals - rapid econo-

mic growth, social justice, economic independence and sustained development - formed the nexus of the planning process in Botswana. Consequently, deliberate measures were taken to develop essential human capabilities - long and healthy life through investment in health; knowledge through investment in education; a decent standard of living through employment creation and social safety nets; and participation through democracy.

Botswana's progress in human development is the result of a deliberate government strategy for development that recognized the structural defects of the economy - a new economic base (essentially diamonds), a small, poor and largely unskilled population, and underdeveloped markets, amongst others - and in consequence depended on a strong development role for the state. The strategy was simple: mineral revenue would be used to develop infrastructure, diversify the economy and develop essential human capabilities. The main thrust of this strategy was on the following:

- Education and health as long-term responses to poverty and joblessness;
- Employment creation based on generous government subsidy support - the Financial Assistance Policy and the Micro Credit and Credit Guarantee Schemes are presently the main incentive programmes, but they follow on a long list of others, some in agriculture;
- Aggressive pursuit of foreign direct investment based on creditable and enforceable property rights, low rates of taxation, a liberal regulatory framework for business and the Financial Assistance Policy;
- Rural development - this entailed extension of basic services to rural areas and incentives for agriculture and business and;
- Social safety nets for economically vulnerable groups - elderly people, people with disabilities and people who are destitute.

Botswana's development success was driven by good macroeconomic management, which recognised the need for a strong state in the development context of Botswana, and a human development-centred public expenditure programme that put education, health and social welfare at the centre of the development agenda.

Human Development Changes in Botswana

A clear picture can be drawn by comparing Botswana's performance in terms of human development with other countries in the region, particularly those in the SADC region. In terms of growth, it is a well-known fact that Botswana has performed much better than other countries in the region, with average growth of about 8.4% per annum in the period 1965-1990. In the late 1990s the country, however, experienced lower average annual growth rates around 5% per annum. While Botswana's growth has been remarkable, the human development performance has not been that impressive. Table 11.3 shows the changes in the Human Development Index for Botswana and selected countries in the SADC region. In the 1980s and 1990s, Botswana's HDI was rising quite significantly and had reached a figure of 0.763 in 1992 from 0.611 recorded in 1983. In 1985, excluding the Seychelles whose data is incomplete, Botswana's Human

Development achievement was ranked as fourth in the region. The countries that performed better than Botswana in terms of the HDI were Mauritius, South Africa and Namibia. In 2001, Botswana's rank in the region had dropped to position five (at a HDI figure of 0.577), outperformed by Mauritius, South Africa, Namibia, and Swaziland. Most of the decline is attributed to the fall in life expectancy as a result of the HIV/AIDS scourge that has hit the country reversing most of the human development gains obtained over the two decades (SAPIRS, 2000).

Table 11.3. Changes in Human Development Index.

Country	Human Development Index					
	1985	1990	1992	1994	1998	2001
Botswana	0.611	0.651	0.763	0.673	0.613	0.577
Mauritius	0.682	0.718	0.821	0.831	0.782	0.765
South Africa	0.678	0.705	0.705	0.716	0.718	0.702
Swaziland	0.564	0.613	0.522	0.582	0.672	0.596
Namibia	0.624	0.644	0.611	0.582	0.651	0.601
Lesotho	0.531	0.561	0.473	0.457	0.583	0.541
Zimbabwe	0.606	0.599	0.539	0.513	0.570	0.554
Zambia	0.470	0.451	0.425	0.369	0.429	0.427
Malawi	0.347	0.348	0.330	0.320	0.419	0.397

Sources: SADC, Regional Human Development Report 2000.
UNDP, Human Development Report 2001.

Table 11.4 shows the changes in life expectancy and infant mortality over time for Botswana and other countries in the region. Botswana's life expectancy had reached 65 years of age by 1992 from 53.2 recorded in 1970. By 1997 it had declined to 47.4 and to a further 41.9 years by 2001. This trend of decline after an initial rise in the 1980s and early 90s is a general trend for all the countries in the region, even though the rate of decline may not be the same.

Among the countries classified as having medium human development in 2001, Botswana was recorded as having the lowest life expectancy in the region. Although exact rankings may be debatable because of issues like data sources and the unavailability of current data for some of the countries in the region, it can be concluded that the declining numbers are a reflection of the devastating effect of HIV/AIDS on Botswana's human development. This has led to a continual reduction in the country's scarce human resources developed during the last two decades. It is indeed partly for this reason that the country has declared HIV/AIDS a national catastrophe and compared the country's situation to a state of war. The 2004 Budget, for instance, allocated the largest share of the development budget on HIV/AIDS programmes. Botswana performs better than all countries (with the exception of Mauritius) on infant mortality. Despite a slight rise between 1998 and 2001, the country's placement is still lower than all the countries in the SADC region except Mauritius. This slight reversal with regard to infant mortality may also be due to HIV/AIDS.

Table 11.4. Changes in life expectancy and infant mortality.

Country	Life expectancy over time & infant mortality ¹					
	1970	1992	1997	2001	1998	2001
Botswana	53.2	64.9	47.4	41.9	38	46
Mauritius	62.9	70.2	71.4	71.1	19	19
South Africa	53.7	62.9	54.7	53.9	60	54
Swaziland	47.3	57.5	60.2	47	64	62
Namibia	49.4	58.8	52.4	44.9	57	56
Lesotho	49.5	60.5	56.0	47.9	94	93
Zimbabwe	56	53.7	44.1	42.9	59	60
Zambia	47.2	48.9	40.1	41	112	112
Malawi	41.0	45.6	39.3	40.3	134	132

1. Measured as per thousand live births.

Sources: SADC Regional Human Development Report 2000.

UNDP, Human Development Report 2001.

Gender and Development

The extent to which countries are able to integrate gender into their development process is now generally accepted as a measure of progress made. Hence in assessing a country's progress in terms of human development, questions about how far women have been involved in the economy need to be answered. In this regard, the southern African region has not done too well. In 1999, the percentage of women in parliament ranged from a low of 7.3% in Lesotho to a high of 29.8% in South Africa. 15.1% of Botswana's parliamentarians were women during that period, lower than the figures for South Africa and Seychelles respectively. In terms of Deputy Ministers, in 1999 only South Africa was better placed, with 61.5% of their Deputy Ministers being women compared to Botswana's 50%. Even though a lot of progress has been made on this front, there is still room for improvement. More women need to participate in both economic activities and in decision-making if meaningful development is to be achieved.

Levels of Education Human Development in Botswana

Botswana's performance in terms of education has also been very impressive. School enrolments and literacy rates have risen due to rapid investment in education since independence in 1966. The basic adult illiteracy rate fell from 66% in 1971 to 24% in 2000. The country has also attained a 97% primary enrolment ratio. Net primary enrolment rose from 76% in 1980 to 80% in 1997 (World Bank, 2001; UNDP, 2000). Gross enrolment in primary, secondary and tertiary education increased from 51% in 1980 to 71% in 1998. This put Botswana in sixth position in the SADC region in terms of this index (SADC Human Development Report, 2001). As part of the Revised National Policy on Education (RNPE), transition to junior secondary level is 100%. Due to limited resources, both human and physical, the transition to senior secondary level has been lower than 50%. Students who could not find space in senior secondary education were expected to join the vocational education centres, search for jobs in the informal sector, or

become openly unemployed. The formal sector is not able to absorb these yearly increases of students who could not gain access to senior secondary or vocational training into the labour force.

Table 11.5. Enrolment at all levels of education and training in Botswana.

Level	1987	1989	1991	1993	1995	1997	Rate of growth 1987-1997
Primary Schools Annual Growth Rate	248,823	275,437 5.39%	292,233 3.07%	305,479 1.33%	313,693 1.15%	322,268 1.14%	2.62%
Secondary Schools Annual Growth Rate	39,375	49,348 22.28%	68,487 20.38%	85,697 12.93%	103,159 19.01%	116,076 7.11%	11.42%
Teacher Training College Annual Growth Rate	1316	1358 2.65%	1286 7.17%	1261 -0.86%	1170 7.83%	999 -14.10%	-2.72%
Vocational/Technical Training Annual Growth Rate	2261	3143 25.02%	3609 2.70%	4675 14.08	8095 47.69%	8830 42.24%	14.60%
Colleges of Education Annual Growth Rate	476		991	1399 19.06%	1271 -0.55%	1261 -0.56	10.23%
University of Botswana Annual Growth Rate	2255	3133 10.43%	3567 6.00%	4466 12.32%	5501 8.80%	8007 9.73%	13.51%
All Levels Annual Growth Rate	294,506	332,419 7.79%	370,173 6.22%	402,967 3.89%	432,889 5.66%	457,441 3.28%	4.50%

Source: BIDPA: National Employment and Manpower Study Report-2001.

In Table 11.5 it can be observed that total primary education enrolment grew quite rapidly from 248,823 in 1987 to 310,482 in 1992, an increase of 3.9% per annum. However, from 1992 to 1998, total primary education enrolment increased further to 321,271, an average annual increase of only 1.1%. Over the entire period, the rate of growth of primary enrolment was averaged at 2.1% p.a. Part of the reason for this reduction in the growth rate of primary education enrolment was a decrease in repeaters in the primary education system from 1987 to 1991: the number of repeaters stood around 13,000, but decreased sharply after 1991 and was just under 10,000 in 1998. The rate of growth of primary school repeaters averaged a negative 2.6% over the period from 1987 to 1998.

Botswana has suffered from both surpluses of generally unskilled labour, resulting in high levels of unemployment and underemployment, and shortage of skilled labour, which constrains the implementation of development programmes and opportunities for rapid growth, as well as sustainable economic diversification. The priorities for the education sector were established in NDP 7, and consisted of improving the quality of education, providing all children with nine years of general education, and increasing access to technical and vocational education. The need to improve the quality of education has been emphasized as a means to meet

the manpower requirements that will be needed by an expanding economy. However, it is realized that there is a mismatch between qualifications held by graduates of the vocational training system and the employment needs of the economy. The country has made commendable progress in the localization of posts in various sectors of the economy over the years, as reflected by a marked decline in the percentage of expatriates in total employment.

Botswana is amongst the few countries in Africa that have developed and practiced manpower planning techniques for forecasting manpower requirements. These projections, together with rates of return analysis for different levels of education and cost estimates of producing different skills, have played an important part in determining and guiding investments in formal skills training and expansion, especially in post-secondary and tertiary education (ILO/UNESCO/UNIDO, UNDP (1993).

Formal sector employment expanded at almost 9% per year between 1964 and 1988. The supply of skilled labour was augmented by an increase in the number of non-citizens employed, which was observed to have quadrupled between 1964 and 1988. However, the proportion of non-citizen workers fell from 9% to about 5% of total employment during the same period, indicating a strong citizen participation in formal sector employment and high rates of localization.

However, the justifications for human development must go beyond those kinds of economic considerations and take into account what happens to Botswana in the process, in terms of its social, psychological and political development and well-being, including individual freedoms, self-esteem and quality of life. In the context of Vision 2016 and Botswana's aspirations to be an educated, informed nation, able to compete on a global scale, the education and training systems must not only equip Botswana with life skills, but also with the values needed to give those skills meaning and quality.

The processes of globalization are having a number of profound effects on human development. As a result of the global information networks that have arisen over the past two decades, world culture is being transformed in ways that sometimes challenge and threaten many communities and societies, that feel marginalized by the march of new technology. However, there is no way that Botswana or any country can stop the processes of globalization and technological progress. Non-participation in those advances would only leave Botswana further behind the rest of the world, and may lead to real reductions in standards of living.

HIV/AIDS and its Impact on Human Development in Botswana

Planning for human development in the context of HIV/AIDS poses serious challenges for Botswana, not only because of the high rate of HIV prevalence which leads to human suffering and death, but also because of the macroeconomic impacts that HIV/AIDS will have on labour markets, human development processes and public finances.

Sound financial management, and good management of natural resources like diamonds, has led to Botswana's high economic growth. All of this is threatened by the fact that diamond production has reached a plateau and that the country is 'engulfed by the highest incidence of HIV/AIDS in the world' (see Table 11.6). These two problems pose threats to the country's future socio-economic well-being as well as human development.

Contrary to what is often believed and said about HIV/AIDS, it affects the richest as well as the poorest countries, particularly in the developing world. The African countries whose HIV/AIDS prevalence rate is more than 15% are coincidentally those with the largest mines, namely South Africa, Namibia, Swaziland, Zimbabwe, Botswana, Lesotho and Zambia. For

Table 11.6. Countries with >20% HIV Adult Prevalence Levels, 2002.

Country	Adult rate (%)	Adults and children	Adults (15-49)	Orphans cumulative
Botswana	38.80	330,000	300,000	69,000
Zimbabwe	33.73	2,300,000	2,000,000	780,000
Swaziland	33.44	170,000	150,000	35,000
Lesotho	31.00	360,000	330,000	73,000
Namibia	22.50	230,000	200,000	47,000
Zambia	21.52	1,200,000	1,000,000	570,000
South Africa	20.10	5,000,000	4,700,000	660,000

Source: UNAIDS 2002.

example, South Africa, where a little over 20% (Table 11.6) of the adult population has HIV (7th highest figure in Africa, in percentage terms) ranks 107th on UNDP's HDI rating. In Swaziland, which ranks 125 on the HDI rating list, 33.44% of the adult population has HIV. Botswana is not significantly different, and ranks 125th on the HDI rating yet has the highest HIV prevalence (38.8%) in the world. One may therefore be tempted to say that there is some form of trade-off between the level of Human Development and the HIV prevalence level in Africa.

HIV/AIDS and Human Poverty

Until the mid 1990s, Botswana's premier human development challenge was perhaps unemployment and the eradication of poverty. In the late 1990s, HIV/AIDS - and thereafter health - became arguably the single most important development challenge in Botswana. Poverty and health are very closely linked to each other in a two-way causation relationship. Poor health very easily translates into poverty for sick people who seldom earn an adequate income. On the other hand, poverty often results in poor health. Over-crowded accommodation, poor personal hygiene, poor diet and poor sanitation increase poor people's susceptibility to infection. In fact, diseases that feed on such conditions - cholera, tuberculosis and sexually transmitted diseases - are often referred to as diseases of poverty. Poverty reduction and improved health are, therefore, mutually beneficial pursuits.

Since human development is defined as choices to improve one's life, human poverty denies choices and opportunities and is a major obstacle to development. In Botswana, it was estimated that in 1993 59% of rural Botswana were poor (46% in urban villages and 29% in urban areas). Female-headed households are generally poorer than male-headed households: 50% of female-headed households live below the poverty datum line compared to 44% of male-headed households. As a result of HIV/AIDS, income for the poorest quarter of households is expected to drop by 13% over the next 10 years.¹ To date, the annual rate of Africa's per capita GDP growth has been reduced by 0.8% as a result of HIV/AIDS. In the worst-affected countries, the pandemic will reduce economic growth by 1-2% (UNDP, 2003). Also according to the UNDP statistical fact sheet, it is projected that by 2021 the size of GDP in Botswana will be 24-38% less than it would have been without HIV/AIDS, and it is estimated that the government will lose 20% of potential public revenue by 2010 due to the pandemic.

1. For more information, see UNDP HIV/AIDS statistical fact sheet: July 2002 (in some cases this document has been quoted as UNDP statistical fact sheet) on <http://www.undp.org/>

Labour Productivity

As a result of HIV/AIDS, employers in the government and private sectors are faced with extra labour costs through workers constantly going away on sick leave or dying soon after being trained. Shortages of skilled labour arising from this result in increases in labour costs. In sub-Saharan Africa, the rate of economic growth is found to have fallen by as much as 4% because of HIV/AIDS, and labour productivity has been reduced by up to 50% in the hardest-hit countries (Forsythe *et. al.*, 1996, Botswana National Task Force on HIV/AIDS, 1997).

Strategies Adopted for Human Development in Botswana

Given the shortage of skilled manpower and the need to rapidly localize posts in the expanding economy, the government decided to plan for manpower development. The main aim of Botswana's manpower plans was to try and eliminate imbalances between demand for, and supply of, manpower. The projections made provided useful information for training institutions, trainees, students, workers, and employers about labour market supply and demand. These manpower plans were prepared by the Employment Policy Unit (EPU) of the Ministry of Finance and Development Planning (MFDP) to help guide the economy in terms of education, training and demand for various skills. Five national development plans were developed up to 1987 (in 1982, 1983, 1984, 1985, and 1987). A lack of manpower projections in the EPU and shift in employment policy focus led to a halt in the preparation of manpower plans. In 2001, the Botswana Institute of Development Policy Analysis (BIDPA) was commissioned to produce national manpower projections. These projections were to be used for guiding training institutions in terms of courses to offer and priority areas of study for the Ministry of Education. The main recommendations from the BIDPA study report are that manpower planning should be resuscitated and made on a continuous basis. The conclusions were made for a number of reasons, including the role of human development in economic development in general, and the experiences of the East Asian economies in particular. For Botswana, the justification for human development planning was based on the following:

- The need for an adequate supply of flexible, multi-skilled labour in order to enable the economy to grow, adapt and become more diversified over time;
- The long lags in building the education and training system infrastructure;
- The high cost of having excess supplies of certain types of skilled labour, not only in terms of resources used up but also in terms of opportunity cost of that labour;
- The existence of labour market imperfections, such as asymmetric information, ill-defined property rights and transaction costs, but more especially the dominance of government in determining demand and supply, institutionally setting wages and terms and conditions of employment, and an insensitivity to market signals to balance demand and supply for labour;
- Inadequate levels of finance for manpower training needed within the private sector, since individual firms may have difficulties securing the benefits of such training, and individual workers may have difficulties securing the finance to pay for the levels of education and

training they want and can profitably benefit from. Such is the case especially with general training; and

- Various reasons related to globalisation. Because of globalisation, knowledge has become an instrument of survival for nations, as even products are more knowledge-intensive than previously.

Financing Human Development in Botswana

At Independence, Botswana had few schools or educated citizens as a result of the neglect of education by the colonial government. The few schools that existed had mainly been developed through local and missionary initiatives. Given this small human capital base, the government had to invest heavily in education. For many years, (and even currently), both recurrent and development expenditures of the Ministries of Education and Local Government² were given the lion's share of government budgets. Government has consistently maintained this deliberate bias towards education in terms of its expenditures. At Independence, government could not afford to pay for all the education requirements since it was building new schools and having other budgetary considerations. For most of the late 1960s and early 1970s, students were required to pay school fees as well as other expenditures for their education. In the late 1970s, government began to be increasingly aware of equity issues of education, as it was becoming evident that a number of children were unable to complete some levels of education due to financial constraints. The Botswana government was also highly influenced by international practice and law, with such goals as "universal education for all". The government abolished school fees for primary education in 1978 and for secondary education in 1989. University education was also paid for by the government via a bursary scholarship, which required the graduate to contribute 5% of their initial gross salary for each year of sponsorship. Apart from the fact that this contribution does not cover the full costs of training, a more serious problem has been that a majority of the graduates were not contributing since coordination between employers and the Bursaries Department has been poor.

To alleviate the problem of non-recovery and based on recommendations of the Revised Education Policy, the government shifted its financing policy from a bursaries system to a loan/grant system. This was also in line with cost recovery measures, even though this policy primarily addressed a larger problem of attracting students to courses considered to be scarce. Such courses attracted a 100% grant, while those considered not to be scarce had a very low grant element. Proposals are still being discussed to also shift some of the costs of primary and secondary education to beneficiaries and their parents as a way of sharing costs and cost recovery. While such a move may be desirable, it is important that such a policy should not exclude children from truly poor families from the education system. There are already indications that some children of the very poor are unable to complete certain levels of education because of hidden costs and issues of access. Studies done in the past have shown that the background of parents matters in terms of both completion of, and rates of return from, education (e.g. Siphambe, 2000a, 2000b). Siphambe (2000a,) and Atta *et. al* (1996), have shown that it is indeed feasible to have cost sharing at upper secondary education and tertiary levels without reducing demand for education, since this demand was found to be inelastic. Private rates of

2. Primary education falls under Local government and Lands.

return to education are also found to be substantially high, making it acceptable to beneficiaries to share the costs with government.

The loan/grant system has been implemented for more than five years now, and yet it has not improved the cost recovery in a substantial manner. There is a lack of information on graduate employment, especially in light of the fact that graduates are not guaranteed employment by government as was the case in the past. Implementing the loan/grant system is therefore proving to be a very difficult task. Evidently there is a need to have a thorough look at the loan grant system. Research is needed to guide education policy makers on the most appropriate cost sharing method. Some alternatives include a graduate tax system, which is assumed to be easier to administer as it works on the same principle as an incomes tax. A major problem with this system is that it assumes all graduates get employment, which is not the case for Botswana currently. With regard to applying cost recovery to secondary schools, there is a need to have an appropriate structure that can identify students from poorer families for scholarship awards. Cost recovery can become a very thorny issue without a proper mechanism for identifying students from needy families. It is perhaps for this reason that government has not yet implemented the policy despite it having been approved at government level. Government is proceeding cautiously.

Conclusions

Although Botswana, in comparison with other African countries, has made good progress in raising literacy and school enrolments and improving health, the gains from education and health are lower than those in other developing countries. Low rates of investment in physical capital have implications for the rates of return to human capital, particularly education. If human capital and physical capital are complements, then the policy problem is to enable them both to grow rapidly. Returns to human capital investment depend on the success of policies in promoting the growth of physical capital.

It is evident that there are many inter-linkages between human capital and economic development. But the strategy of human development should focus on the factors that contribute positively to human development. Long-term investment in education and health would create favourable conditions for high human development despite fiscal constraints to the government. It is not correct to believe that investment in human capital alone will be sufficient for growth.

In the context of Vision 2016 and Botswana's aspirations to be an educated, informed nation able to compete on a global scale, the educational and training systems must not only equip Botswana with the skills needed for life, but also with the values needed to give that life meaning and quality.

Botswana has had an admirable performance in terms of economic growth. Its performance in terms of human development is however mixed, as some gains obtained in the last two decades have been lost due to HIV/AIDS. The economic prosperity of Botswana and its people will, apart from the ability to attract foreign direct investment and economic diversification of the economy to lessen its dependence on diamonds, depend on the successful fight against HIV/AIDS.

The HDI and life expectancy data have been on the decline since 1997. Literacy rates have risen although more needs to be done. There is also a concern about poverty and income distribution. The country needs to have deliberate and well-targeted policies to deal with these problems if it is to achieve the Vision 2016 goals. Part of the solution lies with employment

creation, well targeted schemes, the right quality of education, etc. There is a need to make a thorough assessment of our past and learn from that past, as well as to learn appropriately from other countries. But the one obvious route to development is to be outward-looking and produce for the larger SADC market. The key to becoming an effective part of a larger SADC market is being efficient and productive. Much of the effort has to be made at both individual and national levels to combat HIV/AIDS. But if human development is to be achieved, more effort is needed, especially towards behavioural change.

Planning for human development in the context of HIV/AIDS poses serious challenges for Botswana, not only because of its attendant human suffering and death, but also because of the macroeconomic impacts it will have on labour markets and human development.

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Chapter 12

Poverty and Unemployment in Botswana

H. K. Siphambe

Introduction

Poverty and unemployment have been recognized by many developing countries as some of the major problems that they have set themselves to eradicate. Most countries have come up with plans and blue prints as part of strategies to try and plan the fight against these two main societal problems. This chapter deals with the problems of poverty and unemployment. The chapter first looks at the theoretical issues relating to these two problems, and then examines the nature and extent of the problem in Botswana. It then looks at the efforts made to address poverty and unemployment, and lastly appraises these efforts with a view to indicating some of the key issues in making a way forward.

The magnitude and extent of poverty in any country depends on the average level of national income and the degree of inequality of its distribution. Lower national incomes are more likely to lead to increases in poverty. For a given national income, more unequal distribution of income is also more likely to lead to increases in incidences of poverty (Todaro, 2000). In broad terms we can distinguish between relative and absolute poverty.

Relative poverty is more to do with income inequalities: it is about the income of one member of society in relation to the other. Because relative poverty is likely to always exist since personal incomes differ, economists have often spent less time and effort writing and researching about that kind of poverty. It is the absolute poverty that has been the centre of analysis and writing over the years.

Absolute poverty is measured in terms of a minimum poverty line, which is the minimum level of income needed to satisfy the basic physical needs of food, clothing, and shelter in order to ensure continued survival (Todaro, 2000). That minimum standard of living varies from country to country because of different cost structures and other issues. The United Nations uses \$1 per day as a basis for comparing different countries' levels of absolute poverty. When we classify someone as poor in the absolute sense, we are basically saying they have an income that is below that minimum level of income in whatever way it is defined.

Indicators and Measurements of Poverty

For a long time poverty was measured in terms of income alone. But it has now come to be recognized that poverty is much broader than just the lack of income. The poor lack adequate food and shelter, access to education and health, and are often vulnerable to adverse events outside their control. They are often treated badly by the institutions of state and society, and are excluded from participation in those institutions (World Bank, 2001:15). What this illustrates is that poverty has many dimensions. It is now recognized that poverty encompasses not only material deprivation (measured by income or consumption) but also low achievements in educa-

tion and health or what is now known as capability poverty. There is also the third element of poverty, which is participation poverty: this is concerned with poor people's inability to participate in decision-making processes that affect their lives - the poor are usually voiceless and powerless. The main reason for considering broader dimensions of poverty is that the different dimensions of poverty interact and reinforce each other in very complex ways. For example, there is a close relationship between the low education of the poor and their low income, all reinforcing each other in ways that perpetuate their poverty.

The oldest measure of poverty is income poverty. The source of data for this measure is usually the household income and expenditure surveys. The method involves establishing a poverty line - the minimum level of income below which an individual or household is determined to be poor. This measure depends on a country's economic and social circumstances. As the World Bank (2001) points out, poverty measures based on income or consumption are not free from problems. Survey designs vary between countries and over time, often making comparisons difficult (World Bank, 2001:16).

Other measures of poverty have been developed over time in recognition of some of the weaknesses of the income poverty measure. One such measure involves looking at deprivation in terms of capabilities in the dimensions of health and education as mentioned above. It is recognized that access to health and education impacts positively on poverty. The poor are usually deprived in terms of health and education. They have high infant mortality rates, low life expectancy, and their children are more at risk of dropping out of school early. Measurements of poverty along these lines are therefore made in terms of aggregates, such as infant mortality and life expectancy on the health side, and net or gross primary enrolment and literacy rates on the education side. One of the main problems with these measures of capability poverty is that data on both health and education are not available on a regular basis.

