An Examination of the Residents' Perceptions of Impacts of Nature Based Tourism on Community Livelihoods and Conservation: Case study of Chiawa Game Management Area, Zambia.

By

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Declaration

I **Sydney Tembo** declare that

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Abstract

Nature-based tourism is centered on the idea that local communities living within and around protected areas should derive benefits from nature resources. Likewise nature resources will simultaneously benefit from their interaction because the community will develop an understanding and appreciate the importance of conserving nature through various benefits derived. The research focus was on assessing the perception of residents of Chiawa, Zambia, regarding the benefits derived from nature-based tourism. This is the first study of this nature to be conducted in Chiawa.

The overall aim of the research study was to examine the perceptions of the Chiawa community of the impacts of nature based tourism and its implications on the livelihood of the Chiawa residents and on the conservation of nature, upon which tourism is anchored. The three specific objectives were:-

- 1. To examine the perceptions of the community on economic impacts of nature based tourism on the livelihood of Chiawa Community.
- 2. To examine the perceptions of the community of the effects of nature based tourism benefits on support towards conservation of nature in Chiawa and Lower Zambezi National Park.
- 3. To examine perceptions on nature and extent of constraints limiting household participation in nature-based tourism.

Various research methods were used to address the objectives of this study. These methods included quantitative and qualitative research techniques. Structured questionnaires with multiple choice type answers were administered to households and safari operators to collect data. These techniques were complemented with five

focus group meetings conducted in village action groups (VAGs) of Chiawa GMA, and both participant and direct observation techniques were used during household surveys.

The elements of analysis of the study looked at various factors that influence the perception of households on tourism benefits and conservation efforts by the community. Elements such as tribe, gender, education, length of stay, age and spatial distribution were analyzed. Elements of analysis from tour operators looked at business types, types of benefits filtering to the community through employment and community projects.

It was established during the course of the research that both positive and negative perceptions on the impacts of nature-based tourism on residents of Chiawa GMA exist. However, the few residents who derived benefits from nature based tourism operations were positive and the rest were negative. The perceptions of the respondents on support towards conservation are above average. The study found that the most significant silent factor that may influence negative attitudes or perceptions is high levels of human – wildlife conflicts. This is not surprising considering that farming is the major livelihood strategy for most households. Demographic variables were not found to be useful predictors of perception responses. Several factors were established as limiting to household participation in nature based tourism, these established factors included, lack of working and start up capital, lack of understanding of nature based tourism business, lack of interest and lack of support from tourism agencies.

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List of Abbreviations

CBNRM Community Based Natural Resource Management

CRB Community Resource Board
CBT Community Based Tourism

GMA Game Management Area

HCA Hunting Concession Agreement

HWC Human Wildlife Conflict

IIED International Institute for Environment and Development

IUCN International Union for Conservation of Nature

LZE Lower Zambezi Ecosystem

LZNP Lower Zambezi National Park

MoU Memorandum of Understanding

MTERN Ministry of Tourism Environment and Natural Resources

MS Moonstats

PA Protected Area

SET Social Exchange Theory

SRT Social Representation Theory

TCA Tourism Concession Agreement

UNDP United Nations Development Programme

VAG Village Action Group

WTO World Tourism Organization

ZAWA Zambia Wildlife Authority

CHAPTER 1: INTRODUCTION

1.1 Introduction

Tourism is expanding rapidly on a global scale (Denman, 2001; Eagles et al., 2002; World Tourism Organization (WTO), 2003; Esu, 2008; WTO, 2009), fueled by widespread economic growth and the associated increase in disposable incomes (Luvanga and Shitundu, 2003; Blake et al., 2002). Since 2000 this phenomenon has started to benefit countries in southern Africa more noticeably - associated with customer demand for new destinations and innovative new products. In the case of Zambia, tourism has remained one of the major sectors that play a vital role in the stimulation of national economic growth Ministry of Tourism Environment and Natural Resources (MTENR, 1998). Growth in the tourism sector contributes to employment creation, rural and infrastructure development, increased foreign exchange earnings and community and entrepreneurial development. Britton (1981) stated that the tourism industry is labour intensive and provides jobs for local people in both rural and urban areas. Tourism creates opportunities for both large and small entrepreneurs, promotes awareness and understanding among different cultures, breeds a unique informal sector and creates economic linkages with agriculture, light manufacturing and construction industries, handicraft, art and souvenirs. Furthermore, it creates linkages with service sectors such as health, education, entertainment, banking and insurance and also helps to conserve the environment.

Zambia's tourism industry established itself in the 1950s, and despite short interludes of serious investments particularly in the 1970s, mid-1980s and from 2000 onwards, it remains an emerging industry. Regardless, the Government has recently promoted the sector to one of the four pillars of the economy – along with mining, agriculture and manufacturing.

Zambia's tourism industry is currently based on two principal assets: the Victoria Falls and the country's wildlife resources found in Protected Areas (PAs) which include national parks, game management areas and game ranches and to a decreasing extent on "open" traditional land. As yet cultural, archaeological and historical assets have not been fully utilized in tourism promotion.

Over the past two and half decades, Zambia, like several other southern African countries, introduced community based natural resource management (CBNRM) Programmes in Game Management Areas (GMAs). CBNRM programmes seek to meet two complex goals: conservation of nature, and economic empowerment of rural households (Wainwright and Wehrmeyer, 1998; Gillingham and Lee, 1999; Adams and Hulme, 2001). A GMA in Zambia is a buffer zone around a national park wherein safari and resident hunting are permitted. These are communal areas in which people live and co-exist with wildlife. Their predominant traditional livelihood strategy is subsistence farming. In these areas, the Zambia Wildlife Authority (ZAWA) share wildlife management responsibilities and also share hunting license revenues with communities through community resources boards (CRBs), these are legal institutional frameworks established under the Zambia Wildlife Act number 12 of 1998. Fifty percent of all hunting revenues accrued from hunting in a GMA is allocated to CRBs as their share. Out of which five percent is allocated to the traditional chiefs in respective GMAs.

