

**THE IMPACT OF TOURISM ON
AGRICULTURE IN THE OKAVANGO DELTA,
BOTSWANA**

BY

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ABSTRACT

In recent years the use of tourism as a development strategy by third world governments has increased, resulting in the intersection of international tourism and local agricultural strategies. The aim of this thesis is to critically assess the impact of tourism development on local agriculture in the Okavango Delta in Botswana. More specifically, the study appraises the current state of tourism and agriculture in the Okavango Delta, assesses the social, economic and environmental effects of tourism development on the Okavango Delta and its communities, examines local agricultural production and consumption patterns, assesses the patterns of supply and demand of food in the region, and evaluates the impact of tourism on local subsistence agriculture, while making use of both qualitative and quantitative data sources.

The Okavango Delta region is faced with several socio-economic problems. These include high unemployment levels, unequal regional development, income inequalities and extreme levels of poverty. 'Rural-urban' migration by local subsistence farmers in search of formal employment opportunities has risen steadily since the early 1990s, resulting in unprecedented social changes to the inhabitants of the Delta, and the abandonment of traditional farming practices. This, together with the limited interaction between the local population and tourism industry, is increasingly leading to tension between local and foreign parties in the region. The large proportion of foreign owned tourist facilities and foreign investment results in major economic leakages, and the exclusion of Motswana from any form of meaningful participation in the tourism industry. The presence of foreign tourists in the Delta enforces the need for imports, increasingly damaging local agricultural production as both production and consumption becomes imported.

If tourism is to be of any benefit to the local population in the Okavango Delta, there has to be local involvement and ownership. The fostering of linkages between tourism and other sectors, particularly agriculture, is imperative in attempting to bring about socio-economic growth in this region.

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LIST OF ACRONYMS

ACP	African, Caribbean and Pacific Nations
AE 10	Agricultural Extension Fund NO. 10
ALDEP	Arable Lands Development Programme
ARAP	Accelerated Rainfed Arable Programme
BAMB	Botswana Agricultural Marketing Board
BLDC	Botswana Livestock Development Corporation
BMC	Botswana Meat Commission
CBNRM	Community Based Natural Resource Management
cbpp	contagious bovine pleuropneumonia
CJD	Cruetz-Jacobs Disease
CMW	Conservation and Management of Wildlife
CSO	Central Statistics Office
CSO	Central Selling Organisation
DWNP	Department of Wildlife and National Parks
EU	European Union
FAP	Financial Assistance Policy
GDP	Gross Domestic Product
HATAB	The Hotel and Tourism Association of Botswana
ITCZ	Inter Tropical Convergence Zone
IUCN	The World Conservation Union
KCS	Kalahari Conservation Society
MCD	Mad Cow Disease
MoA	Ministry of Agriculture
NAMPAADD	National Master Plan for Arable Agriculture and Dairy Development
NDP	National Development Plan
PDL	Poverty Datum Line
PSLE	Primary School Leaving Examination
SACU	Southern African Customs Union
SADC	Southern African Development Community

SLOCA	Service to Livestock Owners in Communal Areas
UBS	University of Botswana Students
WMAs	Wildlife Management Areas
WTO	World Tourism Organisation

DECLARATION

I, Phillipa Anne Harrison, REG. No. 972147803, hereby declare that the dissertation entitled, "The Impact of Tourism on Agriculture in the Okavango Delta, Botswana", is the result of my own investigation and research and that it has not been submitted in part or in full for any other degree or to any other University.

Pa Harrison
P Harrison

08/04/2003
Date

CHAPTER ONE

INTRODUCTION

1.1 Study Context

In a world of change, one constant over the last two decades has been the sustained growth of tourism both as an activity and an industry (Cooper *et al*, 1993). Human beings have migrated across the earth for millennia. Plate tectonics, feet and horses made for slow travel compared to the jet planes, motorcars and trains now in use. The earliest hunters, gatherers and nomads travelled with the seasons in search of land and wildlife to sustain themselves. This travel that stemmed from basic survival was very different from the travel we undertake today. Only during the past few decades have higher incomes and paid holidays in the North allowed great numbers of people to travel purely for pleasure and recreation, often to destinations in the South (McLaren, 1998).

Prior to colonial rule and the introduction of western political and economic systems, people in the Third World lived in relatively self sufficient communities in harmony with the natural environment. The social and economic structures of Third World economies changed with colonial rule. The new structures, consumption styles and technological systems became so incorporated into Third World economies that even after gaining political independence, the use of western values, products, technology and capital continued and expanded. Expensive infrastructural and agricultural projects were financed by the West in attempts to 'modernise' many Third World countries and in doing so made them more accessible as tourist destinations. Many viewed this as a continuation of neo-colonial exploitation (McLaren, 1998).

The transition of the Northern Hemisphere, from a rural to an industrialised society, the dramatic global growth of the middle class and a parallel increase in disposable income and leisure time following World War Two has made tourism the world's largest industry (Economist, March, 1991; McLaren, 1998). According to the World Tourism

Organisation (WTO), the worldwide tourism industry has annual revenues of almost three trillion dollars, and its economic impact is second only to that of the weapons industry. More specifically,

- “By 1989 tourism was the third largest household expenditure after food and housing in most industrial nations.
- The industry employs more people than any other industrial sector (more than 112 million people, or one out of every fifteen workers worldwide).
- Including lodging, transportation, and restaurants, the tourism infrastructure is worth three trillion dollars.
- The industry has invested nearly 360 billion dollars in new capital equipment” (McLaren, 1998, p. 13).

According to Torres (1996, p. 1), “...as tourists from the generally more developed ‘North’ have sought new and more exotic locations, governments in the generally less developed ‘South’ have welcomed them as a source of foreign exchange, investment, employment and economic growth,” therefore causing the Third World tourism industry to boom. National development plans are based on the assumption that the economic benefits of tourism will trickle down to stimulate other sectors of the economy, including agriculture (Ministry of Overseas Development, 1967). This assumption is based on the understanding that tourist-driven demand for greater variety and higher quality of food will encourage local farmers to both increase and diversify production of agricultural goods. Evidence, however, does not support this argument (Belisle, 1984).

Various studies, (such as Bryden, 1973; Belisle, 1984; Torres, 1996) reveal a different scenario developing where tourism generates increased food imports which both damage local agriculture and drain foreign exchange reserves (Belisle, 1984). Tourism can also successfully compete with agriculture for scarce resources of land and labour (Bryden, 1973). Furthermore, contrary to the belief of poverty alleviation and local multiplier effects, evidence suggests that most benefits from tourism in less developed countries accrue to transnational corporations, non-local entrepreneurs and governments (Bryden, 1973). Tourism centres can contribute to local poverty by serving as magnets for rural migration. Rural migrants in search of improved employment opportunities typically compete for a limited pool of low-paying jobs and end up living in squalid conditions on the resort periphery (Torres, 1996).

While tourism is an important source of revenue and job creation for many Third World economies, not all forms of tourism are good. As more and more tourists become interested in hard-to-reach 'frontier' destinations, those areas become popularized, and soon private industry takes over. Once an area is targeted for tourism development, the process of road building and the displacement of the local population begins. Communication systems and energy intensive accommodation for visitors are built. The roads and communications networks also provide other industries with access to cheap labour and natural resources. This cycle of development is occurring in small communities and villages throughout the world at an alarming rate, while many of these areas are considered the most important, biologically diverse regions on the planet. Tourism also tends to increase local reliance upon a global economy, leaking many economic profits outside of the community back to the companies and countries that control most of the travel infrastructure. At the same time, tourism can decrease dependence on local resources as technologies, food and health services are imported. Local people are often 'pushed out' and local prices for commodities and services rise, as do taxes (McLaren, 1998).

The government of Botswana, for example, is grappling with the task of developing a tourism policy that will maximize its goals of rural job creation, revenue generation from foreign exchange, conserve and protect wildlife, and be compatible with the cultural norms of its people. To date, the government has taken a strong conservation stand and has only marginally stressed increased tourism. However, the deteriorating national economic situation, exacerbated by drought and a subsequent decline in revenues from cattle raising, has prompted leaders to push for more tourism to compensate for economic losses (<http://www.lead.org...htm>).

Since independence in 1966, the government of Botswana has been determined to promote economic development as a way of improving the quality of life and living standards of its people. Botswana's current National Development Plan (NDP) identifies various natural resources on which the economy of the country is based: vast cattle ranges, a variety of presently exploited or potentially useful minerals and rich natural areas and wildlife habitats on which the tourism industry is based. Botswana contains significant open rangeland and some of the last great populations of wild animals in Africa. The NDP says "...they (the wildlife) represent a tourist attraction that

has yet to be fully exploited. Meanwhile, and more importantly, they make a contribution to the subsistence economy of the country.” (<http://www.lead.org...htm>).

Revenue from tourists is currently and potentially a significant source of income for Botswana. Some tourists use local safari companies, guides, lodges/hotels and restaurants that contribute to the local economy. Others, especially the ‘independent’ travelers who guide themselves and use their own vehicles are perceived to offer little benefit to the country, as they bring much of their own food with them, and use inexpensive camping facilities. The sale of recreational hunting licenses provides eighty-three percent of the central governments direct revenue from the Department of Wildlife and National Parks. These funds are used to protect and maintain national parks and wildlife reserves, provide veterinary services to sick or wounded animals, and pay local staff in the parks. Additionally, monies derived from the lease of land and hunting concessions accrue to local land boards, as do revenues from leases for business premises in small towns. This income forms an important part of revenue available for the development of local public services and amenities (<http://www.lead.org...htm>).

The Okavango Delta in Botswana, the focus of this thesis, presents a unique opportunity to study the impact of tourism on rural agriculture, to observe the negotiation and competition which occur between global tourism and local agriculture, and to review the inevitable transformation of local culture, economy and physical landscape (Torres, 1996). Britton (1982) highlights the point that “...when a third world country uses tourism as a development strategy, it becomes enmeshed in a global system over which it has little control” (p. 331). According to Torres (1996, p.2), “...many publications in the tourism literature attest to the widespread social, economic and environmental effects of the global forces of international tourism on local communities in both industrialised and developing nations”. From a disciplinary perspective, this has major geographical implications.

1.2 Geography and Tourism Research

The development of sustainable tourism is becoming an increasingly important global engine for economic growth (Hassan, 2000). As a result, more social scientists,

including geographers, are pursuing tourism-related research. Through the use of theories from both geography and related disciplines, geographers are able to focus on numerous issues relating to the tourism industry. Tourism has relevance within most geographic sub-disciplines such as cultural, environmental and rural geography. Within tourism, issues such as rural restructuring, processes of industrial concentration, and environmental impact and degradation are considered (Robson, 2002). These issues are also well established topics of research within the geographical discipline (Ioannides and Debbage, 1998).

Research needs to be undertaken in the field of geography to gain a better understanding of tourism related issues such as: What is the impact of global tourism development on local agricultural systems and communities? What factors prevent the development of linkages between international tourism and local agriculture in underdeveloped areas? And what possible measures exist for creating linkages between the tourism industry and local agricultural production in Third World tourist destinations? (Ioannides and Debbage, 1998). In this context the aim of this study is to examine the impact of tourism on agriculture in the Okavango Delta in Botswana.

1.3 Rationale for the Study

In many ways, Botswana has had one of the most intense, and most successful, economic development experiences among sub-Saharan nations in the post-colonial era. This development has largely depended on mining and cattle, and has been export driven (Valentine, 1993). Recently, due to concerns regarding the diminishing returns of extractive industry, environmental costs, and the vulnerability of the cattle industry to both importers' decisions and disease, tourism has played an increasingly important role in planning for Botswana's economic future (Lilywhite and Lilywhite, 1991). Many other developing countries both in sub-Saharan Africa and elsewhere also see tourism as a sustainable and environmentally sensitive way to earn foreign exchange as well as provide relatively large numbers of skilled and unskilled jobs and infrastructural development (Hitchcock, 1991; Young, 1995).

Agriculture in Botswana is of great economic importance to both local farmers and the GDP of the country as a whole. If linked together, tourism and agriculture are two

sectors that have the potential to stimulate rural development, and help improve the distribution of economic benefits to the local people. Botswana has the potential to create a thriving local agricultural sector and international tourism ventures that compliment and benefit each other. There is, therefore, a great need for research to be done on this tourism/agricultural sector of the economy, which will not only be of benefit to Botswana but many other developing countries throughout the world.

1.4 Research Methods

Over the past two decades tourism has come to be regarded as one of the world's largest industries. Both private and public sectors worldwide are increasingly paying attention to the national and regional social, economic, environmental and political impacts of tourism development on host communities. The tourism literature tends to focus on the benefits of tourism growth to a host region, such as job creation, the generation of foreign exchange, infrastructural development and the growth of intersectoral linkages (Hall, 1994). However, numerous studies noting the failure of the development of the predicted intersectoral linkages, reveal a different scenario, in which tourism generates increased food imports, contributes to local poverty through encouraging rural-urban migration, and leads to the social and environmental degradation of host communities and regions (Torres, 1996).

Various methods, ranging from simple estimates to complex mathematical models are used to determine the social, economic and environmental impacts of tourism. Tourism studies tend to differ greatly in regards to the focus and accuracy of tourism impacts. Many reports oversimplify and misinterpret research findings, creating a distorted and incomplete image of tourism's social, economic and environmental impacts (Stynes, 1992).

Research methodology is concerned with the planning, structuring and carrying out of research in such a manner as to be considered scientifically sound. It is a form of decision-making in that researchers must make choices on factors such as: the most appropriate theory available for investigating the research problem; the generation of research objectives regarding the study subject; the methods of data collection to be

used; the data analyses techniques; and the linkage and interpretation of the findings back to the original study problem (Mouton and Marais, 1990).

There are substantial methodological problems encountered in undertaking research on tourism. These problems lie in the multiplicity of potential frameworks available for research analysis. A lack of clearly articulated or agreed upon methodological approaches to tourism studies can create an intellectual and perceptual 'minefield' for researchers, particularly as the value position of the research will have enormous bearing on the results of any research (Hall, 1994).

Hence, in order to comprehend the social processes at work within the tourism-agriculture relationship, it is essential to consider the research within the theoretical frameworks available for data analysis and theory building (Sadler, 1993). The theoretical framework section of this thesis (Chapter Two) explores the theories which will be considered in the analysis of data and development of social, economic and environmental conclusions.

1.4.1 Aim and Objectives

The aim of this thesis is to assess the impact of tourism on local subsistence agricultural production in the Okavango Delta in Botswana. More specifically, the objectives of this thesis are to:

- i. Determine and analyse the patterns of agricultural production and distribution, tourism development, infrastructure development and rural migration in the Okavango Delta region.
- ii. Determine the impacts of tourism development on local agriculture in the Okavango Delta. This will include an examination of changes in land use and labour, rural income, trade, consumption patterns, demographics, agricultural production and infrastructure developments.
- iii. Assess tourist demand for food, ability of resort to meet that demand, and the importance of food type to the tourist when visiting the Okavango Delta region.
- iv. Evaluate past and present agricultural structures in the Delta in order to determine what is required to develop and maintain a successful agricultural

- venture. This will help determine requirements needed to improve the existing tourism/agriculture relationship.
- v. Study patterns of rural migration in the Okavango Delta region. Analyse the social changes that result from this migration (such as changes in household structure, income, gender-based division of labour, farming systems, education, consumption patterns).
 - vi. Determine the local marketing and distribution patterns present in the Delta, and how these impact on the importance and availability of local produce to the tourism industry.
 - vii. Identify possible solutions to strengthening the relationship between tourism and local agriculture in the Okavango Delta, with specific regard to presenting viable alternatives in which local agriculture will benefit from tourism.

1.4.2 Critical Questions to be Answered in this Study

- i. What impact does global tourism development have on local agricultural systems and communities?
- ii. What type of demand and supply of fresh produce is present for the tourism industry in the Okavango Delta.
- iii. What factors prevent the development of a local agricultural goods supply to the tourism industry in the Okavango Delta?
- iv. What alternative possibilities exist for developing a link between the tourism industry and local agriculture in the Okavango Delta?

1.4.3 Tourism Indicators

The linkage between a Third World tourism industry and local, subsistence agriculture is very complex. It involves the interplay of foreign tourists, businesses, Third World environments, local production and marketing systems and local farmers. Hence, a range of tourism indicators, or selected pieces of tourist information should be considered in attempting to gauge the relationship between rural tourism and local agriculture (Smith, 1995). Quantitative indicators such as tourist arrivals, local agricultural production figures, job creation, foreign ownership and rural-urban

migration figures are examples of indicators that may be used to determine the local tourism-agriculture relationship (Smith, 1995).

The following indicators will be considered in this thesis:

- i. The number of tourists, and the nationality of the tourists visiting the area. This provides a means to determine the demand placed on local resources and an estimate of foreign exchange generation.
- ii. The local crop and livestock production figures. This provides a means to determine changes in agricultural production practices.
- iii. The local economic indicators such as, local employment figures, average monthly incomes, contributions of tourism to provincial and national GDP, and tourist expenditure figures. This provides a measure of tourism contribution to the economic growth and development of the host region and local community.
- iv. The general ownership of tourism related facilities by foreign parties, which provides a means of determining the degree of foreign control of the industry, and the leakage of tourism revenues out of the region.
- v. The degree of rural-urban migration by the local population, which provides a means to determine the social impacts of tourism development.

1.4.4 Study Area

The Okavango Delta is situated in the Ngamiland district in the northwestern corner of Botswana, forming part of the international boundary between Botswana and Namibia. Ngamiland district is geographically the third largest in the country, with a total land area of 109 130 square kilometers. The Okavango Delta fluctuates in size, but tends to occupy approximately 15 000 square kilometers during its peak flow season (Figure 1.1; Figure 1.2; Figure 1.3), (Ndubano, 2000).

The major economic activities in the district include tourism, subsistence agriculture, handcrafts and small to medium scale industries. The district's headquarters, Maun, contains the region's supportive infrastructure, and is the commercial town and focal point for tourism and its related activities such as the production of handcrafts and tourist souvenirs (Ndubano, 2000).

**Figure 1.1: Map of Botswana
Showing Okavango Delta Region**

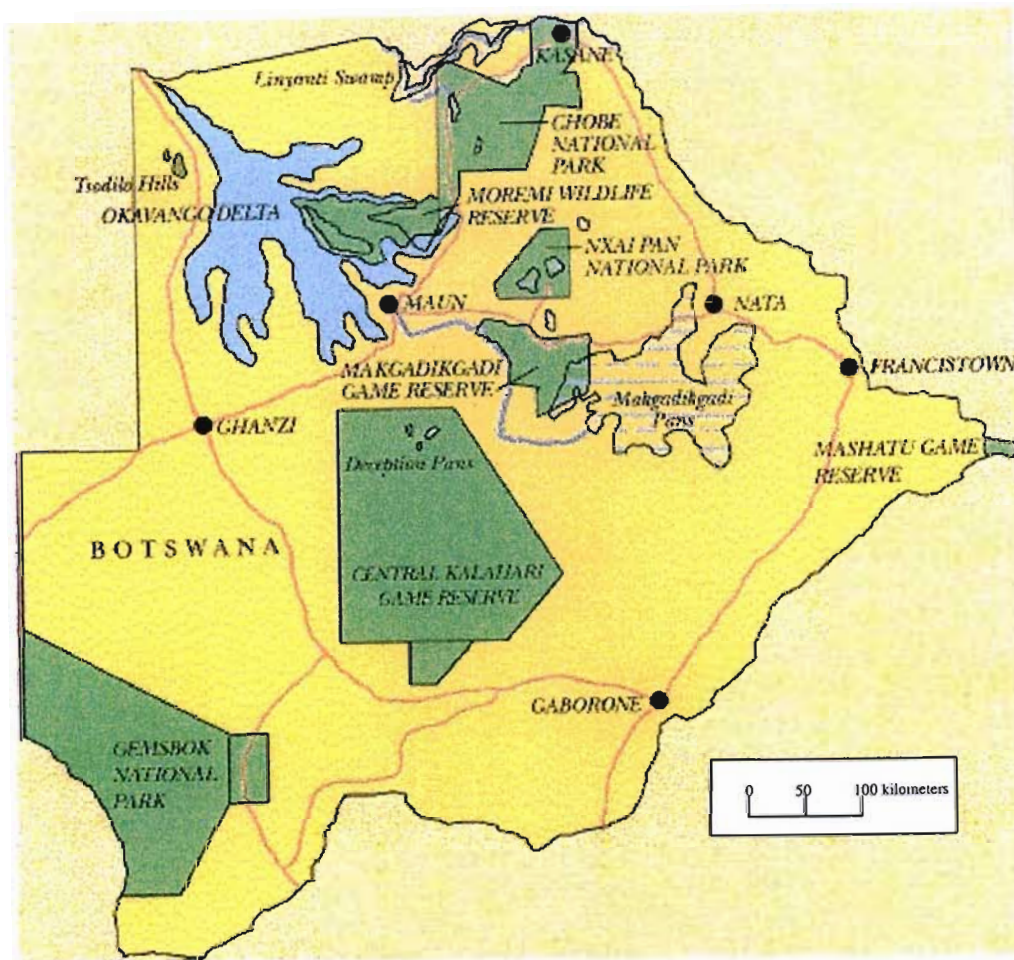
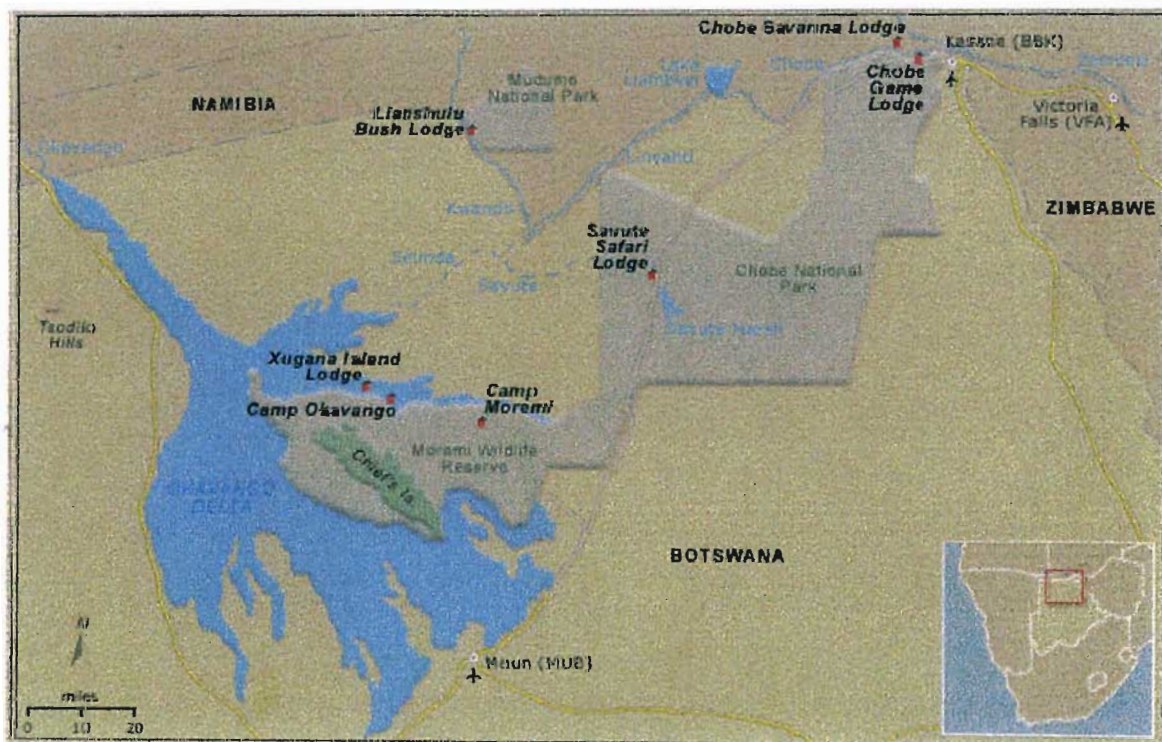
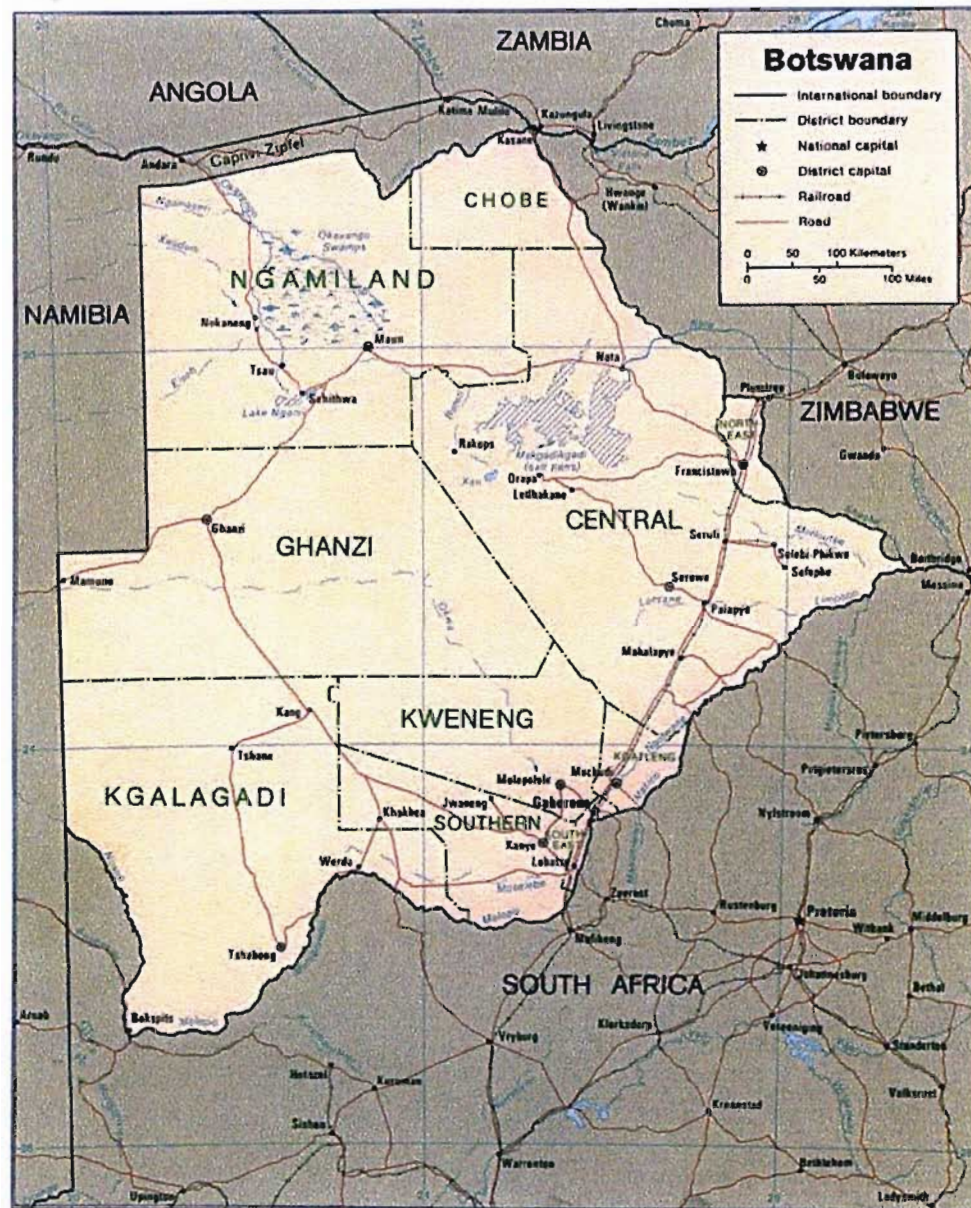


Figure 1.2: Map of Okavango Delta



**Figure 1.3: Map of Botswana
Showing Districts**



1.4.5 Data Sources

This thesis will utilise both qualitative and quantitative research methods, which will aid in providing a comprehensive understanding of tourism and agriculture in the Okavango Delta. Qualitative research within the field of tourism involves qualities of human behavior as qualitative methodologies are humanistically or behaviourally orientated, and attempt to portray reality from the ever-changing world of the subject (Ferriera, 1988). Geography tends to require both quantitative and qualitative research techniques in that it involves the study of human interaction with the geographical environment, and hence is not numeric or consistent.

Several sources of information can be used in the obtaining of data for research such as documentation, archival records, interviews, direct observation and the collection of physical evidence such as artifacts (Yin, 1989). In this these, both primary and secondary data form key evidence sources. Primary data consists of tourism research reports, government papers and official documents, statistical bulletins and qualitative interviews with key participants in the tourism industry in the Okavango Delta.

1.4.5.1 Available Data Research

Available data research occurs when the researcher uses statistical and other data collected by an additional party, that was not fully analysed and exploited by the original data collectors due to differing fields of study (Veal, 1997). The use of available data tends to be undertaken extensively by social scientists in that, due to the costs and time required to conduct original field studies, many scientists view the use of available data as a means to economise on such costs, time and manpower (Hall, 1994).

Document sources for data used in this thesis include:

- i. Documents obtained from the Central Statistics Office (CSO) in Gaborone, Botswana, The Kalahari Conservation Society (KCS); the Department of Wildlife and National Parks (DWNP), and the Ministry of Agriculture in Gaborone, Botswana.

- ii. Non personal documents such as the financial records of tourist accommodation facilities in the Okavango Delta.

The use of available data assists researchers in studying subjects to which physical access is impossible. Unlike experiments and surveys, available data can be studied over a long period of time and they tend to cost less than large-scale surveys.

Problems with the use of available data include the fact that much of this information is written for commercial purposes, and hence tends to be biased and, at times, exaggerated (Bailey, 1994; Limb and Dwyer, 2001).

1.4.5.2 Qualitative Interviews

Qualitative interviews are an important part of research in that they provide the personal insight of key sector participants on issues relating to the research topic (Yin, 1989).

The use of qualitative interviews has a number of advantages in that they are flexible, allow for spontaneity in responses, and enable anonymity for respondents. However, interviews are also costly (travel), time consuming, often biased and inconvenient (Bailey, 1994; Hoggart *et al*, 2002).

Interviews in the form of structured questionnaires were conducted with the following sectors between April 2001 and April 2002:

- i. Local inhabitant survey: A map depicting the Okavango Delta region was used to locate the larger towns of Maun, Shakawe, Etsha 6, Sehitwa, Tsau and Mohembo. A total of 18 households in each of these towns was selected randomly, with one member of each household informally interviewed with the aid of an interpreter. Therefore a total of 18 local inhabitants was interviewed in each of these towns in the Okavango Delta.
- ii. Tourist survey: A map depicting the Okavango Delta region was used to locate the major tourist areas of Maun, Shakawe, Moremi National Park and Etsha 6. A total of 400 structured questionnaires was randomly distributed to tourists

staying in each of these four areas, with 237 mailed responses received. Hence there was a response rate of 59 percent.

- iii. Tourist accommodation survey: The Okavango Delta contains 60 hotels, lodges and safari camps in the area. Structured questionnaires were distributed to 57 of these facilities, with responses received from 53 of the managers. Hence, there was a response rate of 88 percent.
- iv. Retail company survey: There were 14 retail companies in Botswana that were identified as being the primary suppliers of food to the tourist facilities in the Okavango Delta region. Structured questionnaires were distributed to all 14 of these companies, with a 100 percent response rate experienced.

1.4.5.3 Secondary Data Sources

Book, journal and magazine articles, were used extensively to provide a broad overview of the global tourism-agriculture relationship.

1.5 Structure of Thesis

The structure of this thesis is as follows:

- Chapter One provides an introduction to the study and presents the methodology used in this thesis. It provides a brief description of the study area, the aims, objectives and critical questions to be answered in the thesis, and the methods and approaches undertaken.
- Chapter Two presents an in-depth investigation into the theoretical concepts relating to tourism and its economic, social and environmental impacts on rural economies and communities. It provides a general overview of the concept of tourism, exploring the various definitions available, and reviews tourism as an industry. It also examines the various economic, social and environmental impacts of tourism on a host region, with specific reference to the impact of tourism on agriculture within a global context.
- Chapter Three provides a broad overview of tourism and agriculture in Botswana. It provides background information on the tourism and agricultural

industries in Botswana, and focuses more specifically the Okavango Delta region. It provides demographic characteristics, socio-economic profiles and critical challenges facing this region.

- Chapter Four evaluates the impact of tourism development in the Okavango Delta, and the resultant decline in the subsistence agricultural sub-sector. Issues affecting the growth of the agricultural sector in this region are also addressed.
- Chapter Five presents the evaluations, recommendations and conclusions to the study.

CHAPTER TWO

Tourism and Development: A Review

2.1 Introduction

Tourism expanded on a grand scale in the 1960s in western industrialised nations and later in developing countries. Most of the developing nations see it as a new opportunity to secure foreign exchange and stimulate economic growth (de Kadt, 1979). The introduction of carefully managed tourism strategies can lead to a series of economic and social benefits for host communities in the less developed world (Ioannides, 1995). Tourism is considered an activity essential to the life of nations because of its direct effects on the social, cultural, educational and economic sectors (Murphy, 1985).

This chapter presents a broad overview of the various definitions and concepts of tourism. It reviews the positive and negative effects that tourism development has on host destinations, concentrating on its impact on developing nations. The growth of tourism as a world-wide industry has led to an increase in the globalisation phenomenon. This chapter therefore considers the concepts of globalisation and development with specific reference to tourism. It lastly presents a broad review of the impacts of tourism on agriculture.

2.2 Definitions of Tourism

According to the Department of Environmental Affairs and Tourism of the Republic of South Africa (1996), tourism creates opportunities for the small scale entrepreneur, promotes awareness and understanding among different cultures, aids in the promotion of an unique informal sector, creates economic linkages with agriculture, small scale manufacturing and curios (art, crafts and souvenirs), establishes links with service sectors (such as health, entertainment and banking), and provides employment opportunities. International tourism is transforming previously closed societies of

insular, “inward-looking” states into an open universal society where contact between people becomes a daily reality. It satisfies a deep need for exchanges and encounters with other cultures. Tourism plays an important role in countless peoples lives and it is arguably one of the most influential phenomena in the economic and social development of our society (Vellas and Becherel, 1995).

Tourism is viewed by social scientists and academics from numerous perspectives and therefore, a range of definitions for the concept has been developed. According to Hunt and Lane (1991), defining tourism is problematic. One of the first definitions of tourism was suggested in 1942. It states that “(T)ourism is the sum of the phenomena and relationships arising from the travel and stay of non-residents, in so far as they do not lead to permanent residence and are not connected with earning activity” (Perez and Jose, 2001, p. 1). Some hold the view that tourism is a service industry that takes care of visitors when they are away from home. Others restrict the definition of tourism to the distance away from home to include overnight stays in paid accommodation or travel for the purpose of pleasure or leisure. All these views and definitions however, fail to address the issue of business travel, which often include aspects of leisure activity (Holloway, 1994).

Alternatively, Gunn (1994, p.4) believes that tourism “encompasses all travel with the exception of commuting”, and that it is more complex than just a service industry. According to McIntosh and Goeldner (1986, p.ix), “(T)ourism can be defined as the science, art and business of attracting and transporting visitors, accommodating them, and graciously catering to their needs and wants”. Furthermore, the concept that tourism is interactive and may be defined as “...the sum of the phenomena and relationships arising from the interaction of tourists, business suppliers, host governments, and host communities in the process of attracting and hosting these tourists and other visitors” (McIntosh and Goeldner, 1986, p. 4).

Nash (1989, p.37) views tourism as “...a form of imperialism – a dichotomy of have and have nots with lesser developed countries serving the pleasures of more developed countries”. Shanes and Glover (1989, p.2) state that “the service experience of tourism is a social experience, and as such involves human interaction whose nature or form is determined by the culture or cultures of the interacting individuals”. Smith and Eadington (1992) provide the simplest definition of tourism yet,

by stating that “(T)ourism is in fact a significant social institution” (p. xiii). While conceptualizing tourism in its entirety is difficult, academic interest in the subject has not been halted by the lack of an accepted, official definition. These definitions of tourism are fairly broad and therefore do not encompass the characteristics of international tourism and eco-tourism in their entirety.

2.3 International Tourism

Since the end of the Second World War there has been an unparalleled growth in the number of tourists visiting exotic destinations around the world. There has also been a persistent spread in the spatial extent of activity and the resultant emergence of new tourist destinations (Williams, 1998). According to the World Tourism Organisation (WTO) (1994), international tourism (as measured in tourist arrivals at foreign borders) during the 1950s involved about 25 million people worldwide – a figure that was no larger than the number of domestic holidays taken in Great Britain at the same time. However, by 1994 international tourism had risen to an estimated 528 million arrivals. It is also estimated that there will be around 937 million international arrivals by the year 2010 (Erkkila, 1994). The expansion of international tourism has been almost continuous, reflecting not just the increasing popularity of foreign travel but more importantly, the centrality of tourism within the lifestyles of modern travelers (Williams, 1998).

International tourism can be considered an export industry, and therefore may provide unparalleled opportunities for earning foreign exchange. It is little wonder then, that since the 1960s, international tourism has often been seen as a dynamic engine for economic development in both high and low income countries (Schaller, 1996). According to Gamble (1989, p.2) international tourists can be defined as “people who, mainly in the pursuit of pleasure, cross a frontier and stay at least 24 hours in a foreign country”. About 80 percent of international tourists originate from North America and Europe, both rich, industrialized nations (Williams, 1998).

Higher incomes, the provision of a wide number of retail outlets (travel agencies at which foreign travel may simply be arranged and purchased), the development of package tours and the commodification of foreign travel, the provision of good-quality,

low cost accommodation and transport, and the provision of local tour and holiday guides who liaise between visitor and host, have given millions of people the opportunity to comfortably travel to foreign destinations (Ward, 1997; Williams, 1998; Robson, 2002).

2.4 Eco-tourism versus Mass Tourism

During the 1970s, after several decades of rapid growth, mass tourism began attracting the attention of geographers, anthropologists and sociologists. They challenged the view that upheld mass tourism as a development tool and argued that tourism maintained an unequal relationship rooted in western imperialism (Schaller, 1996). Extensive leisure time, a result of urban metropolitan societies, fostered tourism as a pervasive social phenomenon, and therefore metropolitan production centres dominated the creation and control of tourist areas, which are often in underdeveloped areas (Lea, 1988; Nash, 1989; Limb and Dwyer, 2001).

Recently, researchers have begun to examine how local communities can control and benefit from tourism activities in their area. During the 1980s, governments, communities and scholars began to show interest in alternative forms of tourism. These were given in a wide variety of names: nature tourism, soft tourism, responsible tourism, green tourism, eco-tourism, but all were seen as alternatives to mass tourism. Among these numerous terms, eco-tourism has become prominent, though a consistent definition of the concept does not exist (Schaller, 1996; Robson, 2002).