A third element of poverty, which is even more difficult to measure, is participatory poverty. This element refers to the vulnerability of the poor to different risks like violence, crime, natural disasters, etc. But most important is the voicelessness and powerlessness of the poor. This dimension of poverty is measured using a combination of participatory methods, polls, and national surveys on qualitative variables, such as the extent of civil and political liberties. As would be expected, this measure has serious methodology problems and an unavailability of data that can be used to make international comparisons.

As the World Bank (2001) rightly recognizes, measuring poverty in a multidimensional way poses a big challenge when it comes to measuring overall poverty. The issues that surface include what weights to assign to the different dimensions and how to generalize about poverty, when a person may be poor by one dimension and yet not poor by another. For instance, is a person who is not income-poor and yet not healthy and not educated considered poor or not? It is the contention of this chapter that despite these difficulties in generalizing, we should not get derailed from our intended purpose. The basic issue is that measuring poverty in dimensions other than income alone helps our understanding of both the concept of poverty and also enriches our understanding of the various policy interventions that we can engage in. As is often emphasized by statisticians, if you cannot measure it you cannot manage it. There is, therefore, a need to continue to interrogate and work towards improving the data to insure that it will be useful in making meaningful assessments and this help guide policy interventions towards poverty reduction, and ultimately poverty alleviation.

Poverty in Botswana

Income Poverty

The most comprehensive study of income poverty in Botswana so far is the Botswana Institute of Development Policy Analysis (BIDPA) study of 1997. The findings from this study indicated that 47% of the people of Botswana, or 38% of all households, were living below the poverty threshold of P100 per person per month in 1993/94. Of these, 30% were classified as "very poor". Although still high, the incidence of poverty had, however, declined compared to 1985/86, where it was found that 59% of Botswana were living below the poverty datum line.

From the Household Income and Expenditure survey (HIES) 1993/94 data, however, poverty reductions were not uniform across the country. The remote rural areas had the smallest fall in poverty levels between the periods. South West, Kgalagadi, Ghanzi, and the western parts of Kweneng and Southern Districts had the highest poverty rates in 1993/94, with 71% of their population classified as living below the poverty datum line (PDL). But in general terms rural Botswana made more progress in poverty reduction than urban areas. This is an important fact, given that 62% of the poor in 1993/94 were found in rural villages. Another 14% and 24% respectively were found in the urban areas and urban villages. Poverty in Botswana as in most developing countries has a gender dimension, as shown by the significantly lower success of female-headed households in getting out of poverty than male-headed households. Whereas female-headed households experienced a decrease of 10 percentage points, the percentage of male-headed households in poverty was reduced by 14 points (BIDPA, 1997).

The worst forms of poverty are concentrated in the country's most remote areas, where a high degree of dependence on government welfare exists. There are indications that income poverty may have declined since 1994.¹ The United Nations Human Development Report (2003) estimates the number of people living below poverty datum line at 33.3%, which also indicates a decline. What is known currently is that, even though poverty may not be as high as in 1994, the levels are still unacceptably high enough to cause concern to policy makers and commentators on the Botswana economy. For the economy to achieve the Vision 2016 goal of zero poverty, there would be a need for concerted efforts to be made in the line of poverty eradication or reduction.

Capability Poverty

Botswana has made appreciable success in reducing capability poverty, as shown by the positive changes in health and education indicators. Infant mortality rates have been declining significantly, falling from 98 per 1000 live births in 1970 to 38 per 1000 live births in 1998. Life expectancy at birth rose from 55 years in 1971 to 67 in 1997 before beginning to fall sharply to 47 years in 2002. The country's progress in health has however been reversed by the spread of HIV/AIDS. The HIV/AIDS scourge has been so serious that it has reversed all the gains in health made in the first two decades after Independence, and continues to drain the economy of its useful human resources.²

Botswana's performance in education has also been very impressive. School enrolments

1. A Household Income and Expenditure Survey has just been completed, which should give us the most up-to-date information on income poverty.

2. For literature on the impact of HIV/AIDS on the economy, the reader should refer to Greener *et. al.*, 2000 (BIDPA 2000a).

rates rose as have literacy rates due to the rapid investment in education. The basic adult illiteracy rate fell from 66% in 1971 to 24% in 2000. The country has also attained a 97% primary school enrolment ratio. Net primary school enrolment rose from 76% in 1980 to 80% in 1997 (World Bank, 2001; UNDP, 2000). Gross enrolment in primary, secondary and tertiary schools increased from 51% in 1980 to 71% in 1998. This put Botswana in sixth position in the SADC region in terms of this index (SADC Human Development Report, 2001). As part of the Revised National Policy on Education (RNPE), transition to junior secondary level is intended to be 100%. However, due to limited resources, both human and physical, the transition to senior secondary level has been lower than 50%. The students not finding space in the senior secondary education system join the vocational education centres, find unskilled jobs or jobs in the informal sector, or become openly unemployed. The formal sector has been unable to absorb these yearly increases in the unskilled labour force. These are individuals who are more likely to be poor, especially if they are unable to acquire any useful skills beyond junior certificate.

Apart from the lack of resources to allow for more transition to higher levels of education, there are problems of school drop-out, especially from children coming from poorer sections of society. Some of the reasons for children dropping out of school are the hidden costs associated with education (such as lack of money for uniforms), high opportunity costs of child labour (especially for the poor), lack of food allowances, etc. With the children of the poor often unable to attend school because of their parents' poverty, it is likely that poverty will be passed on to the next generation. There is a need, therefore, to address the issues of equity in education as well as issues of transition within the educational system.

Participatory Poverty

As highlighted previously, participatory poverty is the most difficult dimension of poverty to quantify. Despite the difficulty, it is generally believed that Botswana has had a development system that is very participatory. There are structures in place right up to the local village that are geared towards allowing every Motswana to participate effectively in policy formulation and implementation. At the apex of these structures are the *Kgotla* and the Village Development Committees (VDCs). The Chiefs use the *Kgotla* for public discussion and to gather views on matters affecting their communities, including before government makes policy decisions. This form, together with the "freedom square" or open political discussion, has been used extensively for gathering comments from residents as well as communicating new policies. Kgosi Seepapitso IV (1989) argues that through the *Kgotla* people are being consulted and there is therefore a two-way communication. Harvey and Lewis (1990) argue that the Tribal *Kgotla* system provides a forum where the Chief listens to advice and where each member of society can have a voice. Moreover, local Councillors and Members of Parliament provide regular feedback and explain government programmes in the *Kgotla*.

There are however limitations to that participation, partly because of the limited capacity of some members of the community to comprehend some of the policies being proposed by government. As a result, there is sometimes a tendency for the Chief and Government to publicise their more insignificant policies and programmes, while the tribe provides a passive, receptive and helpless audience (Chief Lenchwe II, 1989). Seepapitso IV (1989) argues that a problem with the two-way communication of the *Kgotla* is that politicians often fail to respond to complaints that the people voice in the *Kgotla*. Holm (1989) observes that participation is very limited for two main groups, both of which are also very vulnerable to poverty - minorities and

women. It is common for politicians to come from the dominant ethnic groups in the ward or constituency. Even though the *Kgotla* is an institution where all may speak freely, in practice members of the minority groups (e.g. Basarwa, Bakgalagadi, Bayei) would be free to attend but not allowed to speak (Ngcongco, 1989). As for women, most tribes did not consider public affairs a domain for women until recently. Thus women did not participate in the *Kgotla* as a rule. Holm (1989) for instance, using survey data from the UB Democracy Project, shows that close to a majority of the public in the rural areas believe a woman should not run for President.

The importance of all these points is that there is a limit to effective participation in Botswana, especially by the “minority” tribes and women, both groups that also happen to be in the top of the list of those mentioned in the literature of poverty as being the most vulnerable to poverty. There is therefore some amount of participatory poverty in Botswana, even though its magnitude has not been determined quantitatively.

Causes of Poverty

The main cause of poverty in Botswana is founded on the country’s narrow economic base and limited income generation opportunities, as well as a small domestic market. The economy is very dependent on mining, and the population is not only small but suffers from skewed income distribution. The dominant sector of mining, while contributing about three quarters to export earnings, more than half of government revenue, and more than 30% to GDP, only contributes about 4% to employment. Most of the other sectors of the economy also have severe limitations because their backward linkages are mainly with the South African economy. Agriculture, which provides for broad based growth in some of the countries in the region, is not a very successful venture in Botswana due to the high frequency of drought.

There is also a close link between poverty and unemployment. Most of the relevant studies done in Botswana, including the BIDPA study of 1997, have shown that poverty is to a large extent an unemployment and underemployment problem. Most of the poor are not only resource-poor but are also unemployed or underemployed. Other important causes of poverty in Botswana include a lack of education and skills, lack of productive assets, policy failure and inappropriate targeting of programmes, the decline of traditional support mechanisms (such as extended family and *mafisa*³), and problems related to market access and low producer prices (BIDPA, 1997: 65).⁴

Poverty Reduction Strategies

Evolution of poverty reduction strategies

On attaining Independence, most countries in Africa adopted strategies that promoted growth predominantly through heavy state intervention and inward-looking strategies. There were no attempts to put into place strategies for poverty reduction, as it was assumed that growth would automatically trickle down to the poor, thus alleviating poverty. The last four decades has been

3. Mafisa was a system of support for the poor by the rich. This involved lending some cattle for the poorer members of society, who would usually look after them in return for a service in the form of milk and draught power as well as being given offspring at certain periods.

4. A thorough discussion of causes of poverty in Botswana is found in Siphambe (2003a, 2003b) and BIDPA, 1997.

rich with experience for the developing countries in Africa. Firstly, growth was slower than anticipated because of both external and internal factors. Among the internal factors were issues relating to policy failure, political instability, and - in the last decade, - the spread of HIV/AIDS. Among the external factors were falling commodity prices, unfavourable trade relations, and external debt. As a result of these unfavourable economic conditions, poverty has been increasing, has remained stable at high levels, or has been declining by very small margins. There was a great concern from many countries that poverty needed to be dealt with in a more strategic way, by introducing a strategy formulated specifically to target it. The response of many countries was to come up with Poverty Reduction Strategies Papers (PRSPs). Like the structural adjustment programmes, the PRSPs have been viewed with mixed feelings simply because most of them are World Bank/IMF or UNDP sponsored. Most of the countries have only just started implementing the PRSPs, and evaluations of their relative success or failure are just being made.

According to the IMF, Poverty Reduction Strategy Papers are prepared by the member countries through a participatory process involving domestic stakeholders as well as external development partners, including the World Bank and the International Monetary Fund. Updated every three years with annual progress reports, PRSPs describe the country's macroeconomic, structural and social policies and programmes over a three-year or longer horizon to promote broad-based growth and reduce poverty, as well as associated external financing needs and major sources of financing (IMF Websites, 2003).⁵

Poverty Reduction Initiatives in Botswana

Botswana has recently developed a PRSP for the country, which is still to be debated in Parliament before it can be adopted by government. The need for developing a PRSP for Botswana was driven more by the need to strategically think and implement ways that could reduce poverty and position the country to the ideals of Vision 2016, especially with regard to the pillar of "a prosperous, productive and innovative nation". There was a recognition on the part of government that current poverty levels are quite high and yet the strategies to deal with them are not well articulated, targeted and coordinated.

In the past, Botswana's attempt to reduce poverty has been based on three main areas of intervention. The first area - direct productive support schemes - is that of assisting entrepreneurs to enhance their productivity and therefore create employment opportunities and diversify the economy away from diamonds. Amongst these policies were schemes such as the Financial Assistance Policy (FAP), Small, Micro and Medium Enterprises (SMMEs), and Citizen Entrepreneurial Development Agency (CEDA). The basic route through which these schemes were to reduce poverty was through employment creation and participation of citizen entrepreneurs in business ventures. Even though successful in creating employment to some extent, FAP and SMME faced numerous problems. Some of the problems mentioned in the FAP Evaluation Report including the abuse of the scheme, lack of effective monitoring and evaluation, fraud, and the inability of some businesses to live beyond the subsidy era (BIDPA, 2000b). As a result of these and other logistics problems, FAP and SMME were discontinued. In their place, government introduced CEDA in 2001. Unlike the previous schemes, CEDA is not a grant but a

5. For a thorough discussion of PRSPs for various countries, and for those within Africa in general, refer to the IMF Website, where the actual PRSPs and regular reviews are posted for each country. These are listed per country. Botswana does not appear in that website because its PRSP was not prepared under the auspices of IMF/World Bank.

subsidized interest scheme that is accessible only to citizen entrepreneurs. The change in the spirit shown in CEDA is to instill sustainable business practices and move away from the philosophy of handouts from government. CEDA's success in creating sustainable employment and therefore poverty reduction lies in its ability to transform the culture of handouts, and being able to address some of the weaknesses that were inherent in FAP and SMME. There is already concern that CEDA does not cater for the poor because the requirements are stringent and the forms are too complicated. Those who hold that view argue that CEDA's success in poverty reduction will be very limited.

A second set of anti-poverty policies relate to government programmes geared towards employment creation in the rural areas. Some of these programmes include the Labour Based Public Works Programme (LG117), Labour Intensive Public Works Programme, Accelerated Rain-fed Arable Programme (ARAP), the Remote Area Development Programme (RADP), and the Arable Lands Development Programme (ALDEP). From different points of view, these programmes are all aimed at either enhancing rural incomes through supporting the productivity of key sectors and/or creating employment for rural dwellers. These programmes have also been assessed as being successful in reducing poverty in Botswana, albeit to a limited extent. Their success is limited in part by the very same problems that were found with FAP and SMME: they have also been subject to abuse, were not well monitored, and were not well targeted. They are also criticized for creating a dependency syndrome amongst Botswana on government: for instance, there are examples of Botswana who tilled big areas of land without planting any crops under the ARAP programme. Payment of programme money was based on the amount of land tilled rather than output produced from the land ploughed.

A third group of policies developed by government to alleviate poverty are the direct social support. The Government of Botswana recognized early in its development that not all Botswana could benefit from employment and other productive endeavours. Examples of people who could not benefit are destitutes, orphans, and the disabled. Government therefore came up with various support systems to fighting poverty directly. Examples of such programmes are the orphanage support programme, World War II Veterans' allowance, Old age Pension Scheme, and the Drought Relief Programme. Assessment of these programmes also shows that they have had a major contribution in preventing starvation. The programmes are highly criticised by some for creating a culture of dependency amongst Botswana. This is because most of these programmes are not well targeted and are therefore subject to abuse and fraudulent use by those who are not meant to benefit from them.

Recommendations for Poverty Reduction in Botswana

Botswana has made tremendous efforts in poverty reduction through various measures. Both income and capability poverty have been on the decrease, although not at a rate that will allow the country achieve the Vision 2016 goal of zero poverty by that year. The various policy measures have made only small impacts on poverty reduction, mainly because the programmes were subject to abuse and fraud, and tended to create a dependency syndrome of Botswana on government. Such weaknesses of past programmes should be taken as good lessons when designing future poverty reduction programmes. It is generally accepted that a major part of poverty reduction will come from pro-poor growth, which is based on growth that is employment enhancing. Efforts should be made to push Botswana's growth to become employment intensive in order to spread the benefits of employment to more Botswana.

A second issue relates to the fact that poverty has a gender dimension. Data shows that women are worst affected by unemployment, they are more likely to be poor, they have a lower participation rate, and they are generally disadvantaged in a number of economic issues. There is therefore a need to address gender in employment creation. Specifically, the questions of why women tend to be disadvantaged in the labour market, and how that can be addressed to reduce unemployment of women in particular, must be answered.

It is hoped that the recently formulated poverty reduction strategy will be a useful guide to poverty reduction in Botswana. The challenge ahead is quite a big one but one that cannot be avoided.

Definition and Nature of Unemployment

Labour is one of the most important factors of production in any economy. This is because labour is not only a factor of production but also a beneficiary of the results of production. If the wages and salaries that accrue to labour are low, especially measured in terms of labour's productivity, that may lead to poverty. If labour is not employed it is also likely to become poor since it has no income. Unemployed labour also implies that there is generally a foregone output that could have been produced had labour been productively engaged. The general underutilization of labour takes different forms. Labour can be unemployed openly in the sense of people having been looking for employment during the time of the survey (this is the conventional international definition of unemployment, which only looks at those who were actively looking for work). We can also define unemployment in broader terms to include those who had no employment but had stopped looking for work, the "discouraged" unemployed. At a much broader context we may even include the "disguised" unemployed and the underemployed. The disguised unemployed are those doing work that could be done by fewer people, such that the marginal productivity of such workers is zero or very close to zero. Removing one of these from people employment will not affect total output. This especially happens in the agricultural sector, where more people may be involved in activities that could be done by fewer people. Another form of disguised unemployment is found especially in the informal sector, where workers are underemployed, working fewer hours than a certain meaningful number of hours per day or week. In Botswana this includes anyone working less than 35 hours a week. Most economies prefer to measure unemployment using only those who were actively looking for work, that is,

Unemployment is defined as:
$$\frac{\text{the unemployed} \times 100}{\text{the total labour force}}$$

where the unemployed is only those who were actively seeking for employment, and the total labour force is the sum of those who were actively looking employment plus those employed during the time of the survey. In recognition of the weaknesses of only relying on this measure of the underutilization of labour, the next section of this chapter highlights the extent of unemployment by considering the discouraged unemployed and those underemployed.

Labour-Force, Unemployment and Underemployment in Botswana

Between 1991 and 1996, the labour force grew at an average of 3.4% per annum, while the growth rate of formal sector employment was lower at 1% per annum. As a result of this

mismatch between the supply of labour and its demand, unemployment has generally been on the rise in the 1990s. The 1991 Population and Housing Census reported an unemployment rate of 13.9%. This increased to 21.6% in 1994, where it remained almost stable at 21.5% in 1996 (CSO, 1997, 1998). Later estimates have, however, shown unemployment to be decreasing since 1998. A Botswana Demographic Survey of 1998 estimates unemployment to have declined to about 19.6% in 1998. The 2001 budget speech reports a further fall in unemployment to approximately 15.8% in the year 2000. A Botswana Aids Impacts survey estimated unemployment to have risen slightly to 16.8% in 2001 (CSO, 2002). This fall in unemployment from about 22% in the mid-nineties was achieved despite the slower growth of non-mining GDP. The reduction in unemployment over the last ten years is promising if it can be sustained. But there is concern that some of the employment growth during the last decade is due to expansionary fiscal policies that government may not be able to continue with for a very long period given limited resources. There is also concern that the private sector is not creating additional jobs and diversifying the economy from its dependence on diamonds.

The most comprehensive data source currently for unemployment is still the 1995/96 Labour Force Survey, even though preliminary data for the Household Income and Expenditure Survey (HIES) 2002/2003 has been released.⁶

The 1995/96 LFS shows that 182,703 of the total labour force or 34.6% were unemployed. Of these unemployed persons, 88,175 or 48% were discouraged job seekers. Disregarding those who were not actively looking for a job gives an unemployment rate of 21.5%. The most affected age groups are those from 15-19 and from 20-24, whose unemployment rates were recorded at 35% and 39% respectively among those actively seeking work. When discouraged job seekers are included in these figures, the estimates are 58% and 50% respectively (CSO, 1998). The youth, i.e. those aged between 12 and 34 years of age, were reported to be the largest proportion of the unemployed, accounting for 69% in 1995/96. The survey also reveals that 55% of the unemployed lived in rural areas. Among those who were actively seeking employment, 59% were in the urban areas, whereas among the discouraged 71% were found in the rural centres. What this indicates is that most of those who are unsuccessful in their job hunt usually go back to the rural areas, where they may end up engaging in the agricultural activities.

The problem of the labour market in Botswana is not only that of open unemployment, there is also significant underemployment. The 1995/96 Labour Force Survey shows that a significant number of those who were employed during the survey period were classified as having been underemployed. Underemployment was defined in the survey as persons who worked for less than 35 hours in the reference survey week for an economic reason, and who reported that they were available for more work (CSO, 1998). The total number of those who were underemployed stood at 28,789 or 8.3% of those employed. Amongst these, approximately 60% were female workers. Underemployment was found to be more prevalent among persons in rural areas, who made up 68% of the total underemployed. Most of the underemployed (80%) indicated that they were underemployed because they could not find more work (CSO, 1998).

The recently released preliminary results from Household Income and Expenditure Survey (HIES) 2002/2003 data show a reversal of the unemployment trend, with unemployment having increased to 23.8%. Unemployment for males and females was 21.4% and 26.3%

6. More comprehensive analysis of the HIES 2002/2003 data has not yet been made. CSO has just released preliminary results covering unemployment, labour force and income issues.

respectively. For all locations, i.e. town or cities, urban villages and rural areas, unemployment was higher for females than for males. For cities or towns, unemployment for females and males was 21.6% and 15.5% respectively. For urban villages, unemployment for females and males stood at 30.3% and 28.9% respectively. In the rural areas, females and male unemployment was recorded at 26.7% and 20.3% respectively. Generally unemployment was highest in urban villages, followed by rural areas, and lowest for cities or towns. The disparity in unemployment rates is an outcome of the concentration of jobs in towns or cities, and the fact that those unemployed in cities and towns usually migrate back to rural and urban villages once they are not successful in securing employment in cities or towns. In all regions, the age groups 15-19 and 20-24 have the highest unemployment rates for both males and females, indicating that unemployment is especially a youth problem in Botswana.

Table 12.1. Trends in total labour force and unemployment, 1991-2003.

Data Source	Unemployed	Employed	Labour Force	Unemployment Rate(%)
1991 census	61,625	379,938	441,293	13.9
HIES 93/94	107,723	391,804	499,527	21.6
1995/96 LFS	94,528	345,405	439,033	21.5
1998 DS	115,703	441,187	556,890	20.8
2000 MIS	90,729	483,432	574,161	15.8
2001 Census	109,518	449,235	558,753	19.6
HIES 02/03	144,424	462,401	606,826	23.8

Source: MFDP, Annual Economic Report, 2003, CSO, 2004.

According to the 2001 Census Survey, The total population aged 12 years and above was estimated at 1,189,688 of which 558,753 were economically active (labour force) and 629,562 were economically inactive. This gives a labour force participation rate of 47%. This is lower than that reported in the 1995/96 Labour Force Survey (LFS), which was about 55%. Among the currently active labour force, 66% were employees paid in cash. Another 7% were self-employed without employees. About 3% were self-employed with employees and worked in their own cattle post/lands unpaid respectively. 2001 Census data shows that most of the unemployed have secondary education and no other form of training.

Recommendations for Addressing Unemployment Issues

Unemployment in Botswana is still quite high, estimated at 23.8% in 2002/2003. Most of the unemployed are the young with only a junior or secondary school education, and most have no training. The following general issues could be recommended as ways of addressing with the unemployment problem in Botswana:

1. Employment creation needs to be pursued much more vigorously. Unemployment has been mainly due to the fact that the demand for labour could not keep pace with an increasing labour force. Studies done on Botswana show that the responses of employment to changes in output are quite significant (e.g. Siphambe, 2003). These results indicate that increasing non-mining GDP is a good way to generate employment. The highest response of

employment to output is found in commerce, which is one of the potential sectors for economic diversification, especially tourism.

2. In recognition of employment and other problems associated with the dominance of diamond mining on the economy, economic diversification has always been in the forefront of the Botswana Government's development strategy, as indicated by the successive themes of the National Development Plans and Budget Speeches. Economic diversification has however not progressed as fast as was anticipated. There is, therefore, a need to emphasise and support investment projects that are more labour intensive and have relatively strong linkages with the rest of the economy.
3. Data from the Labour Force Survey 1995/96, 2001 Census and HIES 2002/2003, show that most of the unemployed are the youth with a secondary education and no training. Providing for training and higher levels of education is therefore a useful way of addressing the supply side of the unemployment problem. Training institutions should also make regular tracer studies to check the relevance of their programmes to the labour market, to avoid producing graduates that are not suitable for the labour market.
4. Given the link between poverty and unemployment, there is a need to pay particular attention to employment creation as part of a strategy for poverty reduction.

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Chapter 13

Issues of the Environment and Development in Botswana

C. Mupimpila and M. Rathedi

Introduction

This chapter discusses issues of the environment and development in Botswana. The chapter consists of three main parts. The first part gives a brief overview of the relationship between the environment and development. Part two is about externalities and the economics of pollution, and gives a theoretical presentation of key terms as a background to practical examples from Botswana. The third part is about the relationship between the environment and development specific to Botswana. To understand the driving forces behind the concern for the environment, this part presents an overview of environmental problems in Botswana and then analyzes, in detail, the issues of poverty, population and environment degradation.

Environment and Development

There have been remarkable changes in development paradigms over time. Perhaps none of these changes is more significant as the shift in favour of sustainable development. According to a widely cited definition by the World Commission on Environment and Development (1987, p 43), "*Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs*". Sustainable development is about maintaining a balance between economic, social and ecological objectives (see for instance, Dalal-Clayton *et. al.*, 1994; Munasinghe, 1993). This concern for the environment is due, among others, to the realization that the environment and development are intricately linked. Precisely, there are three functions of the environment that are often cited in this context. First, the environment is a source of raw materials and energy necessary for production. Any type of production ultimately depends on resources derived from the natural environment (Dasgupta, 1991). Secondly, the environment provides other benefits such as recreation and beauty. Thirdly, the environment is an assimilator of the residuals from production. Some residuals are re-cycled into production while other residuals are assimilated into the environment and accumulate over time. The accumulated residuals in the environment can be benign or harmful, depending on the absorptive capacity of the environment. Thus, residuals only cause damage to the environment and human health when they accumulate beyond the absorptive capacity of the environment.

Pollution and solid waste may be defined as the presence of certain substances in the air and water in excess of the absorptive capacity of the environment. Some common pollutants are carbon dioxide and other oxides of carbon, oxides of sulphur, nitrogen, and photochemical oxidants and chlorofluorocarbons. These pollutants cause a range of problems, some of which affect human health directly while others destroy the environment, thus reducing the productivity

of the available natural resource base. Part two of this chapter looks at the damage that can be caused through what are called 'externalities.'