Chiawa GMA has exceptional nature based tourism advantage when compared to other GMAs in Zambia (Hamilton et al., 2009). Traditionally, in all GMAs, the major forms of commercial wildlife utilization is both safari and resident hunting whereas for the case of Chiawa GMA, in additional to the conventional forms of commercial wildlife use, commercial photograph safaris is predominantly practiced. These land use options are managed through zoning schemes. Furthermore, its proximity to Lower Zambezi National Park, a prime wildlife tourism area in Zambia creates various opportunities to residents of Chiawa. Notable benefits accrued to the people of Chiawa include employment opportunities and sharing of revenue accrued from hunting permits and land

use fees from photographic safaris. These benefits are inline with CBNRM goals that seek to strike a balance between wildlife conservation and community needs. It is believed that nature will only survive if the community within its borders derives benefits (Lewis and Cater, 1993; International Institute for Environment and Development (IIED), 1994; Goodwin, 2002; International Union for Conservation of Nature IUCN, 2005). Walpole and Goodwin (2001) in their paper found that such benefits should, theoretically, be of sufficient magnitude to discourage destructive subsistence foraging and cultivation, and other land uses and unplanned developments in conflict with nature conservation. However, the potential contribution of nature-based tourism to rural households in GMAs is currently unclear. Therefore, this study examined the perceptions of Chiawa resident's of wildlife tourism within the tourist host community and further examined perceptions of the effects of tourism benefit on local support for Chiawa GMA and Lower Zambezi National Park using social exchange theory and social representation theory. The knowledge on the understanding of resident's perceptions is fundamental to identifying approaches for increasing contribution of wildlife based tourism toward impoverished rural economy in GMA's.

1.2 Need for the study

A paradigm shift in the past two and half decade has been witnessed in the management of natural resources in protected areas (PAs) (Damm, 2002; Strasdas, undated; Spencely, 2003; Berkes, 2004). The shift in natural resource management policy is to provide incentives for conservation and local communities residing within and around PAs. A protected area movement from the traditional exclusionist to inclusion of local people on the root that local people derive benefits from their natural resources (Lewis and Carter, 1993; IIED, 1994; Wainwright and Wehrmeyer, 1998; Damm, 2002). This envisages that survival of these PAs assets depend on the goodwill of the people living around and within PAs (Damm, 2002, Sekhar, 2003). The inclusion approach has become a popular conservation strategy applied in Game Managements Areas in Zambia including Chiawa through the community based natural resource management approach.

In Chiawa Game Management Area (GMA), natural resources and tourism are managed under a collaborative management between Zambia Wildlife Authority and local community, represented by the Community Resource Board (CRB), sharing responsibility and benefits. Income generated through non-consumptive and consumptive utilization of resources is collected by Zambia Wildlife Authority and shared with the community.

Tourism plays an important role in the area and currently there are 28 tourist camps and lodges in the GMA. The proximity to the Lower Zambezi National Park and indeed the variety and abundant wildlife resources in the eastern part of the GMA attracts many tourists. Furthermore, the area offers excellent opportunities for sport fishing and scenic view of the river environment and the valley escarpment. In 1999 the Chiawa GMA CRB and Zambia Wildlife Authority sold a hunting concession agreement (HCA) in the western part of the GMA, which runs for a period of 15 years. Therefore, leaving the eastern part of the GMA devoted for non-consumptive tourism. At the time of field research work, the concession had five years before it expires.

Rural participation in wildlife tourism based development has emerged as a major trend in Africa through the establishment of community based natural resource management (IIED, 1994; Nyambe and Nkhata, 2001; Hamilton et al., 2009). In the background to this study, one may point out the promise that nature based tourism holds as a useful means to resolve contemporary issues such as increasing local incomes and employment, and raising consciousness for natural resource conservation. Therefore, in the past two and half decades researchers have increasingly studied the perceived impacts of nature tourism benefits of the tourist host community (Gillingham and Lee, 1999; Nyambe and Nkhata, 2001; Hamilton et al., 2009; Tembo et al., 2009). It is essential to study the perceptions of the host community towards tourism development as an important element for policy and planning purposes. The need for the study in Chiawa GMA emanate from the fact that there is limited understanding of residents perceptions on economic benefit from nature based tourism and perceptions of residents on support towards conservation.

Generally, Chiawa GMA and LZNP are among PAs in Zambia that have been studied little in terms of social ecological research. The recent national study on the economic and poverty impacts of tourism in Zambia conducted by Hamilton et al. (2009) carried out a comparative analysis on wealth distribution derived from natural resources in the GMAs and open areas. It was revealed that households in the GMA derive more benefits from natural resources compared to those in open areas where there are no collaborative management arrangements. However, it did not investigate on how the benefits are perceived.

1.3 The Problem Statement

Much of Zambia's tourism is nature based United Nations Development Programme (UNDP, 2003). Tourism in Chiawa GMA has a comparative advantage as land use option to agricultural. Low rainfall in addition with increased human/wildlife conflicts poses challenges to agriculture development, depriving communities from their livelihood strategy predominant in rural areas in Zambia. Over the last two and a half decades, the Lower Zambezi National Park and Chiawa GMA has experienced growth in terms of tourism investment. This investment has translated into increase in tourist arrivals and revenue earnings. This phenomenon has impacted the resident of Chiawa GMA through revenue from wildlife tourism (Hamilton et al., 2009; Tembo et al., 2009). The CBNRM concept requires host community participation in tourism development project. If CBNRM is taking place in Chiawa GMA as an intervention to invigorate rural poverty, one would like to understand the relationship between benefits from wildlife tourism and local support for conservation. In the absence of studies to investigate or examine the relationship of wildlife tourism and the community as the case is for Chiawa GMA and LZNP. It becomes difficulty to understand the impacts of wildlife tourism as a stimulus to rural economic growth. A thorough tourist host perception study is one of the approaches one would apply to study the relationship of nature based tourism benefits and the host community. As earlier mentioned, host community perceptions towards nature based tourism is an important element for planning nature based tourism development. In the case of Chiawa GMA, residents' perceptions of impacts of naturebased tourism on community livelihood and conservation were unknown. The present study sought to establish tourist host perceptions regarding nature based tourism development in Chiawa GMA.

However, a number of studies that relate to rural household welfare in GMAs have been undertaken (Warnwright and Wehrmeyer, 1998; Hamilton et al., 2009; Fernandez et al., 2009). Hamilton et al. (2009) in their study found a direct contribution of the tourism industry to welfare of Chiawa resident was insignificant. In order to understand the impact of the relations between wildlife benefits and host communities a comprehensive perceptional study is necessary. Such a study which should investigate how the host community perceives tourism development is imperative to understanding their views and needs. The views and needs must be taken into consideration by tourism and CBNRM planners when formulating tourism and CBNRM policies.

The present study acknowledges several studies undertaken on host community perception towards tourism development in other parts of the world (Wang et al., 2006; Bender et al., 2008; Sekhar, 2003; Gillingham and Lee, 1999; Tsundoda and Mendlinger, 2009; Zhang, 2008; Haley et al., 2009; Aref et al., 2009; Chen and Raab, 2009; Abdullahi et al., 2007; Wayakone et al., 1997; Esu, 2008; Mason and Cheyne, 2000). However, it was established that there are major conceptual variations in these studies between attitude and perception as various scholars have often used them interchangeably. Conceptual differences are discussed in the first section of chapter two.

