

Changes on traditional livelihood activities and lifestyles caused by tourism development in the Okavango Delta, Botswana

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ABSTRACT

The Community-Based Natural Resource Management (CBNRM) program in Botswana aims at achieving conservation and rural development. In the Okavango Delta, some communities are involved in tourism through CBNRM to improve their livelihoods. However, research has not adequately analyzed changes caused by CBNRM on traditional livelihood activities and lifestyles. This study, therefore, uses modernization theory to analyze changes on traditional livelihood activities and lifestyles caused by CBNRM at Sankoyo, Mababe and Khwai villages in the Okavango Delta. Using primary and secondary data sources, results indicate that CBNRM is causing a decline in traditional livelihood activities like subsistence hunting, gathering, crop and livestock farming. As a result, a modern cash economy has emerged. New livelihood activities done by communities include: employment in CBNRM projects, the sale of crafts to tourists and thatching grass to tourism lodges. Income derived from CBNRM affords households to build modern houses, buy foreign foods and household equipment like: four-burner gas stoves, kitchen utensils, and satellite televisions. Conversely, this causes a decline in the consumption of traditional foods and the use of huts and household utensils. CBNRM is thus a modernization tool since it is causing a transformation of traditional livelihood activities and lifestyles. However, even though changes in livelihood activities and lifestyles may be an indication of the dynamism of culture in study villages, sudden change and modernization may increase livelihood insecurity. As such, tourism planning should ensure that modernization is sensitive to traditional economic systems and the need for rural livelihood sustainability.

1. Introduction

Tourism is a major global economic force. International tourism has grown substantially in recent years. According to UNWTO (2009), international tourist arrivals reached 922 million in 2008 (up by 1.9% on 2007). International tourism receipts grew to US\$944 billion (euro 642 billion) in 2008, corresponding to an increase in real terms of 1.8% on 2007. Receipts from international passenger transport are estimated at US\$ 165 billion, bringing the total of international tourism receipts including passenger transport (i.e. visitor export) to US\$ 1.1 trillion or over US\$ 3 billion a day. However, international tourist arrivals declined by 8% between January and April 2009, probably due to the global economic downturn. Nevertheless, the UNWTO believes the industry is robust and estimates there will be 1.6 billion visitor arrivals in 2020. Africa recorded a growth of 3% in 2009 despite the global economic downturn

(UNWTO, 2009). In Botswana, the tourism industry grew significantly in the last 15–20 years. For example, in 1989, the industry contributed a mere 2% to Gross Domestic Product (Mbaiwa, 2010) compared to 5.0% in 2007 (World Travel & Tourism Council, 2007).

As with any type of economic development, tourism development creates changes that improve or threaten the quality of life. Changes in the host community's quality of life are influenced by two major factors: the tourist–host relationship and the development of the industry itself (Ratz, 2002). Social and cultural changes to host societies include changes in value systems, traditional lifestyles, family relationships, individual behaviour or community structure (Ratz, 2000). Some scholars (e.g. Cohen 1988; MacCannell, 1976) regard socio-cultural change as one of the evils of tourism development. Cooper, Fletcher, Gilbert, Wanhill, and Stephen (1998) argue that any form of economic development will, by definition, carry with it implications for social structure and cultural aspects of the host population. Therefore, tourism as an agent of change has both positive and negative socio-cultural, economic and environmental impacts in destination areas (Andriotis, 2003; Cohen, 1978; Cooper et al., 1998; Harrison, 1996; Mathieson & Wall, 1982).

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In Greece and The Philippines, tourism development is associated with livelihood changes (Andriotis, 2003; Harrison, 1996). Andriotis (2003) argues that tourism in Crete (Greece) has caused cultural pollution, commercialization of human relations and a negative demonstration effect. Harrison (1996) also states that residents of Boracay (Philippines) subsisted on farming and fishing until the island became an international tourism destination in the 1980s. With growth of tourism development in the island, farming and fishing declined as residents of Boracay became incorporated into the world economic system characterized by infrastructure development, the expansion of the cash economy, wage labour and the introduction of western norms and values (Harrison, 1996). Changes in livelihood patterns in Greece and The Philippines confirm arguments by Albrecht (2004) who state that whenever a dominant economic sector is introduced in a society, there are often changes in the traditional economic base.

In the Okavango Delta located in north-western Botswana, the tourism industry has both positive and negative socio-cultural and economic impacts. Positive impacts include: income generation and employment opportunities, infrastructure development like airport and airstrips, tarred roads, hotels and lodges, telecommunication and banking services (Mbaiwa, 2005). The negative impacts include: revenue leakages, foreign domination of the tourism industry; poor jobs for citizens; and weak linkages tourism has with other economic sectors like agriculture (Mbaiwa, 2005). The limitation of existing tourism literature in the Okavango Delta, therefore, is that it does not adequately demonstrate changes caused by tourism development to traditional economic patterns, livelihood activities and lifestyles of rural and traditional communities. This study, therefore, uses modernization theory to analyze changes on traditional livelihood activities and lifestyles caused by tourism development through CBNRM at Sankoyo, Mababe and Khwai in the Okavango Delta. This paper is intended to make a contribution to the literature on tourism, socio-cultural change and economic development as it occurs in traditional and rural African communities. The paper also adds to the literature on the effects of tourism development especially safari tourism on rural African populations.

1.1. Community-based natural resource management approach

Community-Based Natural Resource Management (CBNRM) is one of the global leading themes in conservation since the 1990s. CBNRM is an incentive-based conservation philosophy that links conservation of natural resources with rural development (Blackie, 2005; Mbaiwa, 2010; Swatuk, 2005; Thakadu, 2005; Twyman, 2000). The basic assumption of CBNRM is that for a community to manage its natural resource base sustainably, it must receive direct benefits arising from its use. These benefits must exceed the perceived costs of managing the resources. The assumptions have three conceptual foundations: a) economic value – giving a resource such as wildlife, a focused value that can be realized by the community or land owner; b) devolution – emphasizing the need to devolve management decisions from government to the community or local land users in order to create positive conditions for sustainable wildlife management; and, c) collective proprietorship – whereby a group of people are jointly given use rights over resources, which they are then able to manage according to their own roles and strategies. These assumptions, have therefore led to CBNRM scholars arguing that when community livelihoods are improved, such a community would be obliged to observe conservation ideals (Leach, Mearns, & Scoone, 1999; Tsing, Brosius, & Zerner, 1999). This paper, however, does not interrogate whether conservation ideals have been achieved in the Okavango Delta. Instead, it has been narrowed to analyzing changes in community

livelihood options and lifestyles caused by CBNRM in the Okavango Delta.

CBNRM is known by different names in various Eastern and Southern African countries. Its success rate also differs from country to country and from project to project. For example, in Zimbabwe, it is called the Communal Area Management Programme for Indigenous Resources (CAMPFIRE). Child, Jones, Mazambani, Mlalazi, and Moinuddin (2003) claim that CAMPFIRE has been successful in achieving better livelihoods and conservation. In Namibia, it is called Living in a Finite Environment and it is also noted for being successful in improving rural livelihoods (Ashley, 2000). In Botswana, the program is known as CBNRM. In the Okavango Delta, CBNRM involves wildlife-based tourism activities such as photographic and safari hunting. It is carried out in marginal and peripheral parts of the Delta. Prime and inner parts of the Delta are dominated by foreign tourism companies. As a result, even though local communities are beginning to participate in tourism, the industry in the Okavango Delta is largely exclusive and enclave in nature (Mbaiwa, 2005).