However, besides the issue of externalities, there are other critical issues concerning the relationship between the environment and development. One of these challenges is that of balancing economic growth with environmental protection. Economic development creates local, regional and global environmental problems such as freshwater degradation, ozone depletion, loss of bio-diversity, climate change, desertification and deforestation. The underlying causes of these problems vary. They include such factors as population growth, rapid urbanization, inappropriate use of technologies, market failures and institutional failures.

In the case of developing countries, poverty and environmental degradation are often linked in a cause-and-effect manner. In developing countries, poverty is both a cause and a result of environmental degradation. Poor people degrade the environment in order to provide for short-term survival. In turn, a degraded environment worsens poverty levels. Part three of this chapter presents an overview of environmental problems in Botswana, focusing mainly on the issues of poverty, population and environmental degradation.

Externalities and the Economics of Pollution

Economists usually define an externality as a situation in which one party (consumer or producer) affects the utility or production possibility of another party (the recipient/victim) without receiving an amount equal in value to the resulting benefits (or costs) to the recipient or victim. For this definition to hold, the party generating the externality must do so in an attempt to maximize its benefits as opposed to deliberately helping or hurting the other party. An externality can therefore be advantageous (positive) or adverse (negative).

One example of an externality is when farm fertilizer in an upstream farm poisons fish downstream. The contamination may result in fish-kill and reduced fish-catch by fishmongers. It may also result in the poison being ingested by fish-eaters. In either case, we have what is known as a negative externality. Another example of an externality is when a farmer unilaterally reduces the size of his cattle herd in a communal area. This increases the available grazing and lowers the cost of supplementary feeding for other farmers. The farmer in this case generates a positive externality to other farmers.

In these examples, the costs and benefits are not reflected in market transactions. There is no reciprocal flow (monetary or otherwise) in recognition of the losses suffered or the benefits gained. The fact that externalities are not priced leads to inefficiency in the allocation of resources. This is not surprising because in a purely competitive market, prices are used to reflect the relative scarcity of resources. Producers then take that scarcity into account and allocate those resources in a manner that will maximize benefits (optimal allocation). It follows therefore that the absence of prices for externalities leads to a sub-optimal allocation of resources. The sub-optimal resource use is due to the fact that externalities are not included in the resource price, and therefore resource use does not reflect the true scarcity value of the resources.

The optimality condition is that, at equilibrium, the marginal benefit of any economic activity should be equal to its marginal cost. Formally, equilibrium occurs when:

1. $MB = MC$

where MB is marginal benefit and MC is marginal cost. This condition holds as long as there

are no externalities. However, when there are externalities and economic agents maximize their benefits, they usually only consider private costs and private benefits to the exclusion of external costs and benefits. This failure to consider external costs and benefits leads to misallocation of resources. In the example of farm fertilizer mentioned above, the farmer imposes costs on fishmongers and therefore the relevant equilibrium condition should be:

2. $MPB = MPC + MEC$

where MPB is the marginal private benefit, MPC is the marginal private cost and MEC is the marginal external cost. Thus, when external costs exist, marginal private benefits should equal marginal private cost plus marginal external costs. The sum of MPC and MEC is known as marginal social cost (MSC). Therefore, when there are external costs, equation 2. yields the social optimum.

In the example of the cattle farmer, the farmer generates a positive externality on other farmers, and the relevant equilibrium condition would be:

3. $MPC = MPB + MEB$

where MPC is the marginal private cost, MPB is the marginal private benefit and MEB is the marginal external benefit. Thus, when there are external benefits, marginal private costs should equal marginal private benefits plus marginal external benefits. The sum of MPB and MEB is known as marginal social benefit (MSB). Therefore, when there are external benefits, equation 3. yields the social optimum.

Figure 13.1 and 13.2 respectively illustrate the impacts of negative and positive externalities on the market system. These figures are designed to underline the general consensus that markets should be corrected to reflect the true social value of resources.

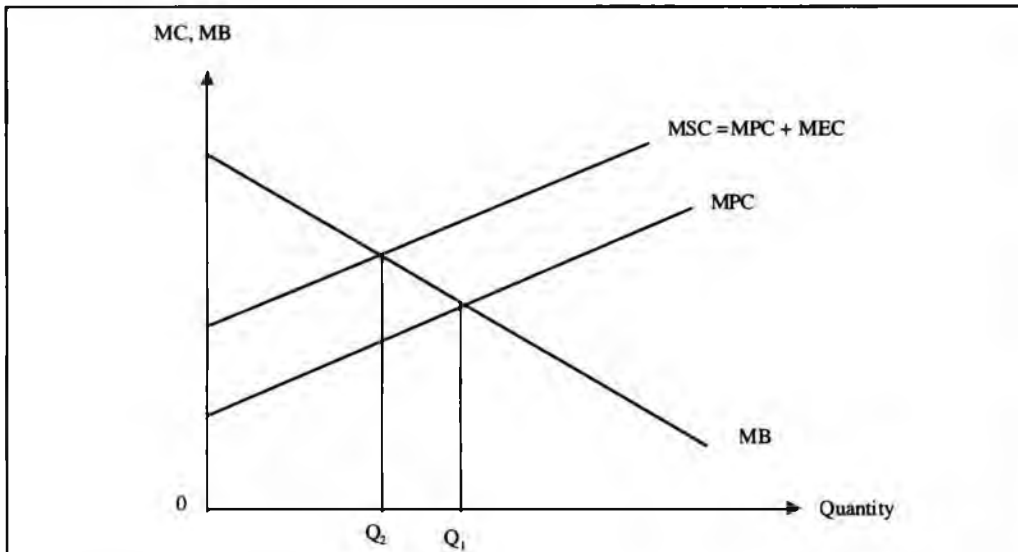


Figure 13.1. The case of negative externality.

In Figure 13.1, MPC = marginal private costs, MSC = marginal social costs and MEC = marginal external costs. Without considering the external costs, the equilibrium output is Q_1 , but when external costs are taken into account a lower level of output, Q_2 , is produced. The negative externality will result in the over-production of the goods in question if the market system is unregulated. In other words, when there are external costs, an unregulated market system will produce more than the social optimum level of output. The opposite is true for the case of external benefits, that is, positive externalities. Figure 13.2 illustrates the case of positive externalities.

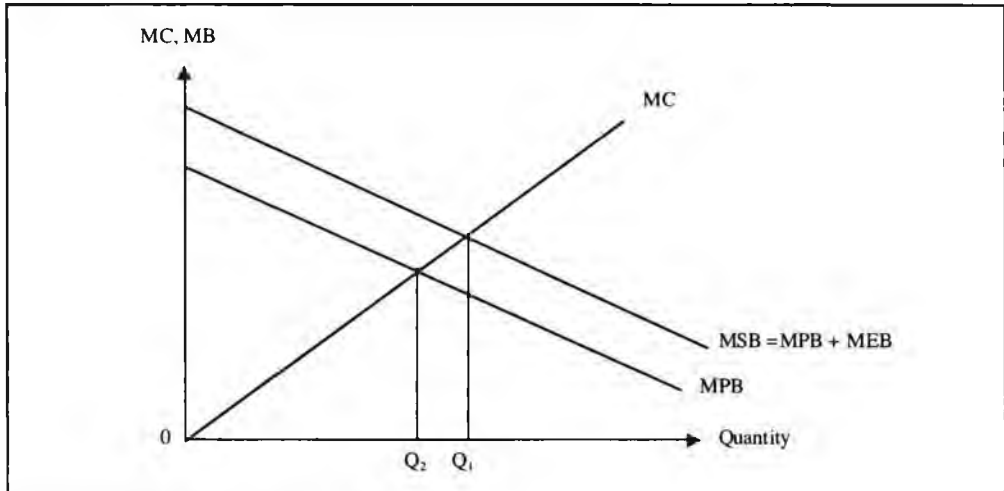


Figure 13.2. The case of positive externalities.

In Figure 13.2, MPB = marginal private benefits, MSB = marginal social benefits and MEB = marginal external benefits. The figure shows that, in the case of a positive externality, external benefits are disregarded in an unregulated market. The private optimum in this case is Q_2 . However, when social benefits are considered, more of the good is produced and the equilibrium moves to Q_1 , which is the social optimum.

Externalities can be classified in several ways, one which is according to the type of activity producing the externality and the type of recipient. One type of externality is that of the producer-to-producer externality. This arises when production by one firm influences the production function of another producer, either positively or adversely, and the emitter of the externality does not bear the costs or enjoy the benefits of his actions. This leads to a mis-allocation of resources as argued above.

A second type of externality is that of the producer-to-consumer externality. This arises when the producer's action affects the utility function of a consumer or a group of consumers. Once more, the producer will maximize profits without taking account of his or her actions on consumers, thus leading to an inefficient allocation of resources as shown above. An example of this may be a factory contaminating air in its vicinity; that polluted air will then reduce the welfare of people working in, and those residing around, that area.

A third type of externality is that of the consumer-to-consumer externality wherein a

consumer's actions alter the utility function of another consumer and the offending consumer does not suffer or benefit from his/her actions; thus in maximizing his/her benefits, he or she disregards the impact of those actions on others, thus again leading to a misallocation of resources. For example, the consumption of transport services may also lead to air or noise pollution.

Finally, there is the consumer-to-producer type of externality. The consumer's actions do not often adversely affect the producer, but it is possible for a consumer to influence the production functions of some producers without taking into account the impact of those actions on producers. The example on pollution resulting from the consumption of transport services is still relevant here, because that pollution can affect the yield in neighboring farms or it may affect the health of workers in that area, thus reducing productivity in the economy.

Externalities are the source of environmental problems because they account for the divergence between private incentives and social incentives. It is this divergence that explains why rational and responsible individuals and firms are often engaged in activities that are disruptive to the natural environment. For example, in many cases the environment is regarded as a free good (its marginal cost is set at zero), and this leads to excessive exploitation. In the case of waste from production (solid, gas and particulate), the polluters do not pay the external costs, leading to excessive levels of pollution.

Externalities become more prevalent in a society where property rights are not well defined or where no one individual possesses exclusive rights to an environmental resource. This means that in most cases the distortions or inefficiencies emanating from an externality can be corrected by properly defining rights of ownership. Consider, for example, the case of water pollution. Applying fertilizer on a farm upstream adversely affects fish harvesters downstream. If the fish harvesters have property rights to the stream, then the farmer will be required to compensate them for the damage caused by water pollution. This will force the farmer to adjust his output (and by extension the level of pollution) to a point where:

$$4. \quad MB = MC + \text{marginal compensation}$$

In this case, MB is the marginal benefit and MC is the marginal cost from farming. The marginal benefit from farming is essentially the marginal revenue, while the marginal compensation is the tax charged to the farmer for polluting the stream. Thus, equation 4. can be restated as:

$$5. \quad MR = MC + \text{tax}$$

where MR is marginal revenue and MC is as defined before. Note that the tax or marginal compensation is equal to the marginal external cost of applying fertilizer. A tax or subsidy designed to internalize an externality is known as a *Pigovian* tax or subsidy. The term Pigovian tax or subsidy is named after the economist Arthur Cecil Pigou in recognition of his seminal work in welfare economics. Clearly, if the aim is to discourage production, as in the case of a negative externality, a Pigovian tax is recommended. On the other hand, if the aim is to encourage production, as in the case of a positive externality, a Pigovian subsidy may be necessary.

Externalities can also be internalized by defining property rights, because the assignment of property rights leads to an optimal outcome. In the above example, if the farmer has the property rights to the stream, he or she will be the one to be compensated in order to reduce farm output (pollution level). Optimality will still be attained.

Almost all environmental externalities display the characteristics of public goods. They

are non-depletable or non-rival in consumption. This means that the consumption of such output by someone does not affect another person's consumption of the same output. For example, if the city council decides to landscape all the open spaces in town, this will confer benefits to all city dwellers, and the enjoyment of that beauty by one person will not affect anybody else's satisfaction. Even if it were possible to exclude people from viewing the landscaped area, it would still be inefficient to charge a positive price for viewers because such a price may inhibit someone's consumption of the landscape, thus reducing his or her utility without increasing that of another person. This measure would not achieve Pareto optimality.¹ It follows therefore that where a public good (or bad) is involved the market system provides inefficient outcomes. Thus economists have often urged that when there are public goods and externalities, the market system needs to be corrected to reflect the true scarcity value of environmental resources. The third part of this chapter discusses issues concerning the relationship between the environment and development in Botswana.

The Relationship Between the Environment and Development in Botswana

Botswana has 12 major ecosystem types and these are depicted in Table 13.1. The ecosystems are found in varied geographical regions in the country and they consist of such physical features as arid shrub savannah in the extreme southwest, Kalahari bush savannah in the southwest, woodlands and forests, and mopane tree and bush savannah in the north of the country. The northern part of Botswana has a wider diversity of ecosystems because this region receives more rainfall than the southern part of the country. More generally, the major tourist destinations are in the northwestern part of Botswana because of a greater variety of fauna and flora in this area. The northwest of Botswana has perennial rivers that support a wide range of plant and animal species.

The Government of Botswana has made earnest efforts to preserve the country's ecosystems. Ecosystem conservation in Botswana is effected through a system of protected areas. There are five categories of protected areas in Botswana: national parks, game reserves, wildlife management areas, forest reserves and natural history monuments. One major difference between these protected areas is that, in national parks, game reserves and forest reserves, wildlife is preserved mainly for its aesthetic value, unlike the case with wildlife management areas where the objective is to preserve wildlife for use by the surrounding communities (see Republic of Botswana, 2000). Botswana has registered considerable success in wildlife management and has been in favour of a resumption of the trade in ivory. The challenge for the future will be that of balancing the trade-offs between economic growth, poverty and environmental protection.

In this era of sustainable development, there is overwhelming evidence that environmental problems are pervasive in many parts of the world. However, in developing countries, the concern for the environment is predicated on the fact that poverty and environmental degradation are closely linked. Precisely, poverty and environmental degradation are related in a cause-and-effect manner. Because of poverty, poor people are forced to degrade the environment as a means of short term survival. In turn, a degraded environment provides fewer resources for survival, and therefore there is a downward spiral in which environmental

1. Pareto Optimal: In consumer theory, an allocation or distribution is said to be Pareto Optimal if it is not possible to make one person better off without making someone else worse off.

Table 13.1. Major ecosystem types in Botswana.

Ecosystem Number	Ecosystem Type	Geographical Region
1	Arid shrub savannah	Extreme southwest
2	Kalahari bush savannah	Southwest
3	Northern Kalahari & bush savannah	Midwest, Okwa/Quoxo Valley, mideast, Letiahau Letiahau, Hainaveld, northwest Ghanzi, midnorth
4	Mixed bushveld, Mopane Tree & bush	South East
5	Savannah	Eastern Hardveld, Northeast, Northwest, midnorth
6	Fringing pan grasslands	Makgadikgadi System & Nxai Pan area
7	Chobe Forest	Northeast
8	Ngamiland tree savannah	Northwest
9	Seasonal swamps sgrasslands	Northeast, Mababe, Kwando, Linyanti, Okavango
10	Wetlands/Riparian swamp	Okavango, Chobe, Linyanti, Zambezi, Limpopo permanent & seasonal swamps, Makgadikgadi Pans (wet)
11	Aquatic	Permanent and seasonal waterways
12	Pans	Makgadikgadi Pan (dry)

Source: Republic of Botswana (2000), Environmental Statistics, Table 13.1, p 180.

degradation entrenches poverty. Developing countries are effected by environmental health problems, including diarrhoea, dysentary, typhoid and respiratory diseases. There are also trade-offs between agriculture and wildlife conservation. These issues are relevant for Botswana, notwithstanding the fact that the country has a total land area of 581,730 square kilometres and an estimated population of only 1.6 million (Republic of Botswana, 2000, p vi).

Watson *et. al.* (1998) identify eight major global environmental issues, namely climate change, loss of biodiversity, ozone depletion, fresh water degradation, desertification and land degradation, deforestation and the unsustainable use of forests, marine environment and resource degradation, and persistent organic pollutants. These issues are experienced at different levels of intensity in Botswana, but the present analysis focuses on the most severe environmental problems in the country. These problems are desertification and land degradation, deforestation and the unsustainable use of forests, loss of biodiversity, pollution and solid waste, mining and environmental degradation.

Desertification and land degradation are linked to population pressure, which increases land degradation by encouraging human active in ecologically fragile and arid lands. This is sometimes called "extensification" (see for instance United Nations, 1994). In other cases, there is the opposite phenomenon called intensification, where a small plot of land is employed to

produce a lot of food. Intensive agriculture reduces the fallow period between crops and depletes soil nutrients. The result is what is called "soil mining", a situation which leads to a downward spiral of reduced yield and income, increased poverty and further environmental degradation.

Desertification and land degradation are, to a large extent, a result of inappropriate economic policies that under-value natural resources, thus encouraging misuse. For example, governments often aim at food self-sufficiency irrespective of the fragility of the ecosystem. Increased agricultural output is usually subsidized without introducing appropriate technology. These factors cause soil erosion and desertification.

In Botswana, the issue of land degradation is closely related to "...the management, or mismanagement, of communal lands, mainly through overgrazing" (Dahlberg, 1994, p 17). Table 13.2 depicts the land tenure system in Botswana during 1974-1995. The table shows that the communal lands are by far the major form of land tenure, accounting for over 50% of the total land area in the country. By their nature, communal lands are a common property resource, and one of the basic problems of a common resource is that there is often some form of adverse externality among the users (see below). Given free access, the long-term tendency is to degrade a common property resource.

Besides communal land, other categories of land tenure are freehold and state land. Thus in all there are three types of land tenure in Botswana: freehold, state land and communal land. The major difference among them is the system of property rights. Under freehold, the land owner holds perpetual and exclusive property rights to the land. This system of land tenure constitutes about 3.3% of the total land area in Botswana (see Table 13.2), and is in contrast to communal or tribal land where there are no exclusive rights to land use.

Table 13.2 also shows that the major change in land use over time in Botswana has been the increase in the proportion of state land, from 17.7% in 1974 to 18.8% in 1981 and 41.8% of the total land area in 1995. This category of land tenure consists of national parks, game reserves, forest reserves, wildlife management areas (WMA), cities and towns. Since the proportion of freehold has remained constant over time, the increase in the share of state land has been at the expense of communal land. From Table 13.1 it is clear that there has been a decline in communal lands as a proportion of the total land area, although they are still the main form of land tenure in Botswana. Communal lands represented 79% of the total land area in 1974, 77.9% in 1981 and 54.8% in 1995.

In Botswana, communal resource use is aggravated by the fact that the country is semi-arid and has a varied rainfall pattern. The geographical size of the country, combined with a relatively small population, may be a benefit in terms of population density and pressure on the natural environment. Indeed the average national population density confirms that the country is sparsely populated. However, disaggregated statistics show that the population is unevenly distributed. About 80% of the population is concentrated in a relatively small part - the eastern part of the country - which is suitable for agriculture. This factor has resulted in ecological imbalances in Botswana, which are aggravated by over-grazing and inappropriate farming techniques. These are the major sources of land degradation and desertification in the country.

Table 13.3 shows livestock production in Botswana from 1979 to 1993. The data is disaggregated between traditional and commercial farmers. In both cases, cattle are by far the main type of livestock raised by farmers, with goats a distant second. Table 13.3 shows that traditional farmers have far larger herds of livestock than commercial farmers. In other words, most livestock in Botswana is raised on communal or tribal lands.

Because of Botswana's system of land tenure, there are few incentives to match

Table 13.2. Land use change (square kilometres) 1974-95.

Land Use /Tenure	1974		1981		1995	
	Land Area Sq.Km	% of Total Land Area	Land Area Sq.Km	% of Total Land Area	Land Area Sq.Km	% of Total Land Area
Communal Land						
Pastr/Arab/Resid	446,511	76.8	415,315	71.4	281,615	48.4
Tribal Grazing Land	-	-	24,292	4.2	24,292	4.2
Policy Ranches						
Lease Ranches	13,090	2.3	13,090	2.3	13,090	2.3
Sub Total	459,601	79.0	452,697	77.9	318,997	54.8
Freehold Land						
Freehold Farms	18,959	3.3	19,429	3.3	19,109	3.3
Arable Blocks	-	-	-	-	320	0.1
Sub Total	18,959	3.3	19,429	3.3	19,429	3.4
State Land						
National Parks	37,360	6.4	37,815	6.5	37,815	6.5
Game Reserves	62,239	10.7	63,517	10.9	63,517	10.9
Forest Reserves	163	-	4,555	0.8	4,555	0.8
Wildlife Management Areas	-	-	-	-	133,700	23.0
Botswana Livestock Development Centre	3,408	0.6	3,717	0.6	3,717	0.6
Sub Total	103,170	17.7	109,604	18.8	243,304	41.8
Total Land	581,730	100.0	581,730	100.0	581,730	100.0

Source: Republic of Botswana (2000), Environmental Statistics, Table 3.3, p 18.

livestock production to the carrying capacity of the land. This factor leads to over-grazing and land degradation. Therefore, a basic environmental challenge in Botswana is how to encourage traditional farmers to sell their cattle; in the absence of individual property rights, increased cattle off-take will lessen the pressure on land. The argument is not about private property versus common property, but about the prudent management of common property resources in order to ensure their sustainable use. Common property ownership is a rational system of property rights. It is the free access to and mismanagement of the resource which cause problems.

Deforestation and the unsustainable use of forests is caused by the conversion of forest areas into agriculture, over-grazing by animals, timber harvesting and wood energy production. Among these factors, the major cause of deforestation on a global scale is the clearing of land for agriculture, including the extension of cropland into the tropical rainforests (United Nations, 1994). Since tropical rainforests are unsuitable for agriculture, farmers in these areas engage in shifting agriculture which destroys more of the rainforests and triggers a downward spiral of poverty and environmental degradation.

The second major cause of deforestation in developing countries is harvesting wood for fuel. In this case, there are imbalances in the supply and demand for woodfuel, resulting in acute shortages of energy for the rural and urban poor. This energy crisis also induces a circle of increased poverty and environmental degradation. However, the underlying causes are market

ECONOMIC DEVELOPMENT OF BOTSWANA

Table 13.3. Livestock production ('000) 1980-1993.

Year	Traditional					Commercial				
	Cattle	Goats	Sheep	Donkey	Horses	Cattle	Goats	Sheep	Donkey	Horses
1980	2,455	624	134	128	18	456	13	15	2	3
1981	2,495	603	121	124	19	472	18	19	2	4
1982	2,504	617	116	136	19	475	19	24	2	5
1983	2,408	762	140	140	17	411	21	25	3	5
1984	2,306	865	145	137	17	380	25	23	1	5
1985	2,092	1,108	172	141	18	368	29	27	2	5
1986	1,955	1,296	199	142	20	378	36	30	2	4
1987	1,866	1,429	204	145	20	397	41	36	2	4
1988	1,972	1,639	218	146	24	436	52	41	2	5
1989	2,084	1,840	240	149	27	460	57	46	2	6
1990	2,212	2,030	267	155	28	485	62	50	3	6
1993	1,562	1,809	233	229	28	459	28	17	2	3

Source: Republic of Botswana (2000), Environmental Statistics, Table 11.1, p 127.

Table 13.4. Primary energy supply (%), 1981-1994.

Year					Petroleum				Total
	Coal	Wood	R.E ¹	Elec ²	Petrol	Diesel	O.P ³	S.B ⁴	
1981	29.29	53.55	0.01	0.11	5.15	10.16	1.73	17.05	100
1982	29.67	51.98	0.01	0.84	5.50	10.47	1.53	17.50	100
1983	28.43	52.73	0.03	1.60	5.85	9.93	1.43	17.21	100
1984	27.44	53.24	0.03	1.82	6.58	9.40	4.49	17.47	100
1985	28.83	52.17	0.04	2.06	7.19	8.15	1.56	16.89	100
1986	29.57	49.93	0.04	2.04	7.47	9.43	1.81	18.72	100
1987	30.19	48.93	0.04	0.61	8.89	9.22	2.11	20.23	100
1988	31.30	48.71	0.04	0.40	8.32	8.54	2.68	19.54	100
1989	31.30	47.68	0.04	0.40	8.80	9.06	2.72	20.58	100
1990	21.24	63.23	0.03	0.35	6.47	6.73	1.96	15.15	100
1991	21.73	55.03	0.02	0.72	5.78	14.84	1.87	22.49	100
1992	23.70	56.90	0.04	0.52	7.65	7.10	4.09	18.84	100
1993	23.07	57.79	0.04	0.64	8.33	6.63	3.50	18.46	100
1994	23.70	58.54	0.04	1.14	8.38	6.12	2.07	16.58	100

1: Renewable Energy (Solar and Biogas); 2: Electricity; 3: Other Petroleum; 4: Petroleum Group Subtotal
 Source: Republic of Botswana (2000), Environmental Statistics, Table 8.9b, p 91.

failures in reflecting the true scarcity value of forests, institutional failures in defining and enforcing property rights, and policy failures by which incentives are given to degrade and destroy forests and woodlands.

In developing countries, the traditional biomass fuels of firewood, charcoal, crop residuals and cow dung are the primary cooking and heating fuels for the vast majority of the population, especially the rural and urban poor – see Anderson and Fishwick (1984), Hall *et. al.* (1982), Morgan and Moss (1981). These authors emphasize the fact that the rural and urban poor in developing countries face acute shortages of traditional biomass fuels because of the combined effects of increasing demand and diminishing supply of traditional fuels. The increase in demand for traditional biomass fuels is considered to be a result of population growth, but is aggravated by urbanization, which concentrates demand; and by increased oil prices, which makes alternative fuels unaffordable to the rural and urban poor.

Table 13.4 shows the sources of primary energy supply in Botswana for the period 1981-1994. It is evident from the table that wood is by far the major source of primary energy, accounting for over 50% of the country's energy supply for the most part of 1981-1994. This pattern conforms to the general picture in developing countries where biomass fuels are the primary sources of energy.

In the urban areas, electricity and petroleum products are a significant source of energy. However, because of escalating and volatile oil prices, these conventional sources of energy may be unaffordable to poor people in the long term, who depend mainly on woodfuel for cooking and heating. Since the rate at which wood is harvested for energy exceeds the natural regeneration rate of forests, the result is deforestation. In turn, deforestation leads to a loss of biodiversity.