1.4 Objectives of the Research

1.4.1 Broad Research Objective

The main objective of the study was to examine residents' perceptions of impacts of nature based-tourism and its implications on the livelihood and conservation upon which tourism is anchored.

1.4.1.1 Specific Research Objectives

- 1. To examine the perceptions of the community on economic impacts of nature based tourism on the livelihood of Chiawa Community.
- 2. To examine the perceptions of the community of the effects of nature based tourism benefits on support towards conservation of nature in Chiawa GMA and the Lower Zambezi National Park.
- 3. To examine perceptions on nature and extent of constraints limiting household participation in nature-based tourism.

1.5 Study Area

1.5.1 Regional Context

The Lower Zambezi Ecosystem (LZE) is located in the south central part of the republic of Zambia, 26°45' – 27°57'E, 15°23' – 16°05'S, bordered by the Zambezi River on the south and Muchinga escarpment in the north, the Luangwa and Lukusashi Rivers in the east and the Kafue River on the western border see (figure 1). This vast and mostly mountainous area is approximately18545 km² in size and comprising the following protected areas: Lower Zambezi National Park, Chiawa GMA, Luano GMA and Rufunsa GMA (ZAWA, 2008). There is also a privately owned conservancy called Rufunsa Ranch which shares borders with the LZNP on the North-western boundary. The Lower Zambezi ecosystem falls in the Kafue, Chongwe and Luangwa Districts of Lusaka Province and half of Luano GMA (Upper Luano) is in Mkushi District of Central Province. The Muchinga and Zambezi escarpments are the most significant physical features besides the three main rivers (Zambezi, Kafue and Luangwa). The Zambezi escarpment has led to the establishment of the Zambezi Biosphere Reserve.

The LZE is very rich in wildlife resources, more significantly the impala and elephant are among the most common species in the area. Chiawa and Rufunsa GMAs have the rare

opportunity of elephant hunting because of the healthy population of elephants in the area (ZAWA, 2008). Rufunsa GMA was for a long time known as the cats GMA because of its lion and leopard population and Chiawa GMAs large herds of elephant and buffalo are a very unique phenomenon. Birdlife is also considerably high and even led to the establishment of Zambesia Ranch in Chiawa GMA was especially established as a Bird Sanctuary and Luano GMA is also home to the famous and yet rare Zambian Parrot.

1.5.2 Specific Study Area

Chiawa GMA is located in the Kafue District of Lusaka Province. The GMA covers the entire Chiawa chiefdom of the Goba people. The area stretches between the Zambezi Kafue Rivers confluence to the Zambezi Chongwe Rivers confluence. Chiawa GMA is approximately 2344 km² in size and was declared a GMA in December 1991 primarily for the conservation of the abundant and diverse biodiversity of the lower Zambezi valley and the adjoining escarpment. Chiawa GMA also forms the western buffer zone for the Lower Zambezi National Park. Part of Chiawa GMA lies opposite Mana Pools National Park in Zimbabwe (figure 1). Chiawa GMA is therefore a very important part of the LZE forming about 13% of the total area and it is very rich in wildlife. Chiawa GMA is one of the only three GMAs in Zambia where Elephant hunting is conducted. Chiawa GMA also has one of the highest HWC occurrence rates. Chiawa GMA was also the first place in Zambia where winter maize growing at commercial rate was introduced. At present the GMA has banana plantations, maize farms, paprika estates and tomato gardens all at very large scale. According to the last census, the two areas have a total population of 10544 people (CSO, 2000).

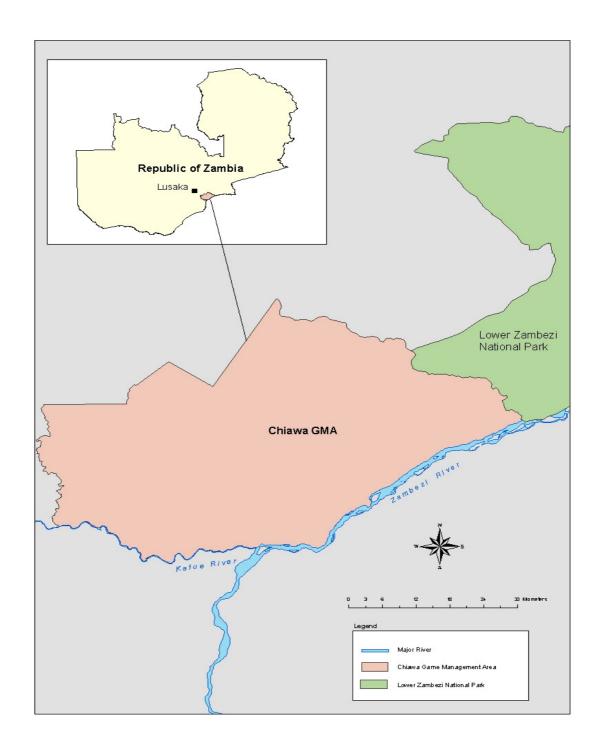


Figure 1: Location of Chiawa Game Management Area : (Chiawa General Management Plan Draft, 2008)

Chiawa has two main wards namely Chibaya central and Kambale. Village settlement patterns are scattered in terms of village distribution along the main access road as shown

in figure 2. Most people are depended on rain fed agriculture (maize, sorghum, millet, bananas and cotton). Livestock keeping currently concentrates on goats and chicken. Another important livelihood component in the area is employment at the numerous lodges along the Zambezi River front and at the commercial farms found in the area.

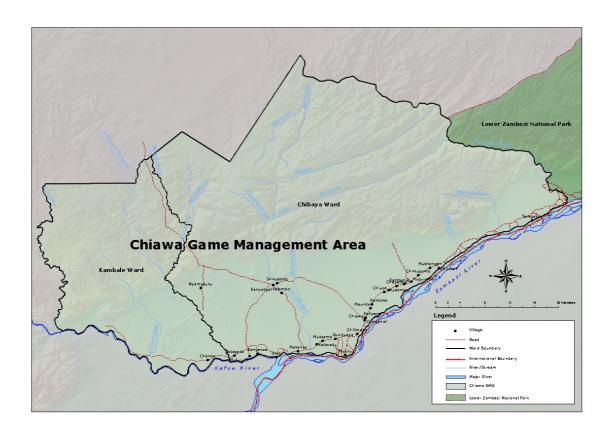


Figure 2: Household distribution in Chiawa Game Management Area, (ZAWA Draft Plan for Lower Zambezi National Park 2008)

1.5.3 Climate

Chiawa GMA lies in agro-ecological zone 3, which is a low rainfall area. It experiences three distinct seasons, namely, hot rainy (late November – April), cool dry (May – August) and hot dry season (September – November). Rainfall and temperatures vary between the valley floor and the plateau due to differences in altitude. Mean annual rainfall in the plateau is about 800 mm while that of the valley is 400 mm or less (ZAWA, 2008). Rainfall is often erratic, unevenly spread and generally insufficient for

agricultural production. Though the rainfall situation in the valley is generally low, sometimes rainfall intensities are very high and induce excessive soil erosion.