In Botswana, communities involved in CBNRM have formed Community Trusts to facilitate their participation in tourism development and conservation. Community Trusts are legally registered entities and organization. Trusts are formed in accordance with the laws of Botswana to represent the interests of the communities and implement their management decisions in natural resources use and tourism development (Mbaiwa, 2010). This being the case, some of the CBNRM projects in the Okavango Delta have collapsed whilst others have succeeded and have significantly benefited participating villages economically. For example, the Sankoyo village CBNRM project (involving photographic and safari hunting) is successful in generating benefits like income and employment opportunities (Arntzen et al., 2003, 2007; Mbaiwa & Stronza, 2010). Sankoyo village CBNRM projects have also raised income that has financed the construction of houses for the needy (e.g. elderly), funeral insurance and expenses for all members, scholarship and household dividends (Mbaiwa & Stronza, 2010). On the contrary, the Gudigwa lodge collapsed (Magole & Magole, 2005). The collapse and poor performance of some CBNRM projects has raised criticism from some scholars (e.g. Blackie, 2005; Swatuk, 2005; Taylor, 2000; Twyman, 2000). These scholars argue that CBNRM is not achieving its intended goals of conservation and improved rural livelihoods.

Despite the debate for and against CBNRM or about its failures or success, available literature in Botswana does not adequately analyze changes caused by CBNRM to traditional livelihood activities and lifestyles of communities living in wildlife-based areas. It is from this perspective that this study therefore uses modernization theory to analyze changes on traditional livelihood activities and lifestyles caused by CBNRM in the Okavango Delta.

2. Modernization theory

This study is informed by modernization theory. Modernization has its origins in a variety of perspectives which Neo-Marxists applied to developing countries in the 1950s and 1960s (Harrison, 1988; Telfer, 2002). Modernization theory draws upon the work of social science theorists such as Weber, Durkheim, Main and Tonnies and many others. Weber (1930, 1978), Durkheim (1933, 1961) and Friedmann (1980) argue that traditional societies in the context of modernization theory are perceived as exhibiting low social economic and political differentiation where social relationships are based on kingship, religious affiliation, regionalization and ethnic identity. Weber (1978; Durkheim 1961; Sofield 2003) note that political authority in traditional society is vested in custom. As a result, social, economic and political order in

a traditional society tends to acquire sacred legitimization. Economic risks are minimized rather than maximizing opportunities for potential benefits in traditional societies (Sofield, 2003). In this regard, economic change is very slow and society is seen as basically static (Sofield, 2003).

Proponents of modernization theory argue that modern society exhibit contrasting characteristics to traditional societies. For example, modern societies are highly differentiated socially, politically and economically. They also have a high degree of specialization in the social, political and economic development (Sofield, 2003). Because of the high degree of specialization, entrepreneurship is seen as a positive contributor to development (Sofield, 2003). Proponents of modernization theory (e.g. Parsons, 1937, 1966; Rostow, 1967; Smelser, 1964; Weber, 1930, 1978) define the process of modernization of traditional societies in terms of structural functionalism. Structural functionalism is perceived as a one-way street or neo-evolutionary process in which the superior economic and technological complex of the developed society is adopted (Sofield, 2003). Sofield (2003: p. 39) argues that "modernization theory posits the thesis that the nature of traditional society is both an expression and a cause of underdevelopment. As such, tradition forms a barrier to development. Major and fundamental change must occur across social, cultural, political and economic values, institutions and patterns of action if modernization is to occur".

Modernization is therefore a socio-economic development strategy that follows an evolutionary path from a traditional society to a modern society as is the case with North America and Western Europe (Schmidt, 1989; Telfer, 2002). Development is equated to economic growth aligned to capitalist models. Modernization is seen as the necessary transformation from rurally based subsistence economies to industrialized western models, and questions of equity are put to one side (Sofield, 2003). Harrison (1992) argues that modernization theory focuses on the process of westernization, whereby the internal structures of developing societies become more like those of the West, allegedly by emulating western development patterns. Harrison (1992) and Telfer (2002) argue that economically, there is a shift from agriculture to industry and the central role for money and the money market in a modern society. Socially, the influence of the family and other collectiveness declines, institutions become more differentiated, and a pivotal role is played by modernizing elites and other change agents in introducing modern values and institutions, often in the face of hostile or resistant tradition (Harrison, 1988, Telfer, 2002).

Modernization theory has an evident fit with neoclassical economics, with its emphasis on prices, the market, and maximization of self-interests (Harrison, 1992; Little, 1982). It argues that if investment capital, entrepreneurial skills, technological knowledge and values necessary for modernity are absent from societies which are developing, possibly because of the conservative nature of tradition, they can be diffused from outside, perhaps as a form of aid provided they are powerful indigenous change agents to act as catalysts and carry the rest of societies with them (Harrison, 1992). In this case, modernization becomes a mixed blessing and its equation with development a matter of personal evaluation rather than objective verification (Harrison, 1992). Modernization, is therefore, seen as the necessary transformation from a rurally based subsistence economy to industrialized western models of economic development.

Modernization theory has since the 1970s been criticized by a number of scholars. For example, Bauer (1872) considered modernization theory as a simply way of disguising the adverse impacts of colonial rule and dependency on developing countries by European colonial powers. Nisbet (1972) argued that the theory is Eurocentric because it insists on measuring development

progress in terms of a country's proximity to the institutions and values of western models. Frank (1966) argued that modernization was empirically untenable, theoretically deficient, and in a practical sense incapable of stimulating development in developing countries. Weiner (1969) and So (1990) also criticized modernization theory for the unidirectional path of development and for the assumption that traditional values are not compatible with modernity. Telfer (2002) criticized modernization theory for its failure to consider traditional methods of development in favour of western ethnocentrism embedded in it. The theory has also been criticized for high level of abstraction (Sharpley & Telfer, 2002; So, 1990) and for its ability to justify western involvement and domination of developing countries (Telfer, 2002). Post-modern scholars criticize modernization because they argue that large-scale top-down meta-theories like modernization no longer apply universally across a diversity of environments (Telfer, 2002).

Modernization theory has recently found a niche in tourism studies. Tourism researchers in sociology and anthropology consider tourism a threat to traditional societies (Sofield, 2003). Smith (1989) notes that in the volume, "Host and Guests", most of the contributors consider the impacts of tourism to be more negative than positive in traditional societies. Scholars like (Cohen, 1988; Greenwood, 1977; MacCannell, 1976) argue that the commodification of culture through tourism destroys the authenticity of traditional culture. As such, modernization theory was introduced into tourism studies as a cautionary measure. Some tourism scholars (Mowforth & Munt, 1998) perceive tourism as an economic development tool. As a result, tourism in developing countries has been promoted as a development strategy to transfer technology, increase employment, generate foreign exchange, increase Gross Domestic Product, attract development capital and promote a modern way of life with western values (Britton, 1982; Cater, 1987; Mathieson & Wall, 1982). As a modernization tool, tourism in developing countries causes the transformation of traditional societies to acquire new and modern way of life (Pi-Sunyer, 1989). Local people in destination areas adopt western values and migrate to urban and resort areas in search of high incomes from tourism facilities (Mathieson & Wall, 1982; Telfer, 2002). In the Okavango Delta, tourism development and the participation of rural communities in CBNRM may be one of the factors causing changes in traditional livelihood activities and lifestyles. This gap has not been adequately researched, as such modernization theory becomes a useful tool in this study.

3. Study area

This study was carried out in the Okavango Delta located in north-western Botswana (Fig. 1). The Okavango Delta is a wetland that covers an area of about 16,000 km² (Tlou, 1985). It is characterized by large amounts of open water and grasslands which sustain human life, plant life, wildlife, birds, insects and various living organisms. The Okavango Delta is also home to 124,712 people who live within and around it (CSO, 2002). Since the 1990s, the Okavango Delta is a key tourism destination in Botswana because of its rich wilderness diversity and scenic beauty.