The loss of biodiversity is a result of habitat disruptions that accompany housing developments, deforestation and other human activities. This means that future generations will be left with a smaller stock of biological resources. Loss of biodiversity threatens future sources of food supplies, medicines, and energy, as well as ecological functions such as the regulation of water run-off, assimilation of waste and many other important ecological functions. This problem is caused in large part by the failure of the market system to capture the true value of natural resources, and because of institutional failures in regulating the use of biological resources.

Botswana has also faced problems of pollution and solid waste management. In particular, the Selebi-Phikwe Copper-Nickel mine has had considerable adverse effects on human health and the surrounding ecosystem. The major problem has been that of sulphur dioxide pollution, which have been in excess of acceptable standards (see Tsimamma, 2001).

In the case of Selebi-Phikwe, a prolonged recession in the metal market has inhibited the efforts of the mining company to reduce sulphur dioxide pollution. There was a time when the sulphur dioxide was converted into industrial sulphuric acid, but this process was discontinued due to inadequate demand for the acid.

Botswana also has diamond mines at Damtshaa, Jwaneng, Letlhakane and Orapa. These have been instrumental in the structural transformation of the Botswana economy. However, diamond mining is destructive to the environment because it involves disturbance of the local environment and production of substantial waste (over-burden) in trying to reach the mineral ore. By its nature, mining entails the stripping and storage or disposal of large amounts of over-burden in order to expose the ore. According to Navin (1978, p 98), in order to produce one ton of copper, 400 tons of unwanted earth material or over-burden will be generated, together with

195 tons of tailings, 3 tons of slag and 1 ton of sulphur. These data illustrate the destructive nature of mining. Other environmental problems associated with mining include earth subsidence and collapse because of underground mine works, water contamination, loss of land use, sloughing, soil erosion and the release of sediments.

While the mining area affected by such problems may be small compared to the total land area in the country, there is no such thing as a small environmental problem because of the inter-dependency among species and ecosystems. Changes in a seemingly remote part of the country can have ripple effects across the country. Furthermore, our knowledge of ecosystem functions is at best limited. The use of natural resources is itself associated with uncertainties and irreversible consequences. Sustainable development therefore dictates that we must err on the side of caution.

Furthermore, Botswana faces scarcity of water, mainly because of insufficient rainfall and high rates of evaporation and transpiration. The scarcity has also been exacerbated by rising demand as a result of increasing population, urbanization and rapid economic development. In 1981, for example, total water consumption in urban areas in Botswana was 10.5 million cubic metres, but by 1991 the consumption has risen to 22.9 million cubic metres (Republic of Botswana, 2000, p 33). These figures show an increase in water consumption of 118% in the urban areas during the 10 year period from 1981 to 1991.

The Government of Botswana has attempted to lessen the scarcity of water by constructing dams and reservoirs. The largest dams include the Bokaa, Gaborone, Letsibogo and Shashe. The best known effort in water supply was the North-South Carrier project, a water transfer system from the north of the country to the south that was built in two phases. The first phase of the project was the construction of the Letsibogo Dam on the Motloutse River, together with 360 kilometres of pipeline carrying water to Gaborone. The second phase of the project was the construction of another dam on the lower Shashe River.

It is estimated that the highest consumer of water in Botswana is livestock (Athlpheng *et. al.*, 1998). However it is forecast that by 2020, urban areas will be the highest consumers of water, followed by the mining and energy sectors. These projections suggest that scarcity of water will, in the future, continue to pose challenges for Botswana.

Summary and Conclusions

Concern for the environment is predicated, in part on the realization that the environment and development are intricately linked. The environment performs three functions. Firstly, the environment is a source of raw materials and energy required for production. Secondly, the environment provides other services such as recreation and beauty. Thirdly, the environment is an assimilator of residuals from the production process. Therefore, one of the challenges in development is to balance economic growth with environmental protection. This balance is a component of sustainable development. Sustainable development is precisely defined as that type of development which maintains a balance between economic, social and ecological objectives.

In developing countries, the need for environmental protection also derives from the fact that poverty and environmental degradation are often linked in a cause-and-effect manner. In developing countries, poverty is both a cause and a result of environmental degradation. Poor

people degrade the environment in order to obtain the means for short-term survival. In turn, a degraded environment entrenches the poverty of these people.

This chapter has shown how ecosystem conservation in Botswana is effected through a system of national parks, game reserves, wildlife management areas, forest reserves and national monuments. Botswana has registered considerable success in wildlife management and has been in favour of the resumption of the trade in ivory. Despite this success, however, Botswana faces some challenges in conservation. These challenges vary from issues of land degradation and deforestation to those of pollution and the scarcity of water. The country therefore needs to balance economic growth with social and environmental protection.

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Chapter 14

International Trade, Trade Policy and the Balance of Payments

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Introduction

Botswana has an open economy, with international transactions constituting a significant proportion of her aggregate economic activity. Moreover, since 1910, Botswana's trade policy, and her pattern and direction of trade may have been dictated more by her membership of the Southern African Customs Union (SACU). In general, the SACU agreements provide for a common external tariff structure and duty-free movement of goods originating from within the customs union, except in specified exceptional circumstances. Furthermore, under the SACU agreement, all other trade negotiations or agreements between Botswana and third parties must be acceptable to other SACU members. Thus in keeping with the SACU agreements, Botswana's trade policy over the years has sought to achieve the broadest possible free and dependable access for Botswana's industrial products and services. The policy also aimed at improving Botswana's access to industrial raw materials through the reduction of tariffs on imported raw materials. This objective tends to underline Botswana's negotiating position in various international trade agreements in recent times. Similarly, this broad objective has been pursued through membership of a range of bilateral and multilateral agreements. These include the bilateral agreement with Zimbabwe, the Generalized Systems of Preferences (GSP), the European Union - African, Caribbean and Pacific (EU-ACP) Cotonou convention (formerly known as the Lomé agreements), the Southern African Development Community (SADC) trade protocol, and more recently the USA African Growth Opportunity Act (AGOA) as well as the on-going negotiations for a SACU-USA free trade arrangement. Hence, Botswana's import and export structures, discussed in detail later in this chapter, are more or less direct reflections of her membership of bilateral and multilateral trading arrangements as well as the results of direct policy choices that the government has embarked upon over the years.

The objective of this chapter is to discuss Botswana's trade policy and the ways in which this has been influenced on the one hand by participation in different and sometimes overlapping trading arrangements, and on the other the way in which this has influenced her trade structure. We also examine Botswana's exchange rate policy, the management of foreign exchange reserves, and the balance of payments over the years. However, before presenting these issues we first address the question as to why countries engage in international trade. An answer to this question would outline the special importance of trade to a small country like Botswana.

Economic policy makers and trade analysts agree that for two countries to trade with each other voluntarily both countries must realise gains from that trade. If one country gained nothing (or lost more than it gained) it would not engage in trade. International trade can be summarized by reference to the traditional theories of Adam Smith and David Ricardo - i.e. the

laws of absolute advantage and comparative advantage. According to Adam Smith, trade between two countries is based on absolute advantage. For instance, assume that there are two countries, Country A and Country B; only two goods are produced in both countries, say maize meal and beef; an hour of labour produces six tons of maize meal in Country A but only one ton in Country B; and an hour of labour produces five tons of beef in Country B and only four tons in Country A. Given this, Country A has an absolute advantage in producing maize meal, while Country B has an absolute advantage in the production of beef. According to the law of absolute advantage, both countries can gain by trading with each other and by specialising in producing that good in which it has an absolute advantage, exchanging part of its output with the other country for the good in which it has an absolute disadvantage (Bo Sodersten and Reed, 1994).

Therefore, Country A should produce maize meal while Country B should specialise in the production of beef. By specialising in the production of commodities they have an absolute advantage in, resources would be utilised efficiently and the output of both commodities will increase. The outcome of specialising in commodities with which one has an absolute advantage is an increase in output for both countries. And with free trade, global resources are utilised more efficiently, leading to increased global welfare. The law of absolute advantage is in contrast with the mercantilists' view that one country can gain from trade only at the expense of another country. The mercantilists therefore argued for protected trade among nations.

The law of comparative advantage goes beyond issues of absolute advantage. It introduces the concept of the opportunity cost of producing one good in terms of another good. A country has a comparative advantage in producing a good if the opportunity cost of producing that good is lower in that country than in another country. The law of comparative advantage states that, even if one country has an absolute advantage with respect to another in the production of both goods, gains from trade still exists. In this case, each country should therefore produce and export the good with lower opportunity costs of production relative to another good. Let now assume that Country B can now only produce two tons of beef instead of five tons. Given this, Country A now has an absolute advantage in the production of both products. However, suppose that the opportunity costs of producing maize meal are higher in Country A ($4/5$) than in Country B ($1/2$), while the opportunity costs of beef production are lower in Country A ($4/6$) than in Country B (2). Using this analysis, Country A must specialise in beef production, while Country B specialises in maize meal production.

The Growth of Botswana's Foreign Trade

The growth of Botswana's foreign trade and therefore her increased participation in global commerce can be measured by the ratio of exports and imports to the gross domestic product. This ratio also measures her degree of openness to trade or her trade dependence over the years. Table 14.1 shows that exports as a share of Gross Domestic Product (GDP) increased over the period 1974 to 2002 by 10.7%, while the share of imports in GDP declined by 15.8%. This implies that Botswana has remained a very open economy and has witnessed sustained increases in its exports. The increase in exports as a share of GDP has been due to steady increases in diamond exports from Botswana.

Table 14.1. Exports and imports.

Year	Exports	Imports	GDP	Trade Ratio	Trade Balance	Exports % of GDP	Imports % of GDP
1974	2.18	3.48	5.38	1.05	-1.30	40.57	61.45
1975	2.56	4.03	6.04	1.09	-1.47	42.41	61.14
1976	3.24	4.49	7.20	1.07	-1.25	44.99	58.10
1977	4.05	5.13	7.44	1.23	-1.08	54.41	55.87
1978	4.25	6.18	8.92	1.17	-1.93	47.63	59.26
1979	5.40	6.64	9.78	1.23	-1.24	55.18	55.15
1980	5.97	7.09	11.22	1.16	-1.12	53.20	54.28
1981	6.51	8.53	12.27	1.23	-2.02	53.06	56.70
1982	6.29	9.94	13.20	1.23	-3.64	47.64	61.23
1983	9.43	10.21	15.28	1.29	-0.78	61.72	51.99
1984	10.85	10.28	17.06	1.24	0.57	63.62	48.64
1985	10.75	10.29	18.29	1.15	0.45	58.76	48.93
1986	14.10	9.28	19.64	1.19	4.82	71.78	39.70
1987	14.01	10.88	21.41	1.16	3.13	65.44	43.70
1988	19.67	11.16	24.68	1.25	8.51	79.68	36.19
1989	19.05	12.76	30.05	1.06	6.29	63.42	40.12
1990	17.75	16.35	31.73	1.08	1.40	55.96	47.95
1991	18.77	16.68	34.17	1.04	2.09	54.94	47.05
1992	19.06	16.00	36.72	0.95	3.06	51.92	45.63
1993	16.39	14.56	36.64	0.84	1.84	44.74	47.03
1994	18.61	13.68	38.14	0.85	4.92	48.78	42.38
1995	18.76	14.50	39.35	0.85	4.26	47.68	43.59
1996	21.59	14.86	42.07	0.87	6.73	51.33	40.76
1997	25.26	16.46	45.00	0.93	8.79	56.12	39.46
1998	25.23	20.33	49.15	0.93	4.90	51.33	44.63
1999	31.21	25.95	54.95	1.04	5.27	56.81	45.39
2000	31.03	23.80	56.88	0.96	7.23	54.55	43.41
2001	29.88	26.20	61.35	0.91	3.67	48.70	46.73
2002	31.70	26.62	61.84	0.94	5.07	51.26	45.65

Source: compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Botswana's Trade Structure and Direction of Trade

Botswana's trade relationships are highly concentrated in a limited number of countries. The country also has only a few export commodities. The major export commodities are diamonds, copper-nickel, and meat and meat products. Diamonds are currently the main export commodity. Botswana started exporting diamonds and copper-nickel in the early 1970s. Vehicle exports were

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a very recent addition. Meat and meat products were Botswana's main exports until the late 1960s.

The main destinations of Botswana's exports are the United Kingdom, the rest of Europe, the Common Customs Area (CCA: dominated by South Africa) and Zimbabwe. During the period under review, Botswana's share of exports going to the USA and Zimbabwe declined, while exports to the UK, the CCA and other European countries increased (Table 14.2). As revealed in Table 14.2, during the period 1976 to 1999 the shares of Botswana's exports to the CCA, the UK, Other Europe, and All Other increased by 16%, 44%, 161%, and 162% respectively. In the same period, Botswana's exports to Zimbabwe, Other Africa and the USA declined by 26%, 55% and 98% respectively. The most noticeable change in the direction of Botswana's trade is a decline (since 1993) in exports to the USA and Other Europe and an increase in exports to the UK. This dramatic change in the direction of exports was due to diamonds, being sold by De Beers' Central Selling Organisation (C.S.O) cartel based in London.

Table 14.2. Percentage share of exports by destination.

Year	CCA	Zimbabwe	Other Africa	UK	Other Europe	USA	All Other
1976	13.19	2.95	2.60	39.37	8.95	32.69	0.26
1977	11.57	4.75	3.62	39.27	13.62	26.82	0.35
1978	13.62	4.20	3.21	4.70	46.12	27.56	0.59
1979	6.98	4.86	3.58	13.01	53.76	17.32	0.50
1980	6.63	3.09	5.35	2.11	61.34	20.95	0.53
1981	17.81	6.33	5.00	7.16	37.27	26.07	0.36
1982	11.33	9.82	3.38	11.53	51.26	11.93	0.77
1983	8.28	7.31	1.88	4.38	70.27	7.44	0.44
1984	8.82	3.72	0.25	2.08	75.73	8.15	1.25
1985	5.61	2.96	0.99	3.84	80.91	5.29	0.41
1986	5.62	5.22	0.76	3.68	83.98	0.23	0.52
1987	3.86	3.59	0.89	1.07	90.16	0.15	0.29
1988	5.40	6.91	1.13	1.14	84.84	0.27	0.32
1989	4.92	6.79	1.33	0.94	85.47	0.25	0.30
1990	4.74	6.81	1.60	1.23	85.33	0.13	0.16
1991	4.99	6.84	1.50	1.44	84.91	0.27	0.05
1992	6.95	4.53	1.50	1.56	85.13	0.25	0.08
1993	8.88	3.16	1.34	14.00	72.19	0.33	0.10
1994	13.93	2.70	0.99	25.08	56.41	0.70	0.19
1995	21.49	3.06	0.83	37.41	36.14	0.88	0.19
1996	18.31	3.08	0.62	54.31	22.46	0.96	0.27
1997	15.82	4.07	1.21	51.54	26.03	1.08	0.25
1998	17.19	2.87	1.27	55.54	21.54	1.03	0.56
1999	15.34	2.19	1.16	56.53	23.41	0.69	0.68

Source: compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Prior to that arrangement, most of Botswana's diamond exports were sold directly in Switzerland. Secondly, Botswana's exports to the USA (mainly of copper-nickel) have been falling since 1982. This decline is due to high local production costs and low copper-nickel prices. In 1985, a new contract for copper refining was signed with Norway and Zimbabwe, while the previous contract with the USA company was terminated because it was unprofitable.

Botswana's imports are predominantly vehicles and transport equipment, machinery and electrical equipment, food, beverages and tobacco, and metal and metal products. The main source of these imports is the CCA, followed by Zimbabwe. Table 14.3 shows that for the period 1976 to 1999, imports from the CCA (dominated by imports from South Africa) accounted for over 70% of total imports. This is followed by imports from Zimbabwe, which has, however, witnessed a declining trend over the years. On the other hand, the shares of imports from the UK and Other Europe may have benefitted from the decline in imports from Zimbabwe, as they have recorded increases over the years. So, as with exports, the UK and Other Europe emerge as the

Table 14.3. Percentage share of imports by source.

Year	CCA	Zimbabwe	Other Africa	UK	Other Europe	South Korea	USA	All Other
1976	81.36	10.78	1.42	1.66	1.68	0.00	2.03	1.07
1977	85.76	9.37	0.57	1.63	0.57	0.00	1.70	0.39
1978	84.68	9.81	0.14	1.66	0.98	0.00	2.01	0.73
1979	87.67	6.64	0.26	2.26	0.94	0.00	1.34	0.88
1980	86.99	6.56	0.17	1.36	1.09	0.00	3.03	0.81
1981	87.56	6.08	0.25	1.13	1.72	0.00	2.23	1.02
1982	86.50	6.09	0.26	2.27	1.74	0.00	1.64	1.48
1983	83.12	6.96	0.40	1.26	5.22	0.00	1.06	1.99
1984	77.98	8.58	0.15	3.09	6.54	0.00	1.85	1.81
1985	74.35	7.19	0.27	4.85	7.48	0.00	2.80	3.06
1986	76.73	7.39	0.20	2.47	6.17	0.00	2.84	4.20
1987	79.55	7.48	0.25	2.31	6.75	0.00	1.89	1.76
1988	77.76	6.41	0.34	5.74	5.06	0.00	2.10	2.59
1989	80.96	5.70	0.74	3.10	6.20	0.00	1.20	2.10
1990	82.32	5.07	0.64	2.49	6.16	0.00	1.14	2.17
1991	83.81	5.28	0.29	3.64	3.86	0.00	1.24	1.86
1992	84.98	4.87	0.41	2.61	4.47	0.00	0.98	1.68
1993	82.64	4.58	0.40	2.62	4.49	0.00	3.29	1.99
1994	77.99	5.87	0.52	2.49	5.90	2.08	1.88	3.26
1995	73.96	5.52	0.34	2.54	6.02	7.11	2.02	2.50
1996	78.00	5.73	0.41	2.58	4.20	4.36	1.29	3.43
1997	72.45	4.46	0.46	1.97	7.03	9.51	1.08	3.04
1998	74.75	3.94	0.56	3.37	6.77	4.80	1.41	4.40
1999	77.07	3.86	0.22	2.14	5.91	2.34	2.01	6.45

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

main non-regional trading partners for Botswana. Imports from South Korea are recent, having started in 1993 as the Hyundai Vehicle Assembly Plant commenced operations in Gaborone.¹

Botswana's Export Structure

Botswana's export commodities are diamonds, meat and meat products (beef), copper-nickel, vehicles and vehicle parts, soda ash, hides and skins, live animals and textiles. Diamonds, beef, and copper-nickel are Botswana's traditional exports, while the rest of the commodities are

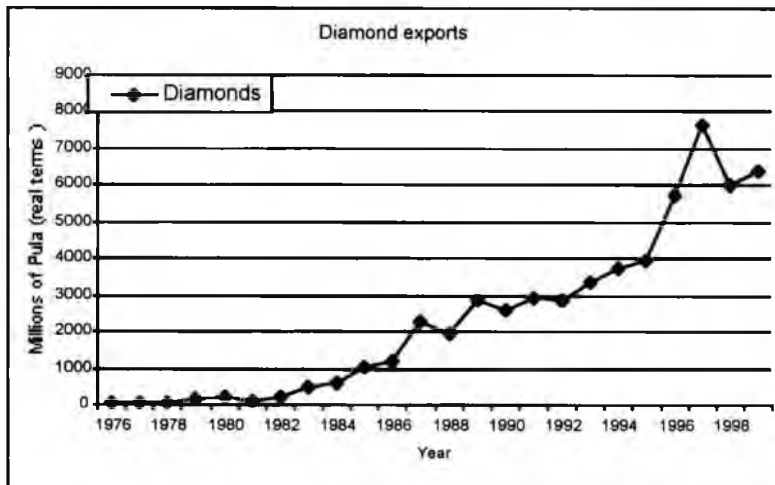


Figure 14.1. Diamond exports.

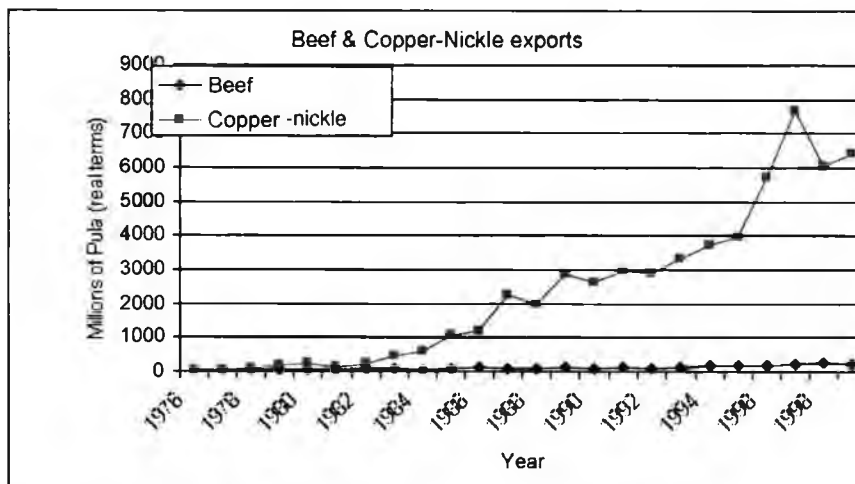


Figure 14.2. Beef and copper-nickel exports.

1. The Hyundai factory closed down in January 2000 and relocated to South Africa.

classified as non-traditional exports. Until the early 1970s, meat and meat products accounted for over 50% of Botswana's total exports. Diamond exports started in the early 1970s, while that of copper-nickel started in 1974. The most recent exports are those of vehicles, which started in 1993 and have since declined drastically because of the closure of the Hyundai vehicle plant.

Traditional Exports

Botswana's traditional export commodities are diamonds, copper-nickel, and meat and meat product exports. Figures 14.1 and 14.2 show that in real terms, the export of these commodities have increased over the years. Table 14.4 moreover shows that the shares of both copper-nickel and meat and meat products declined between 1976 and 1999. Diamond exports on the other hand continue to record increases in its share over the same period.

The poor performance of beef exports in 1980 was due to the outbreak of foot and mouth disease, which resulted in Botswana's beef exports being banned from the EU market. The ban

Table 14.4. Traditional exports as percentage of total exports.

Year	Beef	Diamonds	Copper-Nickle	% of Total Exports
1976	28.07	24.47	33.80	86.34
1977	27.17	30.87	26.28	84.32
1978	14.82	41.14	27.30	83.25
1979	17.95	51.63	17.07	86.65
1980	7.21	60.74	20.69	88.64
1981	19.56	43.59	25.78	88.93
1982	17.00	52.01	13.79	82.81
1983	11.35	66.58	9.44	87.37
1984	7.28	71.87	7.96	87.11
1985	7.05	75.78	8.66	91.48
1986	7.42	73.90	7.48	88.80
1987	2.92	78.63	4.13	85.67
1988	3.63	73.29	5.31	82.23
1989	3.92	76.44	6.50	86.86
1990	3.18	78.74	8.17	90.09
1991	3.30	78.69	7.93	89.92
1992	2.86	78.88	7.23	88.97
1993	3.76	78.19	5.15	87.10
1994	3.66	74.88	5.21	83.75
1995	3.02	67.05	5.53	75.59
1996	2.54	70.28	5.48	78.31
1997	2.23	73.82	4.63	80.67
1998	3.43	69.46	5.01	77.90
1999	2.69	71.99	4.19	78.87

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

was lifted in July 1981 after the disease was eliminated. It must be noted that under the Lome Convention a quota of 39,100 tons of beef from the ACP states per annum is admissible into the EU market. Since 1986, Botswana's share of this quota has been 18,916 tons per annum. This is the largest and most lucrative market for Botswana's beef.

Table 14.4 therefore shows that the share of traditional exports in total exports declined from 86.34% to 78.87% between 1976 and 1999. This decline in traditional exports as a share of total exports has been due to faster growth in non-traditional exports.

Non-Traditional Exports

The trend in Botswana's non-traditional exports is shown in Table 14.5. The table reveals that exports of textiles, vehicles and parts, soda ash, and hides and skin has increased since 1977, and therefore in general terms the share of non-traditional exports to total exports increased from 13.66% 1976 to 21.13%² in 1999.

Within the non-traditional exports sub-sector, vehicle exports have grown the most, followed by textile exports and soda ash exports. Between 1993 and 1999, vehicle exports increased from 2.1% to 9.6%, accounting for the second largest share of total exports after diamonds for that period. On the other hand, the export of hides and skins experienced a decline between 1976 and 1999, while textile exports have been relatively stable.

Exports by Commodity and Destination

Traditional Exports

Meat and meat product exports (beef)

Table 14.6 shows that for the period 1976 to 1999, the UK, Other Europe, Other Africa and the Common Customs Area are the main markets for Botswana's meat and meat products exports. During this period, beef exports increased their share to Other Europe by 34.4 percentage points and by 1 percentage point to Other Africa, respectively. On the other hand, the share of beef exports going to the UK fell by 17.5 percentage points and by 18 percentage points to the CCA.

Diamond Exports

The main diamond export markets are the UK and Switzerland as shown in Table 14.7. Between 1976 and 1992, all of Botswana's diamond exports were destined for Switzerland, but from 1996 onwards the UK assumed the leadership position as the destination for these exports.³

2. This outcome therefore makes Botswana a special case of the Dutch disease avoidance.

3. Diamond exports were previously sold in Switzerland, but are now sold to the Central Selling Organisation in London.

Table 14.5. Non-traditional exports as a percentage of total exports.