1.5.4 Wildlife

The Lower Zambezi has a large variety of wildlife namely mammals, birds, reptiles, amphibians, fish and insects. Most notable among the large mammals in Chiawa GMA are elephant, buffalo, hippo, zebra, waterbuck, kudu, sable, roan, warthogs and impala ZAWA, 2008). Chiawa GMA has abundance of wildlife because it buffers a national park and it is for this reason that it was declared a GMA.

1.5.5 Human Wildlife Interaction

The interaction of human and wildlife in Chiawa GMA is the most salient concern among residents owing to high incidence of crop destruction by wild animals. This problem is widespread since most residents farm along the Zambezi River on the southern part and Kafue River on the Western part. The most frequent human wildlife conflict incidents involve elephants, some of which are residents, others come from LZNP or cross the Zambezi River from Zimbabwe, destroying crops and attacking people. Hippos destroy crops grown on the banks of Zambezi and Kafue Rivers. By law, there is no compensation for the losses incurred Fernandez et al. 2009. However, the Zambia Wildlife Authority has the mandate to control problem animals. The problem animal control implemented by ZAWA is far from being effective. As a result, residents risk their lives by spending sleepless nights in guarding their farming plots. Table 1 below illustrates the status of human wildlife conflict in Chiawa GMA.

Table 1: Status on Human Wildlife Conflict in Chiawa

Species	Nature of HWC	Which part of the year	Coping Strategies	Place
Elephant	Crop raid	During weeding time and after harvest	Drum beating, rattles, burning of elephant dug and immobile status	Both wet land and upland fields
	Human lives taken	Through out the year but severe in dry season	Helpless/ in defensive	More in Mugurameno and Chiawa Central
Hippo	Crop raids	During farming seasons of wetland fields	Immobile Status, ropes tied all along the fields	Whole chiefdom along wetland fields
Monkeys/ Baboons	Crop raids	During farming seasons	Immobile status, rattles and drums	Whole chiefdom both in wetland and upland fields
Birds (red eyed francolin) Weaver Birds	Crop damage	During farming season (millet and maize time)	Rattling tins tied on ropes	Both wetland and upland fields
Bushpig	Crop damage	During farming season	Rattling tins tied to ropes	Upland fields

Source: Stanton (2004)

1.6 Dissertation Structure

This research thesis consists of five chapters. **Chapter one** gives an introduction to the study by explaining the setting for the study; it goes on explain the need for the study. The research problem is explained and the objectives are set out. The chapter further provides a detailed description of the study area

The **second chapter** reviews the literature in context of the study. It reviews global, regional, national and local tourism trends. Since this is the first study of its kind, in the area, concerning tourism benefits, there is limited local literature. Therefore, most of the literature reviewed is about similar studies carried out in other parts of the world.

Literature was reviewed on impacts of tourism to rural community residing with protected areas or adjacent. Finally, literature on research design and methodology was reviewed on the strength and weakness of the techniques.

The **third chapter** on research methodology contains eight sections. The first section introduces the chapter and further gives a description of the research design. The second section gives a description of the case study as a setting within which research can be conducted. Third section discusses the setting in which the study was conducted (research coverage). It further gives a systematic process on how the sample size was selected including research subjects (respondents) from the population. Section four provides detailed information on research techniques applied to address the objectives of this study. Structured questionnaires and focus group questions were employed. The fifth section describes the research measuring instrument. Section six outlines the procedure employed since this type of research is an iterative process. Section seven gives the description on data analysis and evidence obtained is presented in a coherent manner. The last section addresses issues of validity and reliability of the research.

The **fourth Chapter** presents research findings (research results) gathered from the household survey, focus group meetings and tour operators. Each result table or figure is accompanied by a t result interpretation.

The **fifth chapter** presents the discussion and interpretation of the results in chapter four. This chapter has five sections; the first three sections are discussed in the context of the specific objectives of the present study. Section four presents the discussion on the perceptions of the community on livelihood strategies that could invigorate rural economic growth in Chiawa. The fifth section provides the conclusion of the study in the context of research findings and literature review. It further includes research limitation and implication for future research.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature that is relevant to the present study. It begins by presenting an overview of the tourism industry from global, regional, national and local perspectives. The second section begins by clarifying the concepts applied in studies that deal with the views of communities that host tourists, (attitude versus perception). The third section reviews literature on theoretical and empirical foundation on community perception towards tourism development. Section four reveals literature on studies related to tourism and poverty.

2.2 Tourism Industry

Tourism is one of the large and fast growing industries globally (Eagles, 2002; IUCN, 2005). Academicians, practitioners and researchers state that the industry of tourism plays a significant role in enhancing economic growth. Most developing countries not only in African have identified tourism on their economic agenda (Ceballos-Lascurain, 1996; Roe et al., 2006; Fayissa et al., 2007). Ashley et al., (2000) placed tourism at the centre of poverty alleviation. For the case of Zambia, tourism has been placed second on the national economic agenda to agriculture (MFNP, 2006).

2.3 Global Tourism Trends

The tourism industry worldwide has shown significant and mostly sustained growth over the past five years with total tourist arrivals reaching 806 million in 2005 (WTO, 2006). Africa recorded in 2005 positive trends in tourist arrives by 9 percent followed by 8 percent for Pacific and Asia, the Americas and Middle East with 6 percent each and Europe recorded the lowest positive growth of 4 percent. By the end of 2006, the World

Tourism Organization recorded a further 16.5 percent increase in international tourism to a total of 842 million tourist arrivals, with an average growth rate of 4.8 percent to 2005 (WTO, 2005).

2.4 Regional Tourism Trends

One interesting feature of tourist arrivals after 2004 is the emergence of new trends and niches, in particular involving greater environmental awareness and cultural interests. This development, which has diversified the tourism industry through the emergence of new destinations and products, has benefited Africa. The continent has seen significant growth in 2005 and the highest regional growth in tourist arrivals in 2006 (8 percent - double the global rate). Within the African region, sub-Saharan Africa recorded an even higher growth of 9.4 percent with South Africa and Kenya as the main beneficiaries.

In 2004, international tourism arrival figures show a South African dominance (53 percent) in the South-eastern Africa regional market, and a comparatively poor performance (4 percent) of Zambia. Overall trends indicate that tourist arrivals to the region will grow to between 16 million and 20 million by 2010 (WTO, 2005).