The villages of Sankoyo, Khwai, and Mababe (refer to Fig. 1) were selected as study sites in an attempt to narrow down the research. These villages were selected because they have been involved in tourism development through CBNRM for the last 15–20 years. As a result, there is longitudinal data available which made it easier to track changes associated with CBNRM in the last decade. The village of Sankoyo is located on the northeastern fringes of the Okavango Delta. It has a total population of 372 people (CSO, 2002). Ethnic groups at Sankoyo are Bayei and Baubiya. Khwai village is located on the southeastern fringes of the Okavango Delta. Moremi Game

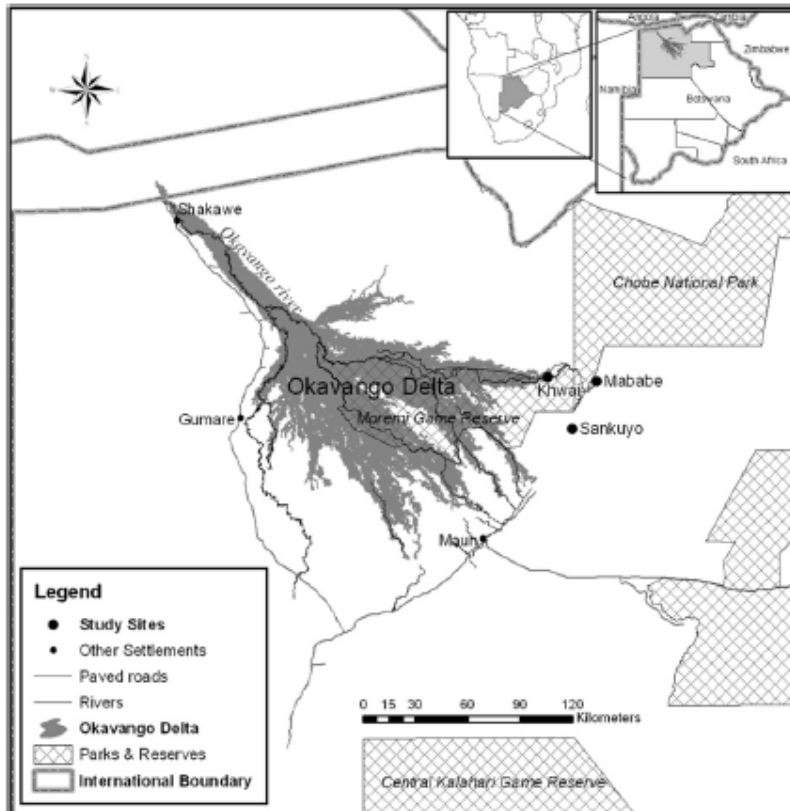


Fig. 1. Map of the Okavango showing study sites.

Reserve borders the village in the south and Chobe National Park in the north. Khwai has a human population of 360 (CSO, 2002). The majority of the people of Khwai are Basarwa or the so-called "Bushmen" (Tlou, 1985). However, other ethnic groups have since come to settle in the village, this includes the Batawana, Basubiya even other Basarwa from different clans. Mababe is also located on the southeastern fringes of the Okavango Delta. It is also found between Moremi Game Reserve in the south and Chobe National Park in the north. Mababe has a human population of 290 people (CSO, 2002). The people of Mababe are also Basarwa but have been described as sandveld people (Tlou, 1985). Historically, the Basarwa of Mababe also lived a nomadic life of hunting and gathering (Taylor, 2000).

4. Methods

4.1. Types of data collected and techniques used

Data for this study were collected between June and December 2007. Both qualitative and quantitative data were collected using primary and secondary data sources. The main tool used to collect primary data was the face-to-face household interviews using open and closed-ended questions. All interviews were conducted in Setswana (a national language spoken and understood throughout Botswana). For household interviews, two types of questions were administered: 'close-ended' questions with a list of alternative answers to each question and 'open-ended' questions. Close-ended questions required a yes/no answer. The rest of the questions

required the respondent to rank their views on a scale with alternatives answers such as: strongly agree to strongly disagree; strongly satisfied to strongly dissatisfied; and, from excellent to very poor. Households respondents were also asked to rank all current livelihood activities according to the level of importance to their households. Open-ended questions required respondents to list, describe, and explain changes in traditional livelihood activities over the last 10 years.

In identifying traditional livelihood activities which people practiced before the introduction of CBNRM in their local areas, household representatives were asked to list all the livelihood activities they did to earn a living before tourism became popular in the Okavango Delta. Indicators of traditional livelihood activities that were addressed included, but not limited to the following: hunting and gathering, crop and livestock farming, fishing, and veld product collection. Households were further asked to make a list of all the livelihood activities they have since adopted after tourism became popular in the area. Indicators for such livelihood activities included, but not limited to establishment of tourism related businesses like community-based lodges, employment in CBNRM projects, and the selling of crafts and thatching grass to tourism lodges in the Okavango Delta.

Face-to-face in-depth interviews were also conducted with key informants to establish livelihood changes before and after the introduction of tourism in study villages. Key informants included a representative from the Board of Trustees, community leaders like the village chief, and the Village Development Committee (VDC). In-depth interviews with key informants took advantage of their

experience and long-term knowledge of livelihood changes in their respective villages over time. In-depth interviews had an advantage in that key informants were recognized as authority figures on livelihood changes in their communities. Even though an open-ended questionnaire was used, interviews progressed in a discussion style. The main purpose of the questionnaire was to guide discussions during the interview and keep it focused. This method had an advantage in that at times free response questions were asked to dig deeper about a particular issue. In addition to the questionnaire, a tape recorder was also used to record all the face-to-face household and key informants interviews. The recording of interviews was done to capture in detail all the information from respondents particularly that from open-ended questions. Focused group discussions were also conducted with the VDC and Board of Trustee in each village to understand these changes. Open-ended questions were asked in the focused group discussion. Focused group discussions were done to confirm data collected from individual interviews. Group discussions were conducted to increase the validity and reliability of data obtained from household interviews and key informants. During the survey, participant observations were also made on household diet, types of modern houses constructed and household equipment used, as well as lodges and campsites owned by communities.

Secondary data sources on the changing patterns of local livelihood activities in the Okavango Delta were also used. This include published and unpublished literature on tourism development in the Okavango Delta such as reports; policy documents, journal articles on tourism, and, annual reports of the CBNRM projects in study villages. Finally, longitudinal data about the CBNRM in study villages since 1998 were also used. The use of longitudinal data made it easy to track livelihood changes caused by CBNRM over the past decade.

4.2. Sampling design

A total of 30 households were randomly sampled in each village for interviews. As a result, a total of 90 households or 48.4% of all households in the three villages was sampled for interviews. A sample of 30 in each of the three villages proved appropriate in that by the time 30 households were all interviewed, the issue of livelihood changes due to CBNRM was saturated with information. As such, subsequent interviews produced no new information. Any member of the household who is 18 years or above qualified for interviews. This is because any individual of 18 years and above in Botswana is considered to be an adult hence suitable for interview in this study.

A total of 54 females and 36 males who were at the time of the interview household representatives were interviewed. Their ages ranged from 18 to 70 years. Only five respondents were beyond Botswana's retirement age of 65 years. In addition to the household sample, purposive sampling was carried out to interview key informants in the three villages. Five key informants were interviewed in each village. As a result, a total of 15 key informants (e.g. village chief, Board of Trustee members, VDC members) were interviewed in all the study villages. In addition, a government officer responsible for CBNRM in the Department of Wildlife and National Parks and a representative of the private safari tourism sector in Maun were also interviewed to understand changes caused by tourism development in the Okavango Delta. Finally, two focused group discussions were conducted in each of the three villages (i.e. one with the Village Development Committee members and another with the CBNRM Board of Trustees). In total, six focused group discussions were conducted in the three villages to assess changes caused by CBNRM.

4.3. Data analysis

Data collected were finally analyzed both qualitatively and quantitatively. Thematic analysis was used to analyze all the qualitative data. Thematic analysis involves data reduction into themes and patterns to be reported. Leininger (1985: p. 60) argues that in thematic analysis, themes are identified by "bringing together components or fragments of ideas or experiences, which often are meaningless when viewed alone". In thematic analysis, themes that emerge from the informants stories are pieced together to form a compressive picture of their collective experience (Aronson, 1994). In this study, qualitative data from households, key informant interviews and focused group discussions were summarized into specific themes and patterns of livelihood changes caused by CBNRM. That is, themes and patterns were made for livelihood activities before and after CBNRM became the dominant economic activity in study villages. Data obtained from all the open-ended questions (e.g. from households and key informants) and recorded in the tape recorder were transcribed for analysis. Themes and patterns were also made from the transcribed data. As a result, some direct quotations from respondents are used in this paper. Finally, quantitative analysis of data from closed-ended questions from households involved the production and interpretation of frequencies and tables that describe the data. All the quantitative data were managed using the Statistical Package for the Social Sciences (SPSS) database.