Year	Live Animals	Hides & Skins	Textiles	Soda Ash	Vehicles & Parts	Other Goods	% of Total Exports
1976	0.11	2.04	4.01	0.00	0.00	7.49	13.66
1977	0.42	2.34	4.01	0.00	0.00	8.91	15.68
1978	0.08	1.25	4.44	0.00	0.00	10.97	16.75
1979	0.04	2.46	3.58	0.00	0.00	7.27	13.35
1980	0.03	0.78	4.01	0.00	0.00	6.54	11.36
1981	0.04	1.47	5.18	0.00	0.00	4.37	11.07
1982	0.05	1.52	5.85	0.00	0.00	9.78	17.19
1983	0.03	0.81	4.73	0.00	0.00	7.05	12.63
1984	0.02	1.30	4.71	0.00	0.00	6.86	12.89
1985	0.02	0.84	2.09	0.00	0.00	5.56	8.52
1986	0.02	0.56	2.36	0.00	0.00	8.25	11.20
1987	0.03	0.24	2.06	0.00	0.00	11.99	14.33
1988	0.03	0.34	2.25	0.00	0.00	15.16	17.77
1989	0.01	0.28	2.13	0.00	0.00	10.72	13.14
1990	0.01	0.60	3.37	0.00	0.00	5.93	9.91
1991	0.02	0.48	3.29	0.59	0.00	5.71	10.08
1992	0.03	0.54	2.08	1.18	0.00	7.20	11.03
1993	0.02	0.48	2.22	1.18	2.13	6.88	12.90
1994	0.05	0.57	3.57	0.74	6.06	5.26	16.25
1995	0.04	0.62	2.46	0.37	16.11	4.82	24.41
1996	0.02	0.35	2.40	0.85	14.10	3.98	21.69
1997	0.02	0.31	2.39	1.06	11.38	4.17	19.33
1998	0.03	0.39	3.48	1.13	11.10	5.96	22.10
1999	0.03	0.38	3.49	1.17	9.62	6.44	21.13

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Non-Traditional Exports

Textiles

Table 14.8 shows that the markets for Botswana's textile exports are the Common Customs Area, the USA, Zimbabwe and the UK⁴, whereas Table 14.9 shows the destination for Botswana's hides and skin, vehicles and parts, and live animal exports. The tables show that exports of textiles to the UK and USA have been increasing over time, whereas the CCA continues to be the dominant destination for the export of vehicles and parts as well as the export of live animals.

4. Data to other destinations are not available for the period 1983-1988.

Table 14.6. Meat and meat products exports (%).

Year	CCA	Other Africa	UK	Other Europe
1976	29.44	9.57	59.34	1.65
1977	29.38	7.95	56.50	6.17
1978	56.22	14.47	26.41	2.90
1979	30.51	12.17	55.02	2.30
1980	67.82	20.86	9.12	2.19
1981	56.33	11.03	22.17	10.47
1982	41.54	6.47	44.87	7.13
1983	20.17	5.06	53.83	20.95
1984	30.25	7.57	33.91	28.27
1985	39.91	11.76	28.14	20.19
1986	31.07	8.17	35.44	25.32
1987	45.97	16.18	20.06	17.79
1988	34.56	14.24	28.64	22.56
1989	24.07	31.92	19.78	24.23
1990	22.61	19.18	26.51	31.69
1991	23.20	18.86	30.96	26.98
1992	19.52	16.39	31.37	32.71
1993	17.87	24.60	29.06	28.46
1994	18.97	15.98	31.44	33.61
1995	25.57	11.13	32.26	31.05
1996	17.39	7.97	41.53	33.11
1997	13.24	10.65	39.33	36.78
1998	10.56	8.45	38.62	42.36
1999	11.49	10.54	41.88	36.09

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Table 14.7. Diamond Exports (%).

Year	CCA	UK	Switzerland	USA	Rest of World
1976	0.00	0.00	100	0.00	0.00
1977	0.00	0.00	100	0.00	0.00
1978	0.00	0.00	100	0.00	0.00
1979	0.00	0.00	100	0.00	0.00
1980	0.00	0.00	100	0.00	0.00
1981	0.00	0.00	100	0.00	0.00
1982	0.00	7.42	92.58	0.00	0.00
1983	0.00	0.00	100.00	0.00	0.00
1984	0.00	0.00	100.00	0.00	0.00
1985	0.00	0.00	100.00	0.00	0.00
1986	0.00	0.00	100.00	0.00	0.00
1987	0.00	0.34	99.66	0.00	0.00
1988	0.00	0.00	100.00	0.00	0.00
1989	0.00	0.00	100.00	0.00	0.00
1990	0.00	0.00	100.00	0.00	0.00
1991	0.00	0.02	99.97	0.00	0.00
1992	0.00	0.22	99.66	0.12	0.00
1993	0.00	15.86	83.86	0.28	0.00
1994	0.00	32.51	66.79	0.69	0.00
1995	0.00	53.49	45.74	0.78	0.00
1996	0.04	74.47	24.72	0.77	0.01
1997	0.04	73.47	26.03	0.46	0.00
1998	0.07	76.38	23.39	0.16	0.01
1999	0.05	80.25	18.97	0.07	0.66

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Table 14.8. Direction of trade, textile exports (%).

Year	CCA	Zimbabwe	UK	USA	Other Africa	Rest of World
1983	18.84	77.85	2.79	0.53	0.00	0.00
1984	77.49	8.17	9.57	4.77	0.00	0.00
1985	41.45	50.09	5.14	3.32	0.00	0.00
1986	34.46	58.54	2.83	4.17	0.00	0.00
1987	33.42	61.49	2.25	2.83	0.00	0.00
1988	29.77	63.50	3.25	3.48	0.00	0.00
1989	25.65	65.77	2.70	3.71	1.74	0.43
1990	19.47	74.79	2.68	0.06	2.98	0.01
1991	16.95	74.81	4.87	2.38	0.95	0.03
1992	45.41	41.77	10.46	0.57	1.50	0.29
1993	73.88	21.22	2.90	0.01	1.76	0.24
1994	78.80	15.17	1.65	4.04	0.05	0.28
1995	65.29	14.98	7.30	10.35	0.81	1.27
1996	40.65	23.33	19.82	11.66	2.51	2.02
1997	39.22	17.49	19.23	17.12	5.00	1.93
1998	40.65	14.48	24.18	19.57	0.57	0.54
1999	41.26	14.43	22.22	21.28	0.66	0.15

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Botswana's Import Structure

Botswana's imports consist of food, beverages and tobacco, textiles and footwear, fuel, wood and paper products, chemicals and rubber products, metals and metal products, machinery and electrical equipment, and vehicles and transport equipment. Table 14.10 shows that the dominant imports are that of food, beverages and tobacco, machinery and electrical equipment, vehicles and transport equipment, and metals and metal products. Generally, fluctuations of all import commodities have been moderate over the years.

Direction of Trade: Imports by Commodity and Source

Botswana's imports by commodity and source are shown in Tables 14.11 to 14.14. The tables show that the CCA (dominated by RSA) is the main source of Botswana's imports, followed by Zimbabwe. From Table 14.11 and 14.12 it can be observed that imports of food, beverages and tobacco, fuel, chemicals, and wood and paper products from the CCA have been on the increase, whereas imports of the same goods from Zimbabwe have been declining for the entire period. The other major sources for the import of chemicals and rubber products, and wood and paper products, are the UK and other EU.

It can also be seen in Table 14.14 that imports of machinery and electrical equipment derive essentially from the CCA, with the USA, UK and the rest of the world accounting for smaller proportions. Machinery and electrical equipment imports from other destinations have declined marginally during this period.

Table 14.9. Direction of trade, non-traditional exports (%).

Year	CCA	Zimbabwe	Other Africa	UK	Other Europe	USA	Rest of World
Hides and Skins							
1989	29.27	37.33	0.00	1.42	8.22	23.74	0.08
1990	9.59	25.45	0.70	11.81	42.37	9.40	0.68
1991	7.15	25.43	1.49	0.03	48.73	16.88	0.28
1992	20.89	12.04	0.00	1.42	51.50	14.05	0.10
1993	28.62	0.40	0.00	0.01	65.54	4.76	0.67
1994	33.29	9.88	0.01	0.01	46.81	2.62	7.38
1995	28.98	13.02	0.00	0.03	54.57	1.14	2.26
1996	11.62	18.45	0.00	0.00	67.36	0.27	2.30
1997	4.79	30.88	0.19	0.00	60.55	0.76	2.84
1998	15.57	13.32	0.10	0.00	70.65	0.43	0.02
1999	12.08	19.34	0.00	0.00	67.24	1.32	0.03
Live Animals							
1989	33.26	0.00	0.00	2.74	14.29	18.29	30.74
1990	0.00	0.69	2.93	9.66	45.17	6.90	29.66
1991	12.03	15.19	0.13	0.00	17.85	25.44	29.37
1992	49.07	2.97	0.62	0.00	39.81	1.66	5.87
1993	41.10	0.00	0.11	1.57	9.97	30.57	16.69
1994	47.36	0.00	0.03	0.75	33.07	0.03	18.75
1995	61.36	0.70	0.00	5.68	10.47	0.00	21.79
1996	44.33	0.05	0.05	6.75	7.31	0.05	41.46
1997	68.93	0.00	0.07	0.00	9.35	0.00	21.64
1998	88.26	0.00	0.03	0.00	7.53	0.00	4.18
1999	79.36	0.00	0.04	0.00	13.06	0.04	7.49
Vehicles & Parts							
1989	50.17	0.00	49.83				
1990	93.10	6.90	0.00				
1991	99.42	0.58	0.00				
1992	15.32	19.24	49.76				
1993	97.13	2.87	0.00				
1994	99.10	0.65	0.25				
1995	97.15	2.51	0.34				
1996	98.66	0.99	0.34				
1997	89.45	6.45	4.10				
1998	94.13	0.98	4.89				
1999	91.36	0.98	7.55				

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Table 14.10. Botswana's imports by principal commodities (%).

Year	Food Beverages & Tobacco	Fuels	Chemicals & Rubber Products	Wood & Paper Products	Textiles & Footwear	Metals & Metal Products	Machinery & Electrical Equipment	Vehicles & Transport Equipment	Other Goods
1973	15.85	5.39	6.02	3.23	8.51	9.95	20.67	14.35	16.02
1974	16.89	10.93	7.14	4.06	10.80	8.10	11.46	15.50	15.13
1975	18.24	10.55	6.61	4.10	10.28	9.93	10.47	13.62	16.19
1976	19.59	10.58	7.74	3.55	11.60	7.24	11.45	11.69	16.57
1977	19.83	10.57	7.84	3.40	10.67	9.53	13.07	10.09	15.00
1978	18.25	8.83	7.28	3.04	9.77	11.56	15.39	12.38	13.50
1979	16.95	13.46	7.67	3.18	8.65	10.81	15.28	11.96	12.05
1980	15.72	13.05	7.77	3.19	8.41	10.97	16.40	11.81	12.68
1981	14.21	12.66	7.78	3.13	9.21	11.53	16.39	12.42	12.67
1982	16.49	14.07	8.21	3.94	9.74	9.31	13.79	11.72	12.73
1983	19.09	12.67	8.34	3.48	9.32	9.83	12.80	11.57	12.90
1984	18.38	10.25	8.46	3.33	9.08	9.13	16.35	12.73	12.30
1985	17.50	11.51	8.09	3.21	8.06	9.21	16.99	13.73	11.71
1986	16.59	8.52	9.48	3.88	7.95	9.33	15.69	16.80	11.77
1987	16.12	7.23	9.75	4.63	8.77	9.45	16.56	15.44	12.07
1988	14.31	6.07	8.51	4.46	8.33	9.25	18.13	19.33	11.60
1989	9.97	4.67	8.35	4.21	7.72	13.92	23.13	15.51	12.52
1990	11.66	5.14	8.14	5.25	8.10	14.30	20.09	14.53	12.78
1991	13.59	6.30	8.92	5.28	8.05	11.09	17.01	15.96	13.81
1992	18.66	5.50	9.42	5.70	7.03	10.77	18.84	9.96	14.11
1993	17.89	6.40	9.24	5.47	7.24	10.18	17.40	13.31	12.87
1994	17.58	5.96	9.66	5.81	8.87	9.34	17.56	11.99	13.23
1995	15.94	5.10	9.24	7.57	7.53	8.69	15.67	18.63	11.62
1996	16.92	6.38	10.22	7.31	7.44	8.82	16.08	14.10	12.74
1997	13.12	5.63	9.08	6.20	6.46	10.67	17.60	19.97	11.28
1998	13.11	4.55	8.86	6.87	5.99	10.07	21.22	16.25	13.07
1999	13.45	4.91	8.84	7.79	5.45	8.96	20.44	13.83	16.32

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Botswana's Trading Arrangements and Trade Policy

As highlighted in the introduction to this chapter, Botswana's trade policy and trade structure over the years have been influenced largely by her membership of not just SACU, but also by her participation in different bilateral and multilateral trading arrangements. Some of these are her membership of SADC; ACP and the Cotonou (formerly Lomé) trade agreements with the EU, and more recently the USA-AGOA and the on-going negotiations for the SACU-USA Free Trade Area⁵. However, it needs to be mentioned that even in the light of these different

5. A fuller discussion of these different arrangements is handled in Chapter 15.

Table 14.11. Food, beverages & tobacco and fuel (%).

Year	CCA	Zimbabwe	Other Africa	UK	Other EU	Rest of Europe	USA	All other
Food, Beverages & Tobacco								
1987	67.23	20.08	0.55	1.16	1.56	0.02	5.68	3.73
1988	68.11	14.82	0.66	1.06	2.71	0.02	8.84	3.77
1989	77.92	14.82	0.45	1.31	2.34	1.51	0.26	1.38
1990	82.37	13.07	0.56	0.41	0.77	2.50	0.01	0.30
1991	78.40	14.95	0.34	0.53	1.08	4.52	0.01	0.17
1992	89.79	5.46	0.49	0.26	1.58	2.01	0.17	0.24
1993	88.97	5.56	0.42	1.30	1.33	1.17	1.00	0.25
1994	85.44	9.05	0.47	0.26	2.10	2.24	0.03	0.39
1995	83.62	11.57	0.33	0.00	1.52	0.00	1.22	1.74
1996	82.64	12.16	0.44	0.01	1.35	0.00	0.64	2.77
1997	83.86	12.12	0.56	0.02	0.44	0.00	0.20	2.79
1998	87.14	11.64	0.41	0.04	0.13	0.00	0.04	0.61
1999	93.32	1.77	0.30	0.02	2.14	0.02	0.06	2.38
Fuel								
1987	99.83	0.10	0.00	0.00	0.01	0.00	0.00	0.06
1988	99.72	0.16	0.09	0.00	0.02	0.00	0.00	0.00
1989	98.11	0.31	0.17	0.02	0.72	0.00	0.06	0.60
1990	98.64	0.15	0.12	0.01	0.39	0.00	0.01	0.67
1991	99.22	0.63	0.10	0.01	0.04	0.00	0.00	0.00
1992	99.39	0.37	0.22	0.00	0.00	0.00	0.01	0.00
1993	99.69	0.27	0.00	0.01	0.01	0.00	0.02	0.01
1994	99.84	0.10	0.00	0.01	0.00	0.00	0.01	0.03
1995	99.97	0.02	0.00	0.01	0.00	0.00	0.01	0.00
1996	99.86	0.12	0.00	0.01	0.00	0.00	0.01	0.00
1997	99.72	0.20	0.05	0.00	0.01	0.00	0.01	0.01
1998	99.51	0.44	0.00	0.00	0.05	0.00	0.00	0.00
1999	99.50	0.23	0.24	0.00	0.01	0.01	0.01	0.01

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

arrangements, Botswana's trade policy over the years has sought to achieve the broadest possible free and dependable access for Botswana's industrial products and services. The policy also aimed at improving Botswana's access to industrial raw materials through the reduction of tariffs on imported raw materials.

Most notable of all the trade arrangements in terms of influence over Botswana's trade policy is her more than century-long membership of SACU. The SACU agreements provide for duty-free trade with South Africa and other small economies in the region (Lesotho, Namibia and Swaziland), and a relatively high degree of protection against imports from the rest of the world. In recent years, SACU tariffs against the rest of the world have been progressively reduced, partly in response to membership of the World Trade Organisation (WTO), and this has increased

Table 14.12. Chemicals and rubber products and woods and paper products (%).

Year	CCA	Zimbabwe	Other Africa	UK	Other EU	Rest of Europe	USA	All other
Chemicals and Rubber Products								
1987	91.28	2.38	0.02	1.04	3.45	0.60	0.46	0.77
1988	90.10	2.95	0.14	1.88	3.48	0.31	0.64	0.50
1989	91.81	1.99	0.27	1.00	2.88	0.80	0.31	0.95
1990	87.91	2.05	0.09	1.99	3.74	2.41	0.27	1.55
1991	92.05	2.17	0.04	1.48	2.17	0.43	0.56	1.10
1992	91.81	2.48	0.17	1.19	1.99	0.22	0.59	1.55
1993	90.62	3.11	0.10	1.59	2.50	0.21	0.60	1.28
1994	88.46	2.81	0.04	1.78	4.26	0.36	0.77	1.53
1995	88.69	2.56	0.14	1.25	3.57	0.16	1.18	2.45
1996	89.47	3.37	0.04	0.58	3.20	0.10	0.38	2.86
1997	93.14	2.45	0.01	0.75	1.16	0.05	0.11	2.32
1998	91.18	2.78	0.01	0.74	2.00	0.11	0.19	3.00
1999	91.03	1.95	0.14	1.39	2.47	0.12	0.21	2.68
Woods and Paper Products								
1987	73.85	5.68	0.63	8.57	9.45	0.84	0.55	0.43
1988	76.87	10.34	0.48	6.98	2.48	1.29	0.40	1.15
1989	80.38	9.70	1.56	5.48	1.13	0.16	0.54	1.05
1990	81.04	7.04	2.93	4.67	2.56	0.08	0.40	1.30
1991	84.71	5.91	0.64	5.85	0.57	0.28	0.62	1.43
1992	84.85	6.29	0.60	6.14	0.47	0.13	0.50	1.02
1993	83.03	7.27	0.59	6.57	0.34	0.22	1.03	0.96
1994	80.36	9.01	0.75	6.09	1.02	0.25	1.80	0.73
1995	85.17	7.95	0.36	4.30	0.32	0.01	0.78	1.09
1996	77.91	13.00	0.36	6.12	0.76	0.07	0.88	0.91
1997	74.68	14.18	0.72	6.84	0.89	0.21	1.03	1.45
1998	71.97	9.22	1.65	12.27	2.32	0.34	0.81	1.41
1999	77.45	6.42	0.17	12.22	1.36	0.34	0.85	1.20

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

competition from world imports in both Botswana and other SACU member countries. Additionally, the process of tariff reduction in the SACU area has been further reinforced by the Free Trade Agreement between South Africa and the EU, under which barriers to imports into the SACU area from the EU are being progressively reduced. The SADC free trade agreement will also reduce barriers to imports into Botswana and the SACU area, as well as provide improved access for exports into the SADC market. Similarly, the Cotonou (formerly Lomé) Convention, under which many African Caribbean and Pacific (ACP) states enjoy privileged access to the EU market, will soon be replaced by the proposed Regional Economic Partnership

Table 14.13. Textiles & footwear; and metals & metal products imports (%).

Year	CCA	Zimbabwe	Other Africa	UK	Other EU	Rest of Europe	USA	All other
Textiles & Footwear								
1987	80.22	15.68	0.42	0.28	1.31	0.02	0.05	2.03
1988	82.84	10.42	0.40	1.02	1.03	0.12	0.33	3.85
1989	81.56	11.62	0.47	1.26	0.74	0.15	0.38	3.81
1990	75.28	11.27	0.68	2.05	2.91	0.37	0.50	6.93
1991	77.39	9.40	0.46	2.52	4.97	0.14	0.10	5.00
1992	77.64	13.79	1.07	0.78	1.22	0.03	0.32	5.16
1993	76.14	14.00	1.14	1.00	1.40	0.10	0.15	6.07
1994	66.59	13.11	2.40	0.54	0.53	0.00	0.27	16.57
1995	75.67	10.08	1.90	0.35	0.33	0.41	0.18	11.07
1996	75.74	7.55	3.05	0.90	1.82	0.01	0.43	10.49
1997	73.81	7.60	3.40	0.88	1.70	0.01	0.23	12.37
1998	70.39	6.97	3.70	0.30	1.39	0.24	0.23	16.78
1999	76.84	8.46	1.24	0.21	0.42	0.04	0.27	12.52
Metals & Metal Products								
1987	83.66	11.42	0.10	0.35	2.70	0.91	0.10	0.76
1988	78.63	10.49	0.41	0.81	4.97	1.04	0.79	2.87
1989	85.98	6.38	0.48	0.70	1.71	1.23	2.03	1.48
1990	72.81	3.37	0.08	0.51	21.58	0.13	0.10	1.42
1991	91.83	5.51	0.03	1.06	1.10	0.14	0.07	0.26
1992	89.30	5.17	0.18	1.09	3.38	0.37	0.24	0.28
1993	88.93	5.52	0.05	0.78	4.07	0.08	0.18	0.40
1994	88.46	6.37	0.02	0.43	3.78	0.08	0.36	0.49
1995	87.82	8.51	0.01	1.33	1.30	0.06	0.27	0.68
1996	91.33	6.85	0.03	0.51	0.29	0.06	0.29	0.63
1997	90.06	3.67	0.13	0.11	4.96	0.00	0.37	0.70
1998	87.16	5.73	0.06	0.60	4.14	0.01	0.63	1.66
1999	87.47	5.86	0.01	0.29	0.89	0.00	0.24	5.23

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Agreements (REPA), under which access to the EU for ACP states will be tied to reciprocal access by ACP markets for EU exporters.

From the foregoing, it seems likely that in the years to come, the transformation of the different trading arrangements to conform with WTO agreements will mean greater competition at home and abroad for industrialists and entrepreneurs in Botswana. Therefore a strengthened negotiating regime will be required, as will a very progressive and consistent trade policy agenda. This will not only pave the way for the attainment of the target of Botswana's Vision 2016 - sustained growth and global competitiveness - but also ensure a more diversified and vibrant economy is entrenched.

Table 14.14. Machinery & electrical equipment; and vehicles & transport equipment imports (%).

Year	CCA	Zimbabwe	Other Africa	UK	Other EU	Rest of Europe	USA	All other
Machinery & Electrical Equipment								
1987	66.38	1.00	0.06	4.17	19.10	5.08	2.35	1.85
1988	68.30	0.99	0.08	16.26	5.09	1.56	2.97	4.74
1989	68.09	1.71	0.27	8.02	11.20	5.56	1.66	3.49
1990	72.20	1.33	0.71	5.25	13.77	2.12	2.33	2.30
1991	79.74	1.46	0.18	4.81	5.18	2.51	3.09	3.04
1992	76.62	0.97	0.27	5.49	7.72	4.43	2.60	1.90
1993	75.20	0.93	0.70	3.99	5.73	5.39	5.54	2.52
1994	73.36	1.71	0.15	4.21	8.82	2.52	5.40	3.83
1995	75.33	1.79	0.07	3.53	5.25	3.69	6.93	3.40
1996	79.66	1.95	0.13	4.18	5.61	1.80	2.81	3.87
1997	74.41	1.16	0.16	2.03	12.58	2.25	3.11	4.31
1998	70.45	1.15	0.48	3.27	12.28	2.72	1.85	7.79
1999	68.17	0.87	0.28	3.50	14.76	1.08	5.01	6.33
Vehicles & Transport Equipment								
1987	89.72	0.92	0.05	3.67	0.85	0.56	2.55	1.68
1988	76.20	3.74	0.14	7.95	9.73	0.49	0.29	1.45
1989	86.74	3.89	0.91	1.63	3.54	1.47	1.04	0.79
1990	85.70	0.93	0.75	2.50	2.15	2.81	3.42	1.75
1991	80.85	0.49	0.05	9.50	1.79	2.01	2.47	2.84
1992	91.42	0.82	0.22	1.36	1.01	0.21	1.88	3.07
1993	72.93	0.68	0.05	1.17	1.82	4.58	14.32	4.45
1994	59.39	3.10	0.71	1.56	1.31	9.73	3.47	20.72
1995	39.57	0.92	0.11	3.09	16.09	0.12	1.80	38.30
1996	55.29	1.50	0.05	2.93	4.77	0.09	2.56	32.82
1997	36.23	0.89	0.19	1.57	11.31	0.44	1.43	47.94
1998	55.04	0.51	0.08	0.50	9.29	0.02	4.35	30.21
1999	70.71	2.30	0.22	1.93	2.09	0.08	4.14	18.52

Source: Compiled from statistics provided by the Central Statistics Office (CSO) Botswana.

Botswana's Balance of Payments

According to Salvatore (1998), the balance of payments (bop) can be described as the systematic recording of all international economic transactions between the residents of one country and the rest of the world during a particular point in time, usually a calendar year. The main purpose of the bop is to inform governments of their international positions and to help them with the formulation of monetary, fiscal and trade policies. Governments may also regularly consult the balance of payments accounts of important trading partners in making policy decisions. If total debits exceed credits in the current and capital accounts of the balance of payments, the net debit

balance measures the deficit in the nation's balance of payments. This deficit must then be settled with an equal net credit in the official reserve account of the balance of payment. Thus a deficit in the bop can be measured either by an excess of debits over credits in the current and capital accounts or by the excess of credits over debits in the official reserve account. On the other hand, a nation has a surplus in the balance of payment if its total credits exceed its total debits in the current and capital accounts. This net credit balance gives the size of the surplus and is settled by an equal debit balance in the official reserve account.

One of the basic problems facing most developing countries in the process of economic development is that of trade gap. The crux of the problem, as described by Meier, (1984) is that, *"In the course of development, the rate of growth of national output and the demand for imports tends to exceed the export-based capacity to import...especially during the early phases when the increase in investment is sizeable and structural changes in the economy are considerable. The poor country then confronts a conflict between accelerating its internal development and maintaining external balance. Thus the very logic of the process of development appears to make the problem to be almost inevitable."* For Botswana, however, and as revealed in Table 14.15, the trade gap problem has not been an issue as it has been for most other developing countries of Africa.

Table 14.15 shows that over the two decades shown (1983 to 2003), Botswana's balance of payments recorded overall surplus. The remarkable growth in the quantum and value of diamond exports may have been the major factor for the bop surplus, as the trade account remained very healthy for the entire period. This implies therefore that the balance of payments position of Botswana has been largely determined by the state of her trade account. Table 14.15 sheds some light on another important characteristic of Botswana's international transactions - the persistent deficit on the services account. The existence of a deficit in the services account is a phenomenon common to most developing countries, as it derives from the rather underdeveloped state of their economies. This is thus to be expected from the nature of the main items of transaction on the services account - transportation, travel and insurance.

In the years ahead, it is reasonable to assume that if the existing rate of growth of diamond exports is maintained, and given the efforts that are aimed at increasing the pace of diversification and industrialization, the visible trade surplus can only continue to grow larger, thereby offsetting - as it has done in the last two decades - whatever deficit may arise in the other accounts of the balance of payments. Thus, it is reasonable to assume that in the foreseeable future it is very unlikely that balance of payments constraints may become a problem to the sustained growth and development aspirations of Botswana.