Zambia is good at attracting tourists, but less successful in securing the maximum financial benefits from these tourists. This is due to the relatively short average stay of tourists in Zambia (6.9 days, compared with 8.6 in Botswana and 12.4 in Namibia) stated by (Hamilton et al., 2009). The tourism supply chain is short and the ability to move tourists between destinations within Zambia is limited by inadequate infrastructure and transport.

The tourism sector in Zambia is strongly oriented towards nature tourism (UNDP, 2003; Hamilton et al., 2009). Zambia's tourism industry is currently based on two principal assets: the Victoria Falls and the country's wildlife estate. In popularity, the Victoria Falls outshines the tourism product.

The wildlife estate comprising 19 National Parks and 36 Game Management Areas is the main wildlife product after the Victoria Falls. Of the 19 National Parks, four are emerging as tourism flagships which include Lower Zambezi, South Luangwa, Kafue and Mosi-oa-Tunya (Hamiltone et al., 2009). Lower Zambezi which includes Chiawa is very popular for its canoe and boat safaris on the Zambezi River. Angling for tiger fish is becoming a central attraction, and tourists can enjoy large populations of hippo and elephant with the escarpment as a dramatic backdrop.

Tourism in the Zambezi valley found its roots in 1987 when the first tourist camp was established in the Lower Zambezi National Park, by then, Chiawa area had not been accorded the status of a GMA. Ever since that time, a number of site designated for tourism development is on an increase. Nature based tourism in the area is in its infancy stage since a larger percentage of operations are between 5 to 10 years old. Chiawa GMA is divided into a western region where hunting activity is permitted and the eastern region is designated for photographic tourism.

2.5 Theoretical and Empirical Foundation of Resident's Views towards Tourism Impacts

2.5.1 Concept Variations: Attitude, Perception and Reaction

Inconsistency has been observed in a number of studies that examine the views or opinion of host community towards tourism development. Scholars frequently have used attitude, perception and reaction interchangeably (Ap, 1992). For example scholars have used perception (Ap, 1992; Aref et al., 2009; Tsundoda and Mendlinger, 2009; Abdullhai et al., 2007; Tatoglu et al., 2000; Husband, 1987) and other scholars used concept of attitude (Gillingham and Lee, 1999; Mason and Cheyne, 2000; Sekhar, 2003; Haley et al., 2005; Bender et al., 2008; Wayakone et al., 1997; Wang et al., 2006; Zhang et al., 2006 Zhang, 2008), while others (Chen and Raab, 2009) used reaction to refer to community views. Lankford (1994) and Esu (2008) used the concept perception and attitude in their studies interchangeably. It is postulated that several scholars have used attitudes and perception interchangeably (Chen and Raab, 2009). Therefore, it is important to explore

inconsistency in the application of concepts that examine people's views. Ap (1992) defines attitudes to signify a person's continuing predisposition or action tendencies to some objects. Reisinger (2003) define attitude as being created on the basis of experience during the process of learning, and acquiring knowledge. While Allport (1966) cited in (Wang, 2006, p 411) defines attitudes as "a state of mind of the individual toward a value". While according to Ap (1992) and Reisinger (2003), perceptions signify the meaning attributed to an object. Critically when one looks at the definitions of attitudes two dimensions emerges; attitude is created on the basis of learning and acquiring knowledge while perception can be created without the process of learning and acquiring knowledge (Ap, 1992). It is therefore, argued that perception sounds more appropriate when studying community host views in rural areas were literacy level is high. Host communities are able to attribute a meaning to an object without predispositions about it. The present study examined the perceptions of Chiawa Community towards wildlife tourism benefits and their perception on wildlife conservation in the context of CBNRM arrangements.

2.5.2 Theoretical Foundation

Tourism has become important for most of the countries around the world and it has affected tourist host communities in terms of socioeconomic and environmental impacts. Therefore, this creates the need to understand how residents perceive tourism development within their set up? There are several theoretical foundations in the research field that deals with tourist host community views have received attention in the academic cycles. For example lead scholars such as Doxey (1975); Butler (1974) and (2006); Dogan (1987); Ap and Crompton (1993) developed theoretical models to help explain the relationship that exists between tourism development and tourist host communities. According to Doxey's (1975), irritation theory seeks to measure changes that take place in tourist host community perception towards tourism development. Irridex is based on four approaches where host communities are likely to respond to increased tourist inflow and tourist development in tourist destination, resident perceptions will vary from *euphoria* to *apathy*, then to *annoyance* and the latter to *antagonism*. This model has been acknowledged as a useful theory within academic

cycles. The tourism life destination life cycle theory by Butler (1974) assumes that tourist host communities evolve and change over a period of time. This theory has six stages that tourist destination area experience: *exploration, involvement, development, consolidation, stagnation and decline/rejuvenation*. The Dogan (1989) theory proposes resistance, retreatism, boundary maintenance, revitalization and adoption as approach that resident develop to cop with effects of tourism. Whereas the Ap and Crompton (1993) theory propose four approaches: *embracement, tolerance, adjustment and withdrawal*. For the purpose of the present study, I will not discuss theory gaps identified by other scholars in their findings.

A number of theories have emerged which sought to explain the perceptions of tourist host community towards the impacts tourism. Among the theorizations are social exchange theory (SET), social representation theory (SRT), conflict theory and dependency theory. However, the most important theories to the present study are the social exchange theory (SET) and social representation theory (SRT) to explain the perceived relationship focusing on the costs/benefits and other attributes. Emerson (1976) states that social exchange theory emerged from sociology and social psychology and Miller (2005) stated that the SET is used in the field of economics. The SET framework is based on the principle that social relations involve exchange of resources among groups seeking mutual benefits from exchange relationships (Ap, 1992; Aref and Redzum, 2009). The basic concept of the theory has a number of dimensions which may include cost, benefits, outcome, comparison level, satisfaction and dependence on which human relationships area formed (Miller, 2005). The SET framework applied in this study assumes that host residents are likely to support wildlife tourism development provided that the benefits perceived exceed the cost. In this study, the SET framework seeks to establish the relationships between the perceived benefits and community support towards conservation. In other words the SET allows tourism scholars to investigate positive and negative perceptions towards tourism impacts. Empirical findings reveal that the most tourism scholars measuring resident perceptions towards tourism development in tourist destination have applied the SET framework in their studies (Ap, 1992; Haley et al., 2005; Esu, 2008; Wang, 2008; Aref and Redzuan 2009). The findings from past research work found that communities support tourism development when they personally or generally benefit from tourism. However, the SET framework has limitation since it does exclude other predictable factors towards perceptions within a community. Factors not addressed include social values, norms and beliefs. Social representation theory (SRT) was theorized by Moscovic (1961) as a body of theory in SRT framework embraces two psychology. The constructionism and symbolic interactionism (Moscovici, 2001). In other words, the SRT framework suggest that human beings don't think in isolation but construct a framework of shared references which define how to think about the environment basing on social values, norms and beliefs. Therefore, the integration of SRT framework in this study is to close the limitations identified in SET. The SRT framework is an emerging model in tourism studies that seals gaps identified in SET framework (Haley et al., 2005). According to Yutyunyong and Scott (2009), the SRT framework describes the manner in which people think in their everyday life and how the wider social reality influences their thoughts.