5. Results and discussion

5.1. Livelihoods before tourism were introduced

This study identified traditional livelihood activities carried out in study villages before CBNRM was introduced. From the face-to-face interviews, household representatives and key informants listed a number of livelihood activities their communities practiced before the introduction of CBNRM (Table 1). As such, results in Table 1 show that key traditional livelihoods at Khwai and Mababe were hunting and gathering while crop and livestock farming were the main livelihood activities at Sankoyo village.

Secondary data from Tlou (1985) also indicate that the people of Khwai and Mababe sustained their livelihoods through hunting and gathering of veld products before CBNRM was introduced in the Delta. Men hunted the different animals while women practiced the collection of berries, tubers, frogs, tortoises, reptiles, ostrich eggs, insects, beetles and caterpillars. In-depth interviews with village elders indicate that the people of Khwai also practiced floodplain crop production. Crop production was adopted from other ethnic groups like the Batawana who arrived in the Okavango around the 1890s (Tlou, 1985).

Livestock farming was also one of the key livelihood activities at Mababe before the introduction of CBNRM in the village. Almost half the households owned livestock before CBNRM. This is shown

Table 1
Summary list of livelihood activities before tourism.

Sankoyo	Khwai	Mababe
Main activities	Main activities	Main activities
• Crop farming	• Subsistence hunting	• Subsistence hunting
• Livestock farming	• Gathering	• Gathering
Supplementary activities	Adopted activities*	Adopted activities*
• Subsistence hunting	• Fishing	• Fishing
• Gathering	• Crop farming	• Crop farming
		• Livestock farming

* These are livelihood activities which were adopted due to interaction with other ethnic groups. Government Policy has also encouraged crop and living farming.

by the fact that in 1998, 15 (48.4%) of households at Mababe owned livestock (Mbaiwa, 1999). These results are confirmed by the Eco-tourism Support Services and Ecosurv Consultants (ESSEC) (2005: p. 60) who state that "before 1998, six families owned cattle, 21 families owned goats and 17 families owned donkeys" at Mababe.

At Sankoyo, in-depth interviews with key informants indicate that residents practiced cattle and crop farming and supplemented it with subsistence hunting. Thou (1985) argues that Sankoyo residents had a diversified economy. They farmed, raised domestic animals (e.g. goats, cattle), fished, hunted and supplemented their diet with wild plants and game meat. Arntzen, Buzwani, Sethogile, Kgathi, and Motsolapheko (2007) also state that the main livelihood activities before the introduction of CBNRM at Sankoyo were cattle rearing, arable farming, subsistence hunting, and gathering. On the overall, results show that key livelihood activities in study villages before CBNRM was introduced were crop and livestock farming, subsistence hunting and the collection of veld products.

5.2. Changes in livelihoods caused by tourism development

Households and key informants in study villages were again asked to list current livelihood activities practiced in their communities. Results in Table 2 indicate that current livelihood activities practiced at household level include: the collection and sale of thatching grass to lodges and camps; basket making, wood carving and beads; and employment in CBNRM projects. At a community level, livelihood activities include: the sale of wildlife quota and sub-leasing of their community concession areas to safari tourism companies; and the establishment of community lodges and campsites. In relation to tourism facilities owned by communities, Sankoyo owns Santawani Lodge, Kazikini campsite, and Sankoyo bush camp; Khwai owns Tsaro Lodge and Mogotlo 1 and 2 camping sites; and Mababe has leased out its lodge and a hunting campsite to safari tourism companies. Community CBNRM projects employ people from respective villages. Household interviews showed that 53.3% of the households have a member involved in formal CBNRM employment and 27.8% harvest grass and sell it to tourism operators in the Okavango Delta. These results show the degree at which the study villages are now involved in CBNRM to sustain their livelihoods.

In assessing which livelihood activities are key options in sustaining livelihoods in study villages, households were asked to rank activities they currently do to earn a living (i.e. the value of 1 was given to the main livelihood activity. The order of importance

decreased sequentially until the last value of 8 was reached. This value represented a livelihood activity that is no longer being practiced in a household). Table 3 shows that 58 (64.4%) of the households ranked CBNRM to first position in meeting their daily household needs, 23 (25.6%) ranked it to second position, 5 (5.6%) ranked it to third position and 4 (4.4%) noted that it does not have any impact in their households. These results suggest that CBNRM has replaced traditional livelihood options as the key household activity in study villages.

Results in Table 3 also indicate that the collection of veld products like berries, tubers, wild fruits and insects (except thatching grass) has drastically gone down. The collection of veld products was ranked 8th position in the three villages. This suggests that 90 (100%) of the households surveyed no longer consider the collection of veld products as an important source of livelihood. The collection of veld products was found to be carried out as an incidental activity especially when people happen to be out in the bush for other activities like when collecting thatching grass. This also shows that the collection of veld products which was once a key livelihood activity in study villages has declined.

Several comments were made by respondents to explain why the collection of veld products has declined in their villages. For example, the chairperson of the Board of Trustees at Khwai noted: "people are employed in CBNRM and in other safari companies hence there is no time to go and collect veld products". The Secretary of the Board of Trustees at Mababe noted, "we used to collect a lot of veld products and small animals like bull frogs. A bull frog is very delicious, it tastes like chicken. However, people now derive income from employment in CBNRM projects and other safari tourism companies hence they are able to buy better food from shops in Maun and from tuckshops in our village. People no longer have time to go for veld product collection because they work". These comments indicate that individuals employed in CBNRM no longer have time to participate in traditional chores resulting in the decline of traditional livelihood activities. Stronza and Gordillo (2008) observed similar changes in community-based lodges in South America. According to Stronza and Gordillo the introduction of community-based lodges of Chalalan, Posada Amazonas and Kapawi resulted in the reduction of labour time in subsistence hunting, fishing, and farming by community members in exchange for more time working at the lodge and waiting for the tourism profits. This shows that tourism development does not only cause changes in livelihood activities in the Okavango Delta but to other developing countries faced with the expansion of community-based tourism initiatives and modernization of traditional economies.

Table 2
Summary list of current livelihood activities.

Sankoyo	Khwai	Mababe
Main activities	Main activities	Main activities
• Employment in CBNRM	• Employment in CBNRM	• Employment in CBNRM
• Selling of crafts to tourists	• Selling of crafts to tourists	• Selling of crafts to tourists
• Crop farming	• Selling of thatching grass	
Supplementary activities	Minor activities^a	Minor activities^a
• Livestock farming	• Fishing	• Fishing
• Remittances	• Crop farming in gardens	• Crop farming
• Government handouts	• Remittances	• Livestock farming
• Traditional beer brewing	• Government handouts	• Remittances
	• Traditional beer brewing	• Government handouts
		• Traditional beer brewing

^a These are livelihood activities which were adopted due to interaction with other ethnic groups. Government Policy has also encouraged crop and living farming.

Table 3
Ranking of livelihood activities into positions of importance by households.