Botswana's Management of Foreign Exchange Reserves

Botswana's foreign exchange reserves are currently at US \$5.68 billion, equivalent to 17 months' cover for the imports of goods and services. Given the size of these reserves, the Board of the Bank of Botswana decided in November 1980 to appoint a discretionary fund manager and an investment adviser to assist and advise it in the execution of its reserve management responsibilities. The Board agreed in 1993 to divide the reserves into three tranches. The first, the Liquidity tranche, was meant to serve the purpose of conventional foreign exchange reserves, available as a buffer to accommodate fluctuations in the balance of payments. It was intended to function as the conventional central bank transaction balance reserves. After due consideration of all the factors relevant to Botswana's case, the Bank of Botswana and the government agreed

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Table 14.15. Botswana balance of payments summary, 1983-2003 (P million).

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Balance on visible trade (adjusted)	28	122	445	459	1322	813	1186	343	540	395	646
Balance on Services	-163	-241	-364	-346	-501	-520	-742	-310	-349	-361	-325
Balance on goods & services	-135	-119	81	113	821	293	444	33	191	35	321
Balance on income	..	..	..	..	..	..	..	-197	127	237	712
Balance on goods, services & income	..	..	..	..	..	..	..	-163	318	272	1033
Net current transfers	137	132	170	210	284	409	217	242	363	145	2
Balance on current account	2	13	251	323	1105	702	661	78	681	417	1035
Balance on capital account	105	144	239	207	-143	-67	326	7	7	112	206
Balance on capital and current account	..	..	..	..	..	..	..	85	688	529	1240
Balance on financial account (exc. reser)	..	..	..	..	..	..	..	154	249	582	-98
Net errors and omissions	31	8	11	21	-26	62	177	340	-173	-250	-162
Overall balance	138	165	501	551	936	697	1163	578	764	861	980
	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Balance on visible trade (adjusted)	1369	1538	2493	3269	328	3629	4603	4149	4280	3449	
Balance on Services	-365	-510	-602	-841	-988	-721	-1136	-1010	-127	174	
Balance on goods & services	1005	1028	1890	2427	-660	2908	3467	3139	4152	3623	
Balance on income	-602	-90	-841	-529	505	-1213	-1792	-801	-4418	-1455	
Balance on goods, services & income	402	938	1049	1899	-155	1695	1674	2338	-266	2168	
Net current transfers	166	-108	595	735	1015	1164	1108	1153	1344	1535	
Balance on current account	568	831	1643	2634	860	2859	2782	3491	1078	3703	
Balance on capital account	52	40	21	62	134	95	194	34	99	111	
Balance on capital and current account	620	871	1664	2695	994	2954	2977	3525	1177	3958	
Balance on Financial account (exc. res)	110	-94	141	20	-855	-1127	-1030	-2976	-1375	-3475	
Net errors and omissions	-351	-186	-83	-398	117	2	-6	474	533	457	
Overall balance	379	591	1722	2318	256	1829	1941	1023	336	797	

Sources: Bank of Botswana (BoB), Annual Reports, 1998, 2000, 2003.

on a target level of reserves in the Liquidity Portfolio of six months' of import cover. Should the holdings in the Liquidity Portfolio fall below that level, the first line of defence to improve the balance of payments would be macroeconomic policy adjustments affecting interest rates, the exchange rates, and government revenues and expenditures. It was agreed that the target level of reserves in the Liquidity Portfolio will be reviewed during the preparation of each (six year) National Development Plan.

The second is the Matched Asset/Liquidity Portfolio (MALP), the purpose of which is to set aside foreign currency investments to match the liability side of the country's official balance sheet, i.e. the country's external debt. The main objective for MALP was to minimise the investment risk between public guaranteed external assets and liabilities. The Bank has chosen a

mix between a cash-match approach and a duration-match approach. (A cash-matching approach uses asset receipts to fund liability payments, while the duration approach tries to match the interest sensitivity of assets and liabilities.)

The third is the Pula Fund, which is a long-term investment fund and is used to ensure that Botswana's national savings, broadly defined, are deployed in a way that optimises their contribution to sustained national economic development. A practical objective of the Pula Fund is to take advantage of the high foreign exchange reserves level and invest part of those reserves in long-term assets, such as long-term bonds and securities, with the expectations of earning a high rate of return in the long-term for future generations of Botswana. The Pula Fund was formally launched in November 1993, first between the Bank and the fund managers, and then between the Bank and the global custodian. The Pula Fund was divided into various mandates to reflect the specialist approach of individual fund managers and to benefit from the expected higher portfolios.

Conclusions

The purpose of this chapter was to review Botswana's trade policy, trade structure, balance of payments and the management of foreign exchange reserves. The chapter has revealed that, over the years, Botswana has experienced a remarkable growth in its international trade relations, and that these trade relations have been dictated by her membership of the Southern African Customs Union (SACU), as well as many other bilateral and multilateral trading arrangements. Membership in these trading arrangements have therefore also impacted significantly on the evolution of trade policy as well as the structure, pattern and direction of trade. The country has only a few export commodities - the major being diamonds, copper-nickel, and meat and meat products - that make up well over 80% of total exports. The main destinations of Botswana's exports are the UK, the rest of Europe, the Common Customs Area (CCA: dominated by South Africa), and Zimbabwe. In the case of imports, the main source of Botswana's imports is the CCA followed by Zimbabwe. Botswana's imports are predominantly vehicles and transport equipment, machinery and electrical equipment, food, beverages and tobacco, and metal and metal products.

Furthermore, the balance of payments, which for most developing countries are a symptom of insufficient growth has never been a constraint in the country's development process. Botswana's balance of payments has generally recorded surpluses over the years. This impressive outcome is mainly due to the good performance of the trade account as a result of diamond export earnings. As a direct consequence of this, Botswana's foreign exchange reserves currently stand at about US \$5.68 billion (BoB, Annual Report, 2005), equivalent to over 17 months' cover of imports. These reserves are managed through three investment portfolios, the Liquidity Portfolio, the Matched Asset Liquidity Portfolio and the Pula Fund.

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Chapter 15

The Botswana Economy in the Context of the Regional Economy

J. Sentsho and B. O. Tshoko

Introduction

The post World War II era has been characterised by an increased move towards the globalisation of the world economy. While it is acknowledged that this globalisation has important implications for the world economy as a whole, for individual countries globalisation means that the ability to compete in the new economic system is highly undermined. Because of this, the post World War II era has witnessed a proliferation of Regional Trading Blocs (RTBs) across the globe. While the major early RTBs (like the EEC) were between countries at a reasonably similar stage of advanced economic development, more recent RTBs have involved relatively less developed countries. For example, the proliferation of regional free trade agreements¹, such as the North American Free Trade Agreement (NAFTA), involve a developing country (Mexico) liberalising trade and deepening links with developed countries (the United States and Canada). The expansion of the European Union (EU) to include, first, countries such as Spain, Portugal and Ireland, and second, Central European countries, similarly expands links between developing and developed countries. Many of these regional integration schemes have evolved at the Uruguay Round of GATT negotiations, which continued the post-war trend of global trade liberalisation (Robinson and Thierfelder, 1999).

Other RTBs include the Asia Pacific Rim, the Central American Common Market, and for Africa ECOWAS, the North African Arab Maghreb Union, and the Southern African Development Community (SADC) (Testas, 1999; Rodas-Martin, 1998; Hardy, 1992). There is, however, apprehension among developing countries that the new wave of regionalism might tend to heighten and tighten the already escalated move towards protectionism. Hence it is described with terms such as 'trade blocs', 'fortresses,' 'walling in,' 'locked out,' 'inward-looking' and the 'end of multilateralism' (Pelkims, 1997:57), all of which have an imagery of being "safe inside" or "marginalized or excluded" when outside the bloc. The main questions for developing countries are whether regionalism will affect market access negatively through increased common external barriers and whether it will erode Less Developed Countries' (LDCs) margins defined by existing preferential agreements such as Lome IV (Collier *et. al.*, 1997).

Prospects for Economic Integration in Developing Countries

This section outlines at a purely conceptual level the arguments for developing countries to pursue economic integration as part of their economic development strategy (Evans, 2000).

1. See Burfisher and Jones (1998) for a detailed description of the types of regional trade agreements and the degree of integration in each.

These arguments are based on both the static and dynamic gains of economic integration.

Trade Creation versus Trade Diversion - The static gains of economic integration are generally presented in terms of partial equilibrium analysis (Testa, 1999; Nicolls, 1998), which is mainly concerned with whether economic integration leads to trade creation or trade diversion. Trade creation refers to the replacement of relatively high cost domestic production with low cost imports from a partner country (Nicholls, 1998:324). This means that, as a result of economic integration, inefficient high cost producers would be replaced by efficient low cost producers within the free trade area (Pearson and Ingram, 1980). As a result, economic integration is more likely to lead countries to specialise in the production of commodities in which they have comparative advantage. The opposite of trade creation is trade diversion, where a country switches away from importing from a more efficient producer outside a trading bloc to importing from a less efficient one within the bloc. This means that trade diversion is likely to occur in cases where regional goods and services are produced less efficiently than those produced outside the region. Economic integration is therefore more likely to succeed when it results in trade creation than when it results in trade diversion, since it leads to more benefits for member countries.

The Revenue Constraint - Economic integration is more likely to succeed if it does not result in substantial tariff revenue loss for member states. This is unlikely to be the case for many developing countries, where tariff revenue is not only important for recurrent and development budgets but also as a source of foreign exchange. The irony of this fact is that the more potential partners trade with each other, the higher the proportion of tariff revenue they derive from such a trade. This may actually act as a disincentive for potential partners to form an economic integration unit unless they are guaranteed some compensation for this revenue loss.

Import Substitution versus Export-Oriented - For potential partner countries that have embraced the Import Substitution Industrialisation (ISI) strategy through low interest rates, overvalued exchange rates and inefficient industries protected behind tariff barriers, the required liberalisation of the economy to achieve economic integration is likely to be strongly opposed by industrialists for fear of regional competition, and by workers for fear of job losses through retrenchments and firm closures that will come about as firms adjust to economic restructuring. In contrast, if potential partners generally follow an export-orientated development strategy, they are unlikely to suffer these problems. As a result, the required liberalisation to achieve economic integration is likely to face less domestic resistance.

Potential Partners Similarity - Economic integration is more likely to succeed if potential member states are similar, that is, if the countries are at almost the same level of economic development. In this case, industrial development is likely to be evenly distributed so that the benefits of industrialisation accrue equitably to all member countries. If these conditions are not met, as is quite common in developing countries, there is likely to be industrial polarisation in favour of the more developed countries such that they gain at the expense of the least developed ones. In this case, economic integration will only succeed if the countries involved have an efficient and equitable compensation mechanism from gainers to losers.

Dynamic Gains - The motivation for economic integration may also be the replacement of inefficient producers by efficient ones within a free trade area. This implies that competition

within the union is likely to increase, leading to high quality products; since each country will supply the combined markets of member countries, firms are more likely to operate at the most efficient plant size, thus reaping economies of scale; and most importantly, each country within the union will probably produce goods in which it has comparative advantage. This will not only benefit free trade area members as shown above but will also strengthen regional trade against import competition from countries outside the union.

These potential gains have been important in motivating countries, both individually and collectively, to join the efforts towards the economic integration of many developing countries, including those in southern Africa.

Regional Economic Integration in Southern Africa

The institutional arrangement of economic integration in southern Africa reflects both the political and economic development of the region in the past two decades. As shown in Table 15.1, there are several economic groupings in the region which have tended to influence and impact upon the pace and direction of economic growth in Botswana. The first among these is the Preferential Trade Arrangement (PTA), which was formed in 1981 along the lines of traditional customs union theory. Having achieved little success in its objectives, an attempt was made to revitalise its liberalisation programme as well as attract the newly democratised South Africa, and the PTA reconstituted itself as the Common Market for East and Southern Africa (COMESA) in 1993 (Gibb, 1998). However, it never managed to convince South Africa to join. In fact, the SADC summit of 1995 is said to have decided that dual membership of SADC and COMESA was incompatible (op cit, p 305). As a result the organisation is becoming increasingly less important.

The most important regional blocs in southern Africa, as far as Botswana is concerned, are the Southern African Customs Union (SACU), which allows free trade within a customs

Table 15.1. SADC country membership to regional groupings.

Country	SACU*	CMA	SADC	COMESA	Lome'	SAPs
Angola			x	x	x	
Botswana	x		x		x	
Lesotho	x	x	x	x	x	x
Malawi			x	x	x	x
Mauritius			x	x	x	x
Mozambique			x	x	x	x
Namibia	x	x	x	x	x	
South Africa	x	x	x		x	
Swaziland	x	x	x	x	x	
Tanzania			x	x	x	x
Zambia			x	x	x	x
Zimbabwe			x	x	x	x

* SACU: Southern African Customs Union; CMA: Common Monetary Area; SADC: Southern Africa Development Community; COMESA: Common Market for Eastern and Southern Africa; Lomé: Trade Agreement Between the EU and African, Caribbean and Pacific (ACP) member countries; SAPs: Structural Adjustment Programmes.

union setting, and the Southern African Development Community (SADC), which is also moving in the direction of a customs union but in a broader context than SACU.

Botswana’s Economic Development in the Context of the New SACU

Botswana’s trade relations in the region have been largely shaped by its 85 year membership of SACU. SACU is a free trade arrangement between a group of five countries with close geographical ties and economic links. Four of the member economies - Botswana, Lesotho, Namibia and Swaziland (BLNS) - are small in terms of market size, level of development, and national income, relative to South Africa, the fifth member.

Botswana’s membership in SACU dates back to 1910, when the new Union of South Africa signed a customs union agreement with the then Bechuanaland Protectorate. Under the agreement, members of SACU make a commitment not to set up tariffs against one another, but rather to operate a single goods market with a common tariff against the rest of the world. Import trade, therefore is open between the SACU member countries.²

Following the Independence of the BLS countries, a new treaty was negotiated in 1969 which substantially changed the relationship between the member countries. It incorporated an enhancement factor which substantially increased the BLS countries’ receipts from the revenue pool, discussed in fuller detail in the next section.

Key Characteristics of the Economies of SACU

The five members of SACU have close economic relations going back over a century. Four of the members also form a monetary union. The defining characteristic of SACU is the economic dominance of South Africa in contrast to the size of the other four members. The BLNS depend heavily on South Africa for a significant proportion of their trade and investment.

Notwithstanding the economic and geographic closeness of the BLNS to South Africa, and the fact that they share a common trade and (to a lesser extent) industrial policy, the performance and management of the smaller SACU economies differs markedly from each other and South Africa. The essential economic characteristics of the member countries are shown in Table 15.2.

While the BLNS are dwarfed by South Africa in terms of economic and population sizes,

Table 15.2. SACU countries basic data, 2000.

Country	Population (million)	GDP (\$Billion)	GDP per Capita \$	Av. Growth Rate 1990-2000
Botswana	1.7	5.65	3,424	4.8
Lesotho	2.16	0.88	407	4.2
Namibia	1.76	3.47	2,006	4.2
South Africa	43.8	125.6	2,864	1.7
Swaziland	1.0	1.28	1,308	3.4
SACU	50.42	136.88	2,715	1.9

Source: IMF Annual Financial Statistics, 2001/2002.

 2. The common tariff protects industry within the customs union.

they have experienced higher growth rates, and in the case of Botswana have a higher level of GDP per capita. Over the past two decades, Botswana has experienced much higher growth rates than all other member states (and most of the world) based on the successful exploitation of its diamond reserves.

Different macroeconomic conditions are also reflected in the financial management of the BLNS. Botswana has pursued a conservative fiscal policy and has shown a budget surplus for most of the previous 20 years. Although rising income from offshore investments have reduced its dependence on SACU revenues, they remain significant at around 13% of total government revenue. Table 15.3 shows the extent to which the BLNS rely on their share of SACU revenue.

Table 15.3. SACU revenue payments, 2001/2002 (Rands, billion).

	Botswana	Lesotho	Namibia	Swaziland	South Africa (residual)
SACU Payment (R million)	2,622	1,438	2,641	1,503	9,897
% of Total Revenue Pool	14.5	7.9	14.6	8.3	54.7
% of total Government Revenue	12.8	51.0	30.4	54.1	3.9

Source: Derived from Customs Union Commission Reports.

The Revenue Sharing Formula

An important feature of SACU is the revenue sharing arrangement. The formula provides for a sharing of total SACU customs revenue, based on recent import shares. It takes no direct account of the height of the common external tariff, especially when the common external tariff is in excess of the maximum revenue level, as it has often been (Leith, 1992). It does, however, include a factor that amplifies the share of the customs revenue, and which is used to compensate the smaller member countries for the negative effects of the customs union on their economies. This compensation is justified by the argument that there is a polarization of industry in South Africa away from the smaller countries, and also for the fact that the smaller member countries lack fiscal discretion as the common external tariff and excise taxes are determined unilaterally by South Africa.

But this compensation formula is a serious point of contention between the member countries. In the case of Botswana, for instance, it has been argued that consumers in Botswana pay the equivalent of an excise tax to the South African Government and producers, and that this has not been offset by the countervailing payments to the Government of Botswana.

On the other hand, South Africa argues for a change to the compensation formula in keeping with the South African commitment to WTO, which will see the current price-raising effects on imports fall. South Africa maintains that if the current formula were kept, the BLNS countries would be overcompensated for the price-raising effects on their imports. Furthermore, since the current formula takes no account of the price-raising effect of the common external tariff on BLNS exports to partners, there is no reduction in the compensation which South Africa pays to the BLNS, as those exports grow - as in the case of Botswana's exports of textile and motor vehicles (Leith, 1992).

The 1969 Revenue-Sharing Formula: The Enhancement Factor

Until 1969, BLNS received fixed proportions of the common revenue pool of SACU. In 1969, the revenue formula was renegotiated, giving Botswana and the other small members states a share of the revenue from common external tariff and excise duties, based on their share of imports and the consumption of goods subject to excise duties. This share was subject to a multiplier of 1.42, to compensate for the price-raising effect of the common external tariff, and for the lack of any mechanism to induce investment in the peripheral countries. The formula can be expressed in the following way:

$$R = (i + p) \frac{C + E + S}{I + P} * (1.42)$$

Where:

- *R* is the revenue received from Botswana, Lesotho and Swaziland;
- *i* is the total CIF value at the border of all imports into Botswana (or Lesotho or Swaziland) inclusive of customs, excise and sales duties;
- *I* is the total CIF value at the border of all imports into the customs union area, inclusive of customs and sales duties;
- *p* is the total value of dutiable goods produced and consumed in Botswana (or Lesotho or Swaziland) inclusive of duties;
- *P* is the total value of dutiable goods produced and consumed in the customs union area inclusive of duties;
- *C* is the total collection of customs duties within the customs union area;
- *E* is the total collection of excise duties within the customs union area;
- *S* is the total collection of sales duties within the customs union area; and
- *p* and *P* exclude any exports of domestically produced excisable and sales duty goods that benefit from export drawbacks.

In the 1970s a floor was placed on revenue, such that if the average tariff on Botswana's imports fell below 17%, a rate of 17% would apply; similarly, if the average rate rose above 23%, that rate would apply.

One of the features of this revenue-sharing arrangement was that BLNS received revenue based on their consumption of the relevant commodities, regardless of the size of the total revenue pool. As a result, together with reductions in the common external tariff of SACU, South Africa's share of the common revenue pool had steadily decreased. Under the 1969 agreement, South Africa's share stood at about 20% in 2001, compared with South Africa's 95% share of SACU GDP. One of South Africa's main objectives, therefore, in seeking to renegotiate SACU was to change the revenue formula.

The other point of contention with the 1969 agreement was the two-year lag in payment to BLNS from the revenue pool. However in this issue, both the BLNS and South Africa concur that the two-year lag was unfair to BLNS because the enhancement factor was significantly depreciated by high inflation, loss of interest on revenue accrued but not yet paid, and depreciation of the exchange rate (African Development Bank, 1993; Darvies *et. al.*, 1993; Guma, 1990; McCarthy, 1985; World Bank, 1992).

The 2002 New SACU Agreement

The new SACU Agreement is more comprehensive than the earlier Agreement, and contains 51 Articles. This represents a significant enlargement of the scope of the 1969 Agreement, which contained just 22 Articles. The new Agreement encompasses three main areas: governance and administration, economic policy and regulatory issues, and revenue sharing. Its stated objectives are as follows:

- To promote the integration of the members into the global economy;
- To facilitate the cross-border movement of goods between the members;
- To establish effective, transparent and democratic institutions which will ensure equitable trade benefits to the members;
- To facilitate the equitable sharing of revenue from customs, excise and additional duties;
- To promote fair competition, substantially increase investment and facilitate economic development; and
- To facilitate the development of common policies and strategies.

Institutional Arrangements

The new agreement provides for the establishment of an independent, full-time administrative secretariat to manage the affairs of SACU, to be located in Namibia. The South African Board of Tariffs and Trade will be replaced by a 'SACU Tariff Board' which will consist of a panel of professionals appointed to consider all changes to the common external tariff (each member state will nominate a candidate). All recommendations emanating from the Tariff Board must be ratified by the SACU Council of Ministers, which will consist of one Minister from each member state.

Economic Policy Issues

Under the new SACU, external trade policy will be agreed jointly by the Council of Ministers. The new agreement permits national protection for infant industries in the BLNS but not in South Africa. Under this article the BLNS can impose duties on imports from South Africa, provided the same duties are also imposed on imports from the rest of the world. An infant industry is defined as an activity that has not been located in the BLNS for more than eight years, and this protection is also limited to eight years.

It was necessary to retain an article addressing agricultural marketing arrangements, as some of the BLNS economies continue to retain single marketing channels. Under the 1969 Agreement this article was used to justify closing markets within SACU to protect domestic agricultural producers. The new article (29) explicitly allows for each member state to impose marketing regulations for agricultural products "...providing such marketing regulations shall not restrict the free trade of agricultural products between member states."

The earlier agreement contained no reference to either Technical Barriers to Trade (TBT) or to Sanitary and Phyto-Sanitary (SPS) measures. The new agreement contains two articles addressing these issues: Article 28 on TBT explicitly refers to the WTO agreement on Technical Barriers to Trade, and directs that "*Member states shall strive to harmonize product standards and technical regulations within the Common Customs Area*", the article on SPS (Article 30) simply urges consultation and notes that member state reserve the right to apply SPS measures

in accordance with their national SPS laws and international standards. The agreement provides for common policies in industry, agriculture, competition, and unfair trade practices.

The New Revenue Sharing Formula

The new formula will apply to all members and will be limited by the size of the customs and excise duty pools. The formula was developed with the aim of providing a degree of revenue security to the BLNS. It was recognized that real tariff revenue is likely to decline over time - by including excise duties it became possible to ensure greater revenue stability and arrange for revenue transfers to the lesser-developed members.

The new SACU Revenue Sharing formula for customs and excise revenues works separately and explicitly through two components. Total customs revenues collected will be distributed according to each country's share of total intra-SACU imports. The country with the largest imports from within the union will receive the largest share of the customs pool, thereby providing implicit compensation for the "cost-raising" and "polarization" effects of the customs union. In theory, this may also encourage trade diversion within the customs union. The distribution of the customs component by intra-SACU trade is shown in Table 15.4.

Table 15.4. The distribution of the customs component.

R million	Botswana	Lesotho	Namibia	Swaziland	South Africa
Intra-SACU imports (1998/99)	9,769	4,914	9,137	5,366	7,520
Shares of customs component	27%	13%	25%	15%	20%

Source: Submissions by Member States to the CUTT.

Excise revenues will be distributed on the basis of each country's share of total SACU GDP - a proxy for the value of excisable goods consumed. South Africa, as the largest economy in SACU, can expect to retain around 80% of total excise revenue collected (assuming 15% is allocated to the development component). This is shown in Table 15.5.

The new formula also provides for the creation of a development component, to be set as a fixed percentage of the excise pool (initially 15%). Payments into and out of the development component are determined by a formula and not allocated or tied to specific projects. The development component is therefore an additional compensation mechanism and is not designed to achieve development objectives.

All five SACU countries will receive near equal shares of the development component. Thus, those countries that receive the largest share of excise duties contribute most towards and benefit least from the development component. In addition, the shares accruing to each member state are adjusted marginally in favour of the lesser-developed countries in SACU.

In principle the new SACU agreement should be considered a success. It normalises

Table 15.5. The distribution of the excise component.

R million	Botswana	Lesotho	Namibia	Swaziland	South Africa
GDP (1998)	28,500	4,921	16,826	7,081	740,581
Shares of excise component	4%	1%	2%	1%	93%

Source: Submissions by Member States to the CUTT.

Table 15.6. Distribution of the development component.

Rand (million)	Botswana	Lesotho	Namibia	Swaziland	South Africa
GDP/capita (1998)	17,968	2,395	9,615	7,024	17,578
Deviation from SACU average	65%	-78%	-12%	-36%	61%
Deviation/10	7%	-8%	-1%	-4%	6%
(1-Deviation/10)*20%=					
Share of dev. component	19%	22%	20%	21%	19%

Source: Submissions by Member States to the CUTT.

trade relations between South Africa and the BLNS, provides for the creation of a number of new and democratic regional institutions, and reforms an outdated and unsustainable revenue-sharing arrangement. But in practice, it is questionable whether this new agreement will contribute towards more rapid and equitable economic development within SACU.

Botswana may be less vulnerable to losses of SACU revenue than Lesotho, Namibia and Swaziland. Nevertheless, in the medium- and long-term, government revenue from diamond exports cannot be expected to continue rising, and Botswana will therefore need to consider alternative sources of revenue. This point is reinforced by the argument that any future source of economic growth in Botswana, whether from manufactured or service exports, is likely to provide significantly less government revenue per unit of GDP than diamond mining, where the government revenue content is exceptionally high.

It is disappointing that little progress was made on industrial policy issues and tax harmonisation under the new agreement; and this may work against member countries', such as Botswana's, efforts at diversifying their economies. Member countries will continue to compete with each other for investment through tax incentives and other broad macroeconomic policies. Given the extent of free trade within SACU and the fact that all member countries share common customs and excise tax rates, further tax harmonisation is possible and necessary.