2.5.3 Community Perceptions towards Tourism Development

Tourist host perceptions towards tourism development have been examined by several tourism scholars (Ap, 1992; Wayakone and Shuib, 1997; Husband, 1989; Gillingham and Lee, 1999; Walpola and Goodwin, 2001; Allen et al., 2001; Haley et al., 2005; Zhang, 2006; Wang et al., 2006; Esu, 2008; Bender et al., 2008; Aref et al., 2009; Zhang, 2008; Aref and Redzuan, 2009 et al., 2009; Tsundoda and Mendlinger, 2009; Chen and Raab, 2009). These studies focused on three dimensions social, economical and environmental perceptions measuring a range of variables. As earlier stated, perception is the process of acquiring, interpreting, selecting and organizing sensory information (Reisinger 2003). In perception research, both positive and negative perceptions on tourism exist (Cooper, undated). Tourist host communities if receive economic benefit from tourism they are most likely develop positive perceptions towards tourism development whereas if the community does not receive or gain economic benefits it is most likely that the community will develop negative perceptions. Haley et al. (2005) validated the positive and negative dimensions in perceptional research as two – factor structure. Sharma and

Dyer (2009) in their recent study on residents' involvement and their perceptions towards the impact of tourism, the study revealed that resident perceptions were based on various benefits derived from tourism. Wang et al. (2006) states that personal benefits in their study correlated with support for tourism development and tourism impacts This affirms the research finding by Garland (1984), cited by Cooper. This is consistent with social exchange theory (Haley et al., 2005; Bender et al., 2008).

Walpole and Goodwin (2001) carried out an investigation on the attitude of the communities living within and around protected areas. The argument was based on the paradigm that took place in conservation where scholars like Lewis and Carter (1993); IIED (1994) and Borrini-Feyerabend (2004) believed that rural people should benefit from nature tourism so as they too can support conservation. Sekhar (2003) states that the continuation of PAs depended on the goodwill of the adjacent community with the aim that the community benefits. Walpole and Goodwin (2001) in their study recommended for long term studies in order to fully identify the impacts of nature-bases tourism through measuring the perceptions of host communities' economic systems in relationship with ecological systems.

This study sought to investigate community perceptions towards nature-based benefits focusing a number of variables some of which from literature and others of my own. Benefit dynamics within Chiawa, this include types of benefits, distribution, impact of benefits on households and overall impacts of tourism in Chiawa. It also determines demographic variables by investigating whether tribe, gender, age, education, and length of stay and spatial distribution of household have influence on community perceptions. Other variables include community support on conservation, perceptions on human-wildlife conflicts, constraints limiting household participation and perceptions on further economic expectations.

2.5.4 Frequently Examined Influential Factors in Perceptional Research

Frequently examined influential factors in tourism perceptions were identified from the existing literature. These studies were by Wayakone and Squib, (1997); Vangham, (2003)

cited in Esu, (2008); Haley et al (2005); Bender et al (2008); Tatoglu et al. (2000) and Wang et al. (2006) revealed a number of variables measured as influential factors in perceptional studies. The most common measurable factors include demographic characteristics (age, gender, and place of birth, period of stay, ethnicity and level of education). Others dimensions include level of tourism knowledge, involvement of host communities in tourism development and host community interaction. Haley et al. (2005) postulate that socio-economic and demographic characters are useful predictors of perceptions in tourist host communities. However, according to empirical findings age, gender and level of education were found not to be useful predictors, Vangham (2003) in Esu 2008; Esu (2008); Bender et al. (2008) found age as a useful perception predictor and gender was insignificant. Wayakone and Shuib (1997) found the same results were gender was not a significant factor. Husbands (1987) found age and education useful variables in his research. Esu (2008) and Haley et al. (2005) found period of resident a useful dimension in their findings. A review of the literature has thus revealed differently, some studies approving and others disapproving demographic variable as useful factors in shaping host community perception towards tourism development.

2.5.5 Tourism and Poverty Alleviation

According to WTO (2009), tourism is one of the largest and fastest growing industries and considered as engines of development. It is an engine for generating various positive economic impacts. The most notable one include job creation and provision of a range of opportunities for projects to increase income and improve livelihoods. Tourism receipts look impressive and it is viewed as a panacea to resolve contemporarily issues which include the link between tourism and poverty alleviation. The relationship is based on the premise that tourism economic impacts through the trickledown effect may contribute to improved livelihoods and thereby reducing on poverty. As initially stated in chapter one section 1.1 that tourism in Zambia is among the key economic drivers of the economy considering a wide range of opportunities it plays in the stimulation of national economic growth. In the Zambian context, this phenomenon is likely to directly contribute to rural economic growth considering that tourism is wildlife based and found in PAs. However,

to appreciate the relationship, there ought to be studies to measure the contribution of tourism on poverty alleviation.

Therefore, in other parts of the world scholars have carried out studies to understand and appreciate the role of tourism and poverty alleviation. Blake et al. (2002) carried out a study in Brazil to examine the economic impacts of tourism by linking aspects on how tourism affects household. The study further examined the efforts that tourist spending has on different households. This study was aimed at investigating the relationship between tourism and poverty alleviation. Practitioners, researchers and policy makers have believed that tourism can turn around economies, and mostly identified as a key in unlocking poverty in rural areas. Such studies become inevitable to try and investigate the extent at which tourism can unlock the doors of poverty. In additional, Blake et al, (2002) stated that most studies have concentrated on the economic impacts of tourism without analyzing or examining the levels of impacts on household and how much of leakage sip back to developed countries.

Luvanga and Shitundu (2003) carried out a similar study in Tanzania in which they studied the role of tourism in poverty alleviation. The gist of the study was to examine the impact that tourism has on the livelihoods of the local people in host community considering tourism impressive receipts.

In conclusion, this chapter reviewed a number of literature sources, cardinal to the study objectives. It began by describing the tourism industry from global, regional, national and local contexts, followed by the theoretical analysis of concept variations identified and the development process of theories that measure human perceptions towards an object or a thing. It further presented literature on community perceptions on tourism development and discussed the frequently examined influential factors in perceptional research and finally describes the role tourism development plays in poverty alleviation. The literature described herein played an important role in the conceptualization of processes.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

In order to meet the objectives of the study, research design and methodology include a range of research techniques were applied. The main research tools used in the study were two different sets of structured questionnaires administered to sampled households. The other questionnaire was designed to capture data from tourism operators (safari hunting and photographic). In addition, direct field observations were used to appreciate various aspects such as household distribution as well as social economic and cultural activities in the host community. Household questionnaires revealed host community perceptions of nature based tourism benefits.