Livelihood activity	1st Position	2nd Position	3rd Position	8th Position
Livestock farming	0	0	3 (3.3%)	87 (96.7%)
Dryland crop farming	3 (3.3%)	10 (11.1%)	2 (2.2%)	74 (82.2%)
Basket making	2 (2.2%)	2 (2.2%)	9 (10.0%)	74 (82.2%)
Fishing	2 (2.2%)	2 (2.2%)	0	77 (85.6%)
Remittances	2 (2.2%)	7 (7.8%)	1 (1.1%)	80 (88.9%)
Grass cutting	2 (2.2%)	15 (16.7%)	3 (3.3%)	68 (75.6%)
Government handouts	7 (7.8%)	3 (3.3%)	2 (2.2%)	76 (84.4%)
CBNRM	58 (64.4%)	23 (25.6%)	5 (5.6%)	4 (4.4%)
Employment in other tourism enterprises	7 (7.8%)	5 (5.6%)	1 (1.1%)	77 (85.6%)
Employment in other agencies	9 (10.0%)	3 (3.3%)	0	78 (86.7%)
Employment in drought relief projects	0	2 (2.2%)	0	88 (97.8%)
Beer brewing	2 (2.2%)	3 (3.3%)	1 (1.1%)	83 (92.2%)
Collection of veld products	0	0	0	90 (100.0%)
Semausu (tuckshop)	1 (1.1%)	0	0	88 (97.8%)

Livestock production was found to have decreased in study villages when compared to the time before CBNRM was introduced. For example, in 1998, 36 (37.9%) of the households owned livestock (Mbaiwa, 1999). Livestock ownership was found to have been reduced to 17 (18.9%) households in 2007. These results are confirmed by the ESSEC which notes that in 2004, livestock ownership at Mababe had diminished to only two families. The ESSEC (2005: p. 60) argue that "abandoned kraals with heaps and heaps of goat dung bear witness to the flocks of goats that once roamed the area owned by villagers at Mababe". Results in Table 3 further show that 87 (96.7%) of the households no longer consider livestock farming as an important livelihood activity. This shows a decline of livestock as a livelihood activity in study villages.

Crop production has also gone down drastically between 1998 and 2007. In 1998, a total of 79 (83.2%) of the households practiced crop farming (Mbaiwa, 1999). This has been reduced to 30 (33.3%) of the households in 2007. Results in Table 3 also indicate that 74 (82.2%) of the households no longer consider crop farming as an alternative livelihood option in their households. In all the study villages, households noted that bigger crop fields have been abandoned because people now work in CBNRM projects. The ESSEC (2005: p. 60) argue that at Mababe "most of the fields have been left fallow for several years since CBNRM was introduced, villagers no longer respect arable farming anymore as a socio-economic activity because CBNRM offers more financial viability and is a less labour intensive socio-economic option than arable farming". The ESSEC (2005: p. 61) also note that in one of the village meetings, "there was a strong argument that crop farming is not even an option worth exploring because most people have lost interest in it and talking about it is a waste of time. People have interest on formal and informal employment opportunities created by CBNRM. Many people do not only make enough money, but also do not have enough time to spend in farming since they spend a good part of the year working at a safari camp". Mababe residents were reported for having said at a public meeting on crop farming: "since the harvest is too poor, it is not even worth growing crops" in their area (ESSEC, 2005: p. 62). These results show that the introduction of CBNRM has caused a decline and almost collapse of crop and livestock farming as livelihood options in study villages.

Changes in livelihood activities also occurred in subsistence hunting which before CBNRM was carried out through Special Game Licenses (SGL). The SGL was issued to citizens of Botswana living in wildlife areas and depended principally on hunting and gathering to sustain their livelihoods. This license was free and meant for subsistence hunting only (CSO, 2005). In the late 1980s, the SGL was later found to be contributing to over harvesting of wildlife resources hence government stopped it and introduced the wildlife quota system under the CBNRM (CSO, 2005). Through the wildlife quota system, the Department of Wildlife and National Parks (DWNP) allocates a particular number of wildlife species for safari hunting purposes to communities involved in CBNRM. The number of wildlife species hunted is decided after an annual aerial survey has been conducted on wildlife populations in each concession area by DWNP. The Government of Botswana favours the wildlife quota system because it has introduced control to wildlife harvesting by local communities and promotes conservation (CSO, 2005).

In-depth interviews with households and key informants indicate that people in study villages have accepted the abolition of subsistence hunting in favour of the quota system through CBNRM. For example, an old man at Sankoyo noted, "if you ask us to return to the use of SGL, we would refuse because you cannot do much with it except for meat. It cannot give you money to buy food". At Khwai, a middle aged man noted, "In the past (i.e. during the SGL period) people just hunted and ate meat like lions. The license was

not helpful to us. Today, it is better because we generate income and we have managed to build modern houses for ourselves. We have cash to buy food and send our kids to school". The Councilor for Khwai also noted, "the quota system is the best when compared with the SGL. Hunting freely in the past was not good". These comments show the acceptance of the quota system when compared with the SGL by respondents. Comments also show that people now embrace the commercialization of wildlife resources as a livelihood option. Money has also become a much more needed medium of exchange to obtain modern goods and services as compared to the time before CBNRM got introduced in the study villages.

5.2.1. Local attitudes towards CBNRM as an alternative livelihood activity

Attitudes of residents towards CBNRM were briefly assessed in all study villages. Results indicate that most households have positive attitudes towards CBNRM as an alternative livelihood option. As shown in Table 4, most households (57.8%) noted that CBNRM is an excellent program, 16.7% said it's a good program, and 4.4% said it's a fair program. On the overall, 78.9% of the households have positive attitudes towards CBNRM. Residents' attitudes were positive towards CBNRM mainly because of the benefits they derive from it which include: employment opportunities, income generation, transport services, payment of funeral expenses, water reticulation, housing for elders and the poor, household dividends, allowances for the elderly and orphans, and scholarships.

During interviews, respondents also made positive comments about CBNRM. For example, an elderly woman at Sankoyo noted, "CBNRM has helped us, most of our children in Sankoyo are now working. It's completely different from the past, it was worse and very difficult in the past. There were no jobs and poverty was very serious". At Mababe, a 34 year old lady noted, "Our well-being today has improved compared to the past years before CBNRM. Most Mababe residents work in the Trust, old people get monthly dividends of P200, have houses built for them, and orphans get monthly allowances as well". These comments suggest that CBNRM has been accepted as an alternative livelihood option in study villages when compared to traditional livelihood options.

5.3. Modernization of livelihoods in the Okavango Delta

CBNRM is a key factor in the modernization of the traditional economy in study villages. The rural economy has changed from being a hunting-gathering and agricultural to a cash economy. Data from CBNRM annual reports of the three villages indicate that between 1997 and 2007, Sankoyo generated P13, 209,162 and employed 863 people during the same period. Khwai generated P10, 557,544 between 2000 and 2007 and employed 296 people. Mababe generated P7, 706,183 and employed 550 people between 2000 and 2007. In addition to paying wages of CBNRM workers, this revenue is used to support a number of community projects such as: assistance for funerals, support for local sport activities, scholarships, transport services, connection of water through stand pipes in each homestead, construction of houses for the elderly and

Table 4
Household attitudes towards the CBNRM program.

Rankings	Frequency	Percentage
CBNRM is an excellent program	52	57.8
CBNRM is a good program	15	16.7
CBNRM is fair program	4	4.4
CBNRM is a poor program	17	18.9
CBNRM is a very poor program	2	2.2

needy, financial assistance to orphans and disabled, and provision of communication tools such as television and radios. All these changes have come about due to the availability of money in study villages. Tourism development as a modernization tool often leads to a shift from traditional economic systems to those driven by cash (Telfer, 2002). The case of Khwai, Sankoyo and Mababe, therefore, provides an example of how money generated from tourism contributes to the collapse of traditional livelihood activities like hunting–gathering, crop and livestock farming.

The availability of cash has also led to changes in the type of housing particularly the strong desire by people to own modern houses in study villages. For example, the Board of Trustees in the study villages builds modern houses for the poor and the elderly using materials such concrete, western type of windows, doors and iron corrugation instead of traditional huts made from mud, wood and thatching grass. An old woman at Mababe noted that since CBNRM was adopted in their village, they have money to build themselves modern houses. At Sankoyo, a 26 year old lady noted that modern houses are desired because they are safer when compared with traditional huts. She recited an incident when leopards killed a dog and its puppies by her door step. She noted that if she was sleeping in a traditional hut which in most cases does not have a door, the dog could have run into the hut with the leopard following hence she could have been attacked by the predator. At the time of this study, there were several modern houses especially one roomed houses in study villages. The chairperson of the Mababe Development Trust noted that people in his village started building modern houses around 2004/5 when CBNRM started to have a significant contribution to livelihoods in terms of income generation and employment opportunities in their village. The Board of Trustees at Mababe built 10 houses for the elderly at Mababe between 2004 and 2007. Boards of Trustees at Sankoyo and Khwai respectively built seven and 13 houses in their villages. In 1998, there were no modern houses in homesteads in the study villages observed by these researcher(s). However, this situation has since changed in the last decade after CBNRM and tourism became popular in the Okavango Delta.