If eco-tourism is to be recognised as a legitimate sector of the tourism industry, it must be defined to universal satisfaction. In its broadest terms it refers to tourism that is based on the natural environment, but that seeks to minimise harmful impacts, and better still, attempts to promote conservation (Ward, 1997). According to the Mundo Maya corporate manual, eco-tourism can be considered as passive. It seeks to "...co-ordinate, assist and stimulate cultural and environmental tourist development, recognising the importance of conservation and maintenance of local cultural heritage and the natural resources of the region for present day and future generations (Mundo Maya, 1995, p. 7). According to this definition, the tourists make no active contribution towards conservation, but instead simply seek to minimise the damage caused by their

presence (Ward, 1997). Panos (1995, p.4) defines eco-tourism, as an "...industry which claims to make a low impact on the environment and local culture, while helping to generate money, jobs and help the conservation of wildlife and vegetation. It claims to be responsible tourism which is ecologically and culturally sensitive".

As eco-tourism's goals become more progressive, it is "...widely promoted as a win-win development strategy for underdeveloped rural areas" (Place, 1995, p. 162). It has however, also come under harsh criticism. As Butler (1990, p.41) highlights, some wonder whether it isn't a "...Trojan horse, which in fact penetrates further into the personal space of residents, and may cause political change in terms of control over development, to a greater degree than does mass tourism". Others question whether the tourist traffic, which eco-tourism brings to sensitive wilderness areas, damages the environment more than it helps to conserve it (Smith, 1992). For every researcher who suggests that income from eco-tourism can promote and maintain protected areas, there are others who criticize the ideology of eco-tourism (Boo, 1990; Schaller, 1996). Daltabuit and Pi-Sunyer (1990) state that the concept of environmentalism (and much of eco-tourism) is identical to that of nationalism in that it legitimises interventionist policies. They note that "...it is a short step from external direction (by foreign experts), to a process of appropriation, by which the physical environment, and within it human societies and historical remains, become subtly redefined as global patrimony – universal property" (Daltabuit and Pi-Sunyer, 1990, p. 10).

According to numerous scholars, the solution to such concerns is local control. Tourism ventures in low-income countries have typically been enclave resorts, but by scaling down production processes and returning control to local units of governance, eco-tourism can potentially avoid economic leakages, minimise negative impacts and concentrate the benefits locally (de Kadt, 1992). However, with or without local control, some scholars believe that eco-tourism inherently has negative impacts (Schaller, 1996). While some studies suggest that eco-tourism may inspire locals to preserve or even revive traditional arts and customs, other researchers question whether such cultural conservation is beneficial (Schaller, 1996).

2.5 Tourism as an Industry

When reviewing the concept of tourism in its entirety, the term 'travel industry' needs to be examined more closely. As Williams (1998, p.6) states, "...there are problems inherent in the definition of tourism as an industry, even though there are clear practical advantages in delineating tourism as a coherent and boarded area of activity". It has been argued that defining tourism as an 'industry' establishes a framework in which tourist activity and its associated impacts may be measured and recorded and, more critically, provides a form of legitimisation for an activity that has often battled to gain the strategic recognition of political and economic analysts (Williams, 1998). Tourism in practice is an opaque area and the idea that it may be conceived as a distinctive industry with a definable product and quantitative flows of associated goods, labour and capital has in itself been a problem (Hoggart *et al*, 2002).

Generally an industry is defined as a number of firms engaged in the manufacture of a given product or service. In tourism however, there are numerous products and services, some tangible (provision of accommodation, entertainment and the production of gifts and souvenirs), others less so (creation of experience, memories and social contact). Often the firms that service tourists also provide the same service to local inhabitants who do not fall into the category of tourist. Tourism therefore cannot be considered an industry in any conventional sense. It is in reality a collection of industries, which has varying levels of dependence upon visitors, a dependence that changes through both space and time (Williams, 1998).

Tourism should thus be regarded as more of a system, than an industry. According to Mill and Morrison (1985), the tourism system has four parts: origin, travel, destination and marketing. Origin is the decision made by tourists on the type of travel that will fulfill their basic needs. The second element of the system is the attention given to when, how and where to travel. These decisions are usually determined by social, psychological and economic characteristics (Mill and Morrison, 1985, Hoggart *et al*, 2002). In recent years developing countries have become important tourist destinations.

2.6 Tourism in Developing Countries

The 1960s can be viewed as the point in time in which developing countries were experiencing the political and social climate suitable for the introduction of large scale tourism projects as part of national strategies for economic development. Developing countries with struggling economies began to take note of the mass-tourist 'phenomenon' that was sweeping through the western developed world (Cater, 1992).

Governments in developing countries have opted for development policies favouring tourism as an industry with the possibility of increasing economic growth by generating foreign currency. At the same time, the demand for holiday destinations in the developing world has increased steadily as tourists are increasingly attracted to hot climates with exotic cultures. It is, however, only during the past decade or so that developing countries have been acknowledged as popular tourist destinations, especially for European and North American tourists. But the relative success of the introduction of large scale tourism into some of the most unspoiled areas on the planet must be considered in terms of their present and potential economic, social and environmental costs and benefits (Ward, 1997).

2.7 The Costs and Benefits of Tourism to Host Destinations

Despite the various altruistic and well-meaning reasons often put forward to support the case for tourism development (such as its social and environmental benefits), it is the economic advantages that provide the main driving force behind tourism growth (Cooper *et al*, 1993). In assessing the economic impacts of tourism, the level of economic development of the destination area, the nature and degree of foreign ownership of tourist facilities, the employment of indigenous labour, the provision of infrastructure by the government, and the type of tourist are the key elements that should be considered (Ryan, 1991).

Over the past few decades many economies throughout the world have experienced growth in their service sectors, even when the more traditional agricultural and manufacturing sectors have been subjected to stagnation or decline. Tourism is a service-based industry and therefore has been partly responsible for this service-sector

growth. The service-sector is responsible for about 40 percent of gross domestic product (GDP) in developing countries, and more than 65 percent of GDP in developed countries (Cooper *et al*, 1993).

2.7.1 The Economic Benefits of Tourism

The economic benefits of travel and tourism to a host destination can be either direct or of a secondary nature (Schneider, 1993). The first economic benefit worth noting is the capacity for international forms of tourism to earn foreign currency and to positively influence a country's balance of payments account, (which is the net difference between the value of exports and the cost of imports). With the world tourism 'trade' presently valued at around US \$ 320 billion annually, the potential for tourism to influence the accumulation of wealth in developing regions is considerable (Ryan, 1991; Williams, 1998).

A second advantage of tourism is its ability to bring about economic regeneration and provide support for marginal economies through diversification. Evidence of this exists within numerous rural economies. For example, in areas such as Wales, Devon and Cornwall in Britain, less profitable hill farm economies have been widely sustained by the development of farm holidays and tourist activities such as fishing, riding, shooting, bed and breakfasts businesses and camping (Williams, 1998).

Thirdly, various economists hold the view that an advantage of tourism is its ability to attract inward investment to finance capital projects. Even though the industry is still dominated by small-scale local firms, there is a movement towards greater levels of globalisation in the organisation of world tourism and the development of large-scale international and multinational operators, each with the ability to move significant volumes of investment to new tourism destinations. These firms are distinctive not just due to the way in which they have extended their horizontal linkages (where firms merge with, or take over other companies operating in the same sector), but more specifically through the development of vertical linkages in which, for example, an airline purchases or develops its own travel company and takes on the ownership of hotels. An example of such a firm is the Grand Metropolitan Group, which has

ownership in international hotels, holiday camps, travel agencies, package tours and restaurants (Williams, 1998).

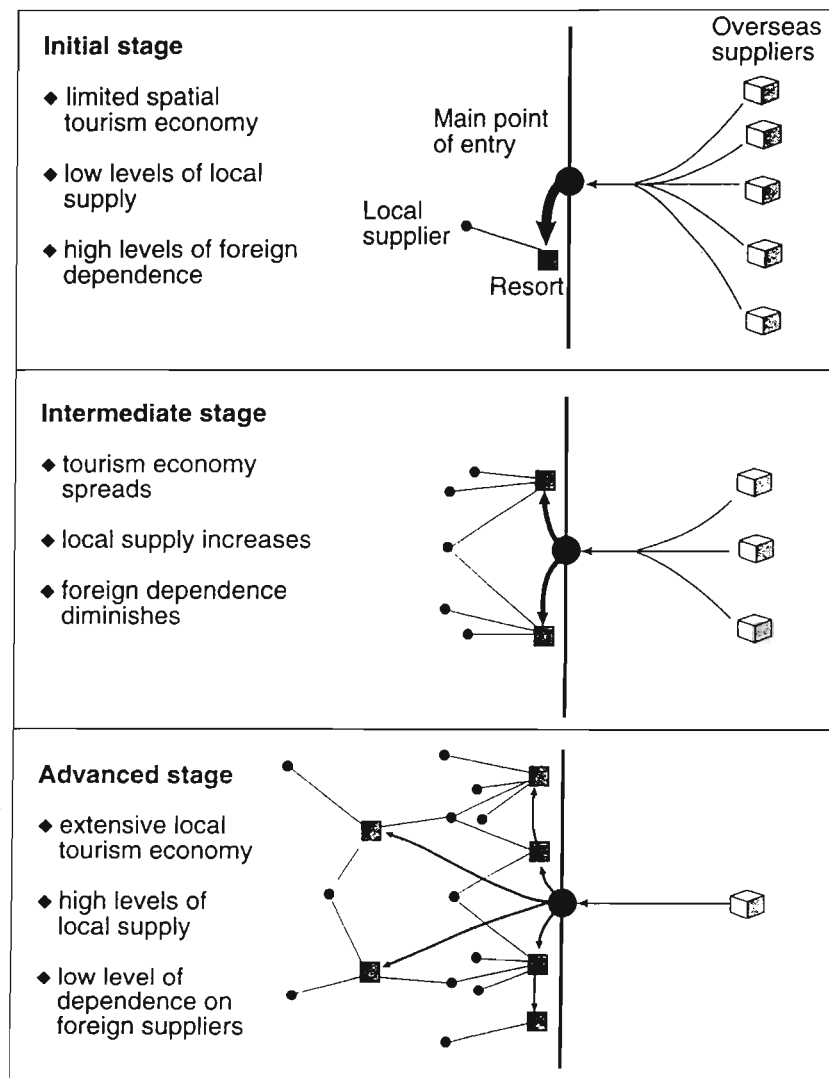
In developing nations, the role of foreign investment in creating a tourism industry through, for example, hotel and resort construction, can be an essential first step, out of which an indigenous industry may eventually develop. Without the aid of foreign investment, start-up capital may not be available locally. Even though profits from foreign-owned firms will tend to leak-out of the economy, local taxation on tourists and their services can provide funding to assist in the formation of new indigenous firms and key infrastructure development (roads, water and power supplies), around which the further expansion of tourism may then be based (Williams, 1998).

Fourth, tourism may bring about development through the encouragement of new economic linkages and increase the gross domestic product (GDP) of an economy. Tourism's contribution to GDP will vary greatly according to the level of diversity and the number of linkages within an economy. In a developed country, tourism's contribution to GDP is generally quite small. For example, in the United Kingdom, the share has usually been about 1.0 to 2.0 percent. However, in developing nations, which lack economic diversity or which, through remoteness, have limited trading patterns, the contribution of tourism to GDP can be substantial (Williams, 1998).

In less developed countries, the lack of linkages from the tourism industry with other industrial sectors within the economy poses a major problem. Through the development of a link between the tourism industry and other service and industrial sectors, a country can decrease its dependency on imports and minimise leakages of income out of the economy. The economic feasibility of numerous industries ranging from handicrafts to local agricultural production must be investigated, and those industries that have potential should be encouraged and supported through the provision of grants and loans. Quotas and tariffs should also be placed on imported goods that can be produced locally, which will provide more incentives for the use of local goods and services (Mill and Morrison, 1985).

The mechanisms by which tourism development may generate new-firm formation and the development of new linkages are complex, but may be explained with the aid of a model. Figure 2.1 reflects a scenario in a less developed country in which, at an initial

Figure 2.1: Tourism Development and the Formation of Economic Linkages



Source: Adapted from Lungren (1973).

stage, local provision of goods and services is limited and the industry is highly dependent on foreign and overseas suppliers. After some time, there is an increase in the number of tourism businesses, and they become more widely spread. Profits (or expectations of profit) spread through the local economy, and existing or newly formed local firms begin to take up some of the supply market. This results in the levels of foreign dependence diminishing as these local linkages emerge. Finally, a mature stage is reached in which a broadly based local tourism economy has been created with developed patterns of local supply and minimal dependence on foreign suppliers (Williams, 1998).

2.7.2 The Multiplier Effect

The measurement of the economic impact of tourism on rural economies is far more complicated than just calculating the level of tourist expenditure. In attempting to quantify tourism's contribution to the economy of an area, the multiplier effect must be considered (Cooper *et al*, 1993).

The original concept of the multiplier is taken from the ideas of R. K. Kahn and John Maynard Keynes, as developed in their seminal works of the 1930s (Ryan, 1991). The possible contribution of tourism development to the wider formation of economic growth, inter-firm linkages and the generation of income is often assessed through what is termed the multiplier effect. Multipliers attempt to measure the effect of tourist expenditure as it re-circulates within a local economy. Tourist spending is originally introduced as direct payment for goods and services such as accommodation, food, local transport, and souvenir purchases. In turn, the providers of these services re-spend a percentage of their tourism receipts in, for example, making their own purchases, in payment of wages of employees, or in taxes to local government. These transactions form further flows of income and extend the indirect linkages of tourism well beyond the immediate core of the tourism industry (Williams, 1998).

The aim of multiplier analysis is therefore to establish the impact generated in any given tourist destination, for every dollar that is spent on the tourist product (Alex, 1997). The multiplier concept is summed up in its simplest form by Eadington and Redman (1991). The "greater the amount of local/regional resource utilisation, and the

lower the proportion of imported goods that enter into local consumption and production expenditures, the higher the multiplier" (p. 52).

The multiplier process can be divided into three levels of effect. Firstly, a direct effect, which is the original injection of revenue into the local economy by the tourist, for example, through the payment of a hotel bill. Secondly, an indirect effect, which consists of a second wave of spending by the recipients of initial expenditures, in purchasing the goods and services required by the tourists. An example of such spending is the purchase, by the hotelier, of local goods for the hotel restaurant. Thirdly, an induced effect, which consists of further spending by the beneficiaries of the direct and indirect effects, on goods and services for their own consumption. An example of such spending is the purchase of clothing by the hotel waiter (Williams, 1998).

Multipliers are usually expressed as a ratio in which the predicted increase in income associated with a unit of currency is stated. Therefore, a multiplier of 1.35 would indicate that for every \$1 spent, a further \$0.35 is generated by the indirect and induced effects. However, the scale of the multiplier will fluctuate, depending upon the extent of development within the economy, the type of tourism and the degree to which the local economy can supply the tourism industry from its own resources and, hence, the extent to which the leakage effects may be minimised (Williams, 1998).

2.7.3 Creation of Employment

One of the most notable direct advantages of tourism is that of public and private employment (Mathieson and Wall, 1982). However, the number of jobs generated by tourism, the type of skills that are required and the type of worker that is needed must also be considered (de Kadt, 1979).

Tourism employment can be classified into three levels. Firstly, that of direct employment in businesses that market goods and services to tourists, such as hotels and restaurants. Secondly, that of indirect employment resulting from tourist expenditures in activities such as manufacturing and wholesaling that supply goods and services to tourism businesses. Examples of indirect employment are present in

construction, and agricultural and manufacturing industries. The extent of indirect employment available is determined by the level of integration of the tourism industry with the rest of the local economy. Therefore, the greater the level of integration, the greater the level of indirect employment. The third level of classification consists of investment-related employment found in construction and other capital goods' industries (de Kadt, 1979).

In the initial stages of tourism development most jobs are held by people from the immediate area. As tourism grows and the facilities increase, migrants can become a large part of the local labour force. This often occurs when resorts are placed in sparsely populated areas where little or no tourist activity has previously taken place (de Kadt, 1979).

Tourism not only creates jobs and business opportunities directly related to travel, such as hotels and attraction establishments, but it also helps diversify and stabilise the local economy. Tourism tends to create new employment opportunities in the host community and therefore influences migration patterns in two chief directions. It aids in retaining citizens who would migrate away, particularly unemployed or underemployed youths in economically marginal areas. Secondly, it also attracts outsiders who are seeking economic opportunity or employment and who often originate from other divisions of the economy, particularly agriculture. Tourism may also aid in attracting additional industry to the community, thus creating new and increased economic opportunities and jobs (Schneider, 1993). Cohen (1954, p.76) states that tourism "...encourages new economic activities in ancillary services and thus indirectly creates new opportunities for economic mobility among the locals".

One of the most noted impacts of tourism on employment opportunities is the creation of a new division of labour between the sexes and within the household. Young women now have the opportunity to secure jobs in tourist services such as hotels or in the production of crafts and souvenirs for the market (Schneider, 1993).

2.7.4 Negative Economic Impacts of Tourism

Although it is regarded as being kinder to the environment than most other industries, nature based tourism has been criticized for its detrimental physical and social impacts on host regions (Boo, 1990; Dearden, 1991; Zurick, 1992). While tourism can contribute vastly to a community in terms of economic, social and environmental activity, it can also bring negative consequences. A number of these problems are economically related (Schneider, 1993).

The tourism industry is seasonal and therefore employs people on a temporary or part-time basis (Schneider, 1993). Tourism employees are usually laid off work during the low season. As a result, the tourism industry cannot provide secure, meaningful jobs for many local residents, and their bargaining power for better wages and conditions is reduced (Blank, 1989; Williams and Shaw, 1991). The residual effects of underemployed or unemployed people for the remaining 'non-peak' seasons create an economic drain on the town's welfare support systems (Schneider, 1993). In addition to tourism employment being seasonal and part-time, the industry creates low-quality and low paid jobs that do not help workers, especially women, escape their nearly unbreakable cycle of poverty. Also, tourism employment offers few or no benefits, provides very little advancement possibilities, and requires only low level, or no entry skills (Martha, 1993). This criticism is particularly relevant for small rural communities, where tourism is often the economic mainstay and major employer (Blank, 1989; Martha, 1993).

In determining the contribution of tourism to the creation of employment, the type and stage of the tourist destination needs to be considered in that, the number of jobs available, their nature and who is employed will vary throughout the growth, decline and rejuvenation of the tourist resort. Large international hotels and resorts generally, create more jobs than smaller local ones, pay higher wages and generate more foreign exchange. However, they also tend to import more, have less linkages with the local sector, and provide few entrepreneurial opportunities for the local community (Harrison, 1992).

Despite the various economic benefits of tourism, researchers have become more and more skeptical about the industry's real contribution to the economic development of destination areas. Since the early 1970s analysts have increasingly highlighted the point that the earlier guarantees of tourism multiplier effects have not materialised in most Third World destinations. The predominant form of traditional, western-oriented mass tourism that has been established in so many less developed countries makes demands for services and products that can rarely be manufactured locally due to many of these destinations having extremely narrow resource bases (Ioannides, 1995). This results in the tourism industries of many less developed countries relying heavily on imported foreign foods, liquor, furniture, air conditioners, and building materials, which lead to high leakages of capital and a reduction in the balance of payments (Wilkinson, 1989).

Tourism is both a labour intensive, as well as a capital intensive industry, and creates external costs which tend to escalate as the industry develops. These include operational costs for research, promotion and personnel, as well as educational costs associated with the training of service employees, business owners and community residents (Hudman and Hawkins, 1989; Schneider, 1993). However, most developing countries have insufficient capital available to support the development of tourism. To address this problem governments often reduce the cost of tourism investment by granting exemption from taxes on the costs of capital goods, granting public subsidies which reduce investment costs, offering tax incentives, which make interest on capital investments tax-deductible (especially on foreign capital), enabling losses to be written off for the purpose of tax levied on tourist activities and, taxing incentives for foreign investment in tourism (Hudman and Hawkins, 1989).

There are several economic concerns of importance to a rural community when it shifts its focus from agriculture to tourism. These include the following:

- Tourism requires a greater number of employees per household than agriculture in order to result in similar payroll incomes.
- Tourism requires a less skilled labour force than agricultural production.
- As employment opportunities move from food production to tourism, employees must absorb the increased costs of housing, transportation and recreation.

- Tourism seems to require more public infrastructure per employee than agriculture.
- Indirect employment generated by tourism investment is 23 percent lower than that produced by agriculture.
- The degree of foreign ownership in a community is another economic concern (Schneider, 1993, p. 78).

2.7.5 Social Benefits of Tourism

During the 1950s and 1960s many proponents of international tourism, including the United Nations, saw the industry “as a powerful motor for global integration” (Enloe, 1993, p. 31). A number of the industry’s advocates saw tourism as a means of promoting a melting pot of intercultural understanding and encouraging political stability (Varetal, 1994).

Not only is tourism a matter of economics and income, it is also a social issue since tourism requires that community residents share their hometown with outsiders. Numerous social advantages exist for a community that has a tourism industry. It facilitates a cultural exchange between hosts and the visitors, and brings new ideas for improvement to the community. This can modify or improve local attitudes towards their culture. In fact, there are cases in Ireland where tourism supported the survival of an almost extinct form of folk art, and also stimulated a renewed interest in developing new art styles of considerable artistic merit, for retail to tourists (Schneider, 1993).

Secondly, tourism can encourage civic involvement and pride within a community. In some instances it has fostered increased cohesiveness and activated stronger protection of traditional culture. Tourism revenue can help to support community facilities and services, such as a local recreation facility, that the community might not otherwise be able to support (Schneider, 1993).

It has been suggested that education in developing countries, at the post-primary level, has expanded partly due to an increase in tourism. The expansion of tourism increased the demand for educated, literate and skilled personnel from both the public and private sectors. An example of this is the emergence of a middle class of skilled

artisans, traders, civil servants, teachers and transport services due to tourism. Furthermore, as social mobility increases, achieved indicators of status such as education, occupation, linguistic ability, overseas travel, and dress will displace the traditional birth-ascribed values of skin colour and family birthright in traditional developing and agricultural communities (Schneider, 1993).

2.7.6 The Negative Social Impacts of Tourism

The investigation into the physical effects of tourism shows that cultural differences between the tourist and the hosts underlies much of the environmental damage. Tourism may create crowding, congestion and pollution, as well as social and cultural changes in destinations or host communities (Schneider, 1993; Martha, 1993). The cultural changes are numerous. Firstly, traditional work patterns in the host community are disrupted by tourism development. This is especially evident in rural areas, where people leave agricultural and other traditional jobs for those in the tourism industry. This can result in a change in the time of day one works. Under traditional agricultural practices, the work is done during daylight hours, while in the tourism industry work during night hours is often required (Martha, 1993).

Some cultural changes due to tourism are not as readily apparent, such as changes in eating habits of the host culture (Martha, 1993). For example, eating habits changed in the Kingdom of Tonga, a Polynesian island country. Food is imported for the tourists due to the belief that tourists prefer familiar food. Even though many tourists enjoy the local fruits and bread, few would be content for long on the relatively bland Tongan diet of yams, taro and fruit. Furthermore, native Tongans are favoring the imported foods over their traditional diets and this competition negatively affects Tonga's agricultural industries, because demand for locally grown food has decreased (Martha, 1993).

The 'demonstration effect' is another direct social impact, caused by the development of tourism in rural areas. This occurs when tourists influence changes in the behaviour of host communities. Tourism cannot be exported to consumers, the consumers must visit the destination to experience the tourism product, and in doing so they act as a stimulus for social change (Cooper *et al*, 1993).

Tourists do not have to come into direct contact with the host community for social impacts to occur. New employment opportunities, brought about by the growth of tourism will result in social change. Additionally, the provision of new forms of communications, transport and infrastructure, for tourism development, will also influence this process of social change. These impacts are considered to be 'indirect social effects' and are evident within many sectors of economic development, not just tourism (Cooper *et al*, 1993).

An increase in income levels, from the creation of employment for the local population within the tourism industry, and the spread of the monetized sector, will alter traditional consumption patterns. Such changes, if they include consumer durables such as television and radio, will expose the host community to a wider range of wants, and speed up the process of social change. These effects may be viewed as 'induced social impacts' (Cooper *et al*, 1993).

The severity of the social impacts resulting from tourism development will be dependent upon the difference in socio-cultural characteristics between hosts and guests (Cooper *et al*, 1993). It is suggested by Inskeep (1991) that these differences include the following:

- Basic value and logic systems
- Religious beliefs
- Traditions
- Customs
- Lifestyles
- Behavioural patterns
- Dress codes
- Sense of time and budgeting
- Attitudes towards strangers

Tourism development may also lead to changes in the arts and crafts of the host culture. Tourism, firstly leads to a resurgence of local art forms. This increased demand can lead to a mass production of the art, a lowering of its quality and value, and the loss of its meaning to the artisan. The traditional music of a host culture can also be negatively affected in the same way by tourism development (Martha, 1993).

The language of the host community, if different from that of the tourists, is affected. Language is one way in which the host community can remain distinct from the visitors. However, the language of the hosts will inevitably change to accommodate the tourists. Also, members of the host society who learn the language of the tourists are more employable and valuable to the tourism industry (Martha, 1993).

According to Allen and Hamnet (1995), compared to the absolute poverty of the majority of individuals in a Third World host community, the tourists seem extremely affluent, which is usually manifest in their appearance and behavior. Dressed in “designer fashions, wearing expensive watches and jewellery and sporting the latest in hi-tech photographic equipment, they (the tourists) frequent luxury hotels and expensive restaurants. The price of even one meal in such establishments is likely to be more than a local will be paid in one month” (Allen and Hamnet, 1995, p. 207).

Some researchers even go as far as describing tourism as ‘whorism’ and blame the sector for dismantling traditional communities and promoting undesirable lifestyles including prostitution, drug addiction and crime (Erisman, 1983). Thailand stands out as a prime example of a destination that has thrived on the proliferation of sex tourism. Today, Bangkok has thousands of brothels, massage parlors, and go-go bars employing an estimated four hundred thousand prostitutes (Kelly, 1993). This in turn has led to a proliferation in sexually transmitted disease, including HIV/AIDS in the country, which is a direct result of the expansion of the tourism industry.

Finally, in attempting to understand the socio-cultural impacts of tourism development on host communities, the following index, drawn up by Doxey (1976) may be considered to be useful:

- i. The level of euphoria: This is the initial thrill and enthusiasm that comes with tourism development. At this stage the tourists are made to feel welcome by the host community.
- ii. The level of apathy: This occurs once tourism development is under way and expansion has taken place. At this stage the tourist is taken for granted, and is now seen as a source of profit taking. Contact is now on a more formal basis.
- iii. The level of irritation: This occurs as the industry approaches saturation point. The host community can no longer cope with the number of tourists without building additional facilities.

- iv. The level of antagonism: At this stage the tourist is seen as the bringer of all ills, and hosts are antagonistic towards tourists. Tourists are now regarded as being there to be exploited.
- v. The final level: At this stage the hosts have forgotten what attracted the tourists in the first place, and in the rush to develop tourism, the attraction has been changed.

2.7.7 Crime

The safety and security of a travel destination are of the utmost importance for a successful tourism industry, as violence and crime against tourists negatively affect its development (Ryan and Kinder, 1996). Many tourists choose their holiday destinations based on the safety and security of the area. Therefore, destinations that are known to contain high levels of crime are most likely to experience difficulty in retaining their tourism industries (Pizam *et al*, 1997).

According to Mathieson and Wall (1982) tourists are often victims of crimes because:

- They are 'tempting targets,' in that they carry large amounts of money and other items of wealth, such as photographic equipment.
- They often participate in risky behaviour such as visiting nightspots at late hours, wandering into remote and unfamiliar areas, and consuming alcohol and drugs.
- Tourists are usually ignorant of local languages and local customs and cultures, and are therefore insensitive to the accepted social behaviour of the destination area.
- They carry notions of safety and law-enforcement based on their experiences at home.

According to researchers such as McPheters and Stronge (1974), Mathieson and Wall (1982) and Milman and Pizam (1988), there is evidence to suggest that tourism contributes to an increase in crime. This may be due to the generation of friction between the host population and tourists, which can manifest itself in criminal activities. In addition, tourists can become targets for criminals, and situations are created where

gains from crime may be high, and the likelihood of detection minimal (Mathieson and Wall, 1982).

2.7.8 Environmental Benefits of Tourism

In recent years, an increasingly coherent and integrated approach has been adopted to strive towards harmonic development of both economy and ecology (Nijkamp, 1992). As Goodall and Stabley (1992, p.61) state, "...the challenge is to find an acceptable level and pattern of development, which is compatible with the maintenance, or even enhancement, of the environment". Since tourism is an economic activity, it will inevitably effect the environment, especially at the destination level. The "environment is a core feature of the tourist product. Tourists are therefore consumers of the environment, travelling to producers locations, the tourist destination, in order to consume the product" (Goodall, 1992, p. 60).

The environment is perhaps one of the most important contributors to the desirability and attractiveness of a destination. Scenic sites, amenable climates and unique landscape features have an unquestionable influence in tourism development and the spatial distribution of tourist movement. Consequently, sustainable development (which can be defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Eber, 1992, p. 1)) is needed to preserve the environment as an asset for the tourism industry (Buhalis and Fletcher, 1992). Therefore, as Mathieson and Wall (1982) state, there should be a symbiotic relationship between tourism and the environment.

Once the environment is recognized as an asset to the tourism industry, a growing need for its preservation becomes apparent. Tourism development is thus dependent on the environment, and necessary measures should be taken in order to maintain, and even improve, the quality of a destination's natural resources. Hence, "the conservation and preservation of natural areas, archaeological sites and historic monuments have emerged as important spillover benefits of tourism. In turn, the protection of these prime resources enhances and perpetuates tourism by maintaining its very foundation" (Mathieson and Wall, 1982, p. 97).

National tourist organisations also recognised the importance of natural resources for continued tourism activity and therefore concentrate on preserving and enhancing attractions. This may lead to the adoption of a number of administrative and planning controls, and the initiation of several projects. It can therefore be said that "tourism provides the incentive for 'cleaning up' the overall environment through control of air, water and noise pollution, littering and other environmental problems, and for improving environmental aesthetics through landscaping programmes, appropriate building design controls, and better building maintenance" (Inskeep, 1991, p. 343).

Additionally, most tourists themselves are becoming increasingly environmentally conscious. Apart from the alternative forms of tourism, in which isolated and unspoiled natural settings are visited, the trend for 'green considerations' is emerging in the mass tourism market as well (Buhalis and Fletcher, 1992).

The "protection, conservation, renovation and transformation of historical and heritage sites, monuments, and buildings has also been stimulated by tourism activity. As tourists express their demand for these sites, they help finance their preservation" (Buhalis and Fletcher, 1992, p. 5). Numerous existing attractions, throughout the world, would never have survived without contributions from the tourism industry (Mathieson and Wall, 1982).

Tourism can also stimulate the creation of natural parks, and conservation units. As a direct result of the tourism industry, on a global scale, millions of plants have been planted and wild animals and rare and endangered species protected (Mathieson and Wall, 1982).

Lastly, the increasing demand for an unspoilt and protected environment is leading to an attitude change within the tourism industry. Tourists are becoming less and less prepared to spend their holidays at crowded, spoilt and unhealthy destinations. This trend has helped local people realise the importance of conservation to the economic success of tourism (Inskeep, 1991). As a result, the preservation of natural environments is a prime consideration for the entire tourism industry and the bodies which regulate it (Buhalis and Fletcher, 1992).

2.7.9 Negative Environmental Impacts of Tourism

Even though tourism has done much to conserve fragile ecosystems and provide unique natural opportunities for many, it also brings several environmental disadvantages with it (Ioannides, 1995). The increasing tourist demand placed on Third World destinations, especially during the peak tourist period, cannot normally be satisfied by the limited natural resource base in a host area. Hence, a number of problems are generated (Buhalis and Fletcher, 1992).

Some of the most common environmental problems that arise from tourist development include damage to various ecological elements, such as wildlife habitats and flora, which often constitute the tourism heritage of the host country (Vellas and Becherel, 1995). Tourism development can cause extinction and irreversible environmental damage. It is noted, for example that "...there are more plant and wildlife species indigenous to Hawaii that have become extinct, or are now considered endangered, due to resort development" (Schneider, 1993, p. 79). Tourism may also degrade the quality of sensitive natural or historic sites. The excessive concentration of high-rise hotels along beach-fronts, the building of durable walkways, stairs, lighting, lookout points and informal areas for tourists, and the destruction of historical monuments through vandalism and theft can adversely influence the image of these historic and natural places of interest (Schneider, 1993; Vellas and Becherel, 1995).

However, as Gunn (1994) points out, it is unfair to lay the blame for environmental damage entirely on the tourist sector without first trying to understand why this problem has arisen. Gunn (1994, p.243) states, that although large numbers of visitors to a fragile ecosystem will certainly lead to depletion, "...most environmental damage is caused by a lack of plans, policies and action to prepare for any economic growth". A common problem is that those who tend to benefit the most from tourism development, such as developers, usually refuse to be held accountable for their projects' environmental externalities, such as pollution of rivers, seas, lakes and ground water by the discharge of impure water and sewage from coastal resorts (Ioannides, 1995; Vellas and Becherel, 1995).

Ecologically sensitive sites, such as wildlife habitats, are not the only areas that may experience damage through tourism development. Tourism can also be responsible for degrading valuable agricultural land through reducing it into property for recreational purposes, and modifying land values and usage in areas surrounding such developments (Schneider, 1993). For example, with the growth of the tourism industry in the Okavango Delta in Botswana, much traditional agricultural and grazing land was converted into wildlife sanctuaries, and tourist resorts and lodges, resulting in the displacement and migration of many traditional communities.

Even though the impacts of tourism development on the environment are debatable, it can be stated that "tourism development always changes, sometimes degrading or even destroying, the very qualities of an area that made it attractive to its first tourists" (Martha, 1993, p. 218).

2.8 Tourism's Role in Development

Tourism has been adopted by many Third World countries as a means to generate development and economic growth (Cooper *et al*, 1993). Tourism is often viewed as a development strategy that may be of help to the strained economies of many of these countries. This is due to the increase in demand for international travel to Third World destinations, which can promote foreign exchange earnings to bring about economic growth (Mill and Morrison, 1985).

Even though tourism has been promoted by numerous scholars, governments and international organizations as a path to development, for most countries it is only one option among a wide range of alternatives, and hence, not all countries have the same interest in tourism (Williams and Shaw, 1991). In fact tourism development itself is a policy choice. It has been discouraged in some countries, prioritised in others and, encouraged in most. The management of tourism in a country is also a reflection of its level of economic development, in that this affects the type and features of the industry (Liu, 1998).

Even though most countries have similar objectives for tourism development, such as national income and foreign exchange generation, job creation, regional development,

economic diversification and natural and cultural heritage preservation, the actual importance and priority of the objective tends to vary between developed and developing countries. The most notable difference in objectives between the two groups is that tourism in industrialized countries can be viewed as mainly a social activity, with economic consequences, while in developing countries, tourism is generally an economic activity with social consequences (Jenkins, 1980; Liu, 1998). Most Third World countries regard the development of tourism as a means to bring about economic growth and diversification, and the generation of foreign exchange. In industrialised countries, the main consideration in developing tourism is the social pressure of meeting the demand for travel from the local population (Liu, 1998).

In supporting tourism development, a government may take various measures, ranging from fostering a favourable climate for private investment through regulations that guarantee economic stability, to actively providing investors in tourism with considerable incentives. However, the nature and extent of the involvement is varied across nations and is determined by a host of factors including, a country's history, the level of development, the political system, and the size of the tourism industry. It can therefore be noted that the less advanced a country's economy, the greater the role played by the state in the tourism industry (Liu, 1998).

Developing countries are generally characterised by a scarcity of capital and advanced technology, an inadequate infrastructure, a small and weak private sector and minimal experience in tourism development. As a result, the state has to be more actively involved in tourism, and has a wider range of functions. Besides supporting and regulating the industry, governments have also become both developers and managers, bridging the gap that often arises from a weak and inexperienced private sector. The governments therefore assume not only mandatory and supportive roles, but managerial and developmental ones as well (Jenkins, 1982; Liu, 1998).

The involvement of foreign capital and expertise in tourism development in Third World nations is also closely related to its economic level. Even though the 'raw materials' for the industry, such as sun, sea, wildlife, and scenery are already present, the provision of international-standard tourist services requires large capital and technology inputs, which are often beyond the reach of many developing countries. International tourism, at present, has its economic base in industrialised western countries, which are largely

dominated by transnational corporations. Therefore, developing countries that wish to expand their tourism activities are generally obliged to negotiate with transnational tourism corporations (Ascher, 1985; Liu, 1998). As Liu (1998, p.28) states, '...these corporations not only have diversified experience of international tourism, the technical and human resources to design, produce and manage tourist facilities, commercial access to the tourist-generating markets and to worldwide information and management systems, but also identify and develop tourist resorts'. Thus, "...for many developing countries, a tourist destination will flourish only to the extent the transnational tourism corporations promote it and make it develop" (O'Grady, 1982, p. 23).

International tourism, as a strategy for development and growth, can be a positive force, but it is also widely criticised since it is often associated with a dependency on external sources of capital and expertise (de Kadt, 1979). Less developed countries, wishing to use international tourism as a development strategy, often look towards foreign aid as a means of securing income to finance the initial stages of tourism growth.

2.9 Foreign Aid

Many developing countries use tourism as a leading foreign exchange earner. However, many of these countries have to import food and beverages, management, equipment and construction materials, and the ownership of tourist facilities is often foreign. As a result, the contribution of income generated by tourism to a country's GNP is relatively small (Burkart and Medlik, 1981).

Due to the high levels of dependency by developing countries on foreign aid, imported materials, food and drink, large debts are usually incurred during tourism development, which have to be repaid with interest. Many hotels and lodges in Third World destinations are also owned and operated by foreign parties, who send a proportion of their profits home. All these factors contribute to a leakage of income, from the local economy, back to industrialised countries (Vellas and Becherel, 1995).

These leakages can be minimised by using locally produced goods, and replacing foreign workers with locals. However, in many developing countries, including Botswana, it is not possible to prevent the use of imported goods, since the agricultural and manufacturing industries cannot produce the range of products required to sustain an international tourism industry (Vellas and Becherel, 1995).

The development of a Third World tourism industry is, to varying degrees, reliant upon foreign investment. However, the essential component, which may determine the success of tourism in an area, is the degree of public and private investment in the industry.