3.2 Research Design

Research design is a plan or process of the proposed research work (Welman et al., 2005). Welman et al, (2005) further states that a research design embraces the process in which the research draws research subjects and collects meaningful data from them. This process is done when the research topic is clearly defined. Research design should be able answers the following questions:- the purpose of the study, what type of data is required, type of the sample, method of data collection, how the data will be analyzed, the methodology of the study and the specific nature or setting of the study.

For the purpose of the present study, research subjects were drawn from five clusters in Chiawa GMA in which the household survey was conducted. Households were selected randomly from each cluster using simple random sampling (see section 3.4.1). In additional, one focus group meeting was conducted in each cluster using snowball sampling. Tourism private sector (tour operators) was drawn from Chiawa GMA and

adjacent Lower Zambezi National Park. Active tour operators were drawn as the unit of analysis from the two clusters (see section 3.4.2).

3.3 Case Study Research

A case study is one way of doing a research study (Zucker, 2001; Ghosh, 2002). Ghosh (2002) stated that it's a good approach of collecting data about an individual, a family or a group of people in a defined community. Case study methods allow the researcher to intensively study factors and causes of particular phenomena. The case study concept is also applicable in several other disciplines (Yin, 1984; Welman et al., 2005). A case study does not necessarily require any particular research tool to be used. It allows the isolating of a certain population (unit of analysis) so that it can be extensively studied (Welman et al., 2005). Its strength is derived from its applicability to real life and human dynamics when analyzing selected unit of analysis. However, the case study research has limitations in terms of subjectivity and generalisability (Ghosh, 2002).

This research applied an investigative case study to intensively study community perceptions of impacts and implications of nature-based tourism in tourist host communities. Units of analysis are responses from host communities and from tourism operators.

Zambia has a total of 19 National Parks and 36 Game Management Areas. National Park is the highest category of protected area in Zambia. Permissible land use activities are photographic tourism. While a Game Management Area is a protected area category in which human beings and wildlife co-exist. The traditional land use is consumptive utilization of wildlife. This includes safari and resident hunting. Chiawa was selected as a case study owing to its uniqueness in character. Currently, Chiawa permits photographic tourism in the eastern part and hunting taking place in the western part of the GMA.

3.4 Procedure

Research involves iterative process (Welman et al., 2005). The first step in this process was to identify the theme or research topic. Relevant literature review to appreciate what other scholars have researched and this attributed to the development of the draft research proposal. The research proposal was submitted and subsequently approved by the degree board of the university. The researcher proceeded to develop research tools or techniques to use for field data collection from subjects in the study area. In fulfilling university requirements, an ethical clearance form was completed, submitted and approved. Field research process began by conducting one to one interviews with subjects at their respective household using questionnaires. After household survey, focus group meetings were conducted in the five (5) village action group. These were composed of varied subjects. Another set of questionnaire was administered to tourism operators and other business houses. A consent letter was presented to identified subjects, so as to allow them fully understand the nature and extent of the study and its objective.

Prior to field research (data collection), questionnaires were subjected for testing through a pilot study. This allowed the researcher to test whether set questions could adequately answer research objectives. Refinement of some questions was done. Codes were used to assign a meaning to descriptive data chiefly obtained from focus group meetings.

3.5 Sampling Design

This study used random sampling to reach out research subject (unit) in VAGs in Chiawa GMA. Welman et al. (2005) and Ghosha (2002) states that in random sampling, research subjects have equal opportunity of been selected from the population and the model is objective in nature. 12 households in each VAG were drawn using random sampling for household survey. More lucid is provided in sections 3.5.1 for household survey and 3.5.2 for tourism business operators both Chiawa GMA and LZNP.

3.5.1 Household Sample Design

Chiawa Game Management Area has a total of thirty seven (37) main villages comprising 1190 households (see figure 2) showing the distribution of settlements in the area. The GMA is divided into eastern and western. The western part of the Chiawa is further divided into five Village Action Groups (VAGs). These are implementing agents that constitute community resources boards. Community Resource Boards and ZAWA jointly manage wildlife therein.

For the purpose of this study, 5 percent of the households representing sixty (60) households were sampled. A total sixty people were interviewed, twelve (12) from each VAG. Households were selected randomly using the table of random numbers after obtaining information from the village leaders in five different clusters of VAGs and these include Kabwadu, Chiawa Central, Mugurameno, Chisakila and Gotagota. From the selected households, each household selected one individual to be interviewed or the whole family to be present. Strictly only people above the age of 18 years were targeted as they have good memory of their surroundings.

3.5.2 Tour Operators Sample Design

Lower Zambezi National Park has a total of six operational tourist facilities that provide tourist accommodation and offer various activities to tourists considering a relatively small number, all tour operators were interviewed and this applied a total count (see figure 2a). Chiawa Game Management Area has a total of 32 tourist sites of which 9 sites are fully developed and operational. Figure 2b shows distribution of tourist facilities in the GMA. Therefore, questionnaires were only addressed to active tour operators as a unit of analysis. Questionnaires were further administered to other business houses that are engaged in other forms of business apart from safari operators.

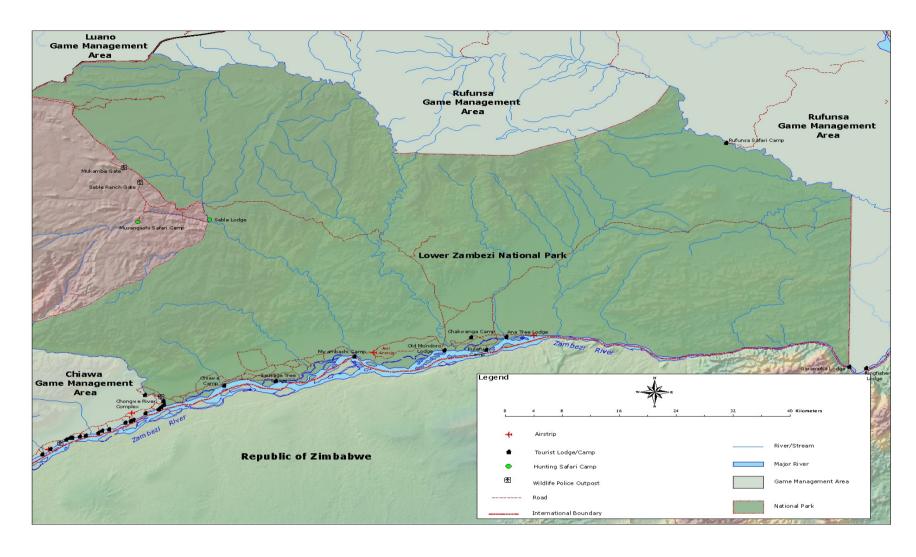


Figure 2a: Location of tourist facilities in Lower Zambezi National Park: (ZAWA Draft Plan for Lower Zambezi National Park 2008)