The transformation of housing in study villages is characterized by the construction of housing units using either a combination of locally produced building materials (e.g. mud, pools, grass etc) or those which are using only western materials (e.g. iron sheets, cement etc). ESSEC (2005: p. 30) found that at Mababe, 19 houses had corrugated sheeting, 13 were thatched, 17 had cement blocks for the wall, 14 used mud and wood and only one used reeds, 18 houses used cement floor and 15 used soil. The ESSEC observed, “there is a tendency that more people are shifting away from thatch to corrugated iron sheets. One implication of this is that thatching skills will disappear”. This illustrates the rate of modernization at Mababe Village. Materials for building modern houses have always been available in Maun (the main gateway city to the Delta) for decades. However, communities in study villages were previously unable to buy the materials either due to the lack of income to meet expenses of buying materials, the lack of interest or due to the lack transportation of building of materials. However, the availability of income from CBNRM has made it possible for residents in study villages to construct modern houses of their choice. Interviews with Board of Trustees chairpersons in study villages indicate that any member in respective villages can hire a Trust vehicle at a low price to carry building materials from Maun to their homes. Maun is located 130 km from Khwai, 150 km from Mababe and 96 km from Sankoyo.

Households were also found having a strong desire to acquire modern equipment for domestic or household use. These include: beds, kitchen utensils, modern blankets and building materials. This is a departure from the use of traditional materials like animal

skins which were used as sleeping mats and clothes, wooden spoons for eating and cooking and traditional wooden plates in kitchen. There is a strong desire in study villages by households to also own modern equipment like television sets, satellite dishes and other related modern equipment. For example, results in Table 5 indicate that 76.7% of the households owned a radio, 50% owned a television set and a satellite dish, 34.4% owned a gas stove, 14.4% had a wrist watch, 35.6% owned a generator for power production, 22.2% owned a refrigerator and 22.2% of households had a member owning a mobile phone. Interviews also indicate a desire by households to have modern power in houses for lighting and playing radios and television in houses. This shows a shift from the use of fire as a traditional method of lighting and heating the house. The desire to own modern equipment shows the extent to which CBNRM has modernized the traditional economy and lifestyles in the Okavango Delta.

Participant observations results indicate that foreign foods are now available in study villages. Households were asked to list the types of food they currently rely on to sustain their livelihoods, the following foods were mentioned: rice, maize meal, maize rice, macaroni, spaghetti, mayonnaise, tomato source, vegetables like cabbage and many other beverages like orange squash. These foods are not traditional in the Okavango Delta. Their origins are either in Europe, Asia, America or other parts of Africa. The arrival of these foods in the Okavango Delta is associated with what local people call *makgoa* (meaning white people) and western influences in the area which includes tourism development. The income derived by households from CBNRM affords household to buy foreign foods and forgo traditional dishes like berries, frogs, insects, tubers and other related veld products which they previously enjoyed. These livelihood changes were summarized very well by the Secretary of the Board of Trustees at Mababe when he noted, “we used to collect a lot of veld products and small animals like bull frogs. A bull frog is very delicious, it tastes like chicken. However, people now derive income and employment opportunities from CBNRM and from other safari companies in the Delta hence they are able to buy better food from shops in Maun and from tuckshops in our village. People no longer have time to go for veld product collection because they work”. This comment shows that CBNRM is one of the key factors contributing to the transformation of traditional to foreign foods and lifestyles in the Okavango Delta.

Some people in study villages also shun local culture. The Chairman of the Sankoyo Trust noted that the community cultural tourism facility known as Shadrira collapsed because no one was interested in displaying cultural dances and artifacts to tourists. The chairman noted: “Young people reject our culture altogether, our cultural village of Shadrira was meant to promote cultural tourism. However, the venture collapsed after a year because young people were not prepared to participate in it. Shadrira collapsed because

Table 5
Modern items owned in households.

Items owned	Frequency of household owning the item	Percentage of household owning the item
Radio	69	76.7
Cellphone	20	22.2
Television	45	50.0
Power generator	32	35.6
Refrigerator	20	22.2
Gas stove	31	34.4
Satellite television dish	45	50.0
Wrist watch	13	14.4
Rifle	20	22.2

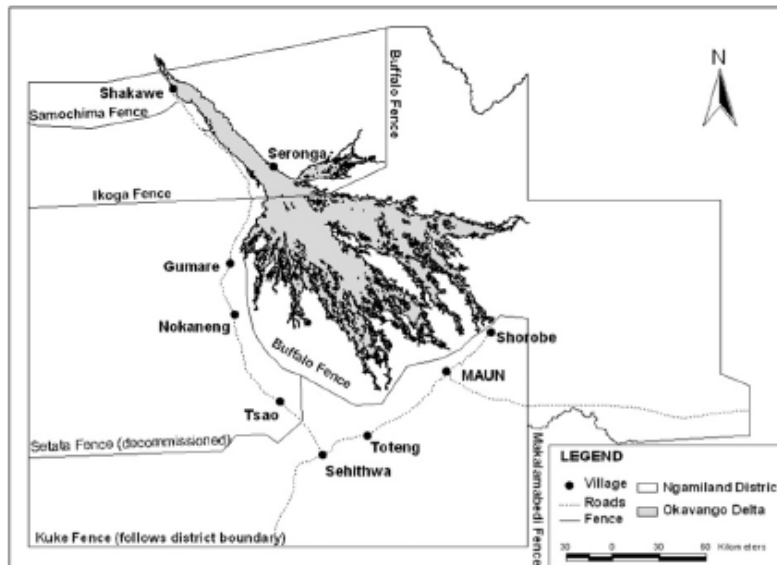


Fig. 2. Veterinary fences in the Okavango Delta, Botswana. Source: Darkoh and Mbaiwa (2010).

people no longer respect local traditions, they want modern things". This comment is a further demonstration of the effects of CBNRM as a modernization tool in the Okavango Delta. CBNRM has in this regard transformed cultural values, livelihood activities and lifestyles in study villages.

5.4. Other factors causing livelihood changes

CBNRM alone might not be the only factor causing changes in livelihood activities and lifestyles in the Okavango Delta. Interviews in study villages indicate that there are several other factors that contribute to the decline of traditional livelihood options and changes in lifestyles in their respective villages, these include the following: the zonation of the Okavango Delta as a livestock free zone through the erection of veterinary fences like the Buffalo Fence which does not allow livestock in the inner parts of the Delta; the demarcation of the Okavango Delta into Controlled Hunting Areas (CHAs) to facilitate wildlife conservation and tourism development; and, the extension of Moremi Game Reserve and Chobe National Park boundaries in 1989.

Government approach to land zonation and the extension of park boundaries in the Okavango Delta was top-down and coercive in nature (Mbaiwa, Ngwenya, & Kgathi, 2008). It reduced access to land and its resources (e.g. collection of veld products) previously enjoyed by rural communities (Mbaiwa et al., 2008). The erection of veterinary fences (Fig. 2) around the Okavango Delta is meant to control livestock diseases such as Foot-and-Mouth which is transmitted when cattle gets in contact with buffalos. As a result, livestock production is therefore restricted to small stock particularly goats. Cattle are not allowed beyond the veterinary fences into inner parts of the Delta where the study villages are located. The erection of veterinary fences is a government strategy meant to control livestock diseases in an attempt to protect Botswana's European beef markets (Darkoh & Mbaiwa, 2010).

The creation of veterinary fences around the Okavango Delta seems to imply that government's main land use priority for the Okavango Delta is tourism and wildlife conservation (Darkoh &

Mbaiwa, 2010; Taylor 2000). Darkoh and Mbaiwa argue that this approach contributes to land use conflicts between Okavango residents and government. In addition, it is probably contributing to the decline of traditional livelihood activities like livestock farming in study villages. However, future research will have to establish the amount of contribution by each factor including CBNRM to changes in livelihood activities and lifestyles in the Okavango Delta.