2.10 Investment

Tourism development requires significant investment since a large proportion of the capital outlay is spent on fixed assets, such as land and buildings. Hence, for the development and expansion of tourism, large-scale investment from a public or private source is essential. In most developing countries, much of the initial investment is provided by the state, since the private sector is generally weak and inexperienced and unable to provide the necessary capital (Robinson, 1976; Liu, 1998). In an attempt to attract private investment, an adequate tourism infrastructure, and a favourable investment climate must be provided by the state. Private investors often require fast returns on their initial capital outlay. In order to address this the state may provide special financial incentives such as subsidies, credits and preferential rates on interest. Many Third World governments attempt to attract investors by passing laws to ease the movement of capital in and out of the country, providing tax incentives for investors, restricting the rights of trade unions, speeding up the planning process, land purchases and import licenses, and by attempting to maintain political stability (Robinson, 1976; Gamble, 1989).

Public and private investment is used to increase and improve the supply of tourism services. Most potential private investors view tourism as a high-risk investment. As a result, banks are reluctant to lend money for the development of tourism ventures. The public sector is therefore often needed to start the process and invest the risk capital required to initiate the tourism development (Holloway, 1994).

However, the procurement of investors does not necessarily guarantee an increase in inbound or domestic tourist numbers. The tourism venture will only grow and the tourist numbers increase if the investment is used to improve the attractiveness of the tourist product (Dwyer and Forsyth, 1994).

2.11 Globalisation and Tourism

One of the most noted characteristics of tourism is that its worldwide growth is increasing at an exponential rate, and as Held *et al* (1999) state, "...it is one of the most obvious forms of globalisation" (p. 360). As Amin and Thrift (1994) state, there is no single, all encompassing, definition of globalisation, rather a set of concerns which involve the disintegration of the nation state, the rise of transnational corporations, and the growth of new technologies and electronic broadcast media. Globalisation is characterised by increasing economic, social and cultural interconnections, that exist across national boundaries, and which are increasingly impacting upon the daily lives of people around the world (Meethan, 2001). According to Ugarteche (2000), globalisation can be defined as "...growth in an economic activity that transcends national and regional boundaries" (p. 75). It is the "...intensification of world-wide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and visa versa (Giddens, 1990, p. 59). It is evident in the increasing movement of goods and services through trade and investment – and of human beings – across international borders, as well as in the exchange of information in real time. It is driven by individual economic players, in search of greater profits, under pressure from competition (Ugarteche, 2000).

There is little doubt that globalisation is having profound impacts on policies, economies, cultures and tourism. Due to its magnitude as an industry, tourism provides a unique vantage point for exploring, arguably the most transformative process in the world today, globalisation. As a mode of travel, interaction, visualisation and experience, tourism is not only increasingly reaching formerly isolated parts of the world, but is also reshaping local identity and traditional social structures. As new forms of tourism become increasingly prominent, such as eco- and heritage tourism, it has become an integral part of all societies, eliciting active and complex responses (Wood, 1998). Some see the growth of tourism, and the resultant globalisation as an

opportunity for less developed countries to carve out a niche in the global market. This is possible since globalisation provides a means of internationally promoting their many, and varied, tourism assets. These include year round sunshine, magnificent beaches and lakes, pristine natural sites and wildlife populations, and rich cultural heritages (Globalisation Seminar, 2001).

The spread of tourism and the rise in globalisation have also been subjected to heavy criticism. It is argued that the tourism industry creates dependency for the host countries on a fickle and fluctuating global economy beyond their local control. Local economic activities and resources are used less for the development of communities, and increasingly for export, and the enjoyment of others. Very few international policies and guidelines exist, which restrict and control tourism, and hence, it has developed throughout the world (Ugarteche, 2000).

Globalisation leads to homogeneity, which is the single greatest threat to sustainability. The continued growth of globalisation will eventually lead to the development of a situation where food, names and products will be the same the world over, defeating the very purpose of tourism (Balik Kalikasan Editorial, 2000).

Globalisation can be conceptualised as a form of de-territorialisation in which the flows of capital, commodities and people are less confined within the boundaries of nation states, than has previously been the case (Meethan, 2001). In tourism impact studies, it is necessary to consider the concept of globalisation. This is because globalisation is, in part, a consequence of wide-scale international tourism development. The social, economic and environmental change that may occur in a host region is, in part, a consequence of globalisation. With the development of international tourism, the likelihood of globalisation increases, and with the growth of globalisation, social, economic and environmental changes will occur.

The concept of globalisation will be adopted within this study in developing a framework that encompasses all aspects of the 'international tourism and local agriculture relationship'. As Torres, (1996, p.17) states, "...global acceptance of a common capitalist paradigm has resulted in profound transformations of local economic, social, cultural and political processes". Rapid and widespread adoption of modern communication and transportation has created a 'time-space compression',

significantly improving the ability of global and developmental forces to alter local realities (Pred, 1993). "The mediation between local and global forces has resulted in a restructuring of the relations of production and consumption in even the most remote communities – seemingly peripheral to and detached from the world economy" (Torres, 1996, p. 17).

2.12 Impact of Tourism on Agriculture Within a Global Setting

Tourism was once considered a clean and harmless economic activity, free from the environmental impacts associated with mining, manufacturing, logging and intensive agri-business. Since the 1970s, this benign concept of tourism has been increasingly questioned (Bramwell and Lane, 1994). The physical impact of feet, litter, and vehicles, the economic impact of tourism's multi-nationals, and the social impact of mass visitation on cultures, heritage areas and objects are now seen as problems (Bramwell and Lane, 1994). It could be argued that the characteristics of rural tourism are, in part, responsible for the development of these problems (Pearce and Butler, 1993).

Rural tourism generally involves a circular movement, journeying from place to place in a sequential fashion. This is in contrast to urban tourism, where the emphasis is on the urban destination as the focus for city-based tourist activities (Pearce and Butler, 1993). Given the explosive rate of urbanisation and the resultant shrinkage of non-urban areas in both industrialised and developing countries, the adequacy of the resource base to support such itinerant tourism would seem increasingly unrealistic (Pearce and Butler, 1993). In reality, rural tourism is concentrated in both space and time, with the focus being on certain 'corridors of movement', leading to a limited number of nodes or sites (Patmore, 1983). Problems arise when these selected areas and zones of travel are not set aside exclusively for tourism, but must share the space and function with other types of resource use (Pearce and Butler, 1993).

This multifunctional characteristic of rural land and water contains both constraints and opportunities, for tourism potential. Firstly, the activities of tourists and the attitudes of the other resource users can generate conflict. Some value the countryside primarily for its agricultural, forestry and mineral products, or regard it as suitable space for urban expansion. Alternatively, it is the tourism potential which is most important to

others. For this group of people, the economic functions of rural land use should give way to its amenity function for visitors. Such claims often cause conflict with more conventional users (Pigram, 1983). Even in rural areas set aside exclusively for tourism, such as national parks, conflict can occur due to differing perceptions of their primary purpose, and the priority which has been given to tourism and recreation above other forms of rural land use (Pearce and Butler, 1993).

In many countries, it is the landscape and distinctive architecture associated with agricultural land use, which generates much of the tourist interest. The farm structures of mid-west USA, the Amish and Mennonite heartlands of Pennsylvania and Ontario, and the rambling homesteads and stations of outback Australia are examples of rural agricultural systems that have generated local tourism industries (Pearce and Butler, 1993). In Britain, Middleton (1982) warns of the significant implications for rural tourism if any major alterations to the quality of the scenic rural agricultural areas occur. In reality, rural environments cannot be regarded as unchanging, but the pace and finality of change and the environmental degradation often associated with large scale agribusiness represent a threat to landscape quality and in turn to the resource base and source for rural tourism (Pearce and Butler, 1993). Such rural alteration and degradation is regrettable because the diverse attributes of the rural landscape provide considerable opportunity for multipurpose resource use, including compatible forms of tourism. It is this capacity for compatibility which offers great potential for broadening the spectrum of opportunities for rural tourism in harmony with other resource users (Pearce and Butler, 1993).

In recent years, travel and tourism have become one of the world's largest industries (World Travel and Tourism Council, 1995). Tourism is essentially a service industry whose primary resources are environments and cultures which differ from those where the tourists usually live, and can therefore be marketed by the industry (Price, 1996). As the world's population becomes increasingly urbanised, environments which are less suitable for dense human habitation become increasingly attractive as tourist destinations. This is not only due to their biophysical characteristics contrasting with those where most tourists live, but also because these environments, which may be found in both industrialised and developing countries, are often the homes of long-established populations of people whose cultures are very different from today's westernised, urban homes. This in turn brings attention to one of the most relevant

tourism issues. This is the fact that tourism is an economic activity which is imposed, or at least grafted on a pre-existing set of economic activities and traditional ways of life, with often little or no concern for the consequences this imposition brings (Price and Harrison, 1996).

Skeptics argue that due to tourism often being driven by foreign, private sector investments, it has limited potential to contribute much towards poverty elimination in developing countries. It is associated with high levels of revenue 'leakage', and the revenue that remains in the destination country is generally captured by rich or middle income groups, not the poor. Tourism is also an unpredictable industry, being extremely susceptible to events which are usually beyond control, such as political unrest, exchange rate fluctuations and natural disasters. In less developed countries, tourism can have a particularly negative effect on the poor, causing displacement, increased local costs, loss of access to resources, social, cultural and more specifically agricultural disruption (Roe and Khanya, 2001).

The development and promotion of rural tourism is frequently justified on the basis of its potential contribution to the social and economic regeneration of rural areas. For example, throughout rural Europe tourism is now considered to be an important new source of income and employment, while also serving as a catalyst to break down social isolation and encourage the repopulation of rural communities (Cavaco, 1995). In other words, tourism is often seen as the solution to many of the problems facing rural farmers around the world (Sharpley, 1997). However, the impact of tourism on agriculture is not as clear-cut and is widely disputed. Government planners and policy makers tend to emphasize the potential positive impacts of tourism on agriculture, particularly the creation of new markets for agricultural goods. However, on closer examination, the negative effects often appear to outweigh the benefits (Torres, 1996).

The most common negative impacts include: inflated food prices (Belisle, 1984); inflation of land values (Belisle, 1984); creation of competition for land resources (Bryden, 1973); competition for labour resources (Cater, 1987); increased local consumption of imported foods (Gomes, 1993); increased imports associated with foreign exchange leakages (Belisle, 1984); changes in cropping patterns (Adams, 1992); maldistribution of tourism benefits (Harrison, 1992); decline in agricultural

production (McElroy and de Albuquerque, 1990); and the deterioration of the natural resource base (West and Brechin, 1991).

The positive impacts of tourism include: stimulation of agricultural development (Belisle, 1984); increased profitability of agricultural production; creation of new market opportunities; and providing farmers with increased or supplementary income (Hermans, 1981; Stott, 1980).

Usually, the principal objective of international tourism policies within developing countries is increasing foreign currency reserves to finance economic development (Vellas and Becherel, 1995). Capital investment within tourism, particularly for the necessary infrastructure to bring about development, is costly. There is likely to be great competition for land resources among tourism, agriculture and other land uses. Large increases in tourism and the over development of recreational areas could be environmentally and culturally disruptive, and detrimental to other valuable sectors, such as agriculture. It is imperative, therefore, that the development of tourism be thoroughly planned, especially in relation to compatible land use, water management, and the development of protected areas (<http://www.un.org...htm>).

Recreational use of land that is valued for its agricultural attributes represents multiple resource use and as such can generate conflict between recreationists and landholders. This problem has been well documented in the United Kingdom, where visitor pressure on landholders can be extreme (Pigram, 1983). Cullington (1981) highlights the fact that farmers in Dartmoor National Park are trying to farm with up to 95 000 visitors per day in the peak tourism season. Even in the remote upland grazing areas, disturbance to stock and damage to stone walls, gates and other farm installations can greatly disadvantage already low-income farmers whose opportunities to profit otherwise from visitors are few (Pigram, 1983). Conflict of this type is most likely to occur closer to towns where fringe landholders face higher levels of trespass damage to the extent that some form of boundary may become necessary. In some cases the actions of tourists may lead to drastic modification of farming practices or the abandonment of arable farming altogether. A British Ministry of Agriculture survey of 100 farms in the Thames Valley near Slough, west London, discovered that two-thirds of the respondents have been troubled by some form of trespass (Pigram, 1983).

With regards to these impacts, the negative attitude of rural communities to the recreational use of agricultural land can be better understood. Continuous visitation of the countryside by urban dwellers seeking diversion, set against a background of rapid changes in farming, is causing a situation in Britain where there is perhaps a greater degree of antipathy between farmers and visitors than ever before (Pigram, 1983).

The impacts of tourism on Third World agriculture are often far more severe and destructive than the impacts experienced in Britain. For example, the growth of tourism in Bali has had far-reaching social and economic effects on the island. It has provided new employment opportunities in hotels, the arts and craft industry, entertainment and travel agencies. However the tourist boom has also resulted in an increase in the price of land, land speculation, and the conversion of land from agricultural to non-agricultural uses. Mass tourism is responsible for introducing organisational changes in traditional Balinese tourism structures. There has been a transition of ownership away from the Balinese, and their response to tourism is increasingly orchestrated by outsiders, mainly Indonesians from Jakarta, and transnational corporations (de Kadt, 1979).

Traditional farmers and agricultural workers in rural areas often find the concept of working in the tourism industry very appealing. This is due to hotel and tourism work being less 'back-breaking' than farming, and it offers the advantage of a fixed income. A typical example can be found in Sousse, Tunisia, where there is a gradual replacement of local agricultural workers by hotel, factory and tourism industry workers. The effects of a phenomenon such as this on the agricultural economy are obvious (de Kadt, 1979).

The sudden development of tourism in a Third World region usually requires vast infrastructure improvements. This usually manifests itself in a construction boom in the area, which requires a local labour force. In the Seychelles, for example, the boom associated with the construction of tourist hotels, resorts, offices and the airport placed unprecedented demands on the local labour supply, and drew many persons out of the agricultural sector. With the completion of the construction phase, labour did not flow back into agriculture and unemployment rose. This chain of events can be found in many other small island economies, and in small areas of larger countries, which have experienced tourism booms (de Kadt, 1979).

In addition to its impacts on rural incomes, tourism affects welfare through altering the range, prices and quality of the goods and services available for consumption. Shifting resources to tourism from alternative activities can decrease the supply of those goods to the local inhabitants and raise their prices. Therefore, the migration of labour from agriculture into high-paying construction and tourism jobs in the Seychelles have had some influence on rising food prices in that area during the tourism boom. In Sousse, Tunisia, food prices also rose, partially as a result of declining agricultural productivity as the original farmers were drawn into high-paying tourism jobs and were replaced by less-skilled migrants. In addition, the seasonal fluctuations in tourism can create seasonal cycles in food prices (de Kadt, 1979).

A further example of how the development of nature-based tourism creates changes in traditional forms of resource use can be found in Thailand. Meo Doi Pui was the first hill-tribe village discovered by tourists approximately 25 years ago, and whose main economic activity was agriculture. As a result of tourism, the village has deteriorated to such an extent that it is now merely a handicrafts market, and has over the years been turned into a museum. The traditional socio-economic growth of the village has gradually come to an end, as agricultural activities have been superseded by tourism. "Why should we plough our fields while tourists come every day and provide our income?" (Hmong man, Meo Doi Pui, quoted in Binkhorst, 1993). The village of Meo Doi Pui has become little more than a shopping area and tourists interested in traditional hill-tribe life can visit the hill-tribe museum. Tribal culture is only being conserved in pictures, old tools, and written information about a way of life before tourists and others changed it (Ashworth and Dietvorst, 1995).

In Africa, the creation of game parks and reserves has caused other shifts in the use of resources. The extension of game parks, the banning of hunting by savannah and forest peoples, the relocation of fishermen away from homes and markets, and the clearing out of unsightly evidence of poverty (such as squatter villages) near tourist sites are highly damaging, even in the most simple economic terms, to the poorest and weakest of the local residents. Another resource for which tourists and residents can compete is access to the parks and tourist attractions. A common complaint is that such areas, which were often traditional agricultural and grazing lands, are closed off to local inhabitants in favour of tourists and richer residents. Some reserved areas, such as private clubs and accommodation sites are inevitable, but it is impossible to

justify denying the local population access to its natural or cultural heritage (de Kadt, 1979).

An example of such a shift in resources is present in the Okavango Delta in Botswana. The Delta is increasingly under pressure from growing population numbers, and the resultant unsustainable use of its natural resources. Water resources are increasingly used for medium scale commercial agriculture, mining and tourism. The unmanaged and uncontrolled expansion of human activities, predominantly associated with tourism, and the foreign control of resources is resulting in the abandonment of many traditional practices, including agriculture, and threatening the livelihoods of the Delta's inhabitants (<http://www.iucn.org...htm>). "If these threats are allowed to persist, they will result in fundamental and irreversible changes in the basin's water balance, and the character and productivity of the Delta as a whole" (IUCN, 2000).

In an attempt to better understand the linkages between tourism, agriculture and economic development in Third World countries, the present economic situation in the Caribbean is a prime example of the interdependence of tourism and agriculture in bringing about development.

There is a widely perceived problem in the Caribbean concerning the lack of integration between tourism and agricultural development. This problem and its possible solutions have been debated in the Caribbean for at least thirty years, but little in the way of a sustainable approach to integrating tourism with agricultural development has emerged from these deliberations (Gayle and Goodrich, 1993). In the meantime those areas in the Caribbean that have developed a viable tourism industry continue to import more food products, not only to satisfy tourists, but also to meet increased demand for certain food items from the local population (Potter, 1996). This increase in food imports to meet new local demand is the result of at least two factors. The first is the 'demonstration effect' where locals change their food preferences to match that of tourists' consumption patterns. The second is the growth in domestic purchasing power, which has partly been brought about by tourism itself (Gayle and Goodrich, 1993). Riegert (1982) notes that the role of tourism has been to increase local 'wants', generate new demands and introduce more exacting quality standards, thus prompting increased needs for food imports, while decreasing the possibilities for local production growth. In other words, tourism's effect on the

economies of the Caribbean has been to make them increasingly dependent on food imports (Ryan, 1991; Gayle and Goodrich, 1993).

With regard to the increasing size of the demand for food and beverage items in the Caribbean, there are certain factors that are cited to explain the lack of local production of these various items. Firstly, tourists demand foods that are not traditionally grown in the Caribbean. For example, New York strip sirloin, caviar or scotch whiskey cannot be produced in the Caribbean, but there are alternative products such as local fish, chicken, fresh fruit and vegetables that are readily accepted by tourists. If specific high-value local food items were grown using the best available techniques, the current food import costs of many Caribbean countries could be greatly reduced (Gayle and Goodrich, 1993; Ioannides, 1995).

Secondly, hotels and resorts demand the finest quality, appearance and uniformity in what they purchase. If the local farmers make better use of technology, seeds and cultural practices they will improve the quality and yield of their produce and consequently receive higher prices for their goods. Lesser quality goods can also be sold in the local market (Gayle and Goodrich, 1993).

Thirdly, tourists are hesitant to try local foods or local cuisine. However, food preferences have greatly changed in industrialised countries around the world. Hotel chefs are constantly seeking new menu items and can convince tourists that eating local foods is part of the holiday experience. There is also greater health awareness amongst First World consumers, resulting in a move away from high cholesterol red meat towards the consumption of more complex carbohydrates and fibres that are typical of indigenous Caribbean food. These trends can be capitalised on, by promoting certain locally available lean meat, and fruits and vegetables (Ryan, 1991; Gayle and Goodrich, 1993; Potter, 1996).

The fundamental problem in linking tourism and agricultural growth in the Caribbean is that a 'peasant' food production system is being asked to meet the needs of some of the most sophisticated consumers in the world. Also, due to the wide diversity of agricultural resource endowments and cultural conditions, as well as socio-cultural attitudes towards agricultural work among the islands that make up the Caribbean, a uniform regional approach is not likely to be very useful. Instead, each country should

estimate the quality and value of the different types of food and beverage items consumed by the tourist industry, and an evaluation could then be made of what items are being imported that could be produced locally given the necessary factors and conditions (Gayle and Goodrich, 1993; Ioannides, 1995).

Most studies tend to highlight only the negative impacts of tourism on Third World economies and traditional agricultural systems. However, the development of tourism can bring about unparalleled economic opportunities for the inhabitants of these rural areas. In terms of direct employment within the tourism sector, many farmers abandon their agricultural practices in favour of earning wages by working in hotels and resorts (Pigram, 1983). The wages of hotel employees everywhere compare favourably with wages in agriculture, especially with earnings in subsistence agriculture. For example, in Cyprus, unskilled hotel employees earned between half and three quarters more than workers in the agricultural sector (de Kadt, 1979).

Tourism can create considerable indirect employment, especially in agriculture, food processing, and handicrafts, as well as transport and distribution (Pigram, 1983). For example, in Tunisia, for each hotel employee, there are three to four people employed in jobs indirectly generated by tourism. For every hotel employee, approximately three quarters of a job is generated in agriculture, more than one in shops and the production of goods such as handicrafts, and a little over one in other manufacturing and distribution activities (de Kadt, 1979).

The extent to which tourism creates employment in agriculture depends on many factors, such as climatic conditions, the potential for the local production of the types of foodstuffs demanded by hotels, the availability and price of imports, the efficiency and distributive mechanisms, and government policies affecting these matters. In East and North Africa, most food requirements can be obtained locally, while in West and most of southern Africa different patterns of agricultural output make locally produced goods less obtainable and reliable (de Kadt, 1979).

In promoting long term sustainable economies for underdeveloped areas, agriculture is still considered an important engine for economic growth. In essence, rural life as it is presently known will cease to exist without agriculture, as it is the cornerstone of rural economic development. Therefore, the maintenance of a healthy agricultural economy

remains a vital component of any comprehensive effort aimed at rural economic development. Efficiency, effectiveness and competitiveness are crucial to agricultural growth in the future. As the Third World tourism industry grows there is an increasing need for the development and adoption of improved agricultural production practices, management and marketing technology, and in particular for entrepreneurial practices which provide scope for flexibility and creativity in the diversification of the economic base (Bramwell and Lane, 1994).

2.13 Sustainable Tourism Development

Tourism development will only achieve long term success if careful planning and management are undertaken to deliver a successful tourism product. It is only recently, however, that the negative effects of tourism on a host destination have been recognised. As a result, concepts like environmentalism and 'green consciousness' have arisen, and the value of tourism to host destinations has been reassessed. This process has also led to the development of the concepts of sustainable tourism and development (Cooper *et al*, 1993).

The concept of sustainable development results from the understanding that current generations are imposing too great a demand upon the natural environment to allow it to continue to reproduce and maintain itself at its previous level of stability (Butler, 1998). This concept of sustainable development has been applied to tourism. Sustainable tourism refers to tourism that is developed and carried out in line with principals of sustainable development (Hunter and Green, 1995; Tribe *et al*, 2000).

Sustainable tourism development is reliant upon three conditions. Firstly, the resources of the environment must be protected, secondly, local communities must benefit both economically and in terms of quality of life, and thirdly, visitors must receive a quality experience. The concept of sustainable tourism is a very broad idea that refers to tourism that is long-lasting, integrated at the same time as diversified, participatory, and environmentally, economically, socially, and culturally compatible (Perez-Salom, 2001).

Therefore, sustainable tourism development means planning attractions in such a way that allows tourists to enjoy them while also having minimal impacts on the host environment and culture. Sustainable development can only occur when the quality of the environment and community life can be preserved indefinitely. To achieve this goal, the local community must be included in all stages of development (Hassan, 2000).

The English Tourist Board (1991, cited in Cooper *et al*, 1993, p.87), provides the following principals, which must be considered for the development of sustainable tourism.

- The environment has an intrinsic value that outweighs its value as a tourism asset. Its enjoyment by future generations and its long-term survival must not be prejudiced by short-term considerations.
- Tourism should be recognised as a positive activity with the potential to benefit the community and the host site as well as visitors.
- The relationship between tourism and the environment must be managed so that the environment is sustainable in the long term. Tourism must not be allowed to damage the resources, prejudice its future enjoyment and bring unacceptable impacts.
- Tourism activities and development should respect the scale, nature, and character of the places in which they are sited.
- In any location, harmony must be sought among the various needs of the visitors, the place and the host community.
- In a dynamic world, some change is inevitable, and it often can be beneficial. Adaptation to change, however, should not be at the expense of any of these principals.
- The tourism industry, local authorities and environmental agencies all have a duty to respect these principals and to work together to achieve their practical realisation.

These principals of sustainable tourism development are primarily based on the theory of carrying capacity (Tribe, *et al*, 2000). Even though originally a wildlife ecology term, carrying capacity has been applied to humans and more specifically to tourists. It has been defined for the purpose of tourism as "...the maximum number of people who

can use a site without an unacceptable alteration in the physical environment and without an unacceptable decline in the quality of the experience gained by visitors” (Mathieson and Wall, 1982; cited in Tribe, *et al*, 2000, p.44). This definition implies that tourism’s carrying capacity is concerned with the quality of the environment and the quality of the recreational experience. Pritchard (1992) in diversifying the understanding of carrying capacity, adds to Mathieson and Wall’s definition by stating that carrying capacity is also concerned with the social and psychological capacity of the physical setting to support tourist activity and development. In addition, McIntyre and Hetherington (1991) also include reference to the ability of the local community, economy, and culture to support tourist activity in their explanation of tourism carrying capacity. As a result of all the variables present, it is difficult to accurately measure the actual carrying capacity of a physical setting. Therefore as Ceballos-Lascurain (1996, p.136) states “...actual carrying capacity can be a judgment call as to the acceptable level of change, both in terms of the resource and the satisfaction level of the visitors and the local community”.

Finally, in order for present tourism trends to become sustainable, there needs to be a general shift away from short-term to longer term thinking and planning in tourism. “It is no longer acceptable for the industry to exploit and ‘use-up’ destinations and then move on” (Cooper, *et al*, 1993, p.273). An increasing number of tour operators and public authorities are becoming convinced that a change in attitudes and patterns of consumption is unavoidable – otherwise the economic basis of tourism would be undermined. Mass tourism is clearly unsuitable because, firstly, it does not take into account the importance of the conservation of natural habitats, or the rational use of natural resources. Secondly, it does not highlight the cultural and social features of an area as a selling point to tourists, and thirdly, it generally ignores the qualitative aspects of tourists while emphasizing quantitative growth. In contrast, sustainable tourism ensures that tourism development is compatible with respect for, and the conservation of, natural spaces and cultural and social values, something that favors the reduction of conflict between the tourism industry, the visitors, the residents, and the environment (Perez-Salom, 2001).

2.14 Summary and Conclusion

This chapter examined and defined the subject of tourism, and its impact on the development of Third World countries. It considered the concepts of international tourism, mass tourism, eco-tourism and sustainable tourism, and their impact on the tourism industry as a whole. The social, economic and environmental costs and benefits of tourism development on Third World countries were analysed. Finally, this chapter reviewed the concept of globalisation within the context of tourism growth, and reviewed the impact of tourism on agriculture within a global setting.

Any form of industrial development will bring with it impacts upon the social, economic and physical environment in which it takes place. Due to the fact that tourists have to visit the place of production in order to consume the output, tourism clearly leads to such impacts (Cooper *et al*, 1993). It is therefore critical, that careful planning is undertaken before and during the tourism development process. However, the development of tourism will not be optimal if it is left entirely in the hands of private sector entrepreneurs, as they are primarily motivated by profit. On the other hand, if tourism development is dominated by the public sector, it is unlikely to be developed at an optimal rate from an economic point of view. Therefore, the development of tourism requires the co-operation of both the public and private sectors (Cooper *et al*, 1993).

Tourism brings changes to a host society through the altering of the environment within which the community exists – an environment which is both physical and social. What may be concluded is that while tourism is clearly a catalyst for change, the nature of the change is not always predictable, and is often dependent upon the volume, and type of tourist visiting the area, and the level of economic development of the host society. Therefore, the greater the level of control, placed upon the number of tourists visiting a destination, and their permitted environmental and social impacts, the smaller the changes to a host community, resulting from the development of tourism (Ryan, 1991).

CHAPTER THREE

Okavango Delta in Botswana: A Socio-Economic Perspective

3.1 Introduction

Tourism has been recognised as one of the fastest growing industries in the world. Governments in both developed and developing countries have identified tourism as a means of generating employment and income in vulnerable economies (Ryan, 1991). Among the many economic, social and environmental impacts that tourism may bring to a host area, it is the changes to traditional lifestyles, through the abandonment of agriculture and changes in consumption patterns, that are perhaps the most damaging.

In several ways, Botswana has had one of the most intense and successful economic growth experiences amongst sub-Saharan nations in the post-colonial era. This development has largely depended upon the mining and cattle industries, and has been extractive and export driven (Valentine, 1993). However, due to increasing concerns regarding the diminishing returns of extractive industry, and the vulnerability of the cattle industry to importers' decisions, disease and drought, tourism is playing an increasingly important role in planning for Botswana's economic future (Lilywhite and Lilywhite, 1991). Many other developing countries, in both sub-Saharan Africa and elsewhere, see tourism as a sustainable way to earn foreign exchange and provide large numbers of skilled and unskilled jobs to the local population, as well as to bring about infrastructure development (Hitchcock, 1991; Young, 1995).

Economic development is generally evaluated in terms of the resultant benefits to national level statistical indicators such as GDP, employment, education and poverty figures. Often less attention is paid to the costs of economic development, and the resultant impact, both positive and negative, on indigenous groups and traditional lifestyles (Bock, 1998). These indigenous and minority groups tend to occupy remote areas. As transportation and extractive technology improves, it has become

increasingly cost effective to conduct exploration, development and resource extraction in these areas. The issues of land use that arise from these operations are among the major concerns facing indigenous peoples at the beginning of the twenty first century (Young, 1995).

This chapter comprises three major sections. The first section gives a broad overview of the country of Botswana as a whole, providing information on demographics, agriculture and tourism. The second section provides general information about the area of study: the Okavango Delta, and gives a brief account of the inhabitants of this region. The final section presents an overview of tourism and agriculture in the Okavango Delta.

3.2 Background Information on Botswana

Botswana is a landlocked country situated in southern Africa. It lies between 18 to 27 degrees south and 20 to 29 degrees east, with approximately 75 percent of the country lying in the tropics. However, due to its altitude (an average 1000 meters above sea level), and distance from the oceans, the climate is temperate rather than tropical. Rainfall is low, erratic and unevenly distributed, ranging from 650 mm in the northeast to less than 250 mm in the southwest of the country (MacGregor and Hutcheson, 2002). It is bordered by Namibia to the west and north, Zambia to the north, Zimbabwe to the east and South Africa to the south and southeast. Botswana occupies 581 730 square kilometers, with a population of 1,7 million (2001 est.) (Republic of Botswana Statistical Bulletin, 2001).

Botswana has, for an African country, a relatively small population, with most of the country's 581 730 square kilometers consisting of sparsely populated desert or semi-desert. The climate in Botswana can be described as semi-arid. Temperatures are high in summer, but often reach sub-zero levels during winter months. The distribution of rainfall is uneven throughout the country both in space and time. The rate of precipitation is much lower than that of evaporation and transpiration, and water is therefore scarce, with rivers that are ephemeral and mostly subterranean. Ground water exists at varying depths throughout most of Botswana. The northwestern

Ngamiland District, which contains the Okavango Delta and Panhandle is an exception in that major rivers in this area are somewhat perennial (Ndubano, 2000).

Around 89 percent of the country's population inhabits the eastern part of Botswana where the towns and cities are fairly populous. Rainfall in this region is relatively stable, ground water not very deep, and the soil is reasonably fertile and available for farming. The availability of water in Botswana is a dominant factor influencing the pattern of human settlement (Republic of Botswana Demography Survey, 1998).

Botswana is divided into nine districts, each with its own administrative center. These include the Southern, South East, Kweneng, Kgatleng, Central, Ngamiland, Chobe, Ghanzi and Kgalagadi districts (Africa Contemporary Record, 2000).

3.2.1 Demographic Characteristics

The population of Botswana comprises about 60 percent Tswana, with the remaining forty percent consisting of minority Basarwa (San) communities, Bantu groups, and a small white and Asian community (Swaney, 1995).

The annual population growth rate between 1981 and 1991 was 3,5 percent, but decreased to an average rate of 2,38 percent during the period 1991 to 2001. Of the total estimated population in the country, around 42 000 people (2,6 percent) are non-citizens. The corresponding figure for 1991 was 29 557 (2,2 percent). Citizens of SADC countries (79,5 percent) constitute the highest proportion of non-citizens in Botswana (Republic of Botswana Demography Survey, 1998).

Overall, the population density in Botswana has risen from two persons per square kilometer in 1991 to three persons per square kilometer in 2001. There is an estimated total of 340 000 households nation wide. Of these households, 164 204 occur in urban areas, while 175 454 are found in rural areas. The highest proportion of households occurs in the Central district (28,5 percent) followed by Kweneng district (12,4 percent) and lastly, Gaborone (11,6 percent). A decline in average household size has occurred throughout the country. Nationally, the average household size decreased from roughly five persons per household in 1991 to four persons per household in 2001. The average household size in rural districts is consistently above four persons per

household, whereas in urban districts the average household size is below that level (Republic of Botswana Demography Survey, 1998; Republic of Botswana Statistical Bulletin, 2001).

3.2.2 Socio-Economic Profile of Botswana

3.2.2.1 The Economy

At independence in 1966, Botswana was one of the world's poorest countries. It was surrounded by hostile white minority governments and had few known prospects for economic development. There was very little infrastructure, only one railway in the eastern region, less than twenty kilometers of tarred road, one public secondary school, almost no industry, and no known mineral deposits (Saunders, 2002).

Following the discovery of minerals in 1967, and sound management strategies, Botswana has transformed itself into a middle-income country with a 1999/2000 Gross Domestic Product (GDP) estimated at 25,208 million Pula. The current US Dollar and Rand exchange rates are 5,2 Pula to 1 US Dollar, and 1,5 Rand to 1 Pula (<http://www.x-rates.com>). The major contributors to total GDP are mining and quarrying (33,3 percent); general government (16,3 percent); banks, insurances and business services (10,7 percent); total net taxes on imports/products (9,4 percent); trade, hotels and restaurants (8,5 percent) and construction (5,6 percent). Per Capita GDP rose from an estimated 13,413 million Pula in 1998/99 to 15,326 million Pula in 1999/00, which is an increase of 14,3 percent (Republic of Botswana Statistical Bulletin, 2001).

A comparison of the contribution of the sectors to the country's economy over the past several years indicates disappointingly slow economic growth. Recent estimates indicate that the economy grew by approximately two percent in 1992/93, 1993/94 and 1998/99, which is not particularly poor by current world standards, but is significantly lower than the 10 percent per annum growth rates experienced in Botswana during the 1980s (Van Buren, 2001; New African Yearbook, 2001).

Several factors have led to this economic 'slowdown', with the most influential being the weak demand conditions in international diamond markets, leading to the imposition of sales quotas by De Beers' Central Selling Organisation (CSO), and a

major reduction in Botswana's diamond exports. Earnings from other main mineral exports, copper-nickel and soda-ash, have also been hard hit by the recession in international and local markets. A further contributory factor has been the reduction in the rate of growth of government spending, in keeping with slower growth revenues. Botswana's government plays a major role in the economy, particularly as an employer, and any change in spending patterns can indirectly effect many other sectors of the economy (Van Buren, 2002).

3.2.2.2 Employment Status

According to The Republic of Botswana Statistical Bulletin (2001), formal sector employment grew by 12 800 employees (5 percent) from 260 000 persons in March 2000 to 272 800 persons in March 2001. Private and parastatal sector employment grew by 10 500 persons (7 percent) from 155 900 persons in March 2000 to 166 400 persons in March 2001. Local government employment figures increased by 600 persons (3 percent) from 20 400 persons in March 2000 to 21 000 persons in the corresponding quarter of 2001 (Republic of Botswana Statistical Bulletin, 2001). According to Van Buren (2002), the government is the second largest formal sector employer accounting for approximately 37 percent of employment, followed by the parastatal sector (59 percent). The primary sector, including agriculture and mining, has a falling employment percentage of approximately one percent every two years. The private sector is still the largest formal sector employer accounting for approximately 57 percent of employment. Botswana's agricultural sector employs an estimated 44 percent of economically active population. However, the majority of the employment is categorised as informal sector employment or self-employment with a considerably smaller number of 'formal sector' agricultural professionals and technicians.

The number of Batswana working in South African mines was at its highest in 1976, with some 25 500 people employed. Since then there has been a decrease in the number of Batswana migrant workers at South African mines. The number of Batswana employed in the mines in 1997 was estimated at 12 464, but declined to 5 867 by December 2000. There were also 1 398 recruits during the first quarter of 2000

as compared to 1 300 recruits during the last quarter of the same year (Republic of Botswana statistical Bulletin, 2001; Van Buren 2002).

Botswana's unemployment rate rose from 10,2 percent in 1981 to 21,2 percent in 1994 before declining to 15,8 percent in 2000. The area with the highest employment rate is the Central district, followed by Gaborone. In both areas the employment of males outnumbers that of females, with the majority of unemployed people consisting of females within the age group of 19 to 29 years of age (Republic of Botswana Demography Survey, 1998).

3.2.2.3 Income

The average monthly household incomes are 1 525 Pula (293 US \$); 731 Pula (390 US \$) and 441 Pula (84 US \$) for towns, urban villages and rural areas, respectively (Republic of Botswana Statistical Bulletin, 2001). The national minimum monthly wage is 270 Pula, which is just under half of what the government calculates is necessary to meet the needs of a family of five. Formal sector employment pays well above minimum wage levels, while informal sector work, especially in agriculture and domestic services, frequently pays below the legal minimum (Africa Contemporary Record, 2000).

3.2.2.4 Natural Resources

Botswana contains large diamond and coal reserves. It is the biggest producer of diamonds in Africa, and the third largest in the world. The country also contains significant reserves of bituminous coal, which has yet to be fully exploited. Mining is an essential source of income for the nation, but employs a very small percentage of the population, 8 300 individuals in 2001 (Van Buren, 2001; Republic of Botswana Statistical Bulletin, 2001).

Botswana experienced an average annual population growth rate of 2,38 percent between 1991 and 2001. As a result of the constant increase in population and the fact that 52 percent of the population is less than 19 years of age, there is an urgent need for improvements in agricultural productivity, and in other sectors of the economy. This

is necessary to provide jobs and ease the increasing pressure placed on natural resources by the growing number of young people who are entering the labour market (Republic of Botswana Demography Survey, 1998; MacGregor Hutcheson, 2002).