The SACU/USA Free Trade Agreement

In November 2002, the U.S. Trade Representative Robert Zoellick notified the U.S. Congress of the U.S. administration's intent to initiate negotiations on a Free Trade Agreement (FTA) with SACU members. According to the United States administration, they are pursuing this FTA as part of a broader strategy of establishing free trade negotiations with interested Africa Growth and Opportunity Act (AGOA) beneficiary countries as a catalyst for increasing trade and investment between the United States and sub-Saharan Africa. The negotiations address topics such as market access, investment, services and intellectual property rights, and were started in June 2003 with a target completion date of December 2004.

SACU currently represent the largest African export market for the United States, worth more than US \$2.5 billion in 2002; and an FTA would guarantee the U.S. preferential access to this market. An FTA would also allow the U.S. access to a market where in the past U.S. exporters were disadvantaged by the European Union's free trade agreement with South Africa. An FTA will also help forge and advance common objectives in the WTO Doha Agenda. Bilateral and regional FTA's create valuable competition for liberalization which is the key to the WTO Doha Agenda.

For southern Africa, the FTA is seen as an opportunity to build on the success of AGOA and to move the growing commercial ties between southern Africa and the United States to full partnership. The SACU countries are leading AGOA beneficiaries, accounting for more than 70% of U.S. non-fuel imports under this programme in 2001 (U.S. Trade Representative, 2003).

It is hoped that this FTA will accord the SACU members the opportunity to improve their commercial competitiveness, and to place the countries in a better position for success in the U.S. market and the global economy. This will be an opportunity to also attract new foreign direct investment. This FTA is also expected to help drive economic integration in southern Africa and promote the goals of the New Partnership for Africa's Development (NEPAD). It also offers an opportunity to further link trade to the region's own economic growth, development and poverty alleviation strategies.

Botswana's Economic Development in the Context of New Developments in SADC

The SADC Trade Potential

This section assesses SADC trade potential by looking at socio-economic and political indicators which may enhance and/or inhibit economic integration. The analysis is meant to indicate the potential contribution of SADC countries to Botswana's economic growth and development. The analysis is based on Table 15.7 below. Looking at economic indicators first, we note that for countries where data are available, the share of the three main commodities of each country accounts for well over 85% (1993 figures) except for South Africa (26%), the United Republic of Tanzania (56%) and Zimbabwe (50%). In contrast, the share of manufactures in total merchandise exports for the years 1995 and 2000 remains below 40% for most countries except Mauritius (77%) and South Africa (40%). These results suggest that most of the SADC economies are still dependent on primary exports, especially minerals and agricultural products.

Another important indicator of trade potential is a countries' real GDP. Table 15.7 indicates that SADC real GDP, which was estimated at US \$190,124 million in 1995, had increased to US \$220,629 million by 2000. It is encouraging to note that all SADC countries experienced a modest rise in real GDP and significant real GDP growth in the 1990s. This growth ranged from a low of 0.7% in Zambia to a high of 6.2% in Namibia. Given that most of these countries are implementing IMF structural adjustment programmes, which include not only economic reforms but also political reforms that encourage countries to adopt democratic principles, there is reason to expect this growth to be maintained and increased in the coming years. The table also highlights South Africa's dominance in the region because of its GDP, which accounts for about 80% of the region's total GDP.

In terms of social indicators, the region had a population of about 150.7 million in mid-2001. Approximately 50% of these are from South Africa and the United Republic of Tanzania taken together. While this population size may signal potential for an enlarged regional market when the SADC protocol is fully implemented, the result should be interpreted with caution given the fact that the table suggests that a large proportion of the SADC population is still living below the national poverty datum line. Further, the problem of poverty may be expected given the fact that Table 15.7 indicates that, for most of these countries, a very small proportion of the labour force are engaged in industrial production.

Economic integration may be hampered by social and political instability. The region

Table 15.7. SADC trade potential indicators.

Economic Indicators								
Country	Share of three main Commodities		Share of manufactures in total exports		Main Export Sector	Real GDP (1995 prices) (millions US\$)		Average Growth (%)
	1979-1981	1989-1991	1995	2000		1989-1991	1995		2000	1990-MR
Angola	96	92	2.1	1.7	fuels	5040	6877	1.3
Botswana	88	94	15.6	4.2	minerals & metals	4773	6585	5.4
Lesotho	-	-	-	3.3	-	933	1116	4.1
Malawi	78	86	12.1	13.8	foods	1429	1739	3.6
Mauritius	89	86	68.2	76.9	agric raw materials	3820	4871	5.2
Mozambique	-	-	2.9	3.9	foods	2311	3382	6.2
Namibia	-	-	22.6	22.7	fuels & metals	3503	4156	4.5
South Africa	61	26	28.3	39.9	minerals & mafs	151113	172074	1.9
Swaziland	-	-	7.6	7.4	foods	1365	1608	3.3
Tanzania	49	56	15.7	5.1	foods	5255	6419	3.2
Zambia	94	93	13.1	21.9	minerals & metals	3471	3971	0.7
Zimbabwe	31	50	37.4	31.7	mixed	7111	7831	1.9
Social Indicators							Political Indicator	
Country	Population (millions)	Population below national poverty line*	Labour Force (%) in:					
			Agriculture		Industry			
	Mid 2001	1984-1999	1980	1990	1980	1990		
Angola	13.5	-	76	75	8	8	Multiparty System	
Botswana	1.7	33.3	5	3	33	31	Multiparty Democracy	
Lesotho	2.1	49.2	23	19	22	20	Multiparty System	
Malawi	10.5	54.0	88	95	5	5	Multiparty System	
Mauritius	1.2	10.6	29	16	25	44	Multiparty System	
Mozambique	18.1	37.9	84	83	8	8	Multipart Democracy	
Namibia	1.8	34.9	47	53	16	18	Multipart Democracy	
South Africa	43.2	11.5	17	14	35	32	Multipart Democracy	
Swaziland	1.1	19.0	40	24	26	26	Monarchy	
Tanzania	34.4	51.1	86	84	4	5	Multipart Democracy	
Zambia	10.3	86.0	76	75	8	8	Multiparty System	
Zimbabwe	12.8	25.5	32	24	27	28	Multiparty System	

* Botswana, Mozambique, Namibia and South Africa values are based on US \$1 per day (1993 PPP US \$) for 1983-1999.

has had many years of political instability, which has taken the form of one-party states in Malawi and Zambia, apartheid in South Africa, and civil war in Angola and Mozambique. However, as Table 15.7 indicates, there are now democratically elected governments and a move towards political stability in most SADC countries, excepting Zimbabwe and the recently admitted war-troubled Republic of Congo.³ This move towards political stability is likely to be important not only for regional integration but also for foreign direct investment which the region's trade policy is currently encouraging.

Intra-SADC Trade

Whereas the previous sub-section focussed mainly on the SADC trade potential, this sub-section will shift focus onto actual trade flows within the region in order to find out whether SADC countries trade more amongst themselves or more with the outside world.

The analysis is based on Tables 15.8 and 15.9. Table 15.8 shows each country's intra-SADC export flows for the years 1995 and 2000. It is interesting to note that South Africa, which supplies the largest intra-SADC exports in the region, increased its exports marginally from 76% in 1995 to 78% in 2000. These figures remained constant at 15% for Zimbabwe, which follows South Africa in terms of importance in intra-SADC trade. For other countries, these figures did not only decline, but were insignificantly small during both years. Each country's intra-SADC exports as a proportion of total country exports in 1995 were largest in Mozambique and Zimbabwe, which registered 32% each, followed by Malawi (17%) and South Africa (11%). These figures had changed significantly by 1999: for instance Malawi, Mozambique and Zimbabwe experienced large declines from 17% to 8%, 32% to 7% and 32% to 28%, respectively. Only South Africa experienced a marginal increase of 11% to 12%.

These results have interesting implications. First, the results indicate that there is very

Table 15.8. Total Intra-SADC exports by country, 1995-1999.

1995	Intra-SADC Exports (value in US\$)	As a Proportion of total Intra-SADC Exports	As a Proportion of total Country Exports	1999	Intra-SADC Exports (value in US\$)	As a Proportion of total Intra-SADC Exports	As a Proportion of total Country Exports
South Africa	2 922 100	76%	11%	South Africa	2 825 344	78%	12%
Zimbabwe	589 865	15%	32%	Zimbabwe	542 060	15%	28%
DRC	101 306	3%	6%	Malawi	85 004	2%	17%
Malawi	74 012	2%	17%	Zambia	71 071	2%	8%
Mozambique	52 105	1%	32%	Tanzania	48 061	1%	7%
Zambia	48 323	1%	4%	Angola	32 020	1%	1%
Mauritius	21 061	1%	1%	Mauritius	23 478	1%	1%
Tanzania	10 120	0%	1%	DRC	3 505	0%	0%
Angola	978	0%	0%	Seychelles	1 869	0%	1%
Seychelles	703	0%	1%	Mozambique	0	0%	0%
Total	3 820 573			Total	3 632 412		

Source: Southern African Update, March 2003, Volume 17.

3. The Democratic Republic of Congo and Seychelles were admitted as SADC members in 1997/98.

little intra-SADC trade flow, which implies that SADC countries trade more with outside non-SADC member countries than among themselves. Since this is partly due to the high tariffs and non-tariff barriers that the region has, economic integration, which is planned to reduce these trade barriers by 85% by 2008 and 100% by 2012, is likely to benefit the region's trade and economic development. Second, the results highlight the importance of South Africa for regional growth and economic integration.

Opportunities and Challenges for SADC Regional Trade

This sub-section discusses the issues that may enhance and/or inhibit the development of economic integration in the SADC region. These include the SADC Trade Protocol, the membership of SADC countries to various regional trade arrangements, the European Union-South Africa free trade agreement (EU-SAFTA), and the Cotonou agreement. These will individually and collectively have an impact on the direction and development of economic integration in the region.

The SADC Trade Protocol

The results of the previous section may be viewed from two different perspectives which could have very important consequences for the way economic integration and development evolves in southern Africa. First, the results may be viewed from a pessimistic perspective in which the low levels of intra-SADC trade are seen as a reason to assume that the region has little or no trade potential and hence little prospect for economic integration. Conversely, the results may be interpreted from an optimistic perspective. This assumes that the low level of intra-SADC trade means that the region has not yet exploited its trade potential. As a result, efforts should be made to take advantage of this opportunity through economic integration. The SADC member states have taken this latter position. The outcome of this stance was the signing of the SADC Trade Protocol on 24th August 1996. The objectives of this protocol, which are given in Article 2 are:

1. To further liberalise intra-regional trade in goods and services on the basis of fair, mutually equitable and beneficial trade arrangements, complemented by other protocols in other areas;
2. To ensure efficient production within SADC, reflecting the current and dynamic comparative advantages of its members;
3. To contribute towards the improvement of the climate for domestic cross-border and direct foreign investment;
4. To ensure the economic development, diversification and industrialisation of the region;
and
5. To establish a free trade area in the SADC region.

The Protocol was ratified by the required two thirds of SADC member states in 2000. As a result of this protocol, the reduction of tariffs and non-tariff barriers (NTBs) to achieve the SADC free

trade area is to be achieved by 2008 for “non-sensitive products” and 2012 for “sensitive products”.

In 1997, the SADC Secretariat commissioned Imani Development (Pty) Ltd. to determine tariff schedules for the implementation of the trade protocol. Their study found that, in general, SADC countries have high tariffs which could weaken trade in the region. These tariffs are mostly higher in what has been termed “sensitive products”. SADC countries’ sensitive products fall into three categories. First are *revenue sensitive* products, on which government revenue is heavily dependent. Second are *socially sensitive* products, which are labour-intensive and thus required for employment creation. Finally, *business sensitive* industries are those that are deemed essential for the country’s economic growth but which cannot compete effectively without government protection, at least in the short run.

According to Sentsho (2000), intra-SADC tariffs are quite high, and countries with substantial manufacturing industries have the highest tariffs - Mauritius (77%), South Africa (83%) and Zimbabwe (99.7%). The most protected products are textiles, footwear, carpets and other flooring materials. However, the seriousness of these tariffs on trade flows is likely to be undermined by the fact that SADC countries are members of various regional trading blocs (see Table 15.1). Secondly, excepting the five SACU members, most SADC countries are undergoing IMF Structural Adjustment Programmes (SAP). This means that, in general, most SADC countries would have reduced or eliminated tariffs and NTBs under one or both of these programmes by 2008-2012.

There are also a number of challenges which this protocol would have to address. First, it has to address the problem of least developed countries within the free trade area. Past experience with integration schemes suggests that integration among unequal partners generally leads to skewed distribution of the gains in favour of the most developed partners. In the case of SADC this would be Botswana, Mauritius and South Africa. Along with this, there should be a regional industrialisation programme to ensure equitable spatial location of industries across the region so as to counter industrial polarisation in favour of the more developed countries. Despite these challenges, this analysis suggests that the SADC Protocol is likely to lead to successful regional integration.

The Lome IV Convention

The intra-SADC trade flows discussed above may be explained from historical, political and economic perspectives. From an historical perspective, Sub-Saharan Africa (SSA) is linked to its former colonial masters both politically and economically because of the colonial era relationship. For instance, the Africa, Caribbean and Pacific (ACP) countries bring together 47 African countries and 23 Caribbean and Pacific countries in a non-reciprocal trade arrangement with the EU under the Lome Convention, which has been in place since 1975 (Arts and Byron, 1997; McQueen, 1998). Secondly, the link to the United States and Japan exists under the Generalized System of Preferences (GSP). Table 15.9 gives a summary of the preference margins SSA countries gain as a result of these trade arrangements. It can be seen from the table that Botswana pays an average tariff of 0.3% in the OECD market. The preference margin, which is defined as the average tariff margin which the preference country pays below the non-preference rival exporter, is given as 2.8%. Generally, the table suggests that African countries receive higher preference margins in the EU, followed by the USA and then Japan. The challenge facing African countries is that these preferences, which have for many years given these countries preferential

Table 15.9. The incidence of OECD tariffs on Sub-Saharan Africa's non-oil Exports (percentages).

Exporting Country	OECD Average		European Community		Japan		United States	
	African tariff	Preference margin	African tariff	Preference margin	African tariff	Preference margin	African tariff	Preference margin
Angola	0.2	-1.5	0.3	-3.2	1.8	0.0	0.1	0.4
Botswana	0.3	-2.8	0.1	-2.9	0.0	-2.1	3.5	-1.1
Cameroon	0.4	-2.5	0.1	-2.8	0.0	0.0	2.1	-1.1
Central African Republic	0.2	-2.2	0.2	-2.3	0.0	0.0	0.0	-1.1
Chad	0.4	-2.7	0.2	-2.9	2.5	0.0	1.6	0.0
Congo	0.1	-1.4	0.0	-2.2	0.0	0.0	0.3	-0.6
Cote d'Ivoire	0.7	-3.1	0.3	-3.3	1.2	-0.5	3.3	-2.0
Ethiopia	0.7	-1.3	0.1	-1.9	1.5	-1.3	2.0	0.4
Gabon	0.6	-2.0	0.0	-2.7	0.0	0.0	2.9	0.7
Ghana	1.0	-2.2	0.1	-3.1	2.3	0.0	2.6	-0.9
Guinea	0.6	-2.3	0.0	-2.9	1.8	-1.9	1.9	-1.0
Kenya	0.5	-3.3	0.2	-3.5	2.4	-1.1	3.1	-2.3
Liberia	0.6	-1.7	0.3	-1.9	0.0	-0.3	2.5	-1.1
Madagascar	0.5	-2.0	0.4	-2.7	0.8	-0.2	0.8	-1.0
Malawi	1.1	-2.4	0.1	-3.5	0.0	-0.1	5.4	-0.6
Mali	0.4	-3.4	0.2	-3.5	0.0	-1.6	3.1	-2.2
Mauritania	1.7	-2.3	0.2	-3.9	3.6	-0.4	1.2	-1.6
Mauritius	1.3	-3.1	0.2	-3.4	4.8	-1.1	6.4	-1.8
Niger	0.1	-3.0	0.0	-3.0	0.0	0.0	3.3	-1.6
Nigeria	2.7	-0.9	0.1	-2.6	3.7	-0.8	5.2	0.7
Senegal	0.5	-3.3	0.3	-3.5	3.6	-0.1	4.9	-1.2
Sierra Leone	0.5	-3.1	0.0	-4.0	2.6	-0.7	2.3	-0.2
Sudan	0.1	-1.5	0.1	-1.9	0.0	0.0	0.7	-1.0
Swaziland	0.8	-4.4	0.5	-4.9	6.7	-3.0	3.5	-1.9
Togo	0.3	-2.8	0.2	-2.8	9.8	-0.8	0.2	-2.8
Uganda	0.9	-2.4	0.6	-3.0	0.0	0.0	2.1	-0.3
Uni. Republic of Tanzania	0.1	-2.3	0.0	-2.5	1.4	-1.0	0.0	-2.4
Zaire	0.3	-2.1	0.1	-2.4	0.0	-0.5	1.3	-1.1
Zambia	0.3	-1.7	0.5	-2.9	0.0	-0.6	1.4	-1.4
Zimbabwe	0.9	-2.5	0.2	-3.3	1.2	-1.0	4.0	-1.0
MEMO ITEM								
Taiwan, China	6.1	0.9	7.5	4.0	2.5	-2.2	6.8	0.7
Republic of Korea	6.0	0.6	7.8	4.2	2.7	-2.2	7.1	0.7

Note: Negative values show the average preferential margins (in points) that the African exporter has over all other exporters of the same goods. Values indicate that the exporter faces a higher than average tariff due to preferences other countries receive. All tariffs shown above are the simple average (outweighed) of duties paid on the country's exports.

Source: A. J. Yeats (1995), Table 4.

access to OECD country markets, are likely to be eroded by the current changes in the global economy; thus exposing these countries' exports to stiff competition from high growth performing countries such as China and the newly industrialised countries of East Asia - Hong Kong, Singapore, South Korea and Taiwan. These changes made the EU skeptical of the non-reciprocity provisions of the Conventions as well as their impact on recipient countries' development (Arts and Byron, 1997). As a result, the current negotiations of Lomé IV and the Cotonou Agreement have very radical EU proposals, which are summarized in Arts and Byron (1997:77); McQueen (1998:670-71) and Stevens (2002) as:

1. Establishing a closer link in the text and in the programmes of Lomé IV between development cooperation and democracy, good governance and the rule of law, as well as strengthening the human rights provisions of the text;
2. Setting aside more Eighth European Development Fund (EDF) resources for specific allocations, either for the exclusive use of the commission or to be made conditionally accessible to ACP states, as recommended by the Development Directorate; and
3. While accepting the need to maintain the unity of the ACP group, the Commission nevertheless emphasises their belief in the growing importance of regional integration as a factor in economic development.

Although the proposals are equally important, we focus for our purposes on proposal 3, which emphasises the EU's "differentiated reciprocity" in the context of free trade areas. The EU's view is that regional integration has potential to benefit the ACP countries in terms of economic growth and development. Most importantly, this approach will benefit the EU because it allows it to achieve its objective of reciprocity, in which ACP countries are to open up their economies in return for the preferential market access they have in the EU; it is seen as important in helping the ACP countries to achieve economic structural adjustment, thus reinforcing IMF structural adjustment programmes (SAPs); it is seen as a means of strengthening the EU's presence in ACP countries by enabling the former's enterprises to utilise the latter's comparative advantage; and it is seen as a means of integrating the ACP countries into the global economy.

To achieve these objectives, the EU envisages Lomé IV negotiations taking two stages. The first stage (1998-2000) is to define areas of economic cooperation and identify potential EU-ACP Free Trade Areas. Countries which qualify for the EU-ACP FTA but refuse to join will be given the less favourable Generalised System of Preferences (GSP). Those least developed countries that fail to form free trade areas because of their weak economies will continue to trade under the Lomé IV provisions. In the second stage of Lomé IV negotiations (2000-2008), the current Lomé IV provisions will continue while the EU negotiates regional and sub-regional free trade areas with the ACP countries.

These proposals have important implications for the evolution of regional integration in southern Africa. The first is that the formation of EU-SAFTA and the potential EU-SADC FTA which these proposals entail are likely to increase EU-SADC export competition in the region. Given the fact that firms in the EU are already more developed and integrated into the world economy, the newly established firms in the region, more especially small citizen-owned firms, are unlikely to effectively compete with the new-comers. The result will, in this case, be the disappearance of the former, which will also result in more problems of unemployment, especial-

ly if EU firms choose to export into the region instead of providing foreign direct investment. Second, this is likely to result in the erosion of preferential margins shown in Table 15.9. Third, the reduction and eventual removal of tariffs on EU imports will cost most SADC countries a substantial amount of tariff revenue. Since these revenues are important for the provision of social services and for funding economic development, unless some form of compensation is made to the least developed countries of SADC, namely, Angola, Lesotho, Malawi, Mozambique, Tanzania, the Democratic Republic of Congo and Zambia, the adjustment to economic integration will be economically and politically painful for these countries.

The European Union - South Africa Free Trade Area (EU-SAFTA)

Another important challenge for the SADC FTA is the EU-SAFTA agreement which was signed in March, 1999. The first potential challenge of the EU-SAFTA for SADC countries is that, whereas previously most SADC exports were protected from competition with South Africa's exports because of the Lome IV provisions, South Africa's access to the EU market through the EU-SAFTA arrangement is likely to result in direct competition with other SADC countries in the EU market. Secondly, commodity exports for SACU countries, which are currently protected by South Africa's high tariffs against EU exports, are likely to face serious competition once EU goods are allowed tariff-free into SACU and later SADC. Previously, South Africa's tariffs against EU exports ranged from 211% in alcohol and related products, around 60% for motor cars and other transport vehicles, and 10% for paper and related products (Sentsho, 2000). The removal of these tariffs will definitely increase EU exports into South Africa and hence SACU, and later SADC countries when the SADC trade protocol is fully implemented.

Other effects of the EU-SAFTA include the loss of tariff revenue for SACU countries, problems of unemployment which are likely to come up as firms restructure because of the challenges and changes resulting from external competition, as well as the need to strengthen the domestic macroeconomic environment to encourage both domestic and foreign investment in domestic economies.

The Impact of SADC Country Membership to Various Regional Integration Groupings

Table 15.1 showed that most SADC countries belong to various regional integration groupings which have a major common objective of achieving free trade through economic integration. Even though this may have some positive benefits for these countries, the major disadvantage of these diverse arrangements is that they compete for scarce human resources and donor funding at a time when they should have a single purpose and common goal and agenda for the region. The multiplicity of trade arrangements may also lessen the pain of defection, and thus encourage splitting as the first best solution whenever problems arise within an integration group. Given these concerns, it may be optimal for the region to consider concentrating on one viable regional grouping where maximum effort can be expended for the greatest possible results.

Regional Economic Development in the Context of the World Trade

Organisation

The major international trade policy challenge that Botswana and other southern African countries will face in the near future is their membership of the WTO. As a signatory to the WTO, Botswana pledges to comply with the organizations conditions of opening up its economy to international competition. This has serious implications, especially for government revenues because of changes on import tariffs, and for the development of domestic industry. The impact on domestic industry will depend more on the elasticity of demand for domestic products. If global markets increase the elasticity of demand that domestic firms face (smaller fraction of the market, closer substitutes available), the mark-up output prices over the marginal costs will be lower. Furthermore, if the elasticity of demand is constant, then changing the size of the market has no effect on production quantities at the firm level (Tybout, 2000). On the other hand, if putting domestic firms in competition with more varieties increases the demand elasticity they face, liberalisation will force mark-ups down and induce an expansion in output. It is clear therefore, that the welfare effects of globalisation on developing economies such as Botswana's are ambiguous and are dependent upon various factors.

The World Trade Organisation (WTO) was formed in 1995 as a successor to the General Agreement on Tariffs and Trade (GATT) which was established in the wake of the Second World War. Over the years GATT evolved through several rounds of negotiations. The latest and largest round was the Uruguay Round, which lasted from 1986 to 1994 and led to the WTO's creation. Whereas GATT had mainly dealt with trade in goods, the WTO and its agreements also cover trade in services and intellectual property.

Lowering trade barriers is considered the best way to encourage trade. Since GATT's creation in 1947-48 there have been eight rounds of trade negotiations, wherein much of the focus has been on lowering tariffs and non-tariff barriers on goods.

Under the WTO Agreements, member countries cannot discriminate between their trading partners by granting one trading partner a special favour without extending it to others. This principle is known as most-favoured nation (MFN) treatment. MFN is also a priority in the General Agreement of Trade in Services (GATS) and the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS). Together, these three agreements cover the main areas of trade handled by the WTO.

Some exceptions are allowed. For example, countries within a region can set up a free trade agreement that does not apply to goods from outside the region. Or a country can raise barriers against products from specific countries that are considered to be traded unfairly.

The creation of the WTO has unleashed a proliferation of overlapping preferential trade and/or integration initiatives in nearly all corners of the globe. However, though regional integration may promote global trade if it leads to the abolition or reduction of barriers on trade within the group, there are still some concerns that under some circumstances regional trading arrangements could hurt the trading interests of other countries. For instance a customs union like SACU could be considered to be in violation of the WTO's principle of equal treatment of all trading partners. But Article 24 of the GATT allows regional trading arrangements to be set up as a special exception, provided certain strict criteria are met. In particular, the arrangements should help trade flow more freely among the countries in the group without barriers being raised on trade with the outside world.

Agriculture, one of the most contentious issues, was included in the Uruguay Round

because, according to the WTO, “there was an urgent need to bring more discipline and predictability to world agricultural trade by correcting and preventing restrictions and distortions”. The chief sponsors of this reform were the USA and other developed countries. Under the Agreement members are required to cut subsidies and go through the process of tariffication, where all forms of import restrictions are converted into tariffs.

Developing countries are bound to be affected by these changes, indirectly via the impact of subsidy removal on the world market (leading to a rise in prices and, possibly, reduction in supply) and directly by the constraints on their own action to develop agriculture.

A complicating factor arises from the coexistence of heavy agricultural protectionism with substantial trade preferences for favoured suppliers, such as under the EU-ACP trade agreement. Because preference beneficiaries receive prices related to those in the high cost, protected markets, rather than the world price, they will see their export prices drop as a result of liberalisation. This adversely affects the beef industry in Botswana, which currently enjoys these subsidies from the EU.

The Doha Development Agenda (DDA)

In year 2000, new talks started on agriculture and services. These have now been incorporated into a broader work programme, the Doha Development Agenda (DDA), launched at the fourth WTO Ministerial Conference in Doha, Qatar, in November 2001.