6. Conclusion

Tourism is a modernization tool when taking place in a traditional setting (Andriotis, 2003; Harrison, 1988; Telfer, 2002). At Khwai, Mababe and Sankoyo villages in the Okavango Delta, tourism as carried out through CBNRM has transformed the traditional economy to a cash economy. Residents have shifted from hunting, gathering, livestock and crop farming to CBNRM activities such as: employment in community tourism establishment like lodges and campsites; selling of wildlife quotas to safari hunting companies, production of crafts for sale to tourists, and collection and sale of thatching grass to other tourism operators in the Delta. The decline of traditional livelihood activities to those influenced by CBNRM confirms arguments that modernization transforms rurally based subsistence economies to western economic models (Harrison, 1992; Schmidt, 1989; Telfer, 2002; Weber, 1930, 1978).

The cash economy in study villages affords resident communities to build modern houses, buy foreign foods and modern household equipment like: beds, four-burner gas stoves, kitchen utensils, radios, satellite televisions and DVD players. These new lifestyles confirm assumption by modernization theorist that tourism is a "development" strategy which transfers technology, increase employment, attract development capital and promote a modern way of life with western values (Cater, 1987; Mathieson & Wall, 1982; Telfer, 2002). Changes in lifestyles are also shown by the reluctance or rejection of local culture in favour of western lifestyles particularly by young people. As modernization theorists (e.g. Friedmann, 1980; Weber, 1930, 1978) describe it, traditional culture is a barrier to development and needs replacement with

modern values. Young people who shy away from their parents' culture to embrace western lifestyles might simply be expression of how local culture is a barrier to western civilization they wish to enjoy. Conversely, the rejection of some traditional cultural issues and changes in traditional livelihood activities and lifestyles may be an indication that culture is not static but dynamic. As such, shying away from some cultural issues by young people and changes in livelihood activities and lifestyles may not necessarily be a rejection of local culture but an indication of the need to accept the reality of cultural dynamism in the Okavango Delta.

According to Harrison (1992), when there is modernization in a society, there is a shift from traditional economic patterns to industry and the role of money and the money market becomes more pronounced. In the case of the study villages, the decline of the traditional economic sector and the growing modern economy is characterized by cash income. The circulation of money generated from CBNRM in study villages is relatively high. This has in the process led to the desire by residents to abandon huts to own modern houses and from eating traditional foods to modern foods. The adoption of western values and traditions especially by local people is in tourism literature referred to as demonstration effect (Ratz, 2002). Demonstration effect leads to a shift in local consumption patterns towards western products (Oppermann & Chon, 1997; Wood, 1979). The consumption of western products (e.g. foods, equipment, lifestyles) in study villages indicates that demonstration effect has occurred in the Okavango Delta. These socio-economic and cultural changes also confirm assumptions by modernization theorists that major and fundamental changes must occur across social, cultural, political and economic values, institutions and patterns of action to show that modernization has occurred (Sofield, 2003).

Although CBNRM has a significant impact in changes in livelihood activities and lifestyles in the Okavango Delta, there are other factors which also cause changes in livelihood activities and lifestyles. These factors include government development strategies like the erection of veterinary fences, the expansion of park boundaries, and the demarcation of the Okavango Delta into Wildlife Management Areas (WMAs) in 1989 (Mbaiwa et al., 2008). The demarcation of the Okavango into WMAs created a general impression on communities that government seem to favour wildlife conservation and tourism development at the expense of traditional options in the Okavango Delta. Most government policies and strategies are top-down coercive to local people (Mbaiwa et al., 2008). As such, they reduce access to traditional resources hence cause changes in local livelihood activities in the Okavango Delta. Top-down and coercive development approaches contradicts the ideals of sustainable development which promotes the participation of all stakeholders especially local people in the decision making process that affect their lives (WCED, 1987). Government development strategies including tourism in rich biodiversity areas should incorporate local people in the decision making.

Finally, that CBNRM is emerging as a key livelihood option in the Okavango Delta has several challenges in terms of sustainability. This is because CBNRM relies on international tourists from developed countries. As a result, the global economic downturn, terrorist attacks and natural disturbances like the outbreak of diseases may affect international travel. The decline in international travel may affect tourism revenue and employment opportunities. Reliance on international tourism as the sole livelihood option may increase the risk of livelihood security of communities in the Okavango Delta. Studies (e.g. Kgathi, Ngwenya, & Wilk, 2007; Tlou, 1985) have shown that communities in the Okavango Delta had diversified livelihood options before the introduction of tourism development. A diversified livelihood approach increased livelihood security and sustainability. Although CBNRM in study villages

appear lucrative at the moment, the vulnerability of international tourism caused by global disturbances place livelihoods dependent on CBNRM in the Okavango Delta at risk. Tourism planners and communities involved in tourism should, therefore, aim at diversifying CBNRM from dependence on international tourism to include domestic tourism. Domestic tourism may be less vulnerable to global challenges like terrorist attacks in airplanes when compared to international tourism. Ghimire (2001) argues that developing countries focus on wealthy tourists from developed countries neglecting the regional and domestic tourist market which has potential for development. In addition, tourism planning should not ignore issues of rural livelihood security and sustainability in this era when culture, livelihood activities and lifestyles in the Okavango are undergoing changes and cultural dynamism.

References

- Albrecht, D. E. (2004). Amenities, natural resources, economic restructuring, and socioeconomic outcomes in non-metropolitan America. *Journal of the Community Development Society*, 35(2), 36–52.
- Andriotis, K. (2003). Tourism in Crete: a form of modernization. *Current Issues in Tourism*, 6(1), 23–53.
- Arntzen, J., Buzwani, B., Setlhogile, T., Kgathi, D. L., & Motselapheko, M. K. (2007). *Community-based resource management, rural livelihoods and environmental sustainability*. Gaborone: Centre for Applied Research.
- Arntzen, J., Molokomme, K., Tshosa, O., Molele, N., Mazambani, D., & Terry, B. (2003). *Review of CBNRM in Botswana*. Gaborone: Centre for Applied Research.
- Aronson, J. (1994). A pragmatic view of thematic analysis. *The Qualitative Report*, 2(1), 1–3.
- Ashley C. (2000). *The impacts of tourism on rural livelihoods: Namibia's experience* (31 pp.). Working paper 128. Overseas Development Institute.
- Bauer, P. T. (1972). *Economic analysis and policy in underdeveloped countries*. Durham: Duke University Press.
- Blackie, P. (2005). Is small really beautiful? community-based natural resource management in Malawi and Botswana. *World Development*, 34, 1942–1957.
- Britton, S. G. (1982). The political economy of tourism in the third world. *Annals of Tourism Research*, 9, 331–358.
- Cater, E. (1987). Tourism in the least developed countries. *Annals of Tourism Research*, 14, 202–226.
- Central Statistic Office, CSO. (2002). *Population and housing census of 2001*. Gaborone: Ministry of Finance and Development Planning.
- Central Statistic Office, CSO. (2005). *Wildlife statistics 2004*. Gaborone: Ministry of Finance and Development Planning.
- Child, B., Jones, B., Mazambani, M., Mlalazi, A., & Moinuddin, H. (2003). *Final evaluation report Zimbabwe natural resources management program-USAID/Zimbabwe*. Harare: USAID.
- Cohen, E. (1978). The impact of tourism on the physical environment. *Annals of Tourism Research*, 5(2), 215–237.
- Cohen, E. (1988). Authenticity and commodification in tourism. *Annals of Tourism Research*, 15, 371–386.
- Cooper, C., Fletcher, J., Gilbert, D., Wanhill, & Stephen, R. (1998). *Tourism principles and practice*. New York: Longman Publishing.
- Darkoh, M. B. K., & Mbaiwa, J. E. (2010). *Natural resource use and land use conflicts: The case of the Okavango Delta, Botswana*. Berlin: Lambert Academic Publishers.
- Durkheim, E. (1933). *Division of labour in society*. New York: Macmillan.
- Durkheim, E. (1961). *The elementary forms of the religious life*. New York: Collier Books.
- Eco-tourism Support Services & Ecosurv Consultants, (ESSC). (2005). *Management and development plan for community multi-purpose CHA NG 41: final report*. Maun: Mababe Zokotsama Community Development Trust.
- Frank, A. G. (1966). The development of underdevelopment. *Monthly Review*, 18(4), 17–31.
- Friedmann, J. (1980). An alternative development and communalistic society: some principles for a possible future. In J. Friedmann, E. Wheelwright, & J. Connell (Eds.), *Development strategies in the eighties*. Sydney: Development Studies Colloquium, Monograph No 1.
- Ghimire, K. B. (2001). *The native tourist: Mass tourism within developing countries*. London: Earthscan.
- Greenwood, D. (1977). Culture by the pound: an anthropological perspective on tourism as cultural commodification. In V. L. Smith (Ed.), *Hosts and guests: The anthropology of tourism* (pp. 129–138). Philadelphia: University of Pennsylvania Press.
- Harrison, D. (1988). *The sociology of modernization and development*. London: Unwin Hyman.
- Harrison, D. (1992). International tourism and less developed countries: the background. In D. Harrison (Ed.), *Tourism and the less developed countries*. England: John Wiley and Sons Ltd.
- Harrison, D. (1996). Sustainability and tourism: reflections from a muddy pool. In L. Briguglio, B. Archer, J. Jafari, & G. Wall (Eds.), *Sustainable tourism in islands and small states* (pp. 69–89). London: Pinter.