A shortage of water which is aggravated by considerable fluctuations in the monthly distribution and total seasonal rainfall trends, is a major handicap to the development of Botswana's natural resources. The limited rainfall makes much of the country more suitable for the rearing of livestock, especially cattle and goats. However, it is estimated that in eastern Botswana 4,45 million hectares are suitable for cultivation, of which only around ten percent is presently cultivated. Although in the east, the irrigation potential is limited, the Okavango Delta region in the northwest offers substantial scope for irrigation, for an estimated 600 000 hectares (MacGregor Hutcheson, 2002).

Botswana has had a cattle based economy for many years, and the number of livestock owned by an individual or family is a measure of wealth and status, and a source of security for a significant number of rural people. Presently, there is an estimated 2,4 million head of cattle in the Botswana. In recent years cattle production, and the export of beef, mainly to Europe, have become major sources of foreign exchange. Continued growth of this industry depends on maintaining the productivity, and protection of grazing lands, and the opening up of new areas of land for grazing (Republic of Botswana Statistical Bulletin, 2001; Van Buren, 2002).

Botswana also contains large open rangelands with a vast population of wildlife. The wildlife are regarded as a tourist attraction that has yet to be fully exploited (<http://www.lead.org...htm>).

3.2.2.5 Land Use

There are three main types of land tenure in Botswana. These include communal land, freehold land and state land (Republic of Botswana Environmental Statistics, 2000).

i. **Communal Land**

Communal land, which is also known as tribal land, comprises about 55 percent of the total national land area. There are twelve tribal Land Boards in Botswana who hold all Communal (Tribal) land in trust for the citizens of Botswana and allocate it to citizens for residential, commercial and agricultural uses. All Batswana, regardless of sex, are entitled to communal land for their personal use. On allocation, the holder does not pay for the land, but does not acquire any exclusive or perpetual rights to it. Nevertheless, in practice, if the land is used for the allocated purpose, it stays in the family indefinitely, and is used as if exclusive and perpetual rights have been obtained, with the exception of grazing rights. However, the owner of a borehole holds de facto rights to the water and surrounding grazing resources. In addition, 50-year leases have been introduced for areas of tribal land which have been zoned for commercial use, such as tourism ventures (Republic of Botswana Environmental Statistics, 2000).

ii. **Freehold Land**

Freehold land comprises around three percent of the total national land area in designated blocks situated along the southern and eastern boundaries of the country, (Botswana's most fertile agricultural land), and a few blocks in the western part of the country. Freehold land entitles the owner to perpetual and exclusive rights to the land, including its natural resources, with the exception of wildlife. The bulk of freehold land consists of private commercial farms which are dominated by the livestock sector (Republic of Botswana Environmental Statistics, 2000).

iii. **State Land**

State land comprises about 42 percent of the total national land area. This land consists of areas that the government has reserved for conservation purposes, and quarantine ranches belonging to the Botswana Livestock Development Corporation (BLDC), villages, towns and cities. Most of the state land is reserved as conservation areas (about 98 percent). These areas consist of national parks, game reserves, forest reserves and Wildlife Management Areas (WMAs), which comprise about eight percent, ten percent, one percent and twenty-two percent of total land area, respectively. The area covered by villages, towns, cities and BLDC quarantine ranches

makes up only around one percent of the total national land area (Republic of Botswana Environmental Statistics, 2000).

3.2.2.6 Changes in Land Use at National Level

The amount of land allocated under the three major land uses in Botswana changed during the period of 1974 to 1995. The most significant changes took place to communal and state land as a result of the re-allocation of areas of communal land to State land. This was generally due to the creation of Wildlife Management Areas (WMAs) which did not exist in 1974, but took up 23 percent of national land area by 1995, and the creation of additional forest reserves during the same period. WMAs are natural areas reserved predominately for wildlife utilization. WMAs provide corridors of land for the long-term conservation of wildlife through the provision of extended wildlife habitats. The WMAs provide migratory corridors for the free and unhindered passage of wildlife between major parks and game reserves (Republic of Botswana Environmental Statistics, 2000).

As a result of the re-allocation of land, the share of total land area that fell under the Communal Land Tenure system dropped from 459 601 square kilometers (79 percent) to 318 997 square kilometers (54,8 percent), while that of state land increased from 103 170 square kilometers (17,7 percent) to 243 304 square kilometers (41,8 percent) by the end of 1995 (Republic of Botswana Environmental Statistics, 2000).

It is, however, important to note that 99,6 percent of the total re-allocated land was a result of the re-designation of communal land to land reserved for conservation uses (Republic of Botswana Environmental Statistics, 2000).

3.2.2.7 Agriculture

Botswana's agricultural sector presently employs an estimated 44 percent of the economically active population. At the attainment of independence in 1966, agriculture contributed roughly 40 percent to the Gross Domestic Product (GDP), but this has since been declining. It was estimated at 2,7 percent in 2000/01 after declining 8,8 percent in 1999. This decline can be attributed to growth in other sectors of the

economy, as well as reduced agricultural productivity (Republic of Botswana Statistical Bulletin, 2001; Van Buren, 2002). The current farming practices result in low productivity and thereby promote poverty rather than alleviate it. There are problems with range management. Botswana's rangelands are too fragile to carry the poorly managed numbers of cattle, donkeys and small stock. In addition, farmers need to be educated on planting crop varieties that are appropriate for the soil types and precipitation levels in their area and on adopting environmentally compatible arable farming methods. Despite its low share in GDP, the agricultural sector can make a significant contribution to solving the problems of unemployment and poverty. Even at its current relatively low level, a large number of rural people are dependent upon this sector for their employment and livelihoods (Republic of Botswana Agricultural Statistics, 1996; <http://www.newafrica...asp>).

There are two distinct agricultural production systems in Botswana, traditional and commercial, with each system incorporating both crop and livestock components. The difference between these sub-sectors is based on land tenure, technologies and market integration. Commercial agriculture, largely associated with freehold farms, is integrated in formal markets, whereas traditional farmers predominantly produce for own consumption and sell whatever surpluses are available. It is estimated that presently, only five percent of Botswana's land is arable, with commercial farms comprising only eight percent of the country's agricultural areas. Botswana's food requirements are increasingly purchased by export earnings from the mining sector, although beef export earnings still adequately cover the cost of basic cereal imports (Republic of Botswana Statistical Bulletin, 2001; <http://www.botswana-online...htm>).

The number of small stock sheep and goats slaughtered by the Botswana Meat Commission (BMC) (Botswana's primary abattoir and beef processing plant), has decreased drastically since 1995 from 5721 animals in 1995 to 203 in 2000. A lack of marketing facilities and depressed producer prices have contributed to this decline, as well as poor stock management by farmers and inadequate technical support from the public and private sectors. There are presently, an estimated three million goats and sheep in Botswana, of which 99 percent are owned within the traditional sector, while one percent was in the commercial sector (Republic of Botswana Agricultural Statistics, 1996; Republic of Botswana Statistical Bulletin, 2001).

Local poultry production has steadily increased since 1991. Within the commercial sector, an average of 300 000 chickens are sold annually. This has led to a reduction in poultry imports. However, the country still depends on imports for day chicks and 'point of lay pullets' to supply poultry production projects. Botswana is presently almost self-sufficient in egg production. There is also a growing interest in small-scale piggeries throughout the country, but production is constrained by the shortage of breeding stock (Republic of Botswana Agricultural Statistics, 1996; Van Buren, 2002).

The national cattle herd doubled in the first 16 years after independence. This was as a result of improved beef export prices, the expansion of available grazing through the drilling of new boreholes, and the establishment of effective disease control, based on a system of cordon fences, and vaccination, which since 1981 has kept most of the country free from foot-and-mouth disease. The national herd stood at 2,35 million head of cattle in 2000, a small increase from the previous year. The success of the cordon fence system (in which huge areas of land are fenced off to separate cattle from wildlife), in controlling the spread of disease, generated a lucrative market within the European Union (EU). The EU offered preferential terms and significant price subsidies (in Botswana's case a 92 percent levy rebate, with a quota of 18,910 metric tons of beef per year) as long as the Lome Convention's stringent disease-control criteria were met. However, the cordon fence system has involved the government in international controversy over its impact on wildlife. The fences halted traditional migratory movements, trapping animals in parcels of fenced off land. The criticism was intensified by the fact that the economic benefits from the beef exports almost exclusively accrued to the five percent of commercial agricultural farmers in Botswana that are estimated to own more than half the national cattle herd. An estimated 50 percent of rural households neither own nor have access to cattle (Van Buren, 2002). In 2000, 147, 859 head of cattle were slaughtered by the Botswana Meat Commission (BMC) at an average price of 561 Pula per 100 kilograms. However, the World Trade Organisation (WTO) has proposed halting the EU beef subsidies enjoyed by Botswana and other African, Caribbean and Pacific (ACP) nations under the beef protocol of the Lome Convention. Beef quotas are to be slowly eliminated by the end of 2007 and during the transitional period, Botswana and other ACP nations will prepare themselves for the establishment of reciprocity in trade with the EU in order to become WTO compliant (Van Buren, 2002).

In the arable agricultural sector, as with beef, commercial farmers provide a disproportionate share of crop production. It is estimated that just 100 commercial farms accounted for 34 percent of total output of sorghum, maize, millet, beans and pulses in 1999. In both 1999 and 2000, relatively high levels of rainfall occurred, in contrast to the 1991/92 drought when the total area planted with food crops decreased by 70 to 80 percent. In May 2001, it was reported that low rainfall levels at the start of the rainy season (November to May), had caused planting difficulties and led to stunted growth and wilting of crops, especially maize. In the period October 2000 to January 2001 season, farmers planted an estimated 36 000 hectares throughout the country, less than half the area cultivated the previous year (Republic of Botswana Agricultural Statistics, 1996; Van Buren, 2002).

The 2001/02 budget speech brought attention to the fact that agricultural productivity grew by only 1,6 percent between 1979 and 1996, prompting a full review during the 2001/02 Fiscal Year of the government's support schemes in the agricultural sector. In June 1998 the government devised a National Master Plan for Agricultural Development (NAMPAD), aimed at increasing productivity and at guiding investment to protect the country's fragile rangelands, which were at risk from overgrazing. The scheme focused on diversification into fields such as horticulture, forestry, game farming and bee keeping. The national budget for 2000/01 allocated five million Pula to implement pilot projects under NAMPAD, including demonstration dairy and vegetable farms and a strategy for reusing wastewater for irrigation in this generally dry country. These projects are to be implemented within the 2001/02 Fiscal Year (Van Buren, 2002).

In Botswana an estimated 1,2 million hectares of land are reserved for the planting of crops, of which 387 400 hectares are owned within the traditional sector and 819 500 hectares within the commercial sector. There are an estimated 121 000 agricultural holders in the traditional sector and only 100 holders in the commercial sector. The actual commercial sector figure is estimated to be slightly higher due to the lack of cooperation by some commercial farmers who refused to take part in the 2001 national agricultural survey (Republic of Botswana Statistical Bulletin, 2001; Van Buren, 2002). Rain fed crop production is the dominant form of agriculture practised in the traditional sector. The average size of farms in the traditional sector is five hectares. There were about 63 200 farms that were five hectares in size, while only 112 farms were larger

than 150 hectares. It is also estimated that a ten hectare minimum is necessary for household self-sufficiency, even during years of adequate rain. Most traditional farmers only use draft animal power during ploughing, which provides inadequate tillage. Typically, traditional farmers do not use agro-chemicals or practise row planting, and generally fail to follow a proper cultivation calendar. Consequently, they achieve very poor crop yields for the primary crops grown, namely sorghum, maize, millet and beans, in comparison to the few larger scale commercial rain fed farms in Botswana, and world averages (Republic of Botswana Government White Paper 1, 2002).

The performance of the rain fed agricultural sub-sector is severely hampered by unfavourable agro-climatic conditions such as endemic drought and high summer temperatures. As a result of the year-to-year climatic variations, there is a large variability in the area planted/harvested and in production levels of the main cereal crops. In addition to the natural constraints other problems affecting the agricultural sector include limited access to credit for farmers, high input costs, lack of supporting infrastructure, lack of agricultural insurance schemes and low levels of technology applications, making it an unreliable source of income (Republic of Botswana Government White Paper 1, 2002).

Irrigated agriculture in Botswana generally takes the form of horticulture, which is dominated by a few, relatively large-scale commercial farms in the Tuli Block region in the northeast of the country, that have the advantage of high-yielding wells and good soils along the Limpopo River. The remaining horticultural sub-sector is fragmented, consisting of numerous small farms, averaging one hectare or less in size. The potential for commercial horticultural production is largely under-utilised, even within the limitations of Botswana's water supply. Horticultural crop yields can be considerably increased through the adoption of modern, efficient irrigation, cultivation and farm-management methods. The total area devoted to horticultural production at present is less than 1000 hectares (Republic of Botswana Government White Paper 1, 2002).

Since 1982, national cereal production has ranged between 12 and 21 percent of the national consumption level. The average income from cropping activities for arable farming households contributes about 25 percent of family income, the rest being derived from other sources. Several government schemes such as the Arable Land

Development Programme (ALDEP), and the Financial Assistance Policy (FAP) are major factors in sustaining the farming population. Furthermore, when programmes which support farmers are considered, it is found that more is being spent by the government to sustain the arable sub-sector than its contribution to GDP (Republic of Botswana Government White Paper 1, 2002). Clearly, there is a problem of sustainability.

According to the Republic of Botswana Poverty Study (1997), the average per capita income for the rural population is about 1 500 Pula. However, the income of around 50 percent of landholders practising rain fed agriculture, who do not own cattle is unlikely to exceed 1000 Pula in one year. The predominant crop types grown in Botswana include, sorghum, maize, millet, pulses, groundnuts and sunflowers (Republic of Botswana Agricultural Statistics, 1996). For such households, formal employment at a minimum wage of 3000 Pula per year would generally produce a higher income and would therefore be more attractive.

It has also been found that the low levels of income and high risks associated with traditional rain fed farming affects the age distribution of rural households. The farming population is ageing, with the average age of male farmers being about 57 years. Rain fed farming is also undergoing a process of feminisation due to the increasing out-migration of younger people, especially males, from rural areas in search of urban-based livelihoods which are perceived to be more financially viable and secure (Republic of Botswana Government White Paper 1, 2002).

In recognition of the need to improve the productive capacity of resource-poor farmers in the traditional arable sector, the Ministry of Agriculture in Botswana has, over the years, implemented a number of development-orientated programmes with the sole aim of promoting and improving the sector by providing an enabling environment for farmers and producers. These programmes include the Arable Land Development Programme (ALDEP) and Accelerated Rainfed Arable Programme (ARAP), Service to Livestock Owners in Communal Areas (SLOCA), the Bull Subsidy Scheme, the Artificial Insemination fund, the Agricultural Extension Fund No. 10 (AE 10), and other agricultural projects funded under the Financial Assistance Policy (FAP). The success of these programmes in improving the sectors productivity has been minimal, mainly due to:

- '...the absence of clear and monitorable sector-wide strategies and plans;
- poor targeting of subsidies and poor performance of farmers;
- unfavourable agro-climatic conditions, characterised by low and erratic rainfall and endemic droughts which make rainfed crop production risky, and
- constraints to the development of irrigated agriculture due to uncertain and scattered water resources, low borehole yields, competition for water with other sectors and lack of a clear policy on apportionment of water for agricultural use, including irrigation' (Republic of Botswana Government White Paper 1, 2002, p. 7).

In the northeast region of Botswana large areas of deciduous forest contains commercial quality timber. Areas containing the particularly valuable mopane (*Colophospermum mopane*) trees spread to the north east and north west region, while morual (*Scherocarya birrer*) trees grow in the north and west. The baobab (*Adansonia digitata*), which can live to a great age with a circumference of more than thirty metres, is also dominant in the north. There are several forest reserves in the Chobe district, the northern Nata state lands and the area north of the Okavango Delta, with inventories either already undertaken or being planned. Such inventories are effective in establishing the quality of timber available for commercial exploitation, and new areas to be investigated for further timber concessions. To address the management and conservation of Botswana's valuable, but ever diminishing forest reserves, forestry legislation is being reviewed and a research action plan implemented. Tree plantation programmes are helping to alleviate the problem of the denudation of trees, as well as increasing public awareness of trees as protectors of the environment and providers of useful products (<http://www.botswana-online...htm>).

3.2.2.8 Mining

Large scale mineral exploitation began in Botswana in 1971, when the Orapa diamond mine came into production. Botswana proceeded to develop a fairly diverse mining sector, with three major diamond mines, namely Jwaneng in the southern Kalahari, and Orapa and Letlhakani in the central Kalahari. There is also coal exploration and copper-nickel production as well as the mining of gold, industrial minerals and semi-precious stones. The diamond mines are owned and operated by the Debswana

Diamond Corporation (Pty), a joint venture between the Botswana Government and De Beers Consolidated Mines of South Africa (Van Buren, 2002).

Since the mid-1980s Botswana's diamond industry has continued to strengthen its role as the mainstay of the country's vigorous economic performance. By 1997 diamonds accounted for an estimated 70 percent of Botswana's exports, about 45 percent of government revenue and some 30 percent of GDP (Van Buren, 2002). With the increase in resources arising from diamonds during the 1980s, the government channelled more income towards development programmes. This enabled the government to undertake investments to address national disasters such as drought, which has been a recurring problem over the past years. The road network was significantly improved throughout the country, and a number of schools and health centers were built to improve access and hence Botswana's standard of living (<http://www.iiasa...html>).

Plans to extract Botswana's coal reserves have been restricted by the low level of international prices and by the great distance to major coal markets. An estimated 17 000 million metric tons of steam coal suitable for power-plant use have been identified in the east of the country. Coal is currently extracted at the Morupule colliery, which is used for the generation of electricity to service the mining industry. The government has also encouraged domestic coal use to try and conserve fuel wood. In 1998 fossil fuels accounted for 5,4 percent of the value of total imports (Van Buren, 2002).

3.2.2.9 Trade

Diamonds have been Botswana's major export by value since the mid-1970s. Other exports include vehicles and parts, copper-nickel matte, textiles, meat and meat products. Botswana's principal imports include vehicles and transportation equipment, machinery and electrical equipment, food, beverages and tobacco, metals and related products, chemical and rubber products, and textiles and footwear (Van Buren, 2002).

The United Kingdom tends to be the principal client, purchasing some two-thirds of all exports, mainly diamonds consigned to the London-based Central Selling Organisation (CSO). Other important clients include the countries of the Southern African Customs

Union (SACU), (comprised of Botswana, Namibia, Lesotho, Swaziland and South Africa), with the main client being South Africa, accounting for some 15 percent of exports, followed by continental Europe. Botswana's principal supplier of imports are the SACU countries, mainly South Africa, which provides some 70 percent of all imports (Van Buren, 2002).

3.2.2.10 Tourism

Botswana affords many possibilities for tourism investment and development. The National Development Plan 8 (NDP 8), the five-year plan for the economy (1998 to 2003), has identified wildlife and tourism as a key sector for economic growth and predicts that tourism will be a one billion Pula industry within the next five years (<http://www.iiasa...htm>).

Total foreign arrivals increased from 1 637 949 in 1999 to 2 145 370 in the year 2000. Most of these arrivals were in the third quarter of 2000. The most popular reason for entering Botswana was either in transit to other countries, or holidaying in Botswana. The majority of arrivals are from the neighbouring South Africa, Zimbabwe, Namibia, and Zambia. However, quite a significant number of European and American citizens visit the country, as well as individuals from other parts of Africa (Republic of Botswana Statistical Bulletin, 2001).

Tourists are attracted to Botswana by relatively unpopulated and remote wetland and thirstrand environments, which support numerous and diverse wildlife populations, as well as the proximity to other Southern African attractions such as the Victoria Falls in Zimbabwe. Government policy is to limit the density and environmental impacts of tourism through the licensing of a limited number of high-cost safari companies who have exclusive access to the wildlife areas (<http://www.iiasa...htm>).

During the year 2000 the total hotel turnover equaled 86,7 million Pula, which was a sharp decline from the 1999 value of 144 million Pula. This decline however, can be attributed to the very low response rate experienced from hotels during the 2000 tourism survey, and is therefore not a clear representation of the total hotel turnover. Accommodation netted the highest income of 42,9 million Pula, followed by meals at

17,8 million Pula. The largest turnover during the year was recorded in the month of September at 26,4 million Pula (Republic of Botswana Statistical Bulletin, 2001).

3.2.2.11 Manufacturing

The Gross Domestic Product of the manufacturing sector grew by an estimated 10,1 percent per year from 1985/86 to 1994/95, and by 5,1 percent from 1995/96 to 1998/99. The largest factor hindering growth in this sector has been the small size of the Botswana market, at 1,5 million, together with trade barriers restricting Botswana based manufacturers from operating in neighbouring, larger markets. Botswana's weak infrastructure, which was once cited as a deterrent, is now being greatly improved, but import dependence and a shortage of skilled manpower remain. The government is addressing the shortage of skills with varying success through efforts to improve education and training. Import dependence is still a problem though, as the percentage of value added to various products in Botswana is used by neighbouring countries as a reason to maintain trade barriers (Van Buren, 2002).

3.3 The Okavango Delta Region

The Okavango Delta occupies the northwestern region of Botswana, in the Ngamiland district. This district is the third largest in the country, with a total area of 109 130 square kilometers, and forms part of the international boundary between Botswana and Namibia. Both the geographic location and the physical characteristics of the district give it remote area status. Soils are generally dominated by heavy Kalahari sand, and the fluctuating waters of the Okavango swamp can make traveling within this district difficult (Ross, 1987; Republic of Botswana Environmental Statistics, 2000).

The Okavango delta is a 13 000 square kilometre lush, tropical wetland, surrounded by Kalahari Desert savannah, and is recognized as one of the world's largest inland delta's (Ross, 1987). However, not all of the 13 000 square kilometres is a flooded 'swamp'. The delta fluctuates in size as a result of a complex relationship involving an annual flood from Angola and local rainfall events. In the current climate regime, and during the driest time of the yearly cycle, the perennially flooded part of the delta will amount to only an estimated 6 000 square kilometers. At the height of the flood as

much as 13 000 square kilometers may be inundated, and there is geomorphologic evidence which suggests that in the past, the delta may have been as large as 22 000 square kilometers (<http://www.places.co.za>).

The Okavango River rises in the highlands of southern Angola, and cuts south through Namibia's Caprivi Strip, and then enters northwestern Botswana (Ross, 1987; Bock, 1993; Hitchcock, 2000). It is the last surviving remnant of the great Lake Makgadikgadi, whose waters and swamps once covered much of the middle Kalahari. It is also closely connected with the Kwando-Linyanti-Chobe swamps and river systems to the northeast. It is thought that in the past the Okavango, Chobe, Kwando and upper Zambezi waterways flowed as one massive river across the middle Kalahari, to join the Limpopo River and then flow to the Indian Ocean. The flow of this river was later impeded by tectonic movements in the earth's crust causing a damming back of the giant river which resulted in the formation of a series of huge and complex swamps (Ross, 1987). As the Okavango River left the humid highlands of southern Angola, and entered the arid, extreme flatness of the Kalahari, it slowed and deposited its sediment load (<http://www.icun.org...html> ; Ross, 1987; Hitchcock, 2000). As a result, channels became blocked and the water sought other courses, continuing to drop its sediments wherever it traveled. Over time, around two million tons of sand and debris were deposited over the Kalahari, creating the characteristic fan shape of the Delta. The Okavango's waters still cut paths through these deposits, and drop their sand load, causing the channels to continue changing direction (Ross, 1987).

Two parallel faults now determine the direction in which the Okavango River enters the Kalahari Basin, in an area in the northern part of the delta called the Panhandle (Ross, 1987; Hitchcock, 2000). Here there is still enough of an elevation change that the water fans out for only fourteen kilometers. This area contains immense 'islands' of densely packed papyrus and reeds. On either side of the Panhandle, Kalahari Desert savanna extends for hundreds of kilometres. Further south the narrow Panhandle gives way to the Delta, which spreads out for over a hundred kilometres to the south, east and west (Ross, 1987; Hitchcock, 2000). This area is a patchwork of swampy land and islands, with a rich diversity of mammals and birds. Central to this ecosystem is the annual flood which brings water with nourishment to the Delta. The summer rains in Angola bring a flood in the winter months (June to September). The flood makes travel for both people and wildlife difficult, and the islands become surrounded by water. Once the

flood recedes, the area can become quiet dry, the formerly riverine floodplains becoming grassy plains. In many ways this flood determines the lifecycle, not only for the animals and plants, but also for the people of the Delta (Bock and Johnson, 2002).

3.3.1 Climate

The Ngamiland district experiences a semi-arid to arid climate. The presence of a southern sub-tropical high-pressure belt influences the climate, causing a large-scale downward movement of air. Convectional rainfall is common in the area, which, like elsewhere in Botswana, is erratic. Annual rainfall levels vary from 450 millimeters to 660 millimeters in the Ngamiland district and tend to occur during the months of November to March. The southward movement of the Inter Tropical Convergence Zone (ITCZ) also adds to the relatively high rainfall amounts in the area – in comparison to the rainfall levels throughout the rest of Botswana. Maun receives an average of 545 millimeters of rainfall annually. The average minimum temperatures vary from 15 degrees Celsius to 20 degrees Celsius for winter and summer months, respectively. Maximum temperatures range from 25 degrees Celsius to 34 degrees Celsius, with peaks in October to November (Makhwaje *et al*, 1995; Ndubano, 2000).

3.3.2 Soil and Vegetation

The vegetation in the Okavango delta region can be broadly divided into Northern Kalahari Tree and Bush Savannah and Aquatic Grassland. The major soil type in the Ngamiland district is the arenosols, which is a typical Kalahari-sand type of soil. This soil-type fringes the Okavango delta and Panhandle, but clay rich luvisols are dominant within the delta itself. These luvisols are important for arable agriculture in the area (Makhwaje *et al*, 1995).

3.3.3 Wildlife

Ngamiland district contains a large diversity of wildlife which is an important natural resource to Botswana. According to the eighth National Development Plan (NDP 8), (1998 to 2003), wildlife has the potential to present an alternative to the countries

dependence on minerals by way of tourism (Republic of Botswana Environmental Statistics, 2000).

In order to conserve this wildlife resource, several national parks and game reserves have been developed throughout the country, covering different ecological zones. The Moremi National Park is situated on the northeastern side of the Okavango delta. Established in 1965, this reserve covers some 3 900 square kilometres of formerly communal land. With habitats ranging from dry savannah woodland, semi-desert like Knobthorn (*Acacia nigrescens*) and Mopani (*Colophospermum mopane*) forests, riparian woodland, floodplain and reed beds to permanent papyrus (*Cyperus papyrus*) swamp, it is arguably the Okavango delta's primary tourist attraction (Republic of Botswana Environmental Statistics, 2000; Ndubano, 2000).

3.4 Socio-Economic Profile of Ngamiland District

3.4.1 Population

The population of the Ngamiland district increased by 17 percent from an estimated 92 192 people in 1991 to an estimated 110 489 people in 2001. Some 40 percent (43 776) of this population lives in Maun, whose population increased by 38,9 percent from 26 768 in 1991 to its present size. Maun has an annual growth rate of 5,08 percent (Republic of Botswana Population of Towns, Villages and Associated Localities, 2001; Republic of Botswana Statistical Bulletin, 2001).

3.4.2 Employment

According to the Botswana Demography Survey (1998), the major source of employment in the Ngamiland district is administrative work (31 percent), followed by agriculture (17 percent) and wholesale and retail trade (8 percent). Employment in hotels and restaurants makes up a further six percent of the economically active population. An estimated 46 000 people are economically active in the Ngamiland district, with some 33 000 people employed in formal sector work. An estimated 12 247 people are unemployed in this district with the majority of them consisting of males and females in the age group of 19 to 29 years (Republic of Botswana Demography

Survey, 1998). According to the Botswana Statistical Bulletin (2001), there are only an estimated 6 000 paid employees in the agricultural sector throughout Botswana, even though up to 44 percent of the economically active population in Botswana are engaged in agriculture.

3.4.3 Income

The average monthly cash earnings for work in the agricultural sector in the Ngamiland district for Botswana citizens is 405 Pula. Employment in the hotel and restaurant sector pays an average monthly wage of 766 Pula (2001 estimates). Both these figures are higher than the national minimum monthly wage of 270 Pula (Republic of Botswana Statistical Bulletin, 2001). The average monthly household income for the Ngamiland district are 731 Pula for urban towns, such as Maun and Shakawe, and 441 Pula for rural areas and villages (Africa Contemporary Record, 2000).

The most common sources of income in the Ngamiland region include livestock and crop sales, the sale of veld products, the collection of drought relief from the government, fishing, working in the tourism sector, the selling of goods as a street vendor, retailing, the production of school uniforms, the sale of wildlife meat and products, basketry, the brewing of beer and as tour guides (Makhwaje *et al*, 1995).

3.5 Traditional Inhabitants of the Okavango Delta

The Okavango Delta was traditionally home to five separate ethnic groups, each with its own identity and language. They are the Hambukushu, Dixeriku, Wayeyi, Bugakwe and Xanekwe (Bock, 1998; Hitchcock, 2000). Members of all five of these ethnic groups live outside of Botswana as well. Bugakwe and Hambukushu and Dixeriku live in northern Namibia and southern Angola, and Hambukushu people can also be found in southwestern Zambia. Xanekwe and Wayeyi people also live in northern Namibia. Due to the Namibian struggle for independence, and the Angolan civil war, communication and travel between Botswana, Namibia and Angola have been difficult since the 1970's. As a result of this, the ethnic communities in these countries have grown apart. Although travel along the Okavango River is now easier between Botswana and Namibia, the continuing civil war in Angola has left Angolan members of

these groups relatively isolated. Apart from the separate ethnic identities of these groups, there is a further important distinction. Bugakwe and Xanekwe are descendents of San or Bushmen people. San are the indigenous inhabitants of southern Africa and have lived in small groups as nomadic hunters and gatherers for thousand of years (Bock, 1993; Bock and Johnson, 2002; Hitchcock, 2000). Dxeriku, Hambukushu, and Wayeyi are traditionally Bantu people who speak distantly related Central Bantu languages. This implies that the Dxeriku, Hambukushu and Wayeyi are more recent inhabitants of the area, having migrated from central Africa several hundred years ago (Bock and Johnson, 2002).

Historically, over the past 150 years or so, Hambukushu, Dxeriku and Bugakwe have inhabited the Panhandle and the Magwegqana in the northeastern Delta (Tlou, 1985; Barnard, 1992). Xanekwe have inhabited the Panhandle and the area along the Boro River within the Delta, as well as the area along the Boteti River (Barnard, 1992). The Wayeyi have inhabited the area around Seronga as well as the southern Delta around Maun, and a few Wayeyi live in their original ancestral home in the Caprivi Strip (Larson, 1988; Hitchcock, 2000).

3.5.1 Traditional Lifestyles of the People

The five separate ethnic groups all followed different traditional subsistence strategies. Originally, the Bugakwe and the Xanekwe groups were hunter/gatherers. The Bugakwe foraged in both the desert savanna and the swamps, while the Xanekwe historically had a riverine orientation in their foraging. The Dxeriku, Hambukushu, and Wayeyi groups all traditionally participated in a mixed subsistence strategy of farming, fishing, hunting, collecting wild plant foods, and cattle and goat herding (Bock, 1998; Hitchcock, 2000; Bock and Johnson, 2002).

Traditionally, Bugakwe men hunted in the desert savanna using poison darts shot from a bow. This method of hunting required immense skill, to track the animals, get close enough to shoot, and to accurately deliver the dart. As a result, the men would be away from their communities for several days at a time on hunting expeditions. Xanekwe men also hunted using poison darts in the savanna, but alternatively hunted in the Delta using spears. Their typical prey consisted of aquatic antelope, and at times

included crocodiles and hippopotamus. The basic technique that the hunters undertook to kill their prey was challenging. The men would balance in a dugout canoe, while one hunter would harpoon an animal, holding it while his companions attacked the animal with their spears and arrows. Dxeriku, Hambukushu, and Wayeyi men also used this technique when hunting in the Delta (Bock and Johnson, 2002). From the late 1800s onwards, men began using firearms during hunting, but the traditional methods have, to a certain degree, persisted to this day. Men from all five of these ethnic groups are also expert fishermen, using bow and arrow, spear, hook and line or nets to catch bream and catfish. Dxeriku, Hambukushu, and Wayeyi men traditionally built fences from acacia thorn trees to protect their agricultural fields from wild animals such as elephants, buffalo and hippo, as well as cattle. These men were also responsible for ploughing the fields and tending to the cattle (Bock and Johnson, 2002; Hitchcock, 2000).

3.5.2 Role of Women in the Community

The traditional role of Xanekwe women in the community was collecting food from the Delta, such as bird eggs, roots, and small animals caught with snares, as well as fishing by using conical baskets called weirs, in shallow water. Bugakwe women collected food from both the Delta and the savanna. This included eggs, roots, fruits, birds and small game in addition to mongongo and marula nuts. Dxeriku, Hambukushu and Wayeyi women also collected food from the Delta and savanna, but historically women from these groups spent more time tending the agricultural fields and processing grain and other produce. Their responsibilities included planting, weeding, harvesting, separating the grain from the chaff, and finally, processing grain into flour. This was done using a mortar and pestle like instrument referred to as a stamping block, to pound the grain. The outer husk was removed and the grain was sifted using specialised baskets. After several cycles of pounding and sifting, flour was produced and the chaff discarded (Bock, 1998; Hitchcock, 2000; Bock and Johnson, 2002).

Traditionally, children and teenagers were able to contribute to the household economy in varying degrees, depending on the subsistence ecology. For example, Bugakwe and Xanekwe children could contribute relatively little due to the fact that in a hunting and gathering subsistence ecology, high levels of skill are required to be a

competent producer. These skills take a long time to develop, and for many types of hunting and gathering activities, adults do not become competent until in their twenties and expert until in their thirties. In the mixed subsistence strategies of the Hambukushu, Dxeriku and Wayeyi, young people could contribute more to their households since some of the tasks took less time to learn. Boys and young men did a large portion of the labour in herding and taking care of the cattle and goats. Girls and young women could perform many of the agricultural related tasks at the same level as adult women. For example, fourteen year old girls were as good at processing grain as 35 year old women. Among all five of the ethnic groups, young people did a great deal of the domestic chores such as collecting water and firewood (Bock, 1998; Bock and Johnson, 2002).

3.5.3 Social and Political Organisation

Bugakwe and Xanekwe people traditionally lived in small groups centered on extended family relationships, with no central authority figure such as a chief. These extended family groups moved periodically in response to local depletion of game, and groups would sometimes camp together for several months, or even years before going their separate ways. The Dxeriku, Hambukushu and Wayeyi people all resided in semi-permanent, patrilocal extended family settlements. There was a central authority figure in the form of a hereditary herdsman, and within a radius of several kilometres from the settlement most families were related (Bock, 1998; Hitchcock, 2000; Bock and Johnson, 2002).

During the late 1700s, the chief of the Batawana, a Tswana speaking group, began to exert political control over the Okavango Delta peoples. This external control resulted in changes to the traditional political structures of these groups, and many matrilineal oriented customs regarding property and the family were replaced by patrilineal Tswana traditions. In the early 1900s the British also began to exert political control over the Okavango Delta, integrating traditional political institutions into government based ones. It was only when Botswana became independent in 1966, however, that government political institutions became formalised in much of the Okavango Delta. Today, the traditional headmen have been replaced by government employees, and

are assisted in their duties by police, court personnel and citizen committees (Bock, 1998; Hitchcock, 2000; Bock and Johnson, 2002).

3.5.4 Example of Traditional Way of Life in a Village in the Okavango Delta: Zankuyu

A survey was conducted by the University of Botswana for the Rural Sociology Section of the Ministry of Agriculture in Botswana on Okavango villages in 1976, to gain a better understanding of the traditional way of life of inhabitants of these villages. By presenting an overview of the way of life of inhabitants of Zankuyu village in 1976, a more thorough account of traditional customs, practised by the Okavango delta peoples can be obtained. This can then be used to highlight some of the changes that have occurred to traditional agricultural lifestyles of inhabitants of the delta since 1976.

3.5.4.1 Zankuyu: Overview of the Village and its Inhabitants

In 1976 Zankuyu was situated roughly forty kilometres northeast of Maun, on the eastern edge of the Okavango delta. The village was composed of about nine to ten housing clusters, with each cluster being two to three kilometers apart. Each cluster consisted of an extended family including grandparents, parents, uncles and children. In 1976 the inhabitants of Zankuyu were predominantly Wayeyi, who had inhabited the area for hundreds of years. There was a highly developed sense of communalism in the village, with most inhabitants working and eating together, as a communal system of production was practiced. There was no school in the village, very few elements of individualism and apparently no group of elite as all work and produce was shared by the village inhabitants, for the benefit of the entire community (UBS Students Survey of Okavango Villages, 1976).

In 1976, the presence of tsetse flies/disease in the area prevented the villagers from raising cattle, goats and sheep, which at the time was the wealth of a typical Motswana. As a result, hunting was used to obtain food and raise cash for paying local tax, buying food and other commodities. The inhabitants of this village were entirely dependent on three things, namely cultivation, which accounted for forty percent of

their food; wild game, which accounted for around thirty percent of their food and was a means to obtain cash; and natural fruits, obtained from the delta. In 1976 these people were almost entirely dependent on the Okavango delta, with around 99 percent of their livelihoods coming from it. All their building materials, water, most of their food, were obtained from the delta (UBS Students Survey of Okavango Villages, 1976).

Work in the Zankuyu village was carried out by everyone except small children, and unlike in most other tribes in Botswana, both men and women helped with the ploughing of fields and did the same amount of work. Most of the work was carried out from six in the morning to seven in the evening, and families could generally only afford one meal a day, usually at lunch. The staple food was boiled maize and sorghum porridge. This was eaten with natural foods such as insects, frogs, fruits and a wide variety of wild game and fish collected from the Delta. In between the meal, khadi, a locally brewed beer was drunk (UBS Students Survey of Okavango Villages, 1976).

At the time of the survey in 1976, the people of Zankuyu still practiced ancient customs and held traditional beliefs and values. Leadership was based on seniority and the older generations played a significant role in keeping the community cohesive. The relationships between individuals in the village was clearly defined by traditional, cultural norms and values. Inhabitants of this village, as well as people throughout the delta, believed that poverty or prosperity in life came from their ancestors. Rules and regulations were made through traditional beliefs and became a habit. Ridicule and gossip were used as a means of social control and helped to bring deviants to conformity (UBS Students Survey of Okavango Villages, 1976).

During the 1970s hunting restriction policies were implemented throughout the Okavango delta and inhabitants were required to obtain hunting licenses which specified the number and type of animals which an individual was allowed to kill. Hunting licenses for lucrative animals such as lions and elephants were too expensive for the average Okavango inhabitants to purchase. The number of animals that each person was allowed to kill during the hunting season was minimal and as a result almost all animals killed were used for consumption, which prevented individuals from raising cash to pay taxes and purchase goods (UBS Students Survey of Okavango Villages, 1976).