The agenda adds negotiations and other work on non-agricultural tariffs, trade and environment, WTO rules such as anti-dumping and subsidies, investment, competition policy, trade facilitation, transparency in government procurement, intellectual property, and a range of issues raised by developing countries as difficulties they face in implementing the present WTO agreements.

Over three quarters of WTO members are developing or least-developed countries. All WTO agreements contain special provisions for them, including longer time periods to implement agreements and commitments, measures to increase their trading opportunities, provisions requiring all WTO members to safeguard their trade interests, and support to help them build the infrastructure for WTO work, handle disputes, and implement technical standards. The 2001 Ministerial Conference in Doha set out tasks, including negotiations, for a wide range of issues concerning developing countries, which were to have been addressed by the 5th Ministerial Conference in Cancun, Mexico in September 2003. However, the WTO members were unable to reach an agreement on a framework for the next phase of the Doha negotiations when they met in Cancun. This failure to reach an agreement means that reforms in international trade which would be of great benefit to the majority of the world's poor have been delayed.

Conclusions

This chapter discussed economic integration in southern Africa, and the process of globalisation and how these developments will affect Botswana's economic growth and development. The chapter shows that the post-war era has been characterised by a proliferation of regional trading agreements, the increased roles of the World Trade Organisation (WTO) and of the IMF/World Bank imposed structural adjustment programmes. These accelerated the process of globalisation and the opening up of developing countries to free trade as well as their integration into the global economy.

The trade arrangements that have actual and potential impact on Botswana's economic development include the new SACU agreement which was signed in 2002, the EU-SAFTA which was signed in 1999, the US-SACU agreement which was due to be signed in December 2004, and the EU-SADC agreement which is still under negotiation. All these agreements are intended to achieve free trade areas by 2008 and 2012. What this means is that by 2012, Botswana will be fully integrated into the global economy, and firms in the country should be fully adapted to compete globally both in terms of product quality, design, productivity and customer service. The global trends taking place in the region suggest that there will be reciprocity in terms of market access for firms, as Botswana firms will freely access EU and USA markets while the latter also freely access Botswana's market and those of the region. The preferential market access under the EU-ACP agreement of 1975, which has been extended to 2008 under the Cotonou agreement, will probably be eroded by these changes.

The implication of this analysis is that the Botswana economy is on the way to full integration into the global economy by 2012. In the context of free trade under economic integration and globalisation Botswana stands to benefit, provided the country's firms are strategically positioned to effectively compete in global markets. To this end, the country will benefit more if, by 2008 to 2012, firms that will be operating in the country, both citizen-owned and foreign-owned, become global players (multinational firms) which have established themselves in the world economy. In the interim period, the challenges that Botswana and the economies of the region face are to:

- Align their economic policies, including the role of the state in the economy, to emerging global trends;
- Intensify their work towards a gradual removal of tariffs and non-tariff barriers;
- Intensify their work in the creation of firms that can penetrate and effectively compete in global markets;
- Study the potential gains and losses of globalisation in order to position their economies strategically, and to lobby, where necessary, for compensation by major trading partners; and, finally
- Educate their citizens on the ways and means of tapping the benefits of globalisation for their countries.

Failure to make these necessary adjustments to the process of economic integration and globalisation, both of which appear to be beyond an individual country's capability to resist, will prove very costly to these economies in terms of competitiveness in the new economic environment, employment creation and retention, industrialization and, resulting from these factors, political stability.

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Chapter 16

Economic Prospects for Botswana: Policy Choices

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Introduction

Botswana has sustained high rates of economic growth over the years. This growth has in many respects been comparable to that of the East Asian Newly Industrialised Countries (NICs). This book indicates that the main catalysts for Botswana's economic growth have been twofold.

First, the Botswana state, through its public sector and parastatals, has played a pivotal role in the country's economic growth and development. Rapid progress in the economy owes much to the policies framed and implemented in the public sector, and to the commitment of the government to achieve the goals set in the development plans. In the current situation, the success of economic programmes depends on both the availability of resources and the pace of improvement of the absorptive capacity of various sectors of the economy. In this regard, Botswana's efforts should move forward on the twin roads of achieving greater economic efficiency and equity while maintaining a high degree of fiscal and financial discipline.

Second, Botswana's primary export sector, mainly the mining sector through diamonds, and to a lesser extent copper-nickel - and the agricultural sector (beef exports), have played a central role in Botswana's economic growth. This book has analyzed and discussed at length the nature and pattern of Botswana's economic growth and development in terms of progress made in the different sectors and policy choices for the future. The country will need to devise measures to ensure that the economy achieves a growth rate of about 7-8% per year for a sustained period and in a manner that generates more income and employment for the majority of her citizens. The country's macroeconomic policies need to be balanced appropriately to the concerns for rapid economic growth, stability and social equity.

The issues of social development, focusing on poverty, unemployment and human development in Botswana, are highlighted. In addition, the book discusses the economic policies that led to the country's economic transformation. In this concluding chapter, we briefly outline Botswana's current and future economic policy environment, and thereby highlight the policy options that would be relevant for the country's sustainable economic development and diversification in the context of the new international economic order.

Botswana and the Global Economy

Globalization is understood as a process in which the economies of the world are integrated through trade liberalization, the free mobility of resources, liberalization of capital markets, and the revolution in information and communications technology (ICT). These global changes have reduced the cost, while simultaneously increasing the speed, of communications across the

globe. Further, the revolution in ICT has abolished barriers of time and space, thus rapidly turning countries into borderless economies.

Botswana has chosen an export-oriented industrialization strategy. Under this strategy, trade policy allows for almost free entry and exit of goods and services into the country. This liberalization of trade is rapidly increasing because Botswana is party to several trade agreements and negotiations that are meant to achieve free trade. These include the Southern African Customs Union (SACU), which was first signed in 1910 and reconstituted into the New SACU in October 2000; the World Trade Organization (WTO), of which Botswana became a signatory in 1995; the EU-South Africa Free Trade Agreement, which was signed in 1999; the Southern African Development Community (SADC) Trade Protocol, which was ratified in 2000; and the on-going negotiations for the EU-SADC Free Trade Area and the USA-SACU Free Trade Area.

The above agreements and negotiations mean that Botswana and southern Africa will be increasingly integrated into the global economy between 2008 and 2012. These global trends will bring with them great benefits for Botswana, as the country's producers will freely access the EU and USA markets. At the same time, Botswana firms will face stiff competition as EU and USA exports, as well as firms from those countries, will freely access the Botswana market and that of the region. This therefore means that firms in the country will have to be fully adapted to compete internationally in terms of product quality and design as well as productivity and customer service.

Under the new economic environment, only countries that have strategically positioned their firms to effectively compete in the *global village* can survive the stiff competition that will emerge in the market and achieve the desired sustainable economic development and diversification. The section that follows outlines the major policy options that emerge from this book and which should help Botswana to achieve this desired objective.

Emerging Issues and Policy Options for Botswana

Issue No 1

Botswana's economic growth and development has been driven by the state. Thus Botswana has been characterized by a large public sector in which the state played the role of the largest employer, the largest financier and the major provider of education, public health and infrastructure. Under the new international economic order, there is a strong emphasis on the "Retreat of the State in Economic Affairs" and the need to "downsize" the public sector. While superficially this encourages the development of a weaker state, the process of globalization suggests that there is a greater need than ever before for a strong participatory state in a developing country like Botswana. The strong state is required for:

- The creation of a modern public service that has the capacity to generate and adapt new ideas while at the same time self-correcting and constantly modifying processes and behaviour within organizations and institutions;
- The creation of a strong and agile private sector that can compete both domestically and internationally on the basis of product design, quality and uniqueness, as well as on the quality of service;

- Ensuring that there is an adequate supply of trained labour with relevant skills to operate in a knowledge-based economy;
- Participating in the creation of fair and just rules that will govern the process of globalization, thereby ensuring that it does not reward strong and advanced countries while excluding and marginalizing weaker developing countries; and
- Ensuring that those who benefit most from the process of globalization, whether individual nationals or foreigners, or domestic firms or foreign-owned firms, willingly share their benefits with those who are marginalized by the process.

Issue No 2

Botswana has developed its export-oriented industrialization strategy under the shelter of high SACU external trade barriers that have long protected South African industries. In fact, Botswana's exports to and imports from South Africa continue to dominate its economy. The process of economic integration in the region and the globalization it entails will remove trade barriers and expose the country's firms to fierce competition with more efficient firms from the EU and the USA. Likewise, the general removal of trade barriers and the elimination of preferential treatment of developing countries' exports by the EU, the US and other developed countries is going to bring Botswana into direct competition with exports from China, the NICs and other high growth performers in East Asia. This therefore, means that, while the private sector in Botswana has enjoyed government economic incentives and a friendly macroeconomic environment over the years, these benefits are going to attract external rivals. Consequently, Botswana firms will need to strategically position themselves in the next four to ten years if they are to survive the imminent economic competition. Further, government will also need to expedite the preparation and implementation of the long-awaited competition policy if its industrial development and economic diversification objectives are to be realized.

Issue No. 3

While economic planning has been important for Botswana's sustained economic growth, the global shift towards the market economy, in which the private sector plays a dominant leading role, suggests that planning will increasingly lose its significance. Under this new economic environment, government will have to move towards *indicative planning*. This would involve identification of priority sectors that, from both the domestic and global perspective, are expected to be major engines of growth in the future. The private sector would then be encouraged, through financial and fiscal incentives, to develop such industries. Thus under the new economic environment, government would need to strengthen public-private sector relationships in the economy.

Issue No. 4

Identification of priority sectors under indicative planning should also influence the education sector. To this end, there should also be skills targeting to meet the human capital needs of the sectors that have been identified as current and future engines of growth. Botswana should find

its greatest resource in the people of the country. The full potential of the country's human resources has to be effectively utilised. High priority has, therefore, to be accorded to education. Government should aim to increase public spending on education, with the largest proportion of this spending earmarked for primary and secondary education.

Issue No. 5

Health is an essential element in the development process and a crucial input for improving the quality of life. Government should also increase public spending on health over the next five years, with more focus on primary health care. Universal immunisation programmes should be effectively implemented throughout the country to eliminate avoidable childhood diseases. The government should step up public investment in programmes that are meant to control communicable diseases. A special thrust should be given to the prevention of further spread of HIV/AIDS in the country. A national scheme of health insurance for poor families needs to be introduced. The government should take all steps to ensure the health of the public by strengthening family welfare programmes.

Issue No. 6

Women and children, particularly those belonging to poor households, are the most vulnerable groups in society, and need special attention from the government. Rural women should be encouraged to assume responsibility for all development programmes related to drinking water, sanitation, primary education, health and nutrition. There should be a major expansion in schemes for micro-finance based on self-employment of women, particularly in the drought and ecologically sensitive areas.

Issue No. 7

In the livestock sector, government should formulate a comprehensive National Livestock Policy, not only to attain qualitative and quantitative improvement in livestock and livestock products, and in feed and fodder resources, but also for a better interface between modern technologies of breeding, nutrition and health care.

Issue No. 8

The process of social and economic development in Botswana should be continued more vigorously in the coming years. This calls for speeding up economic reforms that contribute positively to the country's move into an era of rapid economic growth. Further reforms should be carried out in agriculture, industry and services. The reforms should have a human face and should ensure that the benefits flowing from such reforms reach the rural areas, where the majority of the country's population lives.

Issue No. 9

Botswana's macroeconomic environment has proved to be one of the best in the region. It has contributed significantly to the country's sustained economic growth. The processes of economic

integration, trade, financial liberalization and structural adjustment taking place in many developing countries will gradually make the macroeconomic environment similar among these countries. Consequently, the macroeconomic environment will no longer suffice to attract foreign direct investment. What appears to be of paramount importance will be microeconomic policies that address issues such as the efficiency of the banking sector, efficiency of the public sector, the provision of public utilities, land, factory shells, etc. Therefore, improving productivity and the quality of service to international standards will be critical for success in the new economic environment

Issue No. 10

Botswana has had many agricultural policies that were meant to improve productivity and achieve food security as well as alleviate poverty. While there has been some degree of success in this sector, especially in the cattle industry, the country remains a net importer of food. Much may be expected from NAMPAAAD because it aims to commercialize agriculture and bring its productivity levels to world standards. However, like its predecessors it continues to rely on rain-fed arable agriculture. For a semi-arid country like Botswana, a better route appears to be dry-land farming that is based on irrigation. Government should commit itself to accelerating the pace of agriculture and rural development. Public investment in agriculture should be stepped up significantly, with an emphasis on the poorer districts so as to substantially boost rural incomes and employment for the people.

Issue No. 11

Government should be aware of the dearth of employment opportunities for the youth. Government should adopt policies to expand employment opportunities by creating a climate conducive for investments in the organised sector. Along with expanding financial assistance facilities for small and microenterprises and self-employment activities, the services sector needs to be given all support to realise its full employment potential. The country should make use of all of its the human resources, especially the youth. To enhance the employability of the youth, systematic efforts should be made to include appropriate vocational training within secondary education, and to establish at least one industrial training institute in each district of the country through creative public-private partnerships.

Issue No. 12

Botswana's economic growth is mainly driven by capital intensive mining and land-intensive cattle rearing. Consequently, the country's spectacular growth has been accompanied by high rates of unemployment and high incidences of poverty. The country's efforts to alleviate poverty through employment creation, especially through industrialization, have not been very successful. Consequently, the main form of poverty alleviation has been through direct support such as government benefits to destitutes, orphans, the disabled, old age pension schemes and drought relief programmes. Thus one may say that Botswana has achieved economic growth with a human face. The only problem with the system is its sustainability, as it presently depends on the continued availability of revenues from the mining sector. Therefore, poverty alleviation through employment creation should remain the core policy to pursue in the long-run.

Issue No. 13

Botswana's efforts over the last 20 years to diversify the economy away from the mineral sector have not been much of a success. The share of manufacturing in real GDP has remained constant at an average of 6%. A major problem for Botswana is attempting to achieve economic diversification that is based on the country's comparative advantage. Since the country's comparative advantage is in minerals, cattle rearing and low-skill labour manufacturing, these sectors have continued to dominate the economy over the years. For a small developing country like Botswana, created comparative advantage seems to be a better way forward. This is the route used to achieve economic diversification by the NICs like Singapore. From a very low natural resource base, where the country only had a strategically located port and its human resource capital, Singapore has risen to be one of the most industrialized countries of East Asia.

Issue No. 14

Government, while recognising the importance of tourism as an important sector providing gainful employment to a wide spectrum of job-seekers, from the unskilled to the specialised, should plan to provide appropriate incentives to promote rural heritage, adventure and eco-tourism and to establish high quality tourist destinations.

Issue No. 15

Government should consider forming an Administrative Reforms Commission to prepare a detailed blueprint for completely revamping the public administration in order to make it more performance-oriented and accountable. While focusing on improving the quality of basic governance, "e-governance" should be promoted on a large scale in areas of concern to the common man. Government should ensure that its agencies operate in a responsive and accountable manner.

Issue No. 16

Government should follow policies and introduce programmes that strengthen Botswana's science and technology infrastructure. Science and technology development and application missions should be launched in key areas. The government should mobilise the skills and expertise of scientists, technologists and other professionals working in the country for institution-building and other projects.

Issue No. 17

The revival of industrial growth is of paramount importance. Incentives for boosting private investment should be revived and strengthened to attract more foreign direct investment. In this regard, the government should seriously reconsider the laws and procedures for obtaining work permits by foreign companies or individuals. Government officials in charge of this should be given the necessary training in order to be able to perform these duties judiciously and efficiently. There are indications that businesses are relocating to South Africa on account of non-renewal of business permits, or of long delays in issuing permits to intending business companies. This is an issue that may necessitate urgent remedial actions by the concerned

authority. Foreign companies in need of financial assistance should also be assisted by flexible banking regulations. Furthermore, Botswana's industry should be given every support to become productive and competitive. Competition, both domestic and external, has to be deepened across industry with professionally run regulatory institutions in place to ensure that competition is free and fair.

Issue No. 18

Government should think of establishing a National Manufacturing Competitiveness Council to provide a continuing forum for policy interactions to energise and sustain the growth of the manufacturing industry in Botswana. Manufacturing by small-scale entrepreneurs should be given greater technological, marketing and investment support. A major promotional package for the SMEs sector should be considered in the current plan.

Issue No. 19

Government should commit to a strong and effective public sector, whose social objectives are met by its commercial functioning. To achieve this, there is a need for selectivity and strategic focus. These can be achieved by devolving full managerial and commercial autonomy to successful, profit-making companies operating in a competitive environment. Privatisation has to be considered on a case-by-case basis. Chronically loss-making companies will either be sold or closed. Private industry should be brought in to turn around companies that have potential for revival.

Issue No. 20

Government should take measures to see that privatisation increases competition, not decreases it. We also believe that there must be a direct link between privatisation and social needs (e.g. the use of revenues generated through privatisation for designated social sector schemes). Public sector companies should be encouraged to enter the capital market to raise resources and offer new investment avenues to retail investors.

Issue No. 21

The rate of investment should be increased by orderly development and functioning of the capital markets in order to boost GDP growth. Foreign institutional investors should be continuously encouraged to invest in Botswana industries. The interests of small investors should be protected, and they should be given new avenues for safe investment of their savings. Large scale changes in the global trade environment have been witnessed in the last decade. Our share in global trade has risen at a very slow pace. Government should provide an atmosphere conducive to the rapid growth of the country's exports.

Issue No. 22

Government should take effective steps and strong measures to control the price hike of essential commodities. The government should work for the good of society, paying particular attention to the pressing needs of our rural population and lower income sections. The government should work sincerely to build a national consensus for strengthening economy and accelerating the process of social and economic development. Botswana should emerge as a major powerhouse of the evolving global economy in Africa and in the process also get rid of the chronic poverty and disease which still affect large sections of the population.

To sum up, Botswana has had the healthiest economic development on the African continent during the past decades. This has been achieved by pursuing prudent macroeconomic policies and accruing substantial financial reserves. The future prospects of Botswana to sustain its growth now depend on the ability of the economy to diversify its activities away from the mining sector. The sooner it achieves rapid economic diversification, the higher are the prospects to develop the economy to fulfil the Vision 2016 goals. The necessity of diversification is appropriate because Botswana's progress, despite an impressive track record, has not translated into a significant degree of socio-economic transformation. Over-dependence on diamonds, high unemployment levels and unacceptably high levels of poverty and inequality, both in terms of assets and income, are some of the serious concerns of the country.

In spite of more advanced market liberalisation, greater access to and reliability of infrastructural facilities such as telecommunications, transport and electricity in the country, the creeping effect of the HIV/AIDS pandemic raises serious concern about Botswana's economy and long term growth prospects. A substantial part of Botswana's human resources are being HIV infected, which influences negatively the country's productivity. Although the long-term cost implications of HIV/AIDS are unclear, it remains clear that HIV/AIDS is Botswana's foremost economic and social challenge. Its budgetary impact is likely to be very high over time - indeed health spending has already increased enormously in recent years. This may also result in the spending of the country's foreign reserves. Looking ahead, Botswana's medium-term growth prospects would depend on decisive action to contain the enormous social and economic costs of the HIV/AIDS pandemic. Achieving rapid and sustained economic growth in Botswana is now linked to a paradoxical situation, where the country should think of ensuring a high degree of economic diversification on the one hand whilst tackling the problems of the HIV/AIDS pandemic, poverty and unemployment, and income inequalities on the other.

Arconyms

AB	Air Botswana
ACP	Africa, Caribbean and Pacific
AERC	African Economic Research Consortium
AGOA	African Growth and Opportunity Act
ALDEP	Arable Land Development Programme
AMU	African Arab Maghreb Union
ARAP	Accelerated Rainfed Agricultural Programme
APPs	Annual Performance Plans
BAC	Botswana Accountancy College
BASLE	Bank for International Settlements
BBOS	Botswana Bureau of Standards
BBS	Botswana Building Society
BCA	Botswana College of Agriculture
BDC	Botswana Development Corporation
BDP	Botswana Democratic Party
BEDIA	Botswana Export Development and Investment Authority
BHC	Botswana Housing Corporation
BIDPA	Botswana Institute of Development Policy Analysis
BLDC	Botswana Livestock Development Corporation
BLNS	Botswana, Lesotho, Namibia and Swaziland
BLS	Botswana, Lesotho, and Swaziland
BMC	Botswana Meat Commission
BMVIF	Botswana Motor Vehicle Insurance Fund
BNPC	Botswana National Productivity Centre
BOB	Bank of Botswana
BOBCs	Bank of Botswana Certificates
BP	Botswana Post
BPC	Botswana Power Corporation
BPOPF	Botswana Public Officers Pension Fund
BR	Botswana Railways
BSB	Botswana Savings Bank
BSE	Botswana Stock Exchange
BOTEC	Botswana Technology Centre
BTC	Botswana Telecommunications Corporation
BVI	Botswana Vaccine Institute
CAMELS	Capital Adequacy, Assets Quality, Management, Earnings, Liquidity
CCA	Common Customs Area
CEDA	Citizen Entrepreneurial Development Agency
CIU	Collective Investment Undertakings
CMA	Common Monetary Area
COMESA	Common Market for East and Southern Africa

CPI	Consumer Price Index
CSO	Central Selling Organisation
CSO	Central Statistics Office
DDA	Doha Development Agenda
ECOWAS	Economic Community for West African States
EEC	European Economic Community
EPU	Employment Policy Unit
EU	European Union
FAP	Financial Assistance Policy
FCA	Foreign Currency Accounts
FDI	Foreign Direct Investment
FI	Financial Institutions
FII	Foreign Institutional Investors
FNB	First National Bank
FPE	Financial Public Enterprises
FTA	Free Trade Agreement
FTRS	Food Technology Research Services
GATS	General Agreement of Trade in Services
GATT	General Agreement on Tariffs and Trade
GDI	Gender-related Development Index
GDP	Gross Domestic Product
GEM	Gender Empowerment Measure
GFCF	Gross Fixed Capital Formation
GNP	Gross National Product
GSP	Generalized Systems of Preferences
HDI	Human Development Index
HIES	Household Income and Expenditure Survey
HPI	Human Poverty Index
HRD	Human Resource Development
ICT	Information and Communications Technology
IDM	Institute of Development Management
IFS	International Financial Service
IFSC	International Financial Services Centre
ILO	International Labour Organisation
IMF	International Monetary Fund
ISI	Import Substitution Industrialisation
JFE	Joint Facility for Electives
LDC	Least Developed Countries
LFS	Labour Force Survey
MALP	Matched Asset/ Liquidity Portfolio
MBE	Mineral-Based Economy
MCI	Ministry of Commerce and Industry
MEB	Marginal External Benefit
MFDP	Ministry of Finance and Development Planning
MFN	Most-Favoured Nation
NAFTA	North American Free Trade Agreement

ECONOMIC DEVELOPMENT OF BOTSWANA

NAMPAADD	National Master Plan for Arable Agriculture and Dairy Development
NBFI	Non-Banking Financial Institutions
NBFI	Non-Bank Financial Intermediaries
NDDC	National District Development Conference
NDP	National Development Plans
NEMIC	National Employment, Manpower and Incomes Council
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organisations
NIC	Newly Industrializing Countries
NMGDP	Non-Mineral Gross Domestic Product
NTB	Non-Tariff Barriers
OECD	Organisation for Economic Cooperation and Development
PE	Public Enterprises
PEEPA	Public Enterprise Evaluation and Privatisation Agency
REPS	Regional Economic Partnership
PF	Pension Funds
PMS	Performance Management System
PSRS	Performance-based Reward System
PDL	Poverty Datum Line
PRSP	Poverty Reduction Strategies Papers
PTA	Preferential Trade Arrangement
PDSF	Public Debt Service Fund
RADP	Remote Area Development Programme
RDC	Rural Development Council
RIP	Rural Industries Promotion
RMA	Rand Monetary Area
RNPE	Revised National Policy on Education
RSF	Revenue Stabilization Fund
RTB	Regional Trading Blocs
SACU	Southern African Customs Union
SADC	Southern African Development Community
SAFTA	South Africa Free Trade Agreement
SAP	Structural Adjustment Programmes
SBI	Sustainable Budget Index
SDR	Special Drawing Rights
SEDCO	Small Enterprise Development Corporation
SKIP	Sectoral Keynote Policy Papers
SLOCA	Services to Livestock Owners in Communal Areas
SME	Small and Micro Scale Enterprises
SMME	Small, Medium and Micro-Enterprises
SOE	State-Owned Enterprises
SPS	Sanitary and Phyto-Sanitary
SSA	Sub-Saharan African
TBT	Technical Barriers to Trade
TLGP	Tribal Lands Grazing Policy
TRIPS	Trade Related Aspects of Intellectual Property Rights

UB	University of Botswana
UK	United Kingdom
UNAIDS	United Nations Joint Programme on AIDS
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNIDO	United Nations Industrial Development Organisation
VDC	Village Development Committees
WMA	Wildlife Management Areas
WTO	World Trade Organization
WUC	Water Utilities Corporation

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Economic Development of Botswana - Facets, Policies, Problems and Prospects

With a per capita gross national income of about US\$ 3,430, Botswana has turned out to be one of Africa's success stories of sustained economic growth anchored by good governance, political stability and prudent macroeconomic management. Botswana was rated as one of the poorest countries in Africa at the time of independence in 1966. During a period of about three decades thereafter, the country managed to emerge as an upper-middle-income developing country, with per capita income growth averaging 8.4%. The country has built both public and parastatal institutions that have driven the process of economic growth.

Economic Development of Botswana addresses issues and policies relating to the major sectors and therefore the different aspects of the economy since Independence. The subject matter is presented in a fashion which makes it accessible to the interested non-specialist, while maintaining the degree of rigour necessary for students of economics as well as those with some training in economic theory. This has been achieved in 16 chapters written by 17 authors - 16 of whom are currently in the Department of Economics, University of Botswana, and one in the Research Department of the Bank of Botswana. The subjects covered in the book include:

- An overview of the Economy
- National Development Plans
- Macroeconomic, Financial, Fiscal, Monetary, Trade and Industrial Policies
- Roles of Public and Private sectors
- Agriculture and Rural Development
- The Mining Sector
- Poverty, Unemployment and Employment Creation
- Human Development Issues
- Issues of the Environment

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