- Kgathi, D. L., Ngwenya, B. N., & Wilk, J. (2007). Shocks and rural livelihoods in the Okavango Delta, Botswana. *Development Southern Africa*, 24(2), 289–308.
- Leach, M., Mearns, R., & Scoone, I. (1999). Environmental entitlements: dynamics and institutions in community-based natural resource management. *World Development*, 27(2), 225–247.
- Leininger, M. M. (1985). Ethnography and ethnography: models and modes of qualitative data analysis. In M. M. Leininger (Ed.), *Qualitative research in nursing* (pp. 33–72). Orlando, FL: Grune & Stratton.
- Little, I. M. D. (1982). *Economic development: Theory, policy and international relations*. New York: Basic Books.
- MacCannell, D. (1976). *The tourist: A new theory of the leisure class*. New York: Schocken.
- Magole, L. I., & Magole, L. (2005). *Ecotourism and socio-economic development of Basarwa: The case of Gadiwa village*. Gaborone, Botswana: University of Botswana & University of Tromsø Basarwa Collaborative Programme.
- Mathieson, A., & Wall, G. (1982). *Tourism: Economic, physical and social impacts*. Harlow: Longman Scientific and Technical.
- Mbaiwa, J. E. (1999). *Prospects for sustainable wildlife resource utilization and management in Botswana: A case study of east Ngamiland District* (203 pp.). M.Sc. thesis, Department of Environmental Science, University of Botswana.
- Mbaiwa, J. E. (2005). Enclave tourism and its socio-economic impacts in the Okavango Delta, Botswana. *Tourism Management*, 26, 157–172.
- Mbaiwa, J. E. (2010). *Tourism, livelihoods and conservation: The case of the Okavango Delta, Botswana* (188 pp.). Saarbrücken: Lambert Academic Publishers.
- Mbaiwa, J. E., Ngwenya, B. N., & Kgathi, D. L. (2008). Contending with unequal and privileged access to natural resources and land in the Okavango Delta, Botswana. *Singapore Tropical Geographical Journal*, 29(2), 155–172.
- Mbaiwa, J. E., & Stronza, A. L. (2010). The effects of tourism development on rural livelihoods in the Okavango Delta, Botswana. *Journal of Sustainable Tourism*, 18(5), 635–656.
- Mowforth, M., & Munt, I. (1998). *Tourism and sustainability: New tourism in the third world*. London: Routledge.
- Nisbet, R. (Ed.). (1972). *Social change*. New York: Harper and Row.
- Oppermann, M., & Chon, K. S. (1997). *Tourism in developing countries*. London: International Thomson Business Press.
- Parsons, T. (1937). *The structure of social action*. New York: Free Press.
- Parsons, T. (1966). *Societies*. Englewood Cliffs: Prentice-Hall.
- Pi-Sunyer, O. (1989). Changing perceptions of tourism and tourists in a Catalan resort town. In V. Smith (Ed.), *Hosts and guests: The anthropology of tourism* (pp. 187–199). Philadelphia: University of Pennsylvania.
- Ratz, T. (2000). Residents' perceptions of the socio-cultural impacts of tourism at Lake Balaton, Hungary. In G. Richards, & D. Hall (Eds.), *Tourism and sustainable community development* (pp. 36–47). Great Britain: Routledge.
- Ratz, T. (2002). Residents' perceptions of the socio-cultural impacts of tourism at Lake Balaton, Hungary. In G. Richards, & D. Hall (Eds.), *Tourism and sustainable community development* (pp. 36–47). London: Routledge.
- Rostow, W. (1967). *The stages of economic growth: A non-communist manifesto* (2nd ed.). Cambridge: University Press.
- Schmidt, H. (1989). What makes development? *Development and Cooperation*, 6, 19–26.
- Sharpley, R., & Telfer, D. J. (Eds.). (2002). *Tourism and development: Concepts and issues*. Buffalo: Channel View Publications.
- Smeiser, N. J. (1964). Towards a theory of modernization. In A. Etzioni, & E. Etzioni (Eds.), *Social change*. New York: Basic Books.
- Smith, V. L. (1989). *Hosts and guests: The anthropology of tourism*. Philadelphia: University of Pennsylvania.
- So, A. (1990). *Social change and development modernisation, dependency, and world-system theory*. London: Sage.
- Soffield, T. H. B. (2003). *Empowerment for sustainable tourism development*. Amsterdam: Pergamon.
- Stronza, A., & Gordillo, J. (2008). Community views of ecotourism: redefining benefits. *Annals of Tourism Research*, 35, 444–468.
- Swatuk, L. A. (2005). From "project" to "context": community based natural resource management in Botswana. *Global Environmental Politics*, 5, 95–124.
- Taylor, M. (2000). *Life, land and power, contesting development in northern Botswana*. Ph.D. dissertation, University of Edinburgh.
- Telfer, D. J. (2002). The evolution of tourism and development theory. In R. Sharpley, & D. J. Telfer (Eds.), *Tourism and development: Concepts and issues* (pp. 35–80). Buffalo: Channel View Publications.
- Thakadu, O. T. (2005). Success factors in community-based natural resource management projects' mobilization in northern Botswana: lessons from practice. *Natural Resource Forum*, 29(3), 199–212.
- Tlou, T. (1985). *History of Ngamiland: 1750–1906: The formation of an African State*. Gaborone: Macmillan Publishing Company.
- Tsing, A. L., Brosius, J. P., & Zerner, C. (1999). Assessing community-based natural resource management. *Ambio*, 28, 197–198.
- Twyman, C. (2000). Participatory conservation? Community-based natural resource management in Botswana. *The Geographical Journal*, 166(4), 323–335.
- United Nations World Tourism Organisation. (2009). *UNWTO world tourism barometer*. Madrid, Spain: World Tourism Organization.
- Weber, M. (1930). *The protestant ethic and the spirit of capitalism*. New York: Charles Scribner.
- Weber, M. (1978). *The theory of social and economic organization*. New York: The Free Press.
- Weiner, M. (1969). Review of L. & S. Rudolph: the modernity of tradition. *Economic Development and Cultural Change*, 17(4), 657–661.
- Wood, R. E. (1979). Tourism and underdevelopment in Southeast Asia. *Journal of Contemporary Asia* (9), 274–287.
- World Commission on Environment and Development (WCED). (1987). *Our common future*. London: Oxford University Press.
- World Travel & Tourism Council. (2007). *Botswana: The impact of travel and tourism on jobs and the economy*. London: World Travel & Tourism Council.