With the implementation of the hunting restriction policies in the Okavango delta region, most inhabitants of the delta, including Zankuyu villagers, became poverty stricken and were forced to adopt alternative livelihoods as a means of cash generation and survival, and as a result traditional lifestyles were altered (UBS Students Survey of Okavango Villages, 1976).

3.5.5 Loss of Traditional Lifestyles, Language and Cultural Traditions

The people of the Okavango Delta face a number of challenges to preserve their traditional way of life, languages and cultural traditions. These challenges have their roots in the Okavango people's integration into national, political, social and economic institutions, the hunting restrictions placed on the Okavango delta and the subsequent development of mass tourism in the area. The people have been experiencing this challenge since Botswana's independence, but far more intensely since the 1980s (Bock and Johnson, 2002).

In the mid-1960s the first commercial safari camps were developed in the Okavango Delta, along the Boro and Jao rivers. This attracted Xanekwe from all over the region. The establishment and subsequent expansion of the Moremi Wildlife reserve caused the further migration of Xanekwe, and the establishment of more safari camps in the area (Bock, 1998; Hitchcock, 2000).

Prior to the concentration of Xanekwe at the periphery of the Moremi Reserve, Wayeyi from the Jao region, who had traditionally travelled through, and hunted in this area began arriving, searching for jobs. Throughout the 1980s many more Wayeyi and Hambukushu from the Panhandle and northeastern Delta arrived. Today there are several relatively large towns and smaller villages throughout the Okavango delta. These include Beetsha, Seronga, Mohembo East, Shakawe, Nxamasere, Etsha 6, Qangwa, Gumare and Nokaneng in the western and northwestern part of the Okavango region. The eastern and northeastern region of the Okavango contains the towns of Chanoga, Makalamabedi, Tatamoga, Sankoyo, Shrobe, Matlapana, Maun, Shashe, Komana, Toteng, Kareng, Makakung and Tsau.

Due to the development of Moremi National Park, and other game reserves, the implementation of policies restricting hunting in the Okavango delta, the conversion of communal land into Wildlife Management Areas (WMAs), and the subsequent growth of mass tourism, large-scale migration occurred throughout the delta to such an extent that today, most towns and villages have up to nine different ethnic groups residing in them. These comprise Hambukushu; Basarwa (San), including Bugakwe and Xanekwe; Wayeyi; Dxeriku; Bakgalagadi; Basobia; Barotse; Baherero, and Batawana. There is also a growing white and Asian community in Maun and Shakawe (Makhwaje *et al*, 1995).

3.5.6 Profile of Contemporary Rural and Agricultural Households in the Okavango Delta Region

Indications are that most rural and agricultural households in the Okavango delta region are headed by men (70 percent), and the average family size is between eight and sixteen individuals (Makhwaje *et al*, 1995).

Families in rural, agricultural villages tend to live in traditional compounds consisting of two or three small houses made from cylindrical clay walls and conical thatched roofs. However, the more recent houses are square with corrugated iron roofs. Many houses in the northwest of the delta are still made from reeds. Furniture and crockery are generally western, but traditional sleeping mats and large pots are still used. Most cooking is done on open wood fires and lighting is by candle and paraffin lamps (<http://www.ubh.tripod...htm>).

3.5.6.1 Gender Division of Labour

Females in the Delta region tend to perform the following tasks: pounding maize and sorghum to make meal, collecting grass and reeds, cooking, basketry, scarring birds away from agricultural fields, gardening and building huts (Makhwaje *et al*, 1995).

Male activities include herding, watering and dipping cattle; the digging of wells; the collection of firewood; scaring wildlife away from agricultural fields; the cutting of poles

to be used for poling mekoro's (traditional wooden boats); woodwork; and the clearing of arable land (Makhwaje *et al*, 1995).

Both men and women share the tasks of ploughing, threshing/harvesting and weeding fields (Makhwaje *et al*, 1995).

Most of the rural agricultural households in the delta depend upon family labour. There is no indication of hired labour. In most agricultural households there is at least one member working in urban areas and supplementing rural incomes. However, most people actually living in rural areas are unemployed, and subsistence agriculture, the collection of wild fruits and plants from the delta and the catching of small animals in traps and snares is their only form of economic activity. There is, however, also a growing trend in agricultural villages in the delta where an increasing number of unemployed school leavers, who attended school in the larger towns in the Okavango such as Maun, Shakawe and Etsha 6, return to their family homes in the villages, but who are no longer interested in practicing subsistence agriculture and therefore do not take part in family labour (Makhwaje *et al*, 1995; Ndubano, 2000).

3.5.7 Profile of Contemporary Urban Households in the Okavango Delta Region

There are three urban towns in the Okavango Delta region. These include Maun (population 43 776) in the southeastern part of the delta, Etsha 6 (population 2 629) in the northwestern part of the delta and Shakawe (population 4 389) in the Panhandle area of the Okavango (Republic of Botswana Population of Towns, Villages and Associated Localities, 2001). Indications are that most households in these towns are headed by men, but there are more female headed households than in rural, agricultural villages. The average family size is between two and five individuals (Republic of Botswana Statistical Bulletin, 2001). Of the 50 794 individuals that inhabit these three towns, some 33 859 are employed in formal sector work. Some 18 832 males are employed, while some 15 028 females are employed (Republic of Botswana Demography Survey, 1998).

Most food consumed by inhabitants of these towns is purchased, but several households grow maize in their gardens. The staple diet of inhabitants generally consists of maize and sorghum porridge and beans, bought from local supermarkets, fruit and vegetables such as squash, melons, oranges and cabbage, supplied by local vendors; and meat such as beef and goat, bought from local butcheries. Beer is rarely brewed in urban areas, but commercial beer, as well as traditional sorghum and maize beer is bought from local liquor outlets. Soured milk and bottled or canned soft drinks are also consumed. The consumption of chemically preserved canned drinks has greatly increased throughout the Okavango delta region with the spread of cash income (<http://www.ubh.tripod...htm>).

Families in urban towns tend to live in square brick houses with corrugated iron roofs. Most houses have electricity and cooking is done using gas stoves. Most houses have western furniture and crockery, including beds. Most individuals living in these towns also have family and relatives living in rural, agricultural villages in the delta, whom they support by sending cash remittances (<http://www.ubh.tripod...htm>).

3.6 Agriculture in the Okavango Delta Region

3.6.1 Arable Crops

There are two distinct crop production systems practised by the inhabitants of the Okavango delta region. These are the dryland and Molapo cropping systems. The Molapo system involves planting crops within the moist Okavango delta river beds and flood plains during the drier months and utilises the sediment deposited during the wet season. The dryland system involves planting crops further inland and is solely dependent upon rainfall. Within the Molapo system, ploughing and planting are generally undertaken between August and October, and are usually done by hand. Within the dryland system, ploughing and planting are generally undertaken between November and January, and are usually done by using a team of four to six donkeys, or sometimes oxen. The most common planting method used by both cropping systems is the broadcasting system. Other planting methods include hilling, third furrow planting and mechanical row planting. Mixed cropping is generally undertaken,

with the most common mixture being that of cereals and cowpeas, melons and sweet sorghum (Makhwaje *et al*, 1995).

The principal crops grown in the delta region include sorghum, maize and millet. The secondary crops include cowpeas, groundnuts, melons, pumpkins, sweet sorghum, courgettes, gourds and jugobeans. Sorghum is generally grown in the eastern edge of the delta and maize in the west. In the lower delta, near Maun, maize was the predominant crop grown within the Molapo farming system. However, there has been a shift to sorghum due to unreliability of flooding in this lower region, which is essential in providing adequate moisture for the production of maize. Higher up in the delta and the Panhandle region, maize is still the predominant crop grown using the Molapo system, while millet and sorghum are grown within the dryland farming system. Hambukushu and Wayeyi tribes generally grow millet, while Bakgalagadi and Batawana tribes generally grow sorghum. This is due to differences in dietary preferences between the tribal groups (Makhwaje *et al*, 1995).

The average size of cropping areas in the Okavango delta region range between 0,5 to 16 hectares. Dryland cropping areas generally range between 0,5 to 6 hectares in size. The most common crop management practices undertaken within the region include weeding, bird scaring, which is generally a female activity, with limited help from the men, and wildlife scaring, which is generally done at night and is solely a male activity (Makhwaje *et al*, 1995).

In the Okavango delta region, crop yields tend to be higher from the Molapo system than the dryland farming system. This is generally due to the soils along and within the river beds and floodplains being more fertile and moist from the annual flooding. However, actual yields are not easy to measure per hectare due to the unreliability of farming in this region. The estimates, represented in Table 3.1 are, however, accepted as average annual yields per household.

Table 3.1: Crop Production Estimates by Farming System in Ngamiland District (70kg bags/household)

Crop	Dryland	Molapo
Maize	1 – 3	3 – 10
Sorghum	1 – 6	2 – 6
Millet	1 – 8	-
Cowpeas	0 – 5	-

(Makhwaje *et al*, 1995, p.25).

Most of the harvest is used for home consumption, but in some cases it is also used for trade and bartering. Much of the maize and sorghum yields are used for the brewing of beer, making porridge and occasionally sold to the Botswana Agricultural Marketing Board (BAMB) or other farmers. Secondary crops such as groundnuts and melons are used for both home consumption and sold (Makhwaje *et al*, 1995).

3.6.2 Agricultural Production Constraints

In the Okavango delta region, the major problem faced by farmers regarding the production of crops is low yields. These low yields are the result of a number of production constraints. Low rainfall levels are generally stated as the major constraint, especially within the dryland farming system. In the Molapo system the growth of weeds is the major constraint facing farmers. Damage caused by birds, although cited as a cause of yield losses, is more pronounced in the dryland farming system due to sorghum and millet being the main crops grown there. Poor soil fertility is also a problem generally associated with the dryland farming system. Within the Molapo and dryland farming systems, damage to crops caused by wildlife, such as elephants and antelope is often experienced. Elephants tend to damage fences allowing smaller animals to gain access to agricultural fields (Makhwaje *et al*, 1995).

3.6.3 Horticultural Crops

In the Okavango delta and Ngamiland district as a whole, horticultural production is very limited. There is a large horticultural project in Seronga, owned by a local farmer

who supplies crops to the village and community junior secondary school. There are also several small scale horticultural projects concentrated in and around Maun. The types of crops grown include cabbage, tomatoes, spinach, rape, onions, green peppers and egg plants. Fruit trees such as citrus and paw paws are also grown. The average crop production sites range between 0,4 to 15 hectares in size. The most common problems encountered in horticultural production in the area are low yields caused by pests, disease, inadequate supplies of water for irrigation and the high costs associated with this type of crop production (Makhwaje *et al*, 1995).

Other production constraints, as stated by local farmers, include the drying up of rivers in the delta. Rivers in the area are the main source of irrigation for horticultural production. However, due to a gradual shift in the gradient of the land in the delta area, the annual flooding is no longer as reliable as it was in the past. A lack of reliable seeds and the supply of pesticides is also a problem, as well as the lack of markets in the area in which produce can be sold. This further restricts production levels as the produce is perishable and the large scale cultivation of crops requires a reliable market (Makhwaje *et al*, 1995).

3.6.4 Livestock Production

The most common types of livestock kept by the residents of the Okavango delta region include cattle, goats, sheep, donkeys, horses and chickens. A relatively limited number of sheep is kept by households in the delta because mutton is not particularly favoured for consumption (Makhwaje *et al*, 1995).

The Tswana cattle breed is most common in the Okavango delta region. Other cattle breeds include crossbreeds of Brahman, Simmental, Afrikaner, Bonsmara and Tuli. Goats, sheep, donkeys, horses and chickens are generally of the Tswana breed (Makhwaje *et al*, 1995).

Most of the animals in the Okavango Delta region are kept under the communal grazing system. Management practices within the communal grazing system include herding and kraaling, watering of the animals at local water points such as boreholes

during the dry season, and to a limited extent the production of fodder, which is used during the dry season (Makhwaje *et al*, 1995).

3.6.5 Disease and Mortality

The Ngamiland district as a whole is scourged with several potentially devastating diseases. These include contagious bovine pleuropneumonia (cbpp), foot and mouth disease, pasteurellosis, botulism and gall sickness. Internal parasites such as liver flukes and wireworms are also problematic in the deltas. Predation is also a major problem in the region as grazing areas are surrounded by WMAs and game reserves. Some of the more common predators include lions, hyenas, leopards, cheetahs and jackals. Snakebites also cause livestock loss, but to a lesser degree (Makhwaje *et al*, 1995).

3.6.6 Marketing Outlets

Livestock marketing in the Ngamiland district is through local sales and the Botswana Meat Commission (BMC). Cattle marketing prices range from 200 Pula to 800 Pula per animal in the district (Makhwaje *et al*, 1995).

In the Ngamiland district some 10 466 individuals have agricultural holdings, all of which are full time farmers (Republic of Botswana Agricultural Statistics, 1996).

3.7 Tourism in the Okavango Delta Region

Nature-based eco-tourism dominates the Okavango Delta region. The Ngamiland district is the centre for the tourism and hunting industry in Botswana. As such, wilderness and wildlife based tourism and subsistence farming are the major economic activities in the area (Leinaeng, 1989).

There are 60 hotels, lodges and safari camps in the Okavango Delta region, with about 1 018 beds. There are also several hunting camps with accommodation. There was a total of 826 193 foreign visitors that entered Botswana in 2000, most of whom were South African, followed by Americans, British, Germans and Australians (Republic of

Botswana Tourism Statistics, 2000). According to Silitshena and McLeod (1998), some 53 percent of the economically active population in the Ngamiland district derive at least part of their income from tourism, in the form of both formal sector employment and informal work in the tourism industry.

The development of tourism in the Okavango Delta has led to unprecedented economic growth over the past ten years or so in this region. Tourism has led to the generation of foreign exchange, the development of infrastructure and the conservation of the Okavango Delta and its resources. The population of Maun increased from 26 768 in 1991 to 43 952 in 2001 largely due to the migration of people from rural areas to Maun in search of employment and development opportunities brought about by the growth of the tourism industry. The expansion of tourism in the delta has led to the establishment of various tourism related businesses in Maun, such as wholesale and retail trades, construction and other related services (Mbiawa, 2001).

Tourism in the Okavango Delta has stimulated infrastructural development in northern Botswana. Major road networks have been tarred, making access to northern Botswana and its neighbouring states of Zimbabwe, Namibia and Zambia easier and quicker. Goods and services are now able to reach the Okavango region much more easily (Mbiawa, 2001).

Tourism in the delta region has also partly contributed to the conservation of its natural resources. The Botswana government has developed conservation policies which promote the sustainable use of natural resources. These include the Wildlife Conservation Policy of 1986, the Tourism Policy of 1990 and the implementation of community based natural resource management projects.

The growth of tourism in the Okavango Delta is, however, also characterized by the emergence of a type of tourism that is referred to as 'enclave tourism'. Foreign owned hotels, lodges and safari camps are established to meet the demands of foreign tourists and generally fail to take into account the needs and demands of surrounding local communities. Most tourist facilities and services in the Deltas are owned and controlled by expatriates, and this situation can be attributed in part to the government's policy of high-cost, low-volume tourism. This policy tends to directly

exclude local communities from participating in the tourism business as they lack the necessary skills and financial capability to invest in the industry (Mbiawa, 2001).

The exclusive nature of the tourism industry in the Okavango Delta is characterized by limited interaction between the foreign tourists and local communities, which is leading increasingly to resentment, antagonism and alienation among the local communities, tourists and expatriate tour operators. As expatriate entrepreneurs dominate the tourism sector, Botswana citizens perceive the industry with negativity given its domination by non-citizens and the 'selling out' of their resources (Mbiawa, 2001).

3.8 The HIV/AIDS Pandemic

One of the greatest threats facing the Okavango Delta peoples is HIV/AIDS. In 1998, the HIV/AIDS infection rate in the Delta was estimated to be between 25 to 40 percent of adults, which is one of the highest in the world. Over 90 percent of hospital deaths was due to HIV/AIDS related illnesses. Various factors common to the African HIV/AIDS epidemic contribute to this high rate. These include a longstanding, high rate of sexually transmitted disease infections, high levels of multi-partnered sexuality, and the fact that none of the five ethnic groups traditionally practice male circumcision. Infrastructure improvements in transportation which occurred throughout the 1990s have also contributed to the huge rate of transmission. In 1990 there were only a few kilometres of tarred roads in northern Botswana, while today there are well over a thousand kilometres and many more of improved gravel roads. As a result of this, formerly remote and difficult to reach villages have become easy to visit. Tourists, merchants, and truckers all use these roads, and some of them bring HIV. In addition, the improved transportation network means that people travel from remote villages to large towns, such as the capital city Gaborone and even Johannesburg, to work, attend school, or to purchase consumer goods, and once again, this can provide a means of rapid increase in HIV/AIDS infection in the area (Bock and Johnson, 2002).

The development of nature based tourism in the Okavango Delta since the 1980s has resulted in even the most remote areas being affected. Previously inaccessible parts now have thousands of tourists visiting them each year, and small planes constantly travel between bush camps and the town of Maun, providing another vector for HIV.

Although the Botswana government has an extensive AIDS education and health care plan in place, it has not been able to keep up with the dramatic increase in the rate of infection in the Okavango Delta due to the improved transportation network (Bock and Johnson, 2002).

The Okavango Delta is one of the most remote and least developed areas of Botswana, and is perhaps least able to handle the AIDS disaster. Among the people of the Delta, traditional way of life and extended families are already under great pressure, and the HIV/AIDS epidemic adds a further burden (Bock and Johnson, 2002).

3.9 Conclusion

This chapter provided a broad overview of the country of Botswana, concentrating on its economy, socio-economic profile and demographic characteristics. It also provided an in-depth view of the agricultural and tourism industries in the country as a whole. This chapter also focused on the area of study, the Okavango Delta region, providing an in-depth view of the economy, socio-economic profile and demographic characteristics of this area. It presented a broad overview of the traditional and modern livelihoods of the inhabitants of this region and finally discussed the agricultural and tourism industries in the Delta.

In the Okavango Delta, as in many places around the world, people are in the process of being integrated into national level, political, social, and economic institutions, both within and outside of their control. The Okavango Delta people in general hold the view that economic development has both benefits and costs, but feel that the benefits outweigh the costs. The people see development and modernisation as unstoppable and irreversible, but would like to find a way of being able to maintain their individual cultures while participating in Botswana's national institutions (Bock and Johnson, 2002). Most people, both inside and outside of government in Botswana, tend to agree that the benefits of economic development outweigh the costs. It is possible, however, that by understanding the process of cultural change, these costs can be minimised (Bock, 1998). The next chapter presents a detailed analysis of the impact of tourism on agriculture in the Okavango Delta region.

CHAPTER FOUR

Tourism Impacts on Agriculture in the Okavango Delta

4.1 Introduction

One of the major challenges facing the Okavango Delta region in the twenty first century is the attempt to bring about development and modernisation in the area, through the creation of a world class tourism industry, without compromising the livelihoods of its local inhabitants. The development of tourism has brought about unprecedented, positive changes to the region in the form of infrastructural development, economic growth and employment opportunities. However, this development has also impacted on the lives of all inhabitants of the Okavango Delta region, and not necessarily positively. As tourism brings about increasing infrastructure and economic development and modernisation, it is becoming more and more difficult for local inhabitants to maintain independent, traditional subsistence agricultural livelihoods without integration into the formal, monetary-based economic institutions. This process of integration is leading to drastic, often negative socio-economic changes as increasing numbers of rural, communal agricultural people are forced to participate in modern, capitalist social structures (Bock, 1998).

The aim of this chapter is to analyze the impact of tourism in the Okavango Delta on local lifestyles and traditional agricultural activities. More specifically, the chapter is divided into four sections. The first section gives a broad overview of the history of tourism development in the Okavango Delta region, followed by an in-depth analysis of the impact of tourist resorts and tourists on the supply and demand of food in the Delta. The second section focuses on the infrastructure developments that have occurred in the Okavango Delta as a result of tourism growth. The changes to the way of life of inhabitants of the Okavango Delta as a result of tourism development is the theme of the third section. This section chronicles the changes that have occurred in the use of land in the region, as well as the socio-economic changes that have occurred from

tourism growth and rural-urban migration in the area. Finally, this chapter assesses the changes in agricultural production that have occurred in the Delta.

4.2 Tourism in the Okavango Delta Region

The approach to wildlife conservation in Botswana, as in many other countries in Africa, was inherited from colonialists, in which the interests and welfare of local communities living in the wildlife areas was of no effect or consequence. It is of little surprise, therefore, that communities living adjacent to conservation areas resented these wildlife institutions and feel alienated from conservation in general. This conservation trend, following the publication of the World Conservation Strategy in 1980, has changed, with a move towards integrating and reconciling local community needs and conservation practices (<http://www.iwmc...htm>).

Some of the earliest written records on the distribution of wildlife in Botswana date back to the 1820s. Travellers such as missionaries, hunters, scientists, traders and adventurers, wrote of immense herds of wildlife including elephants, rhinoceros, buffalo, impala, giraffe, zebra and lechwe, a species not previously known to science. In the 1880s the northern Botswana region appeared to be a land well stocked with a wide variety of wildlife, which included many large species such as elephant, rhinoceros, hippopotamous, eland, buffalo and giraffe. There was also a wide range of antelope including roan, sable, tsessebe and lechwe which required forest grasses; large numbers of zebra, waterbuck, vlei and reed buck; sitatunga, a rare aquatic antelope; and numerous predators such as lions (DWNP, 1997).

4.2.1 The Growth of the Hunting Industry in Botswana

During the eighteenth century members of the Bangwaketse tribe, located in the now southeastern Botswana region, began hunting elephant for ivory. They produced ivory arm-bands, knife handles, spoons and jewelry, which they traded for sheep with members of the Griqua tribe, living along the Orange River. By 1780 they were carrying whole tusks south to trade. As a result of this trade, by the 1800s Griqua wagons had crossed into Botswana in search of ivory. This in turn was the beginning of commercial hunting in the area, which by 1900 had reduced Botswana's vast

elephant herds of some 400 000 animals to just a few thousand. These were confined to the protected tsetse areas of the Okavango, Chobe and Limpopo Rivers where wagons could not travel (DWNP, 1997).

During the 1820s and 1830s, southern Botswana was colonized by the 'Difaqane', who comprised well organised and well armed hordes of homeless people who moved northwest into Tswana lands looking for new places to inhabit. These included the Bakalolo from the Drakensburg and Amandebele from Zululand who, without food or livestock, conducted raids throughout southeastern Botswana, dispersing Batswana and depriving them of food and cattle (DWNP, 1997).

The 'Difaqane' invasions, together with intermittent drought, left many Batswana in southeastern Botswana with very little to eat, except what they could get from the veld. Similarly, there was a growing recognition by the Tswana for the need for guns to defend themselves, especially after 1839 when Voortrekker Boers started to settle in Tswana lands north of the Vaal river. Guns, however, would not be sold by traders from the south, except in exchange for ivory (DWNP, 1997).

Early European 'explorers' to Botswana such as William Oswell, Coenraad de Buys, Cornwallis Harris and David Livingstone described the slaughter of elephant and other species such as rhinoceros, ostrich, eland and giraffe, both by Batswana and Europeans. Oswell's son gave an account of his father's 'sport' in 1846 in the area east of Gaborone: "elephants were in such large herds that he halted a week or ten days and shot all day long" (Oswell, 1900 cited in DWNP, 1997, p. 12).

The slaughter of elephant and other animals intensified during the 1860s throughout the Botswana region to such an extent that by 1865, where they had once been common, there were virtually no elephants left in the entire southern half of what makes up the country today (DWNP, 1997).

By 1874 chief Moremi of the Batawana, which inhabited the now Ngamiland region, is believed to have personally owned more than 2000 'modern' rifles, which he issued to his tribesmen to hunt on his behalf. These rifles were generally used to hunt the larger species of wildlife so that the trophies, ivory, hippopotamous and giraffe hide, furs and

ostrich feathers could be exchanged for more rifles, European-made clothing, ironware, lead, liquor and gunpowder (DWNP, 1997).

By the time rinderpest struck in 1896, thousands of animals had been slaughtered. The only major concentrations of animals left were to be found in the Okavango Delta and Chobe River regions, where tsetse fly kept hunters and their wagons out. It is estimated that by 1900, 90 percent of Botswana's wildlife population had been killed (DWNP, 1997).

4.2.2 The Beginnings of Conservation in Botswana

After 1875, once much of Botswana's wildlife population had been destroyed, several local chiefs such as Khama III realised that hunting needed to be controlled. Foreign commercial hunting was forbidden, and white sport hunters were required to obtain permission from the local chief in the area. In 1885 the southern half of Botswana was declared a 'Protectorate of Britain'. However, it was not until the 1890s when chiefs had the backing of the Protectorate Administration that a quota and permit system for the hunting of elephant, giraffe and eland could be implemented (DWNP, 1997).

In 1891 the Protectorate Administration adopted the Cape of Good Hope's 'The Game Law Amendment Act', which was enforced in Botswana in 1893. It was not until 1911, however, that a law was enacted controlling the trade in wildlife products. These laws applied only to foreigners, and not to local people living on their own tribal land. In terms of the law wildlife was termed 'game' and defined by species which included mammals and birds. In effect, the law controlled the use of wildlife such as hunting, killing vermin, raising money from export taxes, and later trading in wildlife products. Fish, reptiles, amphibians and insects were not considered under the law (DWNP, 1997).

Over the next 60 years the law was amended on several occasions and numerous regulations were brought into force. Generally these applied only to foreigners and settlers. However, local people living outside of tribal land, that is for those living on Crown (State) land, there were legal restrictions placed on hunting. In 1921 the issue

of hunting permits for these local people commenced so that Crown residents could apply to hunt wildlife for food (DWNP, 1997).

Tribesmen living on tribal land could generally hunt mammals, amphibians and reptiles, with the exception of elephant, eland and giraffe for which a permit was required. Foreigners and settlers (including public officers) required licenses to hunt anywhere in Botswana. Landowners (settlers owning freehold farms) could hunt game animals on their own farms without license, but could not hunt protected species such as elephant, giraffe, rhinoceros, cheetah, (etc) (DWNP, 1997).

In 1961 a comprehensive law, the Fauna Conservation Proclamation, was enforced. Unlike previous legislation, the 1961 Proclamation was designed to both protect and exploit Botswana's wildlife asset, and contained provisions for the creation of game reserves (DWNP, 1997).

The first major problem faced by the Protectorate Administration in seeking to create game reserves was that a large percentage of the land, including some of the best wildlife areas, was tribally owned. Hence, the consent of the tribe concerned was required before any reserve could be established on their land (DWNP, 1997).

In 1963 residents of Maun, including the Tawana Regent, Mrs. Moremi, attempted to establish the first game reserve on tribal land. After some negotiation, the Batawana tribe living in the area agreed to set aside some 2000 square kilometers in the northeastern Okavango Delta, which was declared the Moremi Wildlife Reserve. The exact location was chosen for its accessibility, varied swamp and dryland habitats, visible river boundaries, and lack of human population. Not wanting the government to administer their reserve, the Batawana agreed to the creation of an administrative society, the Fauna and Flora Preservation Society of Ngamiland (Campbell, 1997).

4.2.3 Wildlife Administration

By 1955 there was still no authority appointed to administer wildlife in Botswana. District Commissioners were responsible for issuing licenses for hunting, export of ivory, ostrich feathers and furs, and to make reports on the depredation of wildlife in

their districts. Increased complaints by farmers in central and northern Botswana that growing elephant populations were destroying crops convinced the Protectorate Administration that official control of "...these marauding brutes" was necessary (Campbell, 1997, p. 22). In 1956 a game officer, Major Bromfield, was appointed and stationed in Francistown with the task of controlling elephant crop raiders. However, he had wider interests than just the control of elephants and managed to gather a small staff and persuaded the Protectorate Administration to establish a legitimate wildlife department in Botswana; undertake a total review of the wildlife laws; hold a conference on wildlife conservation for the future; change the licensing system and initiate safari concession areas and safari hunting (Campbell, 1997).

In 1966 Major Bromfield retired and the wildlife department headquarters were moved to the Ministry of Commerce in Gaborone. A qualified veterinarian was appointed Chief Game Warden, more staff were hired, and the Department of Wildlife and National Parks began to take shape. Concurrently, the tourism industry in Botswana began to develop (Campbell, 1997).

4.2.4 The Growth of Modern Tourism in Botswana

In 1962 East African hunting safari companies were invited to explore the possibility of setting up 'branches' in Botswana. Three East African and one locally established companies signed agreements and were given large concession areas in and around the Okavango Delta region. In these concession areas local inhabitants were allowed to continue hunting, while they were closed to foreigners unless hunting with the concession holder. A package hunting license was developed comprising 31 animals of a wide range of species, and consequently rich foreign sportsmen began to come to Botswana to hunt with licensed professional hunters. In 1966, about 439 tourists paid Pula 67 078 for hunting licenses in Botswana (Campbell, 1997).

While the hunting industry expanded, an embryonic photographic industry began to develop. A South African-based mobile operation, Afrika en Touren 'n Safari, started to bring tourists on three-week trips to the Okavango. There was, however, no Department of Tourism at the time, and it was several years before a tourist officer was

appointed in the newly formed Department of Wildlife and National Parks (Campbell, 1997).

The development of the Department of Wildlife and National Parks in the late 1960s led to the establishment of the National Parks Act of 1968. The Department of Wildlife and National Parks drew its mandate and authority from the Fauna Conservation Act of 1961 and the National Parks Act of 1968. However, it was only in 1992 that these laws were consolidated into the Wildlife Conservation and National Parks Act of 1992. This Act provides regulations for hunting, national parks and game reserves (Campbell, 1997).

In April 1997 the Botswana government ratified the Ramsar Convention and officially registered the Okavango Delta as a Ramsar Wetland of International Importance. The Okavango Delta is presently the largest site (Campbell, 1997). The Ramsar Convention was founded in 1971 in Ramsar, Iran, and is one of the oldest international environmental treaties, based on the twin concepts of maintaining the ecological integrity of Ramsar Wetlands and promoting the sustainable use of the wetland resources (Davis, 1994). In ratifying the convention, the Botswana government committed itself to two specific conditions, in addition to maintaining the Delta's fragile ecology, and promoting sustainable utilisation of its resources. First, that it will consider the protection of the wetland in all national planning and make an inventory of the countries wetland resources. Second, the Botswana government was committed to creating a management plan for the Delta and undertaking any research and monitoring necessary to implement the plan (Campbell, 1997).

With the development of policies aimed at regulating the use of Botswana's wildlife resource since the 1880s, sufficient natural areas and wildlife populations exist in the country to sustain a booming eco-tourism industry. Presently, Wildlife Management Areas (WMA's) account for 30 percent of Botswana's total land area, supporting a 144 million Pula tourism industry. National Parks, Game Reserves and Wildlife Management Areas (WMA's) make up 38,7 percent of Ngamiland district, supporting some 60 hotels, lodges and safari camps in the region (Mbiawa, 2001; Republic of Botswana Statistical Bulletin, 2001).

One of the major challenges presently facing Botswana is ensuring that the growing tourism industry does not destroy the natural, cultural and social environments upon which it is based. In order to develop the industry in a coordinated and consistent manner, the Botswana government formulated the Tourism Policy of 1990. This policy emphasized the promotion of high cost, low volume tourism, and aimed at ensuring that Botswana benefited from the development of the tourism industry (<http://www.gov.bw...html>).

Botswana has developed a tourism industry that encourages the growth of high-cost, exclusive hotels and safari camps. The Okavango Delta region is characterized by the emergence of a type of tourism that is referred to as 'enclave tourism'. Foreign owned hotels, lodges and safari camps are established to meet the demands of foreign tourists and generally fail to take into account the needs and demands of surrounding local communities. Most tourist facilities and services in the delta are owned and managed by whites, some of which are Botswana citizens. This situation can be attributed in part to the government's policy of high-cost, low-volume tourism which tends to directly exclude local communities from participating in tourism businesses as they lack the necessary skills and financial capability to invest in the industry (Mbiawa, 2001).

4.3 Tourism in Botswana

The Botswana Government has developed an up-market-oriented, national tourism policy that promotes 'high-cost, low-volume' tourism, discouraging an influx of low-income tourists whose impact can cause irreparable damage to fragile ecosystems. The policy seeks to target the high income, and presumably high spending segments of the tourist originating markets, that are more likely to take advantage of existing permanent accommodation given their higher purchasing power. Such attempts to balance the country's objective of maximizing revenue earnings from tourism, while considering the fragile ecology upon which the industry is based are generally regarded as being far-sighted and unique within a Third World tourism industry (<http://www.safariweb...htm>).

Wildlife utilisation schemes, which provide for the participation of local communities in the management of wildlife resources, are encouraged with a view to providing employment opportunities in rural areas. The streamlining of licensing, grading and inspection procedures within the tourism industry is presently taking place, with the government's objective being the creation of a supportive environment for local and foreign investors to undertake business within a free enterprise system (<http://www.safariweb...htm>).

In Botswana, national parks and game reserves occupy 17 percent of total land area, while a further 22 percent is set aside as wildlife management areas. The Department of Wildlife and National Parks (DWNP) in Botswana seeks to:

- i. play an effective, national level, leadership and coordinating role on all matters concerning wildlife and national parks;
- ii. to conserve, manage, promote and use productively, the national wildlife resources, and to develop and utilise the country's protected areas such as national parks, game reserves, sanctuaries and wildlife management areas to the benefit of the country as a whole, and
- iii. lastly, to ensure and protect the maintenance of a sustainable ecological balance in national parks, game reserves and other wildlife areas in the country (<http://sunsite.icm.edu...htm>).

Plans for the further development of Botswana's tourism industry include regional cooperation with South Africa, a gradual relaxing of the present 'high-cost, low-volume' policy, and the development of domestic tourism. The 'high-cost' policy has been previously enforced due to the perceived delicate eco-structure of Botswana's major tourist attraction, the Okavango Delta. It was aimed at keeping tourist numbers at a minimum, while maintaining revenues. There is now a move towards involving local communities in the development of attractions based on traditions and culture, as opposed to only wildlife, as was previously the trend (<http://wildnetafrica.co.za...Botswana>).

Botswana secured P8,3 million in 1997 from the European Union to develop a tourism programme and extend a financial assistance scheme to investors in the tourism industry. It was acknowledged that the general tourism pricing structures were not only killing off domestic tourism, but sending international tourists to other destinations. As

Ms. Tswelopele Moremi, Permanent Secretary in the Ministry of Commerce and Industry, which is responsible for tourism, stated, “we may have gone overboard in some areas. We must maintain our competitiveness, especially with South Africa, and bring some destinations within the reach of our own people” (p.1). However, there have presently been few changes, since 1997, in regards to the structure of Botswana’s tourism industry (<http://wildnetafrica.co.za...Botswana>).

Regardless of attempts to involve the local population in the tourism industry, most Motswana have never been significantly exposed to the tourism industry, and have received no real benefits from its development (<http://wildnetafrica.co.za...Botswana>). There is concern that the Batswana are not aware of the potential of tourism, nor supportive of its conservation, due to a lack of understanding by the local population of the industry, and because most Motswana experience no benefits from tourism. There is a need to develop special packages to encourage the Batswana to enjoy tourist facilities, particularly during the low season. The focus of tourism should not rest solely on wilderness, so as to open up other areas of the country to benefit from tourism revenues. As Ms. Tswelopele Moremi stated “tourism in Botswana should not just be about wildlife and wilderness. There is a need to blend our tourism with our culture, sports and the protection and development of historical sites, national monuments and museums “ (<http://wildnetafrica.co.za...Botswana>, p.2).

Local communities need to be involved in the management of tourism resources and citizens trained to manage tourist operations. The development of cultural villages and tours is increasingly being seen as a means of providing low-cost tourist destinations, and at the same time involving local communities in the industry. The proceeds are to be ploughed straight back into the communities, providing incentives for additional tourist developments and local economic benefits (<http://wildnetafrica.co.za...Botswana>).

In economic terms, tourism in Botswana has steadily grown in importance since the early 1990s, and increasingly has the potential to become the country’s key engine of growth. Tourism currently contributes 8,5 percent to GDP and employs 4,2 percent of the total population. Tourism contributes approximately P270 million per annum, and hotel capacity has increased to 70 percent over the years due to the construction of more hotels. Botswana contains many possibilities for tourism investment, and while

there is a move towards more ownership and investment by local people, foreigners are still welcome, especially those with experience and the ability to provide local employment and the ecologically sustainable development of Botswana's natural resources. The Minister of Commerce and Industry has predicted that tourism will be a one billion Pula industry within the next five years (<http://www.botswana-online.com...htm>).

The weaknesses in Botswana's current tourism industry include the fact that the geographical investment base is too small, as it is concentrated in the north and northwest. Access by tourists is also difficult in many places, while distances that must be travelled to reach popular tourist destinations are vast. The public sector also lacks awareness of the tourism industry imperatives, while there is a chronic shortage of local management and technical skills (Mmegi, 2002).

In order for local Botswana citizens to become involved in the tourism industry in any significant way, there is a need to put aside 'personal jealousies and prejudices', in order to bring together experienced locals who could form consortia to buy into and/or buy out from well established larger tourist operators (Mmegi, 2002).

Botswana prides itself on high tourist standards due to the 'low-volume, high-value' concept. This however, is not necessarily true. The standards of services in many tourist areas do not match, or give value for the rates charges. There is also a danger of tourists products on offer, such as the uninhabited and unspoilt wilderness areas of Botswana being destroyed through inappropriate or unplanned development. Due to the segregation of most of the local population from the tourism industry, there is an increasing risk of xenophobia, or resentment towards foreigners by Botswana's, which quickly alienates the sector, and hence potential foreign investors (Mmegi, 2002).

Table 4.1: Total Arrivals in Botswana (2001)	
Year	Total
1996	1 071 121
1997	1 162 774
1998	1 351 798
1999	1 637 949
2000	2 145 370
Source: Republic of Botswana Statistical Bulletin (2001).	

As can be seen from Table 4.1, total arrivals increased by 24 percent from 1999 to 2000, with most of these arrivals recorded during the third quarter of 2000. The most common reason for arrivals was either visiting friends or family, in transit to other countries, or spending a holiday in Botswana. The majority of arrivals were from the neighbouring states of South Africa, Zimbabwe, Namibia and Zambia, while a significant number also came from the European community, the United States of America, and other parts of Africa. The same trend was also observed in 1999 (Republic of Botswana Statistical Bulletin, 2001).

The total hotel turnover for the year 2000 amounted to P86,7 million, which is a sharp decline from the 1999 value of P144 million. This was, however, attributable to the very low survey response rate experienced from the hotels in the year 2000. The accommodation sector netted the highest income of P42,9 million, followed by meals at P17,8 million, while the highest total turnover during the year was recorded for the month of September at P26,4 million (Tables 4.2; Table 4.3) (Republic of Botswana Statistical Bulletin, 2001).

Table 4.2: Total Accommodation Sector Turnover (Pula, Million) (2001)					
Year	Total Turnover	Accommodation	Meals	Bar Sales	Other
2000	86,7	42,9	17,8	9,5	16,3
Source: Republic of Botswana Statistical Bulletin, (2001).					

Table 4.3: Accommodation Facilities Occupancy Rates (Daily Averages, 2001)						
Year	Rooms Sold	Beds Occupied by			Occupancy Rates for	
		Citizens	Other	Total	Rooms	Beds
1994	930	309	877	1 186	51,4	38,3
1995	889	295	843	1 138	50,6	33,9
1996	904	280	802	1 082	51,6	33,2
1997	1 019	537	891	1 428	57,9	40,1
1998	967	425	862	1 287	48,0	40,1
1999	1 095	480	1 433	1 913	53,3	51,4
2000	964	426	742	1 168	45,9	29,4
Source: Republic of Botswana Statistical Bulletin, (2001).						

4.4 Tourism in the Okavango Delta

The Okavango Delta has long earned its prime position as Botswana's most popular, year-round tourist destination due to its crystal clear, clean and bilharzia-free swamp waters, and vast array of animal, bird and plant life. The Okavango region encompasses a core myriad of wetlands and floodplains, boarded by vast expanses of mopane and moimbo forests, Kalahari savannah, rolling dunes and fossil valleys. This wildlife refuge, stronghold of one of Africa's last free-ranging wildlife populations, stands in stark contrast to the small fenced pockets that sadly now symbolize most of the continents vanished wildlife heritage (OPWT, 1998; <http://www.safariweb.com...htm>).

As the cornerstone of Botswana's tourism industry, the Okavango Delta is a vital source of foreign revenue. Local communities, increasingly aware of the value of wildlife, are looking towards tourism as their path to economic empowerment. As the earth's wilderness areas shrink rapidly, the Okavango Delta is becoming an increasingly treasured global resource. It therefore deserves urgent attention as a priority conservation area (OPWT, 1998).

4.4.1 The Tourism Accommodation Sector

Accommodation is a key component of the tourism industry in that the nature of the accommodation available at the tourist destination will determine the type and scale of tourism that is possible (Foster, 1985). The type of accommodation supplied at a destination is generally a function of demand, in that it is the tourists who determine accommodation type. For example, some tourists demand full-amenity accommodation facilities, while others are content with the bare essentials (Bennet, 1995). Accommodation is the key primary sector within the tourism industry. The most direct economic impacts of tourism occurs within the primary sectors. Hence, an increase in the number of tourists staying in accommodation facilities in a tourist destination region would directly result in increased income generation in this sector (Steyns, 1999).

4.4.2 Tourist Facilities in the Okavango Delta

By virtue of being Botswana’s major tourist destination, the Okavango Delta contains sixty hotels, lodges and safari and hunting camps, with most of them situated in Maun. Structured questionnaires, for the purpose of interviews were distributed to 57 of these tourist accommodation facilities, with responses received from 53 of them. Therefore, 88 percent of the hotels, lodges and safari camps in the Okavango Delta were considered in this study.

With regard to ownership, 95 percent of these tourist accommodation facilities have foreign involvement. More specifically, 75 percent were owned by foreigners (Table 4.4).

Table 4.4: Ownership of Tourist Accommodation Facilities	
Ownership	Percentage
Foreign Owned	75
Jointly Foreign and Locally Owned	20
Locally Owned	5

These findings correlate with Silitshena and McLeod’s (1998) findings regarding the ownership of accommodation and transportation sectors in Maun. According to their research, 82 of 97 accommodation and transportation companies (85 percent) have foreign involvement, with 50 of these being entirely foreign owned. Only 15 percent of these companies were owned by black Botswana citizens (Ndubano, 2000).

According to Cooper *et al* (1993), this form of foreign ownership is not unique to Botswana. Most Third World tourism industries are dominated by foreign ownership

and participation, especially in the accommodation sector. As Ndubano (2000) also highlights, in many developing tourism industries there is a danger in foreign involvement and ownership reaching proportions where any meaningful participation by local citizens is impossible. The domination of the tourism industry in the Okavango Delta by foreign interest has increasingly led to the loss of resource control by the local population (Ndubano, 2000).

There is no grading system for hotels in Botswana. However, most hotels in the Okavango Delta region maintain a reasonable, to high standard, particularly those whose main clientele consist of foreign tourists. The more up-market hotels in the region contain air-conditioning, swimming pools, television and entertainment facilities, while most other hotels have most of the basic amenities (<http://www.safariweb.com...htm>).

Lodges and safari camps in the Okavango Delta tend to vary in terms of standards and facilities on offer. Some safari camps are merely campsites with ablution blocks, and can be very reasonably priced, while others consist of luxury groups of chalets or cottages, complete with swimming pools, cinemas, conference rooms and shops. Some lodges such as Nxamaseri Camp provide accommodation in luxury safari tents. Many lodges and safari camps also hire out boats, game and bird viewing and fishing equipment, and offer experienced guides (<http://www.safariweb.com...htm>).

Table 4.5: Average Prices for Accommodation Facilities in the Okavango Delta (US \$) (2002)	
Room Type	Ave. Price p/p Sharing
Tented Camp	\$50-200
Hotel	\$50-200
Lodge	\$50-300
Campsite	\$3,50
Source: (http://www.safariweb.com...htm)	

As can be seen from Table 4.5, most tourist accommodation facilities charge prices well beyond the means of the local population, whose average monthly incomes range from P441 to P731 (Republic of Botswana Statistical Bulletin, 2001).

Although tourism facilities are dispersed throughout the Okavango Delta region, and are somewhat diversified in type, price-range and structure, the segregation of the local population from these facilities through income disparities has led to the growth of tourist enclaves. In Maun, for example, most of the prime river-bank areas are dominated by concentrations of 'upmarket' lodges and hotels, which are insulated from the local population housing areas by 'uninhabited green stretches'. These tourist facilities cater only to the foreign visitors, offering various eco-tourism activities such as boat trips through the Delta, fishing, wildlife and bird viewing opportunities, and swimming pools, bars and restaurants, further strengthening the segregation of the tourist industry and local population, and enforcing the growth of enclaves (Briguglio *et al*, 1996).

The implementation of Community Based Natural Resource Management Projects (CBNRM) in the Okavango Delta is seen as a possible means to involve the local population in the tourist industry, and lessening the extent of 'enclave development' in the area. CBNRM projects focus on allowing local communities to utilise their surrounding natural resources in an attempt to create tourist opportunities, as well as self-employment initiatives (van der Jagt *et al*, 2000).

The potential exists to create extensive Community Based Projects in the Okavango Delta due to the increase in infrastructure, stability and economic growth that has occurred through tourism development over the past decade. The number of tourists visiting the area has steadily risen, and efforts should be made for more of the local inhabitants to benefit from this increase (van der Jagt *et al*, 2000).

CBNRM is a strategy that aims to find new solutions to the failure of 'top-down' approaches to conservation, and rests on the recognition that local communities must be given full tenure rights over the utilisation and benefit of natural resources in order to value them in a sustainable manner. This approach entails community institution building, comprehensive training, enterprise development and policy negotiation of

natural resource management amongst other form of assistance (van der Jagt *et al*, 2000).

The CBNRM approach to local communities that have wildlife as a natural resource is simple. A community is organised into a Community Based Organisation and a wildlife quota and resource-use lease is obtained and sold in its entirety to a safari company and the money is then channelled back into the community. The main aims of CBNRM is to improve the living conditions of the people residing within the natural area, create employment opportunities and alleviate rural poverty, as well as the conservation of the natural environment (van der Jagt *et al*, 2000).

Thirty percent of the land area in Ngamiland District is zoned as Wildlife Management Areas. Hence, there is the possibility of developing extensive CBNRM projects in these WMAs. Experience elsewhere has shown that the long term growth and sustainability of the tourism industry lies in the host communities attitude towards it, especially in rural communities where it is often based. It is perceived that when the local population is fully involved in the management and utilisation of wildlife resources to their advantage, they will come to appreciate its value and hence use it sustainably (van der Jagt *et al*, 2000).

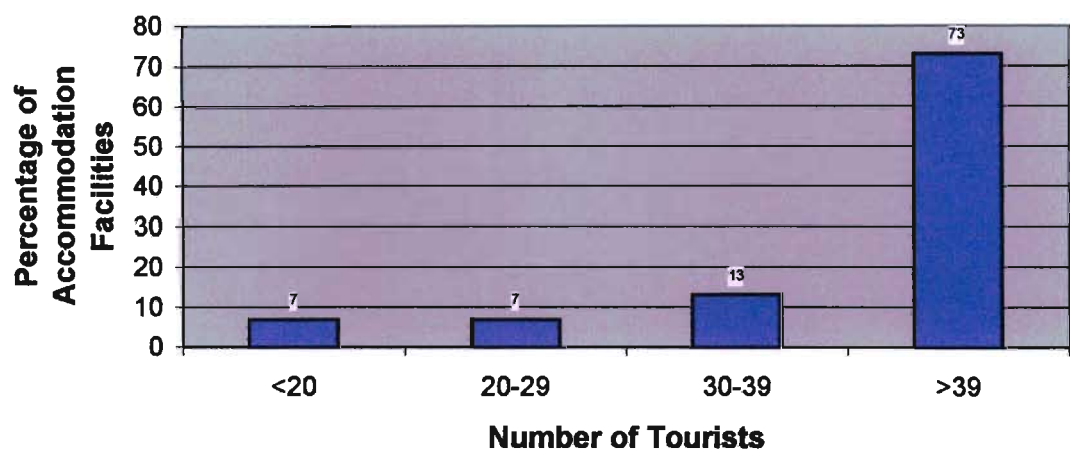
Most of the tourist accommodation facilities in the Okavango Delta cater to the eco-tourism market in that they offer wildlife and bird-viewing opportunities and seasonal boat trips through the Delta. All of these facilities hire between five and sixty black Motswana staff members including waiters/waitresses, grounds men/women, cleaners, tour guides and kitchen staff (Table 4.6)

Table 4.6: Total Hotel, Lodge, Safari Camp Employment Figures (2001/2002)	
Employee Type	Number
Waiters/Waitresses	490
Grounds People	520
Cleaners	550
Tour Guides	350
Kitchenstaff	500

According to the questionnaires completed by the managers of hotels, lodges and safari camps in the Okavango Delta, 95 percent of the accommodation facilities offer meals to tourists, while only 5 percent are entirely self catering. All 95 percent employ a chef/s to prepare meals. According to the questionnaires completed, 96 percent of the chefs were Motswana, while only 4 percent were of a foreign nationality.

Most tourist accommodation facilities in the Okavango Delta have, on average, more than 40 tourists staying there each month (Figure 4.1).

**Figure 4.1: Hotel, Lodge, Safari Camp
Monthly Tourist Numbers (Okavango
Delta, Botswana) (2001/2002)**



**Table 4.7: Room Occupancy Rates for
Tourism Accommodation Facilities
(Okavango Delta, Botswana, 2001)**

Year	Room Occupancy (%)
1999	56,3
2000	51,9
2001	54,2

Source: Republic of Botswana Statistical Bulletin (2001).

Table 4.7 shows that there has been an overall decline of 2,1 percent in room occupancy since 1999. This may be attributed to an increase in the number of rooms available since 1999 due to the expansion of existing hotels, lodges and safari camps in the Delta, and the establishment of new accommodation facilities in this area.

4.4.3 Tourist Profile in the Okavango Delta

Statistics indicate that there has been an increase over the past ten years in tourist arrivals and receipts in the southern African region. Tourist arrivals in southern Africa has had an average increase of 17,5 percent per annum between 1989 and 1998 (WTO, 1999). The southern African tourism industry is the second largest in Africa, surpassed only by the North African industry in terms of the growth in the share of receipts (Ndubano, 2000).

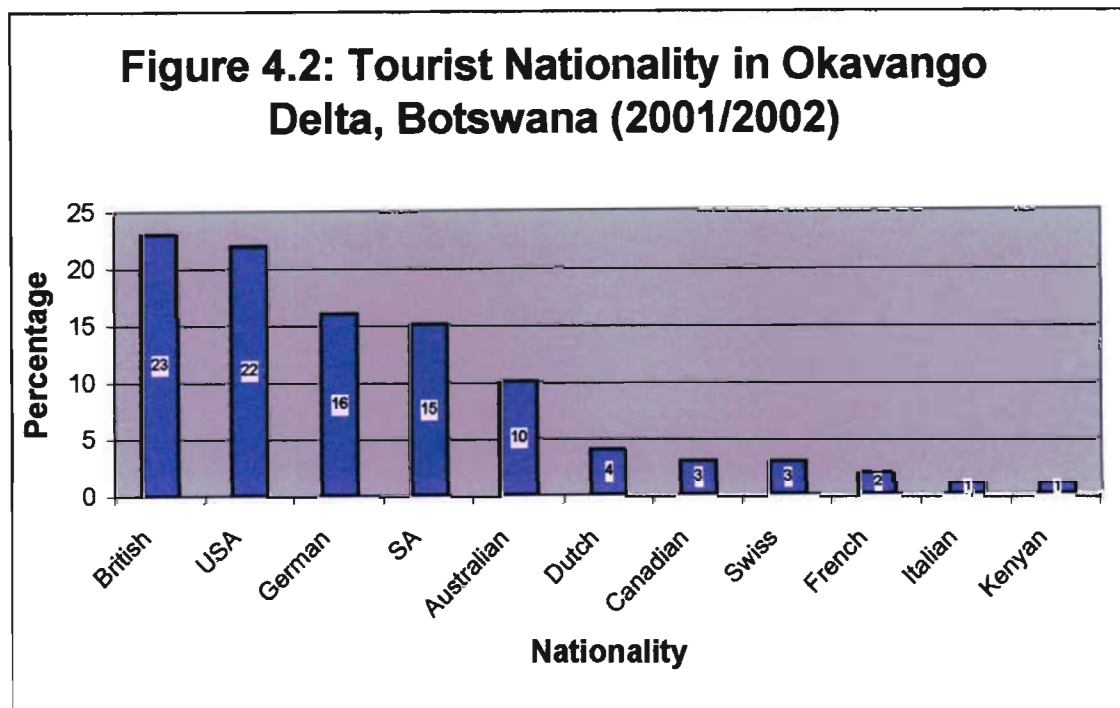
On average, approximately 1,5 million foreign visitors have visited Botswana each year since 1995. Many of these visitors come to Botswana to experience its wildlife and eco-tourism opportunities, and hence spend time in the Okavango Delta region. There are generally three classes of tourists who visit Botswana, distinguished by the price they are willing to pay for their holiday. The first is the tourist who chooses to stay at a permanent camp. The client is usually flown into Maun and transported directly to the camp. This type of tourist is termed 'high cost' by several groups (including the government), as a high price is generally paid for the package in advance, and the client is usually confined to camps owned by the company from which they bought their package (Borge *et al*, 1989; Republic of Botswana Statistical Bulletin, 2001).

The second type of tourist is categorised as the mobile safari tourist. This type of safari tends to be less costly than a permanent camp package, but in several cases it is comparable. The tourist is usually flown into Maun and departs on a specialised trip into the 'bush' of Botswana. Since the fees for a mobile safari tour are comparable to those paid for a permanent camp safari, this class of tourist is also termed a 'high cost' tourist (Borge *et al*, 1989).

The third type of tourist is categorised as the independent traveller. This tourist travels independently, relying upon his own resources, and not as part of an organised tour group. These tourists may drive independently, hire a guide or charter a flight. The distinguishing feature is that they generally do not pay a 'package price' before entering Botswana, and they tend to use public facilities such as park campsites run by the Department of Wildlife and National Parks (DWNP). This type of tourist is termed 'low cost' due to the assumed low expenditures. However, in some cases visitors

combine different types of travel such as taking a mobile safari as well as driving into the National Parks and Game Reserves independently (Borge *et al*, 1989).

Structured interview questionnaires were distributed to 400 tourists in the Okavango Delta between April 2001 and April 2002. Responses were received from 237 of them.



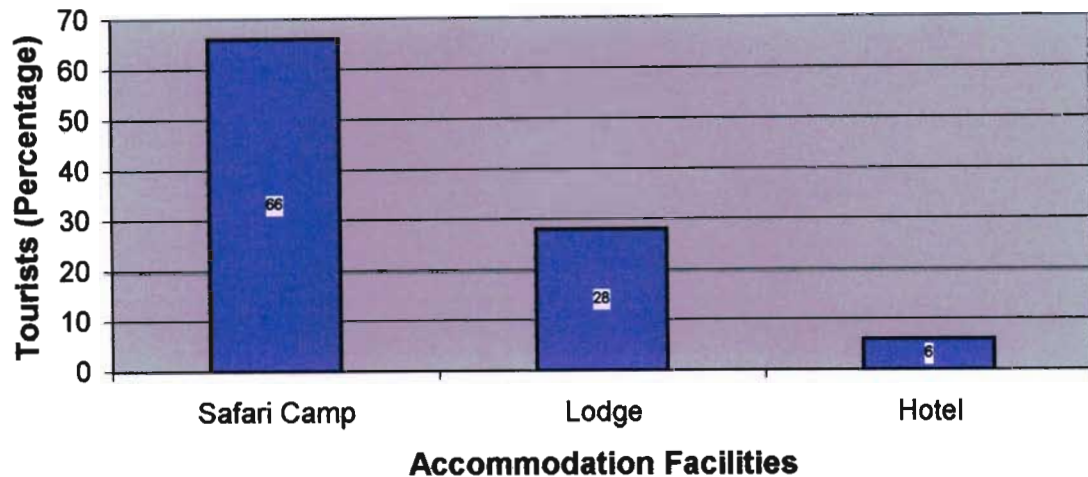
As can be seen from Figure 4.2, 74 percent of tourists interviewed are of European and North American origin, while only 16 percent were from African countries. This has great implication for the generation of foreign exchange for the region as well as impact on the balance of payments. The economic role of international tourism in the region can be examined through both the tourist trade balance and the share of tourism receipts in total exports. The share of tourism receipt in total exports is inversely related to the size of a region, especially in GNP terms (Table 4.8), (Briguglio *et al*, 1996).

Table 4.8: Total National Receipts From Tourism (Botswana, 2001)	
Year	US \$ Million
1995	162
1996	184
1997	184
Source: Africa Contemporary Record (2001).	

With regard to the indirect economic impact, or the multiplier effect, of international tourism, the larger the region, the higher the tourism multiplier. This is due to the magnitude of the multiplier depending largely on the degree of tourist goods and services supplied domestically and how closely various sectors of the economy are linked. In a large country or region, a more diversified resource base and a complete industry system will enable it to enjoy both a high level of inter-industry linkages and a low level of leakage, as most of the international tourists demand can be met by domestic products. Whereas in a small state or region, such as the Okavango Delta, the small scale and limited variety of industries limit the range and volume of linkages and enforce the need for imports (Table 4.9), (Briguglio *et al*, 1996).

Table 4.9: Total Annual National Imports (Botswana, 2001)			
Imports (\$ million)	1996	1997	1998
Food, Beverages, Tobacco	292	297	306
Fuels	110	127	125
Chemicals and Rubber Products	176	205	211
Wood and Paper Products	126	140	144
Textiles and Footwear	129	146	150
Metals and Metal Products	152	241	249
Machinery	278	398	410
Vehicles	243	452	465
Total	1 727	2 260	2 326
Source: African Contemporary Record (2001).			

Figure 4.3: Tourist Accommodation in the Okavango Delta, Botswana (2001/2002)



As can be seen from Figure 4.3, most tourists (66 percent) that participated in the survey were staying in safari camps in the Okavango Delta, which tend to be located in the more rural isolated areas, not in the urban zones such as Maun and Shakawe. The development of tourism facilities has therefore occurred in even the most remote areas of the Delta. However, this has not initiated regional economic development as most of the safari camps have foreign-owned headquarters in Maun or Gaborone to which most of the tourism-generated income accrues.

There has been an unequal distribution of the economic impact of tourism development in the Delta. The majority of the earnings accrue to multinational hotels, and hunting and safari camps, which dominate the Delta's tourism industry.

The Mexico experience of "...the uneven pattern of regional development, shaped by the heavy, nearly exclusive dependence on tourism" is also present in the Okavango Delta region (Torres, 1996, p.9). This too has "...worsened regional inequalities between the wealthy tourist sites and the marginalised traditional villages" in the area. There is also "...a clear spatial segregation between the two groups, with tourism resources concentrated in tourism areas and poor local communities confined to the periphery of the tourist sites" (Torres, 1996, p.9).

In most developing tourism regions, including the Okavango Delta, the potential for tourism to balance regional development has not been realised, and as in the Delta, tourism even leads to the widening of regional disparity. This can be attributed to two key factors. Firstly, in many underdeveloped regions, the dominant mission of the tourism industry is to generate foreign exchange. Regional development is generally not on the government's agenda concerning tourism development, with "an increase in the 'national cake' being viewed as far more important than questions of how the 'cake' might be spatially made and distributed" (Bruguglio *et al*, 1996, p.108).

Secondly, due to regional development being ultimately the result of the location of economic activities in response to differential regional attractions, in most developing regions, including the Delta, it is more cost effective to develop tourism ventures in relatively well developed areas such as Maun, and only in a few cases in remote and extremely attractive locations (Bruguglio *et al*, 1996).

Tourism now comprises 16% of the country's GDP, and it has been rated the fifth most popular destination in Africa. The government has gone to great lengths to promote environmentally sensitive, low-volume/high income tourism and has substantially upgraded the country's travel infrastructure and accommodation capacity. It is also very receptive to joint venture proposals. Lease agreements for hospitality enterprises such as safari lodges have been relaxed, as have building and other restrictions. Tourism profits have led to economic growth, which is of great benefit to the state, but it has also resulted in unequal regional growth, with "little emphasis placed on stimulating non-tourism economic activity" (Torres, 1996, p. 9). This high level of dependency on tourism leaves the area extremely vulnerable to international tourists, who are always in search of new 'unspoiled' areas (Torres, 1996).

Most tourists interviewed stated that they do not intend to spend another holiday in the Okavango Delta (Table 4.10).

Table 4.10: Percentage of Tourists Intending to Return to Okavango Delta		
Accommodation Type	Intend to Return	Will not Return
Safari Camp	36	64
Lodge	43	57
Hotel	47	53

The most commonly cited reason for the lack of intention to return was that the prices charged for tourist accommodation facilities and services were too high. Thirty-nine percent of the tourists interviewed stated that they were taking part in package tours, while 61 percent stated that they were taking part in individually guided tours. Almost all of the tourists (92 percent) who were taking part in package tours felt that exorbitant prices were charged.

These findings have great implications for the continued growth of the Okavango Delta tourism industry. Firstly, due to the increasing perception by both overseas and African tourists that accommodation in the Okavango Delta is not affordable, a growing number of tourists are holidaying in other, more affordable African countries, such as Kenya and Tanzania. As a result, the Okavango Delta is losing most of its potential 'return tourists' to other Third World tourism destinations due to its 'high-cost, low-volume' policies. As was discussed earlier, there is increasing recognition that this policy is damaging the country's tourism industry by putting off both potential and return tourists.

A decline in the number of tourists visiting the Okavango Delta will be extremely damaging to the region's industry in that according to the law of supply and demand, in times of scarcity, prices will rise, and this applies to the accommodation sector, just as anywhere else. Also, during peak tourist months, when there is an influx of visitors, and rooms are hard to come by, accommodation prices will rise. In the Okavango Delta the

price inflation during the peak August to October tourist season tends to increase from between 50 to 200 percent, which increasingly brings into question the degree to which supply and demand dictate prices, as opposed to the deliberate squeezing of the tourist market through irresponsible opportunism. With the current 'high-cost, low-volume' policy, the Okavango Delta is in increasing danger of losing its growing international status as one of the best holiday destinations in Africa. Given the extent to which the region depends on tourism as its economic mainstay, a drastic decline in tourist numbers would greatly damage the region's economy.

Tourist accommodation facilities in the Okavango Delta tend to be independently owned, with no significant franchises operating in the area. In order to increase tourist numbers, and make the Delta's tourism industry more accessible to the local population, there is an urgent need for the establishment of cheaper, more widely accessible accommodation facilities, which will appeal to a greater sector of society, not just upper class foreign tourists, as is the present scenario.

In an attempt to determine the impact of tourism development on local agricultural practices in the Okavango Delta, the structure of the demand and supply of fresh produce for the tourism industry in the area was considered.

4.4.4 The Demand and Supply of Fresh Produce in the Okavango Delta Region

According to the survey conducted in the Okavango Delta, most tourists visiting the region consume food provided by the local hotels, lodges and safari camps. Very few tourists consume only self-provided food.

With regard to the 237 tourists who participated in the survey, those who were taking part in packaged tours consumed meals provided by the tour operators (Table 4.11).

Table 4.11: Number of Tourists That Consumed Accommodation Facility Meals in the Okavango Delta Region, Botswana (2001/2002)		
Tour Type	Did Consume	Did Not Consume
Package Tour	100% (92 tourists)	0%
Individually		
Guided Tour	97% (140 tourists)	3% (5 tourists)

It can be seen from Table 4.11 that, on average, the tourist facilities in the Okavango Delta tend to require significant quantities of food to meet the number of meals desired by tourists visiting the area.

As a result of Botswana’s ‘high-cost, low-volume’ tourism policy, most of the hotels, lodges and safari camps in the Okavango Delta are very costly, charging in excess of P1000 per person, per night (Table 4.5). Hence, most tourists have come to expect a variety of food types of a consistently high quality. Thirty-four percent of the tourists stated that they were vegetarian, and therefore required a selection of fresh fruit, vegetables and vegetarian dishes. Most of the remaining non-vegetarian tourists also stated that the availability of fresh salads, fruit and vegetables, as well as chicken, fish and beef was expected due to the prices paid for meals at most of the accommodation facilities. According to the managers of hotels, lodges and safari camps interviewed in the Okavango Delta, the availability of recognisable ‘western’ dishes is important for the well being of tourists visiting the area, as many tourists experience concerns regarding the sanitation of local cuisine, or find the local dishes contrary to their taste preferences.

According to the tourist surveys, 88 percent of the tourists interviewed stated that they had consumed, or were willing to consume some of the local dishes in the area. However, they also stated that they would not be content to consume only local dishes

throughout their entire stay in the Delta, and that the availability of ‘western’ food was important to them. As a result, tourist facilities are compelled to provide the food types and dishes desired by the tourists (Table 4.12).

Table 4.12: Tourist Concerns Regarding Local Cuisine in the Okavango Delta Region, Botswana (2001/2002)	
Concern	Percentage
Lack of Sanitation	63
Dislike of Foods Appearance	31
Dislike of Foods Taste	78

Some of the most common local dishes that are found in the Okavango Delta region include beef, goat, ostrich and antelope meat based dishes; mopane worms with maize, millet, sorghum and bean based dishes; wild morula plums and millet and sorghum beer, as well as onions, cabbage, tomatoes and potatoes.

As the global tourism industry developed, governments in the ‘South’ welcomed tourism as a source of foreign exchange, investment, employment and economic growth. It was assumed that the economic benefits of tourism would trickle down to stimulate other sectors of the economy, including agriculture, and also encourage the development of intersectoral linkages (Torres, 1996). In regards to the situation in the Okavango Delta region this has not occurred.

Firstly, the local cuisine, and hence agricultural production, is not diversified enough to meet the food requirements of an international tourism industry. Secondly, most

tourists who visit the Okavango Delta have fairly sophisticated tastes in food, and are not prepared to only consume the locally produced dishes. As a result, a large proportion of the food consumed by tourists in the Delta has to be imported from elsewhere. The patterns of supply and demand of food for the tourism industry have therefore developed in isolation from the local agricultural industry, relying increasingly on imported goods. As the rural tourism industry develops from a small-scale, limited venture, to a mass international venture, the importance and use of local produce and resources decrease, due to a limited resource base and pressure from the increasingly commercialised tourist type.

In terms of the supply of fresh produce and processed foods to the tourism facilities in the Okavango Delta, the managers of all of the hotels, lodges and safari camps stated that they purchase their produce and processed goods from the major supermarkets, butcheries and wholesalers in Maun, Francistown, or Gaborone (Table 4.13).

Table 4.13: Primary Tourist Food Suppliers in the Okavango Delta		
Maun	Gaborone	Francistown
Shoprite	Senn Foods	Senn Foods
Spar	Metsef	Ron's Fresh Produce
Sefalana	World Foods	Vege Pack
Maun Butchery and Bakery	Seafood Wholesalers	
Trident Cash and Carry		
Ngami Butchery		
Maun Wholesalers		

All the retail companies reflected in Table 4.13 were interviewed. The Maun and Francistown companies stated that all fresh produce except beef, chicken, eggs and

bream and all processed goods were bought and delivered from Gaborone. The Gaborone companies stated that all fresh produce (except beef, mutton/lamb, chicken, eggs and a small percentage of mushrooms), as well as most processed goods were imported from South Africa (Figure 4.4; Table 4.14; Table 4.15).

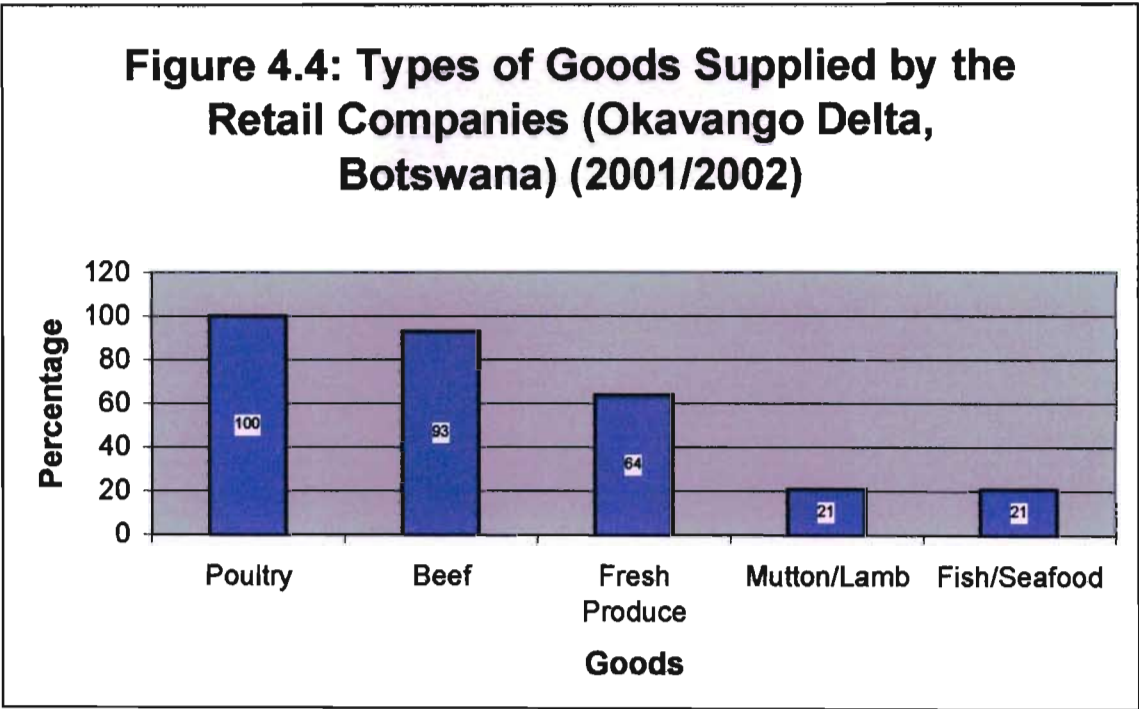


Table 4.14: Source of Goods for Gaborone Retail Companies (2001/2002)	
Goods	Source
Poultry	Local
Beef	Local
Fresh Produce	Imported
Mutton/Lamb	Local
Fish/Seafood	Imported

Table 4.15: Source of Goods for Maun, Francistown Companies (2001/2002)	
Goods	Source
Poultry	Local
Beef	Local
Fresh Produce	Imported
Mutton/Lamb	Local
Fish	Local

According to the managers of hotels, lodges and safari camps interviewed in the Okavango Delta, the most common factor affecting the food types served by tourist facilities is tourist preference (Table 4.16).

Table 4.16: Factors Affecting the Food Types Served by Tourist Accommodation Facilities in the Okavango Delta	
Reasons	Percentage
Tourist Food Preferences	94
Food Prices	91
Import Prices	21
Location of Food Suppliers	91
Ability of Food Suppliers to Meet Resort Demand	74

It can be seen from Table 4.14 and Table 4.15 that most fresh agricultural produce used by the tourist accommodation facilities in the Okavango Delta has to be imported from South Africa. According to the managers of the hotels, lodges and safari camps in the Okavango Delta, most felt that the unavailability of locally produced foods was one of the main reasons why the majority of foodstuffs consumed by tourists has to be imported (Table 4.17).

Table 4.17: Tourist Accommodation Managers Personal Views on Reasons for the Majority of Foodstuffs Having to be Imported from South Africa	
Reasons	Percentage
Unavailability of Locally Produced Foods	92
Unavailability of Sufficient Quantity of Locally Produced Foods	81
Poor Quality of Locally Produced Foods	60
A Lack of Sanitation in Locally Produced Foods	34
A Preference amongst Tourists for Imported Foods	11
(Percentages do not add up to hundred because of multiple responses)	

There is great potential for the establishment of a local agricultural industry in the Okavango Delta region. The tourist facilities are compelled to provide a wide variety of

fresh produce and food types, as this is expected by most of the international tourists who visit the area. These goods are not available locally, so are therefore imported from South Africa, which makes them more costly. All the managers from the tourist facilities in the Delta stated that they would purchase their produce from a local source if such a market existed, as it would be less expensive than imported produce. However, the quantity, quality and reliability of the produce had to be of the same standard, or rivaled that of the imported produce. The managers of supermarkets, wholesalers and fresh produce vendors in the Okavango Delta echoed this view. With regard to the retail companies source of supply of fresh produce, most products were imported from South Africa (Table 4.18).

Table 4.18: Retail Companies Primary and Secondary Source of Fresh Produce (Botswana, 2001/2002)		
Primary Source	Imported	Local
	71 %	29 %
Secondary Source	Imported	Local
	86 %	14 %

Almost all of the managers of these retail companies stated that the unavailability of locally produced foods was the reason why most of the fresh produce had to be imported from South Africa (Table 4.19).

**Table 4.19: Retail Managers Personal Views on
Reasons for the Majority of
Foodstuffs Having to be Imported**

Reasons	Percentage
Unavailability of Locally Produced Foods	93
Unavailability of Sufficient Quantity of Produce	81
Lack of Quality in Local Produce	60
Lack of Sanitation in Local Produce	33
(Percentages do not add up to hundred due to multiple responses)	

As can be seen from Table 4.17 and Table 4.19, both the managers of tourist accommodation facilities in the Okavango Delta, and the managers of the retail companies that supply the accommodation sector, stated that an insufficient quantity of locally produced goods was the main reason as to why most produce is imported.

There is a general lack of infrastructure in the Okavango Delta required to support the development of a successful local produce industry. As a result, problems are often experienced with the processing, cleaning, freezing, packaging and transportation of local fresh produce, such as bream, crops and poultry. Most retail companies stated, during interviews, that local produce is often damaged and thawed, therefore making it unfit for retail.

Botswana has managed to establish a relatively successful local beef, poultry and egg industry which supplies the retail companies throughout the country. However, an

adequate local fresh produce industry which meets the demands of the country as a whole has yet to be established.

In terms of the local beef, poultry and egg industry in Botswana, 91 percent of the retail companies stated that the inconsistent availability of these locally produced goods was a major problem. Other problems that are experienced included poor quality of locally produced goods, a lack of infrastructure to process (i.e., freeze) the produce, and a lack of transportation facilities to meet the delivery requirements of the retail companies. A lack of sanitation in local produce was also mentioned as a problem experienced with the industry.

According to the retail companies that were interviewed, the primary suppliers of local beef, lamb/mutton, poultry and eggs include the Botswana Meat Commission (BMC) in Gaborone and Maun, Boiteko Poultry in Maun and Notwane poultry and eggs near Gaborone. The primary suppliers of the imported fresh produce and processed goods are various South African sourced vendor/producer companies. The major factors, as stated by the local retail companies, that influence their choice of primary suppliers of both local and imported goods include the reliability of service from the company, the prices of delivery service and goods, the location of the supplier, the diversity of food types that can be supplied, the quality of the product and packaging, and the consistency of the product quantity and supply (Table 4.20).

Table 4.20: Factors that Influence Retail Manager's Choices of Primary and Secondary Suppliers (Botswana, 2001/2002)	
Factors	Percentage
Reliability of Service	57
Prices of Delivery	
Service and Goods	86
Location of Supplier	29
Diversity of Food	
Types Supplied	57

With regard to the purchase of food by the hotels, lodges and safari camps in the Okavango Delta, most managers felt that the reliability of service was one of the primary reasons for using the retail company as a supplier of fresh produce and goods (Table 4. 21).

Table 4.21: Reasons for Choosing Hotel, Lodge, Safari Camp Primary Food Suppliers (Okavango Delta, Botswana, 2001/2002)	
Reason	Percentage
Reliability of Service	81
Prices of Delivery	
Service and Goods	60
Location of Suppliers	94
Diversity of Food Types	
Supplied by the Supplier	91

According to the managers of the tourist accommodation facilities in the Okavango Delta, some of the problems experienced with the locally produced fresh produce and goods purchased from the retail companies included an inconsistent availability of these locally produced goods. These would include beef, poultry and bream products and a limited selection of maize and sorghum, and other locally grown agricultural products (Table 4. 22).

Table 4.22: Problems Experienced by Accommodation Sector Managers with Locally Produced Goods, Supplied by Retail Companies	
Problems	Percentage
Inconsistent Availability of Locally Produced Goods	93
Poor Quality of Locally Produced Goods	57
Lack of Sanitation in Locally Produced Goods	21

The major factor hindering the use of local produce by the hotels, lodges and safari camps in the Okavango Delta is the lack of availability of the required goods, in that the local farmers do not produce the quantity, variety and types of produce required to meet the demand created by the tourist industry in the Okavango Delta.

The Okavango Delta is unique within Botswana in that it contains an abundance of water, especially in the northern part of the Delta, and fertile soils, deposited each year by the annual flood from Angola. This alone makes the establishment of successful, commercial, small-scale agricultural ventures possible. However, there is presently a lack of infrastructure and marketing outlets in the area to support this type of venture.

The local farmers in the Delta tend to only cultivate 'traditional' produce such as maize, millet, sorghum and melons. In order to establish a fresh produce market that is supported by the major retail companies in the area, they would need to cultivate 'foreign' produce such as tomatoes, carrots, potatoes, lettuce, cucumber, peppers, cabbage, broccoli and various types of fruits. The Okavango Delta contains both wet-land and thirst-land environments, which would support a wide variety of produce. However, the local farmers lack the knowledge to cultivate and harvest most of these 'foreign' crops. They are also unaware of the diseases that are likely to affect these crops and how to prevent them. Therefore, in terms of the environmental conditions in the area, and local retail support structures, there is potential to establish a successful local 'foreign' produce industry. However, foreign involvement is initially required to educate the local farmers on crop production and disease control. Also, local marketing outlets and governmental support structures need to be established before such an industry can be successfully developed.

4.5 The Impact of Tourism on the Inhabitants of the Okavango Delta

The promotion of a tourism industry in Botswana came about in the early 1990s as a result of the governments attempt to diversify the country's diamond-based mono-economy. Prior to the 1990 tourism policy, the industry had not been given much prominence, but with the government's attempt at diversification, tourism was identified as an additional engine of growth (Ndubano, 2000).

It is argued that the growth of tourism in the Okavango Delta has led to several socio-economic benefits. These include employment opportunities for the local population, the generation of foreign exchange, the conservation of the Okavango Delta and its natural resources, and the stimulation of infrastructural developments (Mbiawa, 2001). An estimated 10 015 people are employed in the tourism and wildlife sectors in Botswana and they directly support an estimated 27 000 additional individuals around the country. The growth of tourism in the Okavango Delta has further facilitated the development of various tourism-related businesses in Maun, therefore creating 'spin-off' benefits and increasing employment opportunities for the local population. These

businesses include the wholesale and retail trades, construction and transportation services, and handicraft and souvenir industries (Mbiawa, 2001).

The expansion of tourism in the Okavango Delta has led to the proliferation of hotels, lodges and safari camps in the region. Tourism in the Okavango Delta has also stimulated infrastructural developments in Ngamiland district. Almost all major road networks throughout Botswana have been tarred, making access to northern Botswana and its neighbouring states of Zimbabwe, Namibia and Zambia easier and quicker. Goods and services are now able to reach the Okavango region much more easily, hence increasing the ability of retail companies to bring imported goods into the Delta region. Furthermore, the expansion of the Maun Airport terminal and runway (completed in 1996) has enabled tourist to fly to Maun directly from Johannesburg and Gaborone for the past six years (Mbiawa, 2001).

The inhabitants of the Okavango Delta face a number of challenges to preserving their traditional way of life, languages and cultural traditions. These challenges have their roots in the Okavango people's integration into national, political, social and economic institutions, the hunting restrictions placed upon the Okavango Delta and the subsequent development of mass tourism in the area. The inhabitants have been experiencing this since Botswana's independence, but far more intensely since the 1980s (Bock and Johnson, 2002).

In the mid-1960s the first commercial safari camps were developed in the Okavango Delta, along the Boro and Jao rivers. This resulted in the first migratory movements of local inhabitants to the periphery of tourist areas, through the movement of Xanekwe from all over the region to these safari camps. The establishment and subsequent expansion of the Moremi Wildlife Reserve caused the further movement of Xanekwe, and paved the way for the development of more safari camps in the delta. Today, there are 60 hotels, lodges and safari camps in the Okavango Delta region (Bock, 1998; Hitchcock, 2000).

4.5.1 Changes in Land Use in the Okavango Delta

The development of mass tourism in the Okavango Delta has led to changes in land use in the area. There are two main types of land tenure in the Ngamiland district. These are communal and state land tenure systems. There is no significant freehold land in the district. The amount of land allocated under the two major tenure systems in the Ngamiland district also changed between 1974 and 1995. The share of total land area that fell under the communal land tenure system dropped from 100 677 square kilometers (92,3 percent of total district land area) in 1974 to 99 399 square kilometers (91,1 percent) in 1981. There was a further drop to 66 532 square kilometers (61 percent of total district land area) by the end of 1995. State land in the district increased from 8 453 square kilometers (7,7 percent of total district land area) in 1974 to 9 731 square kilometers (8,9 percent) in 1981. There was a further increase to 42 598 square kilometers (39 percent of total district land area) by the end of 1995. Therefore, a total of 31,3 percent of total land area in the Ngamiland district was re-allocated from communal land to state land, predominantly for use as Wildlife Management Areas (WMA's) (Republic of Botswana Environmental Statistics, 2000).

Presently in the Ngamiland district, pastoral, arable and residential areas, which fall under communal land makes up 60 072 square kilometers or 55 percent of total land area. National parks make up 3 900 square kilometers or 3,5 percent, and game reserves make up a further 5 560 square kilometers or 5,1 percent of total land area in the district. Wildlife Management Areas (WMAs) make up 32 867 square kilometres or 30,1 percent of total district land area. All three of these land uses fall under state land tenure (Republic of Botswana Environmental Statistics, 2000).

There are three major uses of land in the Okavango Delta region. These include wildlife preservation through the creation of WMAs, national parks and game reserves; livestock production and subsistence crop production (Makhwaje *et al*, 1995).

All ethnic groups in the Okavango Delta traditionally hunted for both meat, commercial gain and social cohesion. Meat constituted an important addition to their diet, especially during years of drought when few or no crops were harvested. The sharing of meat amongst the family and neighbours emphasized social and economic

obligations, while wildlife trophies such as hides, horns and tusks provided trade commodities (Campbell, 1995).

During the 1970s, hunting restriction policies were implemented throughout the Okavango Delta and inhabitants were required to obtain hunting licenses which specified the number and type of animals an individual was allowed to kill. Hunting licenses for lucrative animals such as lions and elephants were too expensive for the average local inhabitant to purchase. The number of animals that each person was allowed to kill during the hunting season was minimal, and as a result almost all animals were used for consumption, which prevented individuals from raising cash to pay taxes and purchase goods (UBS Students Survey of Okavango Villages, 1976).

With the implementation of the hunting restriction policies in the Delta, most local inhabitants became poverty stricken and were forced to adopt alternative livelihoods as a means of cash generation. This greatly increased the migration of the inhabitants as many moved to the larger towns in the area in search of employment. The majority of those individuals who remained in the rural villages were forced to adopt full-time subsistence agricultural lifestyles, as this was the only form of cash generation and 'employment' available to the rural dwellers (UBS Students Survey of Okavango Villages, 1976).

4.5.2 The Local Inhabitants of the Okavango Delta

According to the local inhabitants interviewed throughout the Okavango Delta, just over half of the respondents (51 percent) stated that they had a primary level education (Table 4.23).

Table 4.23: Education Levels of Local Inhabitants in the Okavango Delta	
Education Level	Percentage of Respondents
Primary Education	51
Secondary Education	37
Tertiary Education	3
No Education	9

Agricultural production (livestock keeping and crop production) is a core activity for virtually all rural households in the Okavango Delta. The livelihood strategies for securing income in rural households vary enormously, but a common strategy is for local inhabitants to undertake a range of activities, which in some way, contributes to one or more of household needs. Most households rely on a range of natural resource uses, agricultural sourced incomes and non-agricultural income, usually gained from formal employment. Diversified strategies are essential in Botswana due to the semi-arid to arid conditions present, and the common occurrence of drought, which marginalizes even the highest rainfall areas for rain-fed crop production (Ashley, 2000).

The majority of respondents stated that their main source of income is in the form of formal employment, provided either by themselves, their spouse or children. This was followed closely by agriculture (both arable and pastoral), predominantly in the form of subsistence agriculture (Table 4.24).

Table 4.24: Contribution of Different Activities to Household Needs in the Okavango Delta	
Activities	Comment
Agriculture	Predominant economic activity
Formal Employment	Important source of income, but minimal opportunities available
Fishing	Important to local consumption patterns
Wildlife and Tourism	Has had extreme economic and social impact on local inhabitants
Source: Adapted from Ashley (2000).	

The number of people practicing agriculture within the traditional sector in Ngamiland district has decreased from 10 466 agricultural holders in 1996 to 10 300 holders in 1998. This 1998 figure is the most recent official published statistic for Ngamiland agricultural region. However, it is unofficially estimated that the number of agricultural holders in the district has decreased by approximately 600 holders since 1998 to 9700 holders by the beginning of 2001. Hence, there has been an approximate decrease of 766 agricultural holders (7,3 percent) in Ngamiland district from 1996 to 2001 (Republic of Botswana Agricultural Statistics, 1996; Republic of Botswana Agricultural Statistics, 1998; Republic of Botswana Statistical Bulletin, 2001).

The number of agricultural holders in Ngamiland district is however, not a true reflection of the extent to which agriculture is practised, in that many agricultural holders have land, but do not use it for crop production. The agricultural holdings often tend to stay within a family, but are not cultivated. Many of the survey respondents who

are practicing subsistence agriculture stated that they are seeking formal employment and would give up agriculture if offered formal employment opportunities. Eleven percent of Ngamiland's employable population is unemployed, while Maun has an unemployment rate of 19 percent, even though tourism has done much to reduce this figure. It can however be argued that only six percent of the economically active population in Ngamiland is formally employed in the tourism industry. Therefore, tourism has done little to provide secure, officially recognisable employment for the local population (Ndubano, 2000). According to Silitshe and McLeod (1998) 53 percent of Ngamiland's economically active population derive at least part of their income from the tourism industry. However, even though such a high proportion of the population could be supplementing their income from tourism, the statistics indicate that the majority of them earn well below the poverty line as most of the work is within the informal sector, such as the production of handicrafts and tourist souvenirs (Ndubano, 2000).

4.5.3 Tourism as a Job Creator

The access of local populations to quality employment opportunities is a sure way of achieving sustainable livelihoods, which in turn is an important means of reducing poverty and inequality. Poor rural populations tend to face problems of both unemployment, and low paying jobs (Poverty and Inequality in South Africa, 1998).

Unemployment in the Okavango Delta region is unacceptably high, and is one of the major problems facing the region. Even though the region has an official unemployment rate of 11 percent, the majority of the rural inhabitants are subsistence farmers, which is not considered formal employment. Therefore, the actual unemployment rate is much higher. Most rural households in the Delta contain only one family member who has formal employment, and who is usually located away in a larger town, such as Maun. The remaining household members tend to rely on agricultural production and supplement their incomes through tourism related activities such as craft production (Table 4.25).

Table 4.25: Employed Population in the Ngamiland District (1998)	
Industry	Total
Agriculture	5 890
Mining and Quarrying	34
Manufacturing	2 738
Electricity and Water	36
Construction	2 463
Wholesale and Retail Trade	2 996
Hotels and Restaurants	1 762
Transport and Communications	154
Finance	38
Real Estate	332
Public Administration	10 624
Education	3 791
Health and Social Work	853
Source: Republic of Botswana Demographic Survey (1998).	

As can be seen from Table 4.25, approximately 34 000 individuals are employed in the Ngamiland District. The total population for Ngamiland District is approximately 110 489, therefore, only 30 percent of the total districts' population is formally employed. Even with the mass growth of tourism in the district, the formal sector is not developing adequately to alleviate the high unemployment figures, which imposes three burdens on the region:

- i. The local population suffers from a lack of adequate income, and hence are marginalised by existing social structures.

- ii. The high unemployment rate tends to result in a highly unequal distribution of income as a relatively small proportion of the population enjoys the rewards of employment and ownership.
- iii. The large number of low-income individuals places strain on the regions resources and economy as government aid and financial assistance policies become necessary.

The Hotel and Tourism Association of Botswana (HATAB) is a non-governmental organisation that was at the forefront of tourism development in the early 1990s, with a private sector membership of over 80 companies. Government policy regarding tourism at the time was to spend as little as possible on the industry due to its low expected returns. Hence, the private sector was responsible for investing in the industry with little support from the government. The situation has, however, greatly changed since 1991, with the government currently taking a very active role in the development of the tourism industry in Botswana (Borge *et al*, 1989; Ndubano, 2000).

According to the local survey respondents, 'employment' in the tourism industry is still not regarded by many as the most important source of their household incomes. This is in contrast to the tourism employment generation figures (13 500 individuals), and its income multiplier by such organisations as HATAB. Evidence of this lies in the fact that 68 percent of the respondents claimed that tourism did not bring any significant benefits to their households, while some stated that the impacts were negative such as loss of agricultural land to owners of tourism businesses. Only 32 percent claimed significant benefits through employment of either themselves or their children or spouses, or through the provision of social facilities such as schools.

According to Ndubano (2000), the average monthly income for local tourism employees in the Okavango Delta is between Pula 400 and Pula 990. The average monthly income generated from subsistence agriculture is generally less than Pula 270 per month (Africa Contemporary Record, 2000). Even though local tourism employees receive a higher income than subsistence farmers, their salaries are generally too low to substantially improve their standard of living. According to Ndubano (2000) there is no significant relationship between education and degree of employment within the tourism industry in the Okavango Delta. For example, employees with just a Primary School Leaving Examination (PSLE) certificate earn approximately the same salary as

individuals with secondary and tertiary level education. Most of the local tourist employees in the Delta have no formal training, with many only receiving 'on-the-job' training, which still renders them unqualified, and therefore liable for minimal salaries. For example, even the local employees who hold 'white collar' job titles such as chefs, tour consultants and assistant managers earn as little as Pula 850 to Pula 1600 per month (Ndubano, 2000).

Most subsistence farmers in the Okavango Delta are searching for formal employment and would give up rural agriculture in exchange for 'urban-based' commercial livelihoods, if presented with the opportunity. As one local tourist employee stated, with regard to employment in the tourism industry, "...half a loaf is better than no bread". Although these salaries are too low to substantially improve their well being, they still receive more income than that from subsistence agriculture (Ndubano, 2000, p. 53). However, 62 percent of all tourism employees in the Okavango Delta earn below the 2000 Poverty Datum Line (PDL), which is estimated to be Pula 954,78 per month. Most employees also have up to seven dependents to support, and therefore all their income is used to purchase the most basic necessities such as food, leaving very little to save, which implies very limited local capital mobilisation through savings. This situation is also not only limited to tourism employment.

Most rural migrants in the Okavango Delta have no formal training or tertiary qualifications and therefore, regardless of which industry they secure jobs in, they will be unqualified and receive minimal income with little chance of promotion (Ndubano, 2000). All these scenarios serve to support the assertion that tourism does not adequately benefit the local population, which in turn defeats the aims of the 1990 Tourism Policy. This Policy seeks, amongst other, seeks to bring about rural economic development and uplift impoverished local communities through the provision of tourism employment and the reinvestment of tourism income back into rural communities (Ndubano, 2000).

The tourism industry in the Okavango Delta has led to the development of a large, informal, tourism-related handicraft and souvenir industry. According to the local survey respondents, 52 percent of the respondents stated that the production of handicrafts for tourists was not beneficial in that they are relatively time consuming to produce, yet they receive so little income from their sale. This suggests that the

benefits from tourism related activities are negligible. Most respondents (72 percent) also stated that direct income from tourism came only from formal employment within the industry, and not from its related industries. Cash flow patterns and linkages between the tourists, the industry and the local population are therefore weak and limited.

The tourism industry and its related services attract rural, subsistence dwellers with the possibility of formal employment, yet provides minimal 'improvement of living' opportunities as salaries are too low and most of the employment is unskilled and labour intensive, and hence promotion to significantly higher positions is almost impossible. It can therefore be concluded that although the tourism employment multiplier in the Okavango Delta may be significant, as approximately 53 percent of Ngamiland's economically active population are involved in tourism, the quality of the employment is generally too low to make any major improvements to the livelihoods of the local population (Hartle, 1990; Silitshena and McLeod, 1998; Ndubano, 2000).

An assessment of tourism's impact on local populations depends not only on its direct effects such as profits and jobs generated, but on a range of indirect positive and negative impacts. Poverty assessments tend to highlight the importance of people's assets, and not just their income, in securing their livelihoods. Table 4.26 summarises the major impacts of tourism on five types of capital, relevant to rural communities (Ashley, 2000).

Table 4.26: Impacts of Tourism on Rural Assets	
Assets	Impacts
Financial Assets	Provides a source of income
Physical Assets	Tourism earnings can be invested into livestock, agriculture (ect).
Human Resources	Tourism can provide training and skill development opportunities
Natural Resources	Tourism can increase competition for land, and lead to loss of agricultural areas to exclusive tourism developments
Social Capital	Changes to traditional lifestyles and inter-community conflicts over tourism
Source: Adapted from Ashley (2000).	

In the Okavango Delta region, there are very few opportunities for adult training. The development of skills through tourism has had little impact on alleviating poverty and enabling rural dwellers to secure formal employment. Most local tourist employees only receive 'on-the-job' training, which still renders them unqualified, and hence unable to secure better paying jobs in other sectors of the economy (Ashley, 2000; Ndubano, 2000).

4.5.4 Migration in the Okavango Delta

The levels of out-migration in the Ngamiland district from 'rural' agricultural areas to the major towns in the region has increased drastically since the early 1990s. The population of Maun increased by some 38,9 percent from 26 768 in 1991 to 43 776 in 2001, and similar situations are present in Shakawe and Etsa 6. The tourism industry has contributed to this rural-urban migration. The growth of tourism in the Okavango Delta, especially Maun, has led to significant infrastructure development and resultant employment opportunities. These include opportunities in the tourism industry itself, as well as in the retail, trade, wholesale, transportation, education and construction industries and public administration departments. This infrastructure growth has made the major towns in the Delta 'magnets', drawing rural agricultural dwellers to the 'urban' centres and further decimating the already thinly populated rural-agricultural areas (Ndubano, 2000).

One of the most significant impacts of tourism growth and infrastructure development in the Okavango Delta has been the increase in school attendance since the early 1990s. According to the Republic of Botswana Demography Survey (1998), the number of individuals in the Ngamiland district who had never attended school declined from 30 percent in 1991 to 21,1 percent in 1998. Throughout the whole of Botswana, the primary education sector experienced a 1,5 percent increase in enrolment from 325 948 to 330 767 pupils between 2000 and 2001, which is 0,9 percentage point higher than the 1999 to 2000 growth of 0,64 percent (Republic of Botswana Statistical Bulletin, 2001).

The growth in education levels in the district has also contributed to the increase in rural-urban migration in the Delta. In an attempt to increase education levels throughout the country, the Botswana government has established primary schools in most of the villages, and high schools with boarding facilities in all the larger towns in the Delta. As a result most rural high school students as well as many primary level students travel to the 'urban' towns to attend school, where they board for up to 3 months at a time. The socio-economic impact of this system is drastic.

Firstly, this alters the population demographics of the rural villages in that most individuals within the age group of 15 to 20 years are absent for significant periods of time, attending school. With the increase in migratory movements from rural villages to the larger towns in the delta over the past ten years, the number of males between the ages of 20 to 40 years in the rural agricultural areas has greatly decreased. This is due to the earliest immigrants typically being males, seeking employment in the larger towns, while their wives, children and other household members remain in the villages, providing a social safety net (Daltabuit and Pi-Sunyer, 1990). Hence, in most agricultural villages in the Okavango Delta there is a lack of males between the ages of 20 to 40 years and a lack of individuals, both male and female, within the 15 to 20 year age-group. This tends to alter the family structure and the gender-based division of labour in that the females are left to perform all the agricultural tasks, including those traditionally undertaken by the males only. This impacts on the local production patterns and the productivity of rural village households in that, with the absence of many of the male agricultural workers, less crops are planted and harvested by the remaining female agricultural workers. There has been an overall decline of 35,6 percent in the volume of crops harvested in the Ngamiland region since 1995 (Republic of Botswana Statistical Bulletin, 2001).

There is an increasing trend amongst high school leavers in the Okavango Delta to stay in 'urban' towns to seek formal employment, rather than returning to their agricultural villages to resume their subsistence livelihoods. This has resulted in an increase in rural-urban migration levels, and a subsequent decrease in the practice of traditional agriculture in the Okavango Delta.

According to the local survey respondents, 34 percent of the individuals interviewed in Maun stated that they had moved there, from rural agricultural villages, within the last fifteen years. Seventeen percent of the individuals interviewed in Shakawe, and eight percent of the individuals interviewed in Etsa 6 also stated that they had moved there within the last fifteen years. This urban-ward migration has significantly impacted rural households in the Okavango Delta and their ability to produce an agricultural surplus for sale. The growth of tourism in the Okavango Delta, and the resultant infrastructure developments in the major towns have served to further decimate the already thinly populated rural areas, leaving fewer agricultural workers and only the very young and old behind in the villages (Torres, 1996).

4.5.5 The Socio-Economic Impacts of Migration in the Okavango Delta

The socio-economic impacts of rural-urban migration on rural migrants and their households in the Okavango Delta have been extreme. The rural to urban movement of poor farming populations in search of improved income earning opportunities in the Delta has led to an explosive growth in informal housing settlements in all the major towns. Existing basic services, especially in Maun, are unable to support this rapidly growing informal population is therefore forced to live in increasingly polluted and degraded conditions (Torres, 1996).

Rural migrants generally undergo changes in dress, consumption patterns and language, replacing their traditional dialect with Setswana and English, following their arrival in the 'urban' towns. Setswana and English are the accepted 'languages of commerce' in Botswana, and hence, a migrant's ability to speak them will increase their chances of securing employment. The process of acculturation, however, is gradual, as most migrants tend to maintain ties with their home villages, with many returning regularly to participate in seasonal agricultural activities during their first five to ten years in the larger towns (Burne and Dachary, 1992; Torres, 1996).

While many studies have been done on the differential impacts of tourism on gender (Kinnaird, 1994; Momsen, 1994; Swain, 1989; Swain, 1995), few studies have reported on the effects of tourism and migration on gender around the world. In the Okavango Delta, most jobs associated with the early stages of tourism development, such as construction, recruit males. However, later stage employment tends to support significant numbers of female jobs (Torres, 1996). For example, the Delta now has over 1000 hotel rooms requiring daily maid service. According to the local survey respondents, 14 percent of the migrants interviewed in Maun were female. The majority of them stated that they had moved to Maun from rural villages to join their husbands once they had found formal employment. Only four percent of the female migrants, stated that they had found formal jobs in Maun, while less than one percent stated that they were employed in the tourism industry.

Tourism literature such as Miller (1985), Ryan (1991) and Torres (1996), suggest a pattern of decline in the importance of local food supplies as a resort develops. The early 'explorer' tourists are generally more willing to experiment with local foods and dishes than later stage mass tourists intent on both minimising costs and consuming familiar foods. North American, South African and European tourists, who consist of the bulk of tourists visiting the Delta tend to have conservative food preferences, demanding foods similar to those found in their home countries and resisting indigenous dishes based on locally produced foods (Belisle, 1984; Torres, 1996). This trend is increasingly evident in the Okavango Delta with the rapid growth of South African based franchise outlets such as Steers and Nando's in Maun. Such fast food outlets are very cost sensitive, only purchasing produce from franchise approved sources, and emphasising consistency of ingredients. Most fast food outlets, therefore, find it difficult to consider purchasing supplies from local sources (Momsen, 1996; Torres, 1996). A move away from the use of locally produced foods in the tourism industry is further reinforced by a gradual but persistent shift in the ownership of foreign tourism assets to foreign owners or franchises. Studies such as Belisle (1984), Momsen (1986) and Torres (1996) have repeatedly shown that an increase in foreign ownership is highly correlated with food imports.

Tourism has also altered consumption patterns in the Okavango Delta through the 'demonstration effect', which occurs when the demand for food by the local population shifts to reflect that of tourists (Torres, 1996). This has occurred to a certain extent throughout the Delta, but more acutely in the larger towns, especially in Maun. According to the research conducted in the Delta it would appear that shortly after their arrival in the 'urban' towns, the consumption behaviour of rural migrants switches from traditional staples to reflect the tastes of long-time urban dwellers. This impacts on local agriculture in that as more rural migrants move to the larger towns, there is a continuous shift away from the consumption of traditional dishes by the local population. The local agricultural industry is still reliant on the production of traditional staples, and any major decrease in the consumption of these staples decreases the rate of production of these food types. This also creates an even greater dependency on food imports as the demand for foreign goods by the local population grows (Burne and Dachary, 1992; Torres, 1996).

4.5.6 The Impacts of Tourism on Local Activities and Strategies

Tourism is a relatively new rural activity for local communities, and hence, viewed as being a risky venture. It should therefore be perceived as an additional rural activity, to combine with existing agricultural strategies, not as a substitute. The way in which tourism impacts on existing rural practices has emerged as a key theme in rural development, as its effect influences all aspects of rural life (Ashley, 2000).

The only significant benefit of tourism development on rural subsistence communities in the Okavango Delta has been the provision of cash to individuals involved in the industry. However, tourism income in the region tends to be too low to significantly improve rural livelihoods.

Some of the key ways in which tourism impacts on existing subsistence activities in the Okavango Delta includes reducing access to natural resources, creating conflicting demands on time, and worsening wildlife damage. Tourism related activities often conflict with livestock and crop production, which are the area's key activities (Table 4.27), (Ashley, 2000).

In the Okavango Delta, the large, exclusive areas that have been set aside for wildlife has led to the loss of grazing land and potential agricultural production areas. The loss of access to areas, important for the collection of plants and other natural resources such as building and weaving materials, was also identified by local dependents as a major impact of tourism development.

Tourism is a labour intensive industry. Hence, the amount of time taken up by tourism is significant enough to conflict with agricultural production. Subsistence farmers who supplement their incomes from work within the tourism industry are often unable to carry out farming activities due to the demand placed on them by the industry. Therefore, most subsistence farmers who secure employment in the tourism industry are unable to participate in both sectors effectively, and will tend to abandon agriculture in favour of formal employment opportunities (Ashley, 2000).

Tourism in the Delta is also responsible for increasing the exposure of wildlife to agricultural production areas, and hence increasing wildlife damage to crops and village infrastructure. The presence of large numbers of elephants in the Delta causes damage to cattle water points. In the region, elephants, hippopotamus, antelope and baboons eat crops and predators such as lions kill livestock (Ashley, 2000).

Table 4.27: Tourism’s Impact on Rural Livelihoods	
Rural Activities	Impacts
Livestock Production	Tourism creates competition for water and grazing. Livestock is excluded from core wildlife areas. Loss of cattle to predators. Elephants disrupt herding activities
Agriculture (Crops)	Tourism creates competition for time. Crops damaged by wildlife. Abandonment of agriculture for low-paying tourism employment.
Natural Resource Harvesting	Tourism leads to loss of access to harvesting areas.
Source: Adapted from Ashley (2000).	

4.5.6.1 Tourism Income

Tourism tends to generate three types of cash income for rural dwellers.

- i. Regular salaries for those with formal employment: Third World tourism industries rarely generate permanent jobs for more than a small proportion (1 to 5 percent) of rural households in prime tourism areas.
- ii. Casual earnings from the selling of goods to tourists: Craft makers, grass sellers for thatching and casual labourers make smaller amounts from these casual sales than those employed formally by the tourist industry.
- iii. Profits from the ownership of tourism enterprises: Locally-owned tourism enterprises such as craft markets are generally small-scale, and hence tend to generate small cash earnings, similar to the above category (Ashley, 2000).

4.5.7 Perceived Beneficiaries of Tourism

According to the local survey respondents, 75 percent stated that foreigners are the major beneficiaries of the tourism industry in Botswana. The remaining 25 percent felt that the government was also a major beneficiary, followed by the North-West District Council. Therefore, the local population tends to view foreigners as the major beneficiaries of tourism in the Okavango Delta. This echoes Mbiawa's (1999) and Ndubano's (2000) findings that Botswana's tourism industry is largely in foreign hands. Foreigners tend to receive more income from the ownership of tourism businesses and hold better paying jobs within the industry than their local counterparts. As a result, a large proportion of the income generated from the industry is repatriated out of the country by foreigners, back to their home countries. However, in contrast to this, approximately 90 percent of the foreigners involved in major tourism businesses argue that it is the local people who benefit the most from the industry; "locals benefit directly through employment, and tourism money benefits the government coffers and brings about development in the form of infrastructure to Maun and its people" (Ndubano, 2000, p. 52).

4.5.7.1 Local Perceptions on the Major Tourism Beneficiaries

- 'Foreigners benefit more because they are directly involved with tourists, with no middlemen involved as in the case with us.
- Their businesses are flourishing with increasing numbers of tourists; those businesses which started out small have now grown big.
- They have taken all the prime areas leaving us with almost nothing and nowhere to go.
- Foreigners are in better paying jobs which places them ahead of us.
- Tourists do not provide a market for locally produced goods and businesses as tourists go only to places the operators/hosts take them' (Ndubano, 2000, p.52).

According to Mbiawa (1999) and Ndubano (2000), foreigners involved in the tourism industry argue that the tourism revenues are used by the government and North-West District Council to bring about local development in the form of social infrastructure, which is an indirect benefit to the local population. This is, to a certain extent true. However, infrastructure development in the Delta as a result of tourism growth has done more to increase migration levels and hence unemployment figures in the major towns than provide significant employment opportunities and development to the local population. In addition, when the benefits of tourism are not directly felt by the local population, as is the case in the Okavango Delta, local communities tend to perceive the industry with increasing negativity (Mbiawa, 2001) For the local population to benefit from the tourism industry, a system must be put in place where there is provision for locals to finally assume better paying jobs from foreigners. According to Ndubano (2000), attempts to get Batswana employed in higher paying jobs in the tourism industry is failing. The localisation of 'upper level' jobs, such as managerial posts is not occurring because of a lack of commitment on the part of government to push for this, and resistance by foreigners wishing to secure their jobs.

4.6 Changes in Agricultural Production in the Okavango Delta

Any form of extensive sustainable agricultural production in Botswana requires sound management practices as the climate is semi-arid and harsh, and the availability of water is seasonal. The future of any industry is dependent upon its contribution to the upliftment of the quality of life of the people involved, its efficiency, environmental sustainability and access to viable markets. The future of the agricultural industry in Ngamiland is no exception (Mannathoko, 1997).

The contribution of Botswana's agricultural sector to the country's economy has been declining over the years, regardless of the implementation of various sectoral development initiatives. This decline is most pronounced in the livestock and subsistence sub-sectors, which are the most dominant in the country. The agricultural and rural development policies of the Botswana government originally emphasised food self-sufficiency at the national level. The intention was that the country should produce all of its own basic food requirements, to ensure an increase in agricultural productivity as well as output. In an attempt to achieve this objective, and increase the income base of agricultural operators, as well as provide a more secure and productive environment for those engaged in agriculture, the Botswana Meat Commission (BMC), and Botswana Agricultural Marketing Board (BAMB) were created in 1966 and 1974 respectively (Akinboade, 1999).

The national agricultural strategy shifted from food self-sufficiency (the sixth National Development Plan), to one of food security at national and household levels in the seventh National Development Plan (NDP 7) in 1991. This policy shift was an acknowledgement of the weakness of the agricultural sector in attaining the initial goal of food self-sufficiency. Botswana has never been self-sufficient in basic cereal production since independence, meeting annual production shortfalls with imports. This can be attributed to the unfavourable weather conditions and poor soils which dominate most of the country.

Subsistence agriculture and livestock production were the dominant economic activities practised in Ngamiland until the growth of the tourism industry, and its related infrastructural developments. The agricultural industry, and more specifically the

livestock industry is the only viable industry in Botswana which is owned and operated by citizens, and hence there is a need for growth within the sector through efficient production and increased market access (Mannathoko, 1997).

In 1991 there was a total of 1804 workers formally employed in the agricultural industry. There was a further 6756 individuals practicing traditional sector subsistence agriculture for personal consumption in the Ngamiland district. It is estimated that these subsistence farmers supported a further 40 536 individuals in the form of family and relatives. The total population for the Ngamiland district in 1991 was 94 534 people. Therefore, approximately 50 percent of the population of Ngamiland was involved in, or dependent upon, subsistence agricultural production in 1991 (Republic of Botswana Statistical Bulletin, 2001).

In 2001 there was an estimated total of 9700 individuals practicing subsistence agriculture in Ngamiland, and its total population was approximately 110 489 people. Therefore, only nine percent of the population is directly involved in traditional agriculture. Most farmers also receive additional income from family members who hold formal jobs in the larger towns in the Okavango Delta. Hence, the importance of subsistence agriculture in supporting rural households in the Delta has decreased, as most farmers are now supported by formally employed relatives. This is supported by the fact that the number of crops harvested within the traditional sector decreased by 35,6 percent in the Ngamiland district since 1995, while the number of traditional sector cattle, owned by Ngamiland subsistence farmers, decreased by 8,1 percent since 1995 (Republic of Botswana Agricultural Statistics, 1996; Republic of Botswana Statistical Bulletin, 2001).

Livestock production is a major economic activity in Botswana, particularly in the rural areas, as the cattle industry provides valuable income to a significant number of citizens. It is a major source of income, nutrition, draught power and employment in both the rural and urban areas. During the 1995/96 Botswana Meat Commission (BMC) financial year, livestock producers, who sold directly to the BMC, were paid a total of Pula 126 million, while a further Pula 76 million was paid to livestock industry service providers. The Botswana Government received Pula 10,2 million in taxes from the BMC. The BMC supplies approximately 60 percent of beef consumed in the country, while the livestock industry accounts for approximately five percent of

Botswana's export earnings, which is enough to cover the import costs of basic cereals. The cattle industry therefore plays a significant role in the country's economy, and with improved management systems, the livestock industry's contribution has the potential to be even more substantial (Mannathoko, 1997).

As Avery (1997) highlights, Botswana is a semi-arid country, suitable for only a limited array of primary economic activities. The country can support an extensive livestock production industry (beef cattle and small stock), and wildlife, yet has very limited scope for arable production, except in isolated areas such as the Okavango Delta region, where soils are fertile and water more readily available.

In Botswana, livestock production in the traditional sector is dominated by the communal grazing system, in which livestock are not kept in fenced farms, but left to graze in large communal rangelands. This system tends to cause severe damage to the environment through overgrazing as grasses and other plants are not left to mature due to continuous eating by livestock. In the communal areas, the calving rate is 50 percent, and the mortality rate is 12 percent, compared to 60 percent calving rate and five percent mortality rate in fenced farms (Mannathoko, 1997).

4.6.1 World Markets

The worldwide consumption of beef and poultry is increasing, due to growing population figures and increased First World incomes. It is estimated that by the Year 2025, there will be nine billion people worldwide, with the majority of them in Asia. Studies have shown that Asians consume more meat, especially beef, as their incomes improve. In Europe, beef consumption is currently at the same level as the pre-MCD (Mad Cow Disease) scare period. The international beef market has however, also experienced problems. The March 1996 announcement by the British Minister of Agriculture that there was a possible link between MCD and Cruetz-Jacobs Disease (CJD) resulted in a 40 percent drop in beef consumption in the United Kingdom, a 60 percent drop in Germany and a 98 percent decrease in Greece. All three of these countries are important markets for Botswana beef. The consumption of beef has returned to pre-March 1996 levels.

In most European countries the consumers are now only willing to consume beef from their home countries. As a result, the European Union has introduced legislation on cattle identification. This legislation states that only cattle, identified by their country of origin will qualify for intra-community trade. By January 2000, all Third World beef entering Europe had to be traceable, with 'passports' detailing their movements from birth to slaughter. In Botswana, only animals from fenced farms, which are primarily commercial, are suitable for export to Europe. Cattle from communal areas, including the Okavango Delta, do not qualify for export (Mannathoko, 1997).

Botswana's cattle industry has the potential to greatly contribute to the upliftment of the country's rural, subsistence agricultural communities. However, rural farmers in the Okavango Delta, and elsewhere in Botswana, tend to be reluctant to sell their livestock to the BMC for commercial gain. In the 1980s the Botswana Government introduced drought relief subsidies to local farmers throughout the country, with most rural farmers still relying on them to this day. As a result, most rural farmers in the Okavango Delta do not see the need to sell their livestock, as they receive a reliable source of income for not developing their animal herds commercially. There is also a lack of supportive infrastructure in the rural agricultural areas in the Okavango Delta, such as roads, transportation services, electricity and telecommunications. Hence, most rural farmers in the Delta experience great difficulties in transporting their livestock to the BMC in Maun and Gaborone. Therefore, many rural farmers in the Okavango Delta choose to collect drought relief from the government, and keep their livestock for personal consumption, rather than attempting to sell them commercially, even though they would receive more income from their sale than from drought relief (Mannathoko, 1997).

Due to most rural farmers in the Okavango Delta keeping their livestock in communal grazing rangelands, there is very little control over their movement and interaction with other livestock. The traditional sector livestock industry in the Okavango Delta can only grow if communal rangelands are protected against overgrazing, and if cattle movements are controlled through the fencing in of farms. The implementation of technologies to increase beef production and quality, such as artificial insemination, embryo transplants, rotational grazing and programmed breeding, can only be adopted in fenced farms. In order to achieve this commercial livestock production, supportive infrastructure needs to be implemented in the Okavango Delta. However, this is

unlikely to occur because there is pressure on the government to keep the Okavango Delta's rural areas as underdeveloped and pristine as possible for the tourism industry. As a result, most rural farmers in the Okavango Delta do not consider the possibility of developing their livestock into commercial quality beef herds, as they experience difficulty in marketing their animals. Hence, most subsistence farmers in the Delta would abandon their agricultural lifestyles in exchange for formal employment in the larger towns, if the opportunity arose, than attempt to develop their livestock herds and market them commercially (Mannathoko, 1997).

There is a need to limit government provided subsidies such as drought relief to subsistence farmers in Botswana in an attempt to reduce dependency upon 'handouts', and the reluctance of farmers to properly manage their livestock. This, however, must also come hand in hand with government subsidised supportive resources such as veterinary services, transportation and market access and educational opportunities, as commercial production is dependent upon relevant infrastructure support. There is presently very little possibility of rural infrastructure implementation in the Okavango Delta, and hence most subsistence farmers feel that the economic returns from livestock production are limited and opt for formal employment opportunities in the tourism industry and its related services instead (Mannathoko, 1997).

4.6.2 Agricultural Policies in the Okavango Delta

Over the years, and in recognition of the need to improve the productive capabilities of resource-poor subsistence farmers in the arable sector, the Ministry of Agriculture (MoA) has implemented a number of agricultural development programmes, with the sole aim of promoting the sector by providing an enabling environment for farmers and producers. These programmes include the Arable Lands Development Programme (ALDEP) and Accelerated Rainfed Arable Programme (ARAP), Service to Livestock Owners in Communal Areas (SLOCA), the Bull Subsidy Scheme, Artificial Insemination, Agricultural Extension Fund No. 10 (AE 10) and other agricultural projects funded under the Financial Assistance Policy (FAP) (Republic of Botswana Government White Paper No.1, 2002). The success of these programmes in transforming the sector has been minimal, mainly due to:

- i. '...the absence of clear and monitorable sector-wide strategies and plans; poor targeting of subsidies and poor performance of farmers;
- ii unfavourable agro-climatic conditions, characterized by low and erratic rainfall and endemic droughts which make rainfed crop production risky; and
- iii constraints to the development of irrigated agriculture due to uncertain and scattered water resources, low borehole yields, competition for water with other sectors (such as tourism), and the lack of a clear policy on apportionment of water for agricultural use, including for irrigation' (Republic of Botswana Government White Paper No.1, p. 7).

The Arable Lands Development Programme (ALDEP), which has been assisting small scale subsistence farmers in the Okavango Delta and elsewhere over the past 18 years, has proved to be relatively successful in terms of package distribution, yet has not been able to significantly improve the performance of arable agriculture. A 1997 study on Gender Equity and Access to Economic Opportunities in the agricultural sector in Botswana, confirmed this fact. It stated amongst other things, that the cost of delivering ALDEP to rural farmers is approximately twice the import parity value of the production. While the failure of ALDEP to make a significant impact on rural productivity is blamed on long spells of drought and conflicting policies such as drought relief, which encourages farmers not to increase their agricultural productivity, the study generally concluded that ALDEP has not had a significant impact in improving the performance of the arable sector. It was also concluded that ALDEP and other schemes designed to help small scale subsistence farmers generally encourage them to hold on to their land rather than letting it to larger and more efficient producers, even if they do not cultivate it (Republic of Botswana Government White Paper No.1, 2002).

Irrigated horticulture in the Okavango Delta and elsewhere, has been supported, by the government through the Financial Assistance Policy (FAP). Despite this support, the supply from country-wide horticultural farms covers only 15 to 20 percent of the national demand for vegetables and 24 percent of the demand for fruits. The balance is generally imported from South Africa. Botswana's horticultural sector is dominated by a few, relatively large-scale commercial farms in the Tuli Block in northeastern Botswana, that have the advantage of high-yielding wells and fertile soils along the Limpopo River. The remaining horticultural sub-sector is fragmented, comprising numerous small farms scattered throughout the country, including the Okavango Delta,

mostly of one hectare or less in size. This is generally due to low borehole yields. This trend tends to deny the growers the potential economies of scale, including the possibility of dealing with market fluctuations, and high post-harvest and transportation costs (Republic of Botswana Government White Paper No.1, 2002).

The potential for commercial horticultural production in the Okavango Delta is largely under-utilised, even within the limitations of water supply during the drier months. Horticultural crop yields can be increased significantly if modern, efficient irrigation, cultivation and farm-management methods are implemented, thus enhancing farmers' income opportunities significantly in spite of the competition with imported goods, required by the tourism industry in the area (Republic of Botswana Government White Paper No.1, 2002).

The current weaknesses experienced with this sub-sector in the Okavango Delta are generally due to the fragmentation of the industry into small farming units, and a lack of coordination with respect to crop production. There are also low production efficiencies in most of the small-scale horticultural farms, an acute shortage of qualified professional manpower and inadequate rural infrastructure (Republic of Botswana Government White Paper No.1, 2002).

It has been established that horticultural production in the Okavango Delta can be increased as much as four fold with improvements in technology and management using existing resources. If this were to occur, the Delta would be approximately 70 percent self sufficient in the production of fresh produce (Republic of Botswana Government White Paper No.1, 2002).

4.6.3 Marketing Outlets in the Okavango Delta

Livestock marketing in Ngamiland is through private sales or, to the Botswana Meat Commission in Maun, Francistown or Gaborone. Private sales are to individuals, or directly to butcheries in the area. The Botswana Meat Commission in Maun does not have slaughter facilities for small stock such as sheep and goats, hence small stock in the region is marketed through the Gaborone and Francistown BMC branches, or through private sales (Makhwaje *et al*, 1995).

In Ngamiland, most animals are trekked from the rural villages to the main tarred roads leading into Maun, where they are loaded into trucks and driven to the BMC. Truck owners in the district charge in the range of Pula 100 to Pula 150 per animal. Market prices for cattle in Ngamiland range from Pula 300 to Pula 900 per animal. However, livestock prices differ between districts (Makhwaje *et al*, 1995).

Fresh produce in Ngamiland, and elsewhere in Botswana, is sold to the Botswana Agricultural Marketing Board (BAMB). Farmers in all areas of Botswana tend to view BAMB prices as being low, and feel that prices need to be increased so as to encourage farmers to produce and sell more crops at higher returns. The prices paid by the BAMB in 2000/01 was Pula 2 832 per tonne for pulses, Pula 548 per tonne for sorghum and Pula 508 per tonne for maize. The trend of produce sales in Ngamiland is that following a wet season farmers tend to sell more while less is sold during drought years, hence indicating an inability by local farmers to adapt to variable climatic conditions (Makhwaje *et al*, 1995; Republic of Botswana Statistical Bulletin, 2001).

In the Okavango Delta there are several interrelated factors that hinder the development of linkages between the tourism industry, and local agricultural production. Firstly, local farmers in the area have not experienced a shift from traditional, subsistence to standardised, commercial patterns of agricultural production. The various agricultural development programmes pursued by the government have, so far, failed to improve the performance of the sector, and to ensure the sustainable use of the region's natural resources. There is also a lack of infrastructure in the rural agricultural areas to support the growth of commercialised agricultural production. With regard to the livestock industry, the BMC is a reliable marketing outlet. However, the lack of supportive rural infrastructure, and government policies such as drought relief subsidies have prevented the local subsistence farmers from realising the commercial opportunities that can be achieved through the sale of import quality animals to this marketing board (Republic of Botswana Government White Paper No.1, 2002).

There is also a lack of reliable produce marketing outlets in the Okavango Delta, with the Botswana Agricultural Marketing Board (BAMB) being the major outlet for the area. BAMB prices tend to be low and hence many local farmers are reluctant to produce crops commercially due to the limited income they will receive from their sale. It is

generally felt that it is more beneficial to grow produce for personal consumption, and only sell the surplus to secure additional income during wetter years. Due to the lack of rural infrastructure in the Delta, local produce also tends to be erratic with regard to both the quantity produced from season to season, and the quality of the crops. This is due to farmers being reliant upon seasonal climatic conditions and fluctuating water sources. As a result, the tourism industry tends to purchase imported produce because there are very limited crops available from the BAMB, as the locals are reluctant to sell their produce. The produce that is available tends to be unreliable (Republic of Botswana Government White Paper No.1, 2002).

The local farmers also lack the necessary education and technology required to produce the crop types demanded by the tourism industry, as only traditional produce such as maize, millet and sorghum are grown. The tourism industry is therefore forced to purchase imported goods as this is the only available source for this type of produce. Significant linkages have therefore not developed between the tourism industry and the local agricultural sector, even though there is the potential for the development of a successful, locally owned, commercial horticultural and livestock sector in the area (Makhwaje *et al*, 1995; Republic of Botswana Statistical Bulletin, 2001; Republic of Botswana Government White Paper No.1, 2002).

4.6.4 Rain Fed Agriculture

An economic analysis of rain fed agriculture in the Okavango Delta and elsewhere in Botswana shows that the small traditional subsistence farms are not economically sustainable. As a result, traditional arable farming has to undergo major changes to reduce uncertainty associated with natural conditions in Botswana by adopting more modern cultivation techniques that can ensure higher productivity, even under unfavourable conditions. To develop cultivation units of larger size, some form of farmer grouping is required. Mechanised cultivation and other related agricultural services will be provided for such groups of farms through agricultural service centres, which have to be planned and professionally supported. For a rural farmer to practice arable farming as a sole source of income, they need to earn a net annual income at least equal to that of a skilled urban worker (Republic of Botswana Government White Paper No.1, 2002).

For example, based on a net income of Pula 300 per hectare per year, which is achievable in a progressive 150 hectare land cultivation group, and assuming that an urban worker earns approximately Pula 12 000 a year (based on Central Statistic Office demographic information, March 1999), a farm size of about 40 hectares would be required for each farmer. This information should be considered by the government as a guideline in land allocation policies. The variation in agricultural yields from one region of the country to another, and from one year to the next is fairly high. Even on relatively fertile land, some crops cannot generate a positive mean annual net income per hectare. As a result, arable agriculture is not possible in all the districts and certain crops will not perform uniformly across the country. Therefore, the government should target its assistance according to the potential of the various districts (Republic of Botswana Government White Paper No.1, 2002).

4.6.5 Irrigated Agriculture

The horticultural industry in the Okavango Delta, and throughout Botswana is fragmented into small, isolated units. Over the next ten years small horticulturists will be organised into clusters of advanced production units of 20 to 40 hectares in order to enable small vegetable producers to respond to market demands more effectively and reliably (quantitatively as well as qualitatively), attain better terms in acquiring production inputs and transportation services, and in introducing improved cultivation and post-harvest technologies. The potential exists for Botswana to find a lucrative niche for some fruits in the European markets, taking advantage of the difference in seasons. Emphasis will be placed on cultivating predominantly citrus fruits (oranges and lemons), grapes and olives for export. However, the possibility of developing large scale horticultural projects in the Okavango Delta, and utilising the river's annual inflow will have to await the conclusion of ongoing talks, on account of the Delta's Ramsar protection status and pressure from its thriving tourism industry (Campbell, 1997; Republic of Botswana Government White Paper No.1, 2002).

4.7 Conclusion

This chapter provided an appraisal on the impact of the international tourism industry in the Okavango Delta on local agricultural systems, socio-economic structures and

employment opportunities in the area. It also provided an in-depth view into potential structures that can be developed in the Delta to create linkages between tourism and agriculture, and hence bring about significant economic and employment opportunities for rural subsistence farmers.

In many ways, Botswana has had one of the most intense, and most successful, economic development experiences among sub-Saharan nations in the post-colonial era. This development has largely depended on mining and cattle, and has been extractive and export driven (Valentine, 1993). Recently, due to concerns regarding the diminishing returns of extractive industry, environmental costs, and the vulnerability of the cattle industry to both importers' decisions and disease, tourism has played an increasingly important role in planning for Botswana's economic future (Lilywhite and Lilywhite, 1991). Many other developing countries both in sub-Saharan Africa and elsewhere also see tourism as a sustainable and clean way to earn foreign exchange, as well as to provide relatively large numbers of skilled and unskilled jobs and infrastructure development (Hitchcock, 1991; Young, 1995).

Agriculture in the Okavango Delta has the potential to be of great economic importance to both local farmers and the GDP of the country as a whole. Tourism and agriculture are two sectors that, if linked together, have the potential to stimulate local agriculture, as well as help improve the distribution of tourism benefits to the local people. The Delta has the potential to create both a thriving local agricultural sector, as well as international tourism ventures that compliment and benefit each other, without compromise. There is need for further research to be done on this tourism/agricultural sector of the Okavango which will not only be of benefit to Botswana but many other developing countries throughout the world.

The impact of the development of the tourism industry in the Okavango Delta has not been uniform and varies widely within, and between communities. The use of tourism to enhance the livelihoods of rural subsistence dwellers does not simply mean maximising the number of tourism developments in a region, and hence wage income. A wide range of costs and benefits need to be taken into account, particularly, the assessment of tourism's impacts on existing rural activities, such as subsistence agriculture. In order to minimise the negative impacts of tourism development on rural households, there is a need for a thorough understanding of the complex ways in

which tourism affects subsistence livelihoods, and a need for governmental planning processes to be participatory and responsive to local needs (Ashley, 2000). The final chapter of this study presents an evaluation of the key findings and recommendations.

CHAPTER FIVE

Evaluation, Recommendations and Conclusions

5.1 Introduction

This study examined the impact of tourism development on subsistence agriculture and rural agricultural livelihoods in the Okavango Delta region of Botswana. The Okavango Delta is faced with many developmental challenges. The creation of employment for the local population, the sustainable use of the Delta and its resources, the development of the local agricultural industry, and the continued growth of the tourism industry are amongst the key concerns present in the area.

In this chapter, an overall assessment of tourism's impact on subsistence agriculture in the Okavango Delta is presented, and evaluated with reference to the conceptual framework. This chapter also considers the critical questions upon which this study is based. The challenges facing the local agricultural industry in the Delta are explored, and recommendations for the upliftment and growth of the industry are presented.

5.2 Socio-Economic Conditions in the Okavango Delta Region

An understanding of the socio-economic impacts that tend to result from developmental initiatives in Third World regions, is increasingly being viewed as essential to the long-term sustainability of the area (Ryan, 1991). The Okavango Delta has experienced a number of socio-economic impacts as a result of tourism growth in the region since the early 1990s. Unemployment is very high as only 30 percent of the population has formal employment, while Maun has an unemployment rate of 19 percent (Republic of Botswana Statistical Bulletin, 2001). As a result, the region experiences extreme levels of poverty, especially in the rural areas, where most of the residents do not receive basic services such as water and sanitation. Regional development, employment opportunities and the distribution of economic benefits are unequal, and tend to accrue to only about five percent of the local population. The

levels of 'rural-urban' migration by subsistence farmers in search of formal employment opportunities, have risen steadily since the early 1990s, resulting in unprecedented social changes in the Delta, and the proliferation of squalid 'shanty' areas in all the larger towns in the region.

The growth of the international tourism industry in the Okavango Delta has impacted on the subsistence strategies of the local communities at all levels. Attempts to minimise the socio-economic impacts of tourism growth in the region need to be undertaken, entailing the reconsideration of current approaches to integrating international tourism industries with Third World economies and societies. The overriding challenge facing authorities in the Okavango Delta is reducing 'rural-urban' migration levels, rural poverty, inequality and unemployment.

5.3 The Socio-Economic Impacts of Tourism in the Okavango Delta Region

Most Third World tourism occurs in rural areas or draws upon rural labour resources, and hence, inevitably leads to socio-economic changes, as well as to the establishment of links with the global agri-food system (Goodman and Watts, 1994). In the Okavango Delta, the processes of rural restructuring, which are directly linked to tourism development are dramatically evident. Firstly, the intersection of global food regimes and international tourist flows has occurred. Rural areas, traditionally production spaces for local populations, have become consumption spaces for the leisure of non-locals. However, tourists and the indigenous population remain socially, economically and ethnically separate (Torres, 1996).

In the Okavango Delta region the resentment by local communities of the international tourism industry is growing. Locals increasingly perceive the development of tourism ventures, and the conservation of the areas wildlife and natural habitats, as the 'selling out' of their land and resources, to foreigners, by the Botswana Government. Most Batswana in the Delta experience no tangible benefits from the tourism industry, and hence, fail to see its importance to the region's economy. Due to the loss of land by local people to conservation and tourism, tension between indigenous communities and the global tourism industry in the Okavango Delta continues to grow (Torres,

1996). According to Allen and Hamnet (1995), compared to the absolute poverty of the majority of individuals in a Third World host community, the tourists seem extremely affluent, which is usually manifest in their appearance and behaviour. In the Okavango Delta, most tourists dress in designer safari fashions, and sport the latest hi-tech photographic and wildlife viewing equipment. They frequent the luxury hotels and lodges in the area, where the price of even one meal in such establishments is likely to be more than a local will be paid in one month (Allen and Hamnet, 1995). This is leading to increasing xenophobia in the area, which has the potential to alienate the sector, resulting in the loss of foreign investors and economic returns (Ashley, 2000).

As Cooper *et al* (1993) highlights, tourism cannot be exported to consumers. The consumers must visit the destination to experience the tourism product, and in doing so they act as a stimulus for social change. The impact of tourism development, and the resultant 'rural-urban' migration in the Okavango Delta has had extreme social effects on rural subsistence farmers. The 'demonstration effect' is a direct social impact, caused by the development of tourism in rural areas. This occurs when tourists influence changes in the behaviour of host communities (Cooper *et al*, 1993).

Language is one way in which host communities can remain distinct from the visitors. However, the language of the hosts will inevitably change to accommodate the tourists as members of the host society who learn the language of the tourists are more employable and valuable to the tourism industry (Martha, 1993). Changes in language from traditional dialects to English and Setswana, dress and consumption patterns are evident in all the towns in the region. As Cooper *et al* (1993) highlights, an increase in income levels from the creation of employment for the local population within the tourism industry, and the spread of the monetary sector, will alter traditional consumption patterns. Such changes, if they include consumer durables such as television and radio, will expose the host community to a wider range of wants, and speed up the process of social change.

The tourism industry in the Okavango Delta is dominated by foreign ownership, investment and participation, to such an extent that any meaningful participation by local citizens is becoming increasingly impossible. According to Schneider (1993), the tourism industry is seasonal and therefore employs people on a temporary or part-time basis. As Blank (1989) and Williams and Shaw (1991) also highlight, tourism employees are usually laid off work during the low season. As a result, the tourism

industry cannot provide secure, meaningful jobs for many local residents, and their bargaining power for better wages and conditions is reduced. The formal employment of Batswana in the Delta's tourism industry consists of low-paying, unskilled labour, which provides little prospect for economic improvement or promotion. The foreign ownership of this sector is increasingly leading to the loss of resource control by the local population, as the industry, and the resources upon which it is based, are reserved for the consumption by non-locals. The foreign domination of the Delta's tourism industry has also led to increased wage differentials between expatriate and local tourism employees. Foreign employees' earn up to 30 percent more than their local counterparts for the same job.

Due to the major income disparities experienced by most Batswana in the Okavango Delta, and the exclusive nature of the tourism industry, the segregation of local communities from the tourism sector has reached extreme proportions. The Okavango Delta is dominated by tourism enclaves, insulated from local residents by physical 'buffer zones', and pricing structures, accessible only to wealthy foreign tourists.

Since the early 1970s analysts have increasingly highlighted the point that the earlier guarantees of tourism multiplier effects have not materialized in most Third World destinations (Limb and Dwyer, 2001). The predominant form of traditional, western-oriented mass tourism that has been established in so many less developed countries makes demands for services and products that can rarely be manufactured locally, due to many of these destinations having extremely narrow resource bases (Ioannides, 1995). This results in the tourism industries of many less developed countries relying heavily on imported foreign foods and materials, which leads to high leakages of capital and a reduction in the balance of payments (Wilkinson, 1989). Tourism facilities, and their resultant supportive infrastructure, have been developed throughout the Okavango Delta region. However, uneven regional economic development is still a major problem in the area, as the economic gains from these developments tend to accrue to tourism headquarters located in the larger towns such as Maun and Gaborone, as well as with other foreign based tourism companies. The uneven pattern of regional development, resulting from the districts nearly exclusive dependence on tourism, is clearly evident in the Okavango Delta. Severe regional inequalities exist between wealthy tourist sites, and the marginalised, agricultural villages in the area.

The tourism resources and infrastructure are seldom accessible to poor local communities (Torres, 1996).

Tourism comprises 16 percent of the country's GDP, and is the dominant economic activity in the Okavango Delta region (Republic of Botswana Statistical Bulletin, 2001). Tourism profits in the area have led to exceptional economic growth, which is of great importance to the state, but has also resulted in uneven industrial development, with little emphasis placed on stimulating non-tourism economic activity. The regions high level of dependency on tourism leaves the Okavango Delta extremely vulnerable to international tourists and foreign interests, whose chief concerns are increased economic development through the commodification of environmental and cultural heritage for tourist consumption (Torres, 1996).

5.4 The Beneficiaries of Tourism in the Okavango Delta

The perceptions by local populations in the Okavango Delta, and foreign employees in the tourism sector, as to the major beneficiaries of Third World tourism development, differ greatly. Local residents view foreign tourism employees and owners, and the Botswana Government, as the recipients of benefits resulting from tourism growth. Foreigners, who are involved in the industry on the other hand tend to view the local population as the major beneficiaries, through the provision of employment opportunities and infrastructural development, brought about by tourism growth (Ndubano, 2000).

This study, however, reveals that it is the foreigners who dominate the Okavango Delta's tourism industry, that benefit the most from the sector's development.

Foreigners receive more income from the ownership of tourism related businesses, and employees' receive higher incomes than their local counterparts. A large proportion of tourism-generated income is also repatriated out of the country by foreign owners. This situation in the Okavango Delta correlates to the findings of Martha (1993) regarding tourism-generated employment, in that, in addition to tourism employment being seasonal and part-time, the industry creates low-quality and low paid jobs, that do not help workers, especially women escape their nearly unbreakable

cycle of poverty. Also, tourism employment offers few or no benefits, provides very little advancement possibilities, and requires only low level, or no entry skills.

According to Cooper *et al* (1993), the provision of new forms of communications, transport and infrastructure, for tourism development, will influence the levels of 'rural-urban' migration in the host area. The Botswana Government and the North-West District Council use tourism-generated revenues to bring about local development, through the provision of social and physical infrastructure. However, the infrastructure development in the Okavango Delta has led to an increase in 'rural-urban' migration levels and hence, unemployment and poverty. With the large number of foreign-owned tourism businesses in the Okavango Delta, and resultant foreign investment, there is a high percentage of economic leakage from the industry. The amount of income that is generated through foreign-exchange earnings in the Delta is significantly reduced through the leakage of tourism income to foreign, First World economies. Local ownership and control of tourism resources is essential in reducing income leakage and redistributing tourism benefits to the local population, as foreign owned facilities are "staffed, stocked and furnished by people, food, furnishings, fixtures and equipment from a central foreign source" (Mill and Morrison, 1985, p.224).

5.5 Tourism Employment in the Okavango Delta Region

The provision of quality employment to local, Third World populations is a significant means to achieving sustainable livelihoods, and reducing poverty and inequality for these marginalised societies (Ashley, 2000). In the Okavango Delta region, unemployment rates are very high, as most residents rely on subsistence agriculture and other informal income-generating strategies for their existence.

The average monthly incomes for local tourism employees in the Okavango Delta range between P400 and P990, while subsistence agriculture usually generates less than P270 per month (Republic of Botswana Statistical Bulletin, 2001). Even though tourism employees earn more than subsistence farmers, their salaries are still too low to bring about any substantial improvements to living standards (Ndubano, 2000). Most subsistence farmers in the Okavango Delta are searching for formal employment opportunities and would give up agriculture in exchange for 'urban-based' commercial

livelihoods. However, rural migrants in the Okavango Delta generally have no formal training or tertiary qualifications, and hence have very little possibility for advancement and promotion within the formal sector. This tends to promote poverty rather than alleviating it through employment.

This study has revealed that the development of tourism in the Okavango Delta has done little to economically benefit the local population through the creation of employment. It has instead served to increase 'rural-urban' migration levels, decrease subsistence agricultural production, led to the concentration of unemployed rural migrants on tourist peripheries and increased pressures placed on the region's economy and resources by poverty stricken communities.

5.6 The Impact of Tourism on Agriculture in the Okavango Delta

The development of tourism by Third World governments is often encouraged as a source of foreign exchange, investment, employment, development and economic growth (Torres, 1996). National development plans are drawn-up based on the assumption that the economic benefits of tourism will trickle down to stimulate other sectors of the economy, particularly agriculture. This assumption is often based on the concept that the tourist-driven demand for greater variety and higher quality of food will encourage local farmers to both increase and diversify the production of agricultural goods (Belisle, 1984).

5.6.1 The Demand and Supply of Fresh Produce in the Okavango Delta

The development of the tourism industry in the Okavango Delta region was initially seen as a possible means to bring about economic and social development and poverty alleviation. It was also seen as a means to encourage the formation of linkages between the tourism industry and other sectors of the economy including agriculture. It was hoped that the increase in the need for fresh produce and other goods, due to the growing number of tourists visiting the region, would encourage local farmers to diversify production to meet this demand (Republic of Botswana Government White Paper No.1, 2002).

Despite the attempts by the Botswana Government and regional planners to use tourism as a possible means to alleviate poverty in the Okavango Delta, the linkages between tourism and agriculture remain weak. Most food supplied to the tourism industry is imported from outside the region, with the exception of some local beef, poultry and fish.

According to Torres (1996), a wide variety of production, structural, policy, financial, information and infrastructure constraints contribute to the lack of formation of linkages between tourism and agriculture in Third World tourism destinations. The Okavango Delta presently lacks the infrastructure and local marketing outlets to support the development of a successful local produce industry. The most common constraints preventing the development of linkages between the sectors is the inability of subsistence farmers in the Delta to produce consistently high quality fresh produce. This is due to the harsh climatic conditions in the region, as well as a lack of knowledge by the local farmers of commercial farming methods, and lack of support from the government. There are no significant linkages between local agriculture and tourism in the Okavango Delta. Hence, the growth of tourism in this region has led to a significant increase in the need for food imports. This has damaged the local agricultural industry by completely eliminating the need for local goods, and hence alienating local agriculture from this sector. The need for food and produce imports also drains foreign exchange reserves.

5.6.2 Review of the Impact of Tourism on Agriculture in the Okavango Delta

According to Bryden (1973), Belisle (1984) and Cater (1987), some of the most common impacts of tourism development on Third World subsistence agricultural industries include competition for land and labour resources, and increased imports associated with foreign exchange leakages. Other impacts also include increased local consumption of imported foods, changes in cropping patterns and the decline in agricultural production (McElroy and de Albuquerque, 1990; Ryan, 1991; Adams, 1992; Harrison, 1992; Gomes, 1993).

Tourism in the Okavango Delta region tends to compete with local agricultural production for scarce resources of land and labour. The subsistence sub-sector is increasingly losing farmers to tourism and other related industries. The 'rural-urban' migration of local farmers has led to changes in local consumption patterns in that, with the availability of imported foods, an increasing number of inhabitants are changing their eating habits to match those of foreign tourists and established urban dwellers. This has led to a decrease in the practice of subsistence agriculture in that it is dependent upon the consumption of traditional staples by the local population.

Therefore, in summary, the development of international tourism in the Okavango Delta has led to increased 'rural-urban' migration, increases in the need for imports, competition for land, labour and natural resources, changes in traditional consumption patterns, the depopulation of rural agricultural areas, and a decrease in the production of agricultural products, leading to the marginalisation of the subsistence sub-sector, and leaving rural farmers with few prospects for development (Torres, 1996).

5.7 Recommendations

The following recommendations are proposed, within the context of this study, for the fostering of positive linkages between the tourism and local subsistence agricultural industries in the Okavango Delta, so as to minimise tourism's negative impact on local communities and subsistence strategies.

Tourism is the chief economic activity in the Okavango Delta, and hence, the further development of the industry is a priority for the Botswana Government, regardless of its impact on local communities. However, various measures exist, which, if enforced, may limit the negative impacts experienced by communities from tourism.

Approximately 4460 individuals, which is less than one percent of Ngamiland's population are involved in wildlife management activities. Most of the remaining population in the district see the Delta as being wasted. The long-term survival of the tourism industry, and only viable means to bringing local development to the area, is through the direct and meaningful participation of local citizens in the industry. Unemployment in the Delta now stands at over 60 percent, and the creation of wildlife-

based employment opportunities is of paramount importance in this region. The meaningful involvement of local communities in tourism can be achieved through the creation of community based tourism projects. Whole communities can establish and manage wildlife and cultural based tourism ventures, where the income that is generated is ploughed back into the community to bring about positive development.

The development of community based tourism ventures in the Okavango Delta will do little to reduce the decline in agricultural production, but may help alleviate poverty and the levels of 'rural-urban' migration.

Tourism can only benefit agriculture in the region through the fostering of linkages between the two sectors.

5.8 Future Agricultural Developments in the Okavango Delta

As a result of the limited success of the government provided agricultural development programmes so far, the Ministry of Agriculture engaged the services of TAHAL Consulting Engineers Ltd. of Israel to prepare a National Master Plan for Arable Agriculture and Dairy Development (NAMPADD). The objective of the master plan is to "improve the performance of the sector and ensure sustainable use of the country's natural resources" (Republic of Botswana Government White Paper No.1, 2002, p. 9). The terms of reference concentrated on the preparation of a National Master Plan for Arable Agricultural Development, is based on a thorough assessment and analysis of the country's natural resources, rural infrastructure, socio-economic institutional and environmental issues, as well as policy aspects (Republic of Botswana Government White Paper No.1, 2002).

Currently the TAHAL study has identified the potential for crop and dairy production and completed proposals on how it can be developed, and explored factors that can increase local agricultural competitiveness, and reduce the country's reliance upon the importation of crop and dairy produce that can be produced locally. The study has also reviewed government agricultural development policies relating to crop and dairy production and suggested changes for consideration by Government. It has recommended ways in which arable, irrigated and dairy farming can be made more

attractive and profitable to local farmers, therefore increasing rural incomes, creating employment opportunities and decreasing the rate of rural-urban migration. It also determined human resources requirements and investment levels needed to sustain economically viable crop and dairy farming (Republic of Botswana Government White Paper No.1, 2002).

The NAMPAADD Draft Final Report, with a ten-year plan period, was approved by an Inter-Ministerial Reference Group in August 2000, and handed to the Ministry of Agriculture in September 2000. The report has subsequently been circulated to all Ministries and independent Departments as the first step in the consultation process (Republic of Botswana Government White Paper No.1, 2002).

5.9 Government's Response to the Report

The policy objectives for the agricultural sector, which form the basis of government policy are as follows:

- i. '...improvement in food security at the household and national levels, with emphasis on household food security;
 - ii. diversification of the agricultural production base
 - iii. increased agricultural output and productivity;
 - iv. increased employment opportunities for the fast growing labour force;
 - v. provision of a secure and productive environment for agricultural producers, and
 - vi. conservation of scarce agricultural and land resources for future generations'
- (Republic of Botswana Government White Paper No.1, 2002, p. 10).

The Botswana Government will continue to facilitate the process of agricultural growth through research, training, extension and the provision of infrastructure and essential services. Production and marketing functions will remain the responsibility of the farmer and the private sector, while agricultural sector prices will be determined by market forces. Policies will be implemented to promote competition in both the domestic and international markets within the framework of existing trade agreements. The emphasis for agricultural growth will be on sustainable economic diversification. Significant benefits can be achieved through the diversification of agricultural products, product development, the use of natural resources, and the creation of markets and

technologies for agricultural production (Republic of Botswana Government White Paper No.1, 2002).

One of the key elements of the Agricultural Development Policy is the pricing of food-grains at export parity prices for export crops and import parity prices for imported crops. This will ensure that consumers can obtain agricultural products at the lowest possible prices, and that producers will be guided in their production decisions by competitive domestic and international prices. The government has begun to recognise that subsidies have a role to play in the economy, if they are targeted to those areas and beneficiaries who require them most to bring about positive change. Therefore, socio-economic growth and development, technology adoption and an increase in productivity can be achieved through relevant programming, monitoring and evaluation of the impact of subsidies (Republic of Botswana Government White Paper No.1, 2002).

The implementation of a national agricultural development plan calls for the following key public infrastructural facilities to be extended to production areas: tarred roads, gravel roads to cultivation units, power lines, telecommunication facilities and a source of potable water for every rain fed agricultural service centre and/or clusters of horticultural farms (Republic of Botswana Government White Paper No.1, 2002). The development of this public infrastructure will focus on areas of intensive, clustered, well-organised and strategically located crop production areas. The exact location of production centres to which roads and power lines should be extended, will be established during the course of detailed implementation planning. During this stage the Ministry of Agriculture's frontline staff will find out the number and location of joint or clustered production areas that can be formed, where service centres and nuclei of horticultural production units will be introduced. This, alternatively, will depend on a number of conditions, such as the distribution of suitable soils and existing rain-fed cultivation units, boreholes for irrigation and marketing outlets, as well as the willingness of farmers to form groups and clusters, and manage their farming activities professionally (Republic of Botswana Government White Paper No.1, 2002).

In the Okavango Delta, there is currently one produce collection and marketing outlet in Shakawe. The sustainability of existing, nation-wide marketing facilities, and the future development of new ones depends, to a great extent, on the managerial

capabilities of the operators of these facilities. A supportive system for these facilities, which should provide guidance, training opportunities and sound marketing information to respective management staff, will be established (Republic of Botswana Government White Paper No.1, 2002).

The successful adoption of the National Master Plan for Arable Agriculture recommendations will require a transformation on the part of the Ministry of Agriculture, and the agricultural sector it serves. An in-depth organisation and management study is currently being conducted to establish the best methods for achieving this transformation. The professional challenges posed by the Master Plan to the Ministry's staff include the need for a major effort in technology transfer and the infusion of external expertise to the Ministry. The extent to which the recruitment of additional professional staff is necessary, will depend on two major factors: a) on the rate of professional advancement of the existing staff due to the proposed involvement of external experts during the first few years of the plan implementation; and b) on the success of the implementation process in attracting private entrepreneurs and professionals. It is, however, evident that some of the Ministry's sections, critical for the implementation of the Master Plan require major staff strengthening, that would gradually increase as the implementation of NAMPAADD progresses (Republic of Botswana Government White Paper, No.1, 2002).

5.10 Conclusion

This study presented the opportunity to investigate the impact of tourism development on subsistence agricultural practices and lifestyles in the Okavango Delta in northern Botswana. The research has shown that the Okavango Delta is faced with a number of social, economic and environmental challenges. These include extreme levels of poverty, especially in the rural areas; a lack of infrastructure; competition over land, resources and labour; growing regional inequality; social degradation; increased imports leading to foreign exchange leakages; changes in cropping patterns and increased 'rural-urban' migration; and the loss of control of the region by the local population to the global tourism system.

The paucity of research on the impact of international tourism on Third World agricultural systems is particularly disconcerting in light of the rapid growth of international tourism in developing countries, which are predominantly agrarian societies. If governments are to develop tourism industries which foster local agricultural development, rather than maintaining heavy dependence on imported foods, a better understanding of the relationship between the two sectors is necessary (Torres, 1996).

Enhancing the linkages between tourism and agriculture in the Okavango Delta region represents an important means to stimulate local agriculture and improve the distribution of tourism benefits to rural communities. The conversion of farmers into economic stakeholders and beneficiaries of the tourism industry may significantly reduce the incentive to abandon farming and move to urban areas. This would initially require significant investment in the rural areas, but which would still be far less than is typically required to support the same population within an urban context.

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APPENDIX ONE: QUESTIONNAIRE

QUESTIONNAIRE FOR MANAGERS OF HOTELS, LODGES AND SAFARI CAMPS IN THE OKAVANGO DELTA REGARDING THE PURCHASE AND PROVISION OF FOOD

1. What is the name of this Hotel/Lodge/Safari Camp?
2. What is the average number of tourists staying in this Hotel/Lodge/Safari Camp each month?
 - <10
 - 10-20
 - 20-30
 - >40
3. Is a Chef/Cook hired to prepare meals for the tourists?
4. If so, is the Chef/Cook a
 - Motswana
 - Foreign Nationality
5. How many years has the Chef/Cook been employed by the Hotel/Lodge/Safari Camp?
 - <2
 - 2-4
 - 4-6
 - 6-8
 - 8-10
 - >10
6. What factors affect the food types served by the Hotel/Lodge/Safari Camp?
 - Tourist food preferences?
 - Food prices?
 - Import prices?

- Location of food suppliers
 - Ability of food suppliers to meet tourist demand?
7. What is the reason for choosing the primary Hotel/Lodge/Safari Camp food suppliers?
 - Reliability of service?
 - Prices of delivery service and goods?
 - Location of supplier?
 - Diversity of food types that can be supplied by the supplier?
 8. What is the name of your primary food suppliers?
 9. What is the location of your primary food supplier/s?
 10. Is there a general satisfaction with the quality of the foodstuffs delivered by the supplier/s?
 11. Do the supplier/s deliver
 - Only imported goods
 - Both locally produced and imported goods
 12. What factors, if any, contribute to the difficulties experienced with the delivery of foodstuffs by the supplier/s
 - Unavailability of required foods?
 - Long import distances?
 - Poor roads?
 - Poor packaging?
 - Insufficient refrigeration?
 13. What do you personally feel the reasons are for the majority of foodstuffs consumed by tourists in the area having to be imported from outside the Okavango Delta, as well as from outside Botswana?
 - Unavailability of locally produced foods?
 - Unavailability of sufficient quantity of locally produced foods?
 - Poor quality of locally produced foods?
 - A preference in tourists for imported foods?

14. What are your personal views on the possibility of using locally produced foods as an alternative to using imported foods in the tourist industry in the area?
15. Do you personally feel that a market for locally produced foodstuffs can be developed within the tourist industry in the area?

APPENDIX TWO: QUESTIONNAIRE

QUESTIONNAIRE FOR TOURISTS STAYING IN THE OKAVANGO DELTA REGARDING THEIR FOOD EXPERIENCES IN THE AREA

1. What nationality are you?
 2. Are you presently residing in this country?
 3. Is this your first visit to Botswana?
 4. Are you staying at a
 - Hotel
 - Lodge
 - Safari Camp
 5. Are you taking part in a package tour or an individually guided tour of the area?
 6. If you are taking part in a packaged tour, what are your personal opinions on the quality of food served on the tour?
 7. If on an individually guided tour, did you consume food provided by a Hotel/Lodge/Safari Camp in the area?
 8. What are your opinions on the quality of the food and service at this Hotel/Lodge/Safari Camp?
 9. In terms of both packaged tours and individually guided tours, was your desire for specific food types met?
 10. Was the availability of specific food types important to you?
 11. Were your requirements for fresh produce met?
 12. Did you consume, or have any desire to consume any of the local foodstuffs or dishes while in the area?
 13. If so, did you experience any concerns regarding the sanitation of the local food?
 14. Do you intend to return to the Hotel/Lodge/Safari Camp in the future?
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APPENDIX THREE

QUESTIONNAIRE FOR MANAGERS OF WHOLESALES/SUPERMARKETS/BUTCHERY'S/BAKERY'S REGARDING THE PURCHASE AND SUPPLY OF FOOD

1. What is the name of this Wholesale/Supermarket/Butchery/Bakery?
2. When was this company established?
3. What type of company is it?
4. What type of goods does it supply?
 - Beef
 - Poultry
 - Fish/Seafood
 - Fresh Produce
 - Mutton/Lamb
5. What is the source of its primary supply?
 - Imported goods
 - Locally produced goods
6. What is the source of its secondary supply?
 - Imported goods
 - Locally produced goods
7. Which goods, supplied by the company, are produced locally?
 - None
 - Beef
 - Poultry
 - Fresh produce
 - Lamb/Mutton
 - Fish
8. If goods, supplied by the company, are produced locally, what problems do you experience with the goods?

- None
- Inconsistent availability of locally produced goods
- Poor quality of locally produced goods
- A lack of sanitation in locally produced goods

9. What factors influence your choice of primary and secondary suppliers?

- Reliability of service
 - Prices of delivery service and goods
 - Location of supplier
 - Diversity of food types that can be supplied by the supplier
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