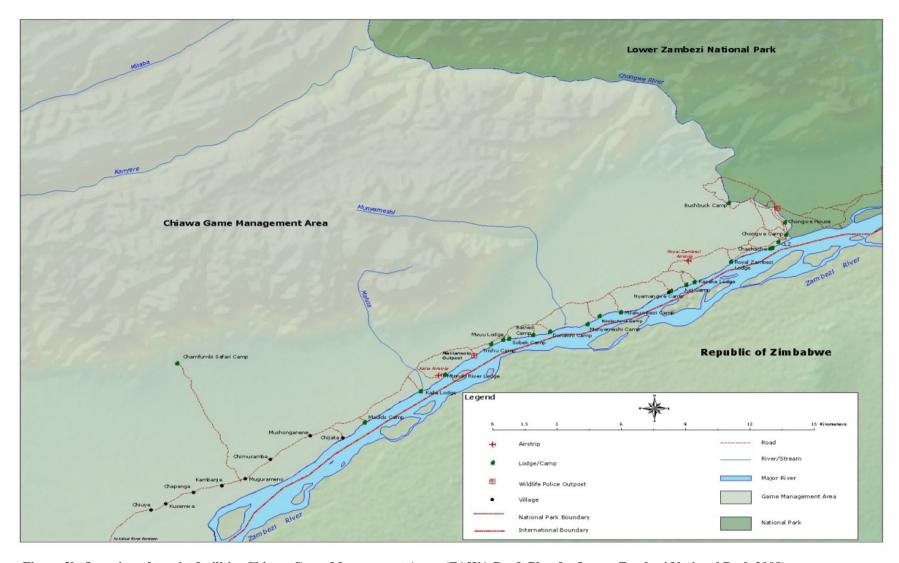


Figure 3b: Location of tourist facilities Chiawa Game Management Area: (ZAWA Draft Plan for Lower Zambezi National Park 2008)

3.6 Data Collection Techniques

For the purpose of this survey the following data collection techniques were used to address the objectives of this research study.

3.6.1 Household Surveys

Household surveys using questionnaires was the main research technique used in sampled households to obtain detailed information about the functioning of households and the surroundings. A household (sample unit) is important since it is the unit of production and consumption in rural areas. Residents were asked to identify their main social economic activities; their perceptions on the exiting nature based tourism benefits using positive and negative changes.

3.6.2 Tourism Private Sector Survey

Another set of questionnaires were used to uncover detailed information from tourism operators including other business houses existing in the host community. Information obtained from this tool uncovered the type and nature of business types. The focus was on both photographic safari operators and safari hunting since their business is dependent on nature resources. This questionnaire uncovered information on employment levels, impact of tourism on livelihoods in household and determined the level of host community support towards conservation.

3.6.3 Focus Group and Participant Observation

Focus groups were conducted in five Village Action Groups (VAGs) of the Community Resources Boards. Chiawa has five VAGs namely GotaGota, Chisakila, Chiawa Central, Mugurameno and Kabwado. At each meeting, focus group members participated in identifying current livelihood strategies and assessed the impact of nature-based tourism on their livelihood. Participant observation during data gathering process, the researcher

took notes on various aspects such as household distribution, household types, and living conditions and observed various social economic activities. Literature was reviewed to understand and appreciate the existing body of knowledge on the status of tourism in the research area.

3.7 Measuring Instrument

The research measuring instruments were aimed purely at addressing the research objectives rather than approving or disapproving a research hypothesis. Structured questionnaires surveys were coded with pre-determined answers. Survey questionnaires are useful in varied information from respondents (Welman et al., 2005). Face to face interviews with respondents in household and tour operators were conducted. Welman et al., (2005) states that personal interviews have high response rates and it is a very efficient technique in gathering information. However, this instrument has other challenges, it is time consuming and costly to implement (Welman et al., 2005).

The research measuring instruments were designed and developed through a systematic process so as to address the issue of validity and reliability. This case study research adopted the procedure developed by Neysmith (2008) on interview questions. Nonetheless the procedure was applied to unstructured, structured and standardized questions. Welman et al., (2005) validate this procedure of pretesting questions through a pilot study. Therefore, the sets of questions used in this research were based on the model outlined in figure 3.

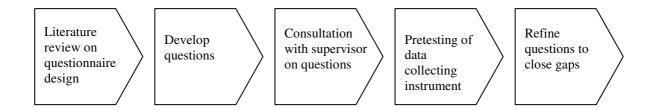


Figure 4: Development of Interview Questions: Neysmith, 2008

The interview with subjects began with the researcher introducing himself using the letter of consent. Subjects were then asked if they were willing to participate in my research, those willing signed the declaration. Thereafter, interviews took place and at the end subject were thanked for their participation in the research process.

3.8 Data Analysis

The data analysis section deals with the process of determining what the field research found out in relation to the objectives of the study. It also deals with how the data can be presented in a structured and coherent manner Welman et al., (2005). Ghosh (2002) stated that the process involves examining, categorizing, application of categories to the collected, data tabulation, statistical analysis and casual inference. Data obtained from structured questionnaires were categorized based on the formulated objectives, followed by coding which is the process of assigning numerical values to each response. It is a model of translating raw data into numerical values which can be easily counted and tabulated. Data tabulation was enhanced through the use of MoonStats. MoonStats is a statistical software program which provides the tools for data exploration, analysis and description.

3.9 Validity and Reliability

This section deals with the validity and reliability of evidence obtained from the field research process. In order to ensure high quality and credible research whose evidence contributes to the body of knowledge on this research topic, validity and reliability were adequately addressed. Validity and reliability originated from quantitative research paradigm (Golafshani, 2003). However, this technique is now applicable in anti-positivist research (Golafshani, 2003). Validity in quantitative research determines the trustworthiness of the research with focus on whether the research has addressed the intended objectives (Golafshani, 2003; Welman et al., 2005), while reliability deals with consistence and accuracy in research evidence and the representativeness of the determined sample (Welman et al., 2005). The essence of reliability in quantitative research lies on replicability or repeatability. Stenbacka (in Golafshani, 2003) added that

quality of research should be tested for its trustworthiness hence making it credible and generalizability in its structure.

Welman et al. (2005) described some threats that may undermine validity to include poor research design; inaccurate measuring instruments can result as research errors. Validity both internal and external as well as reliability were addressed. Construct validity, this is the initial conceptualization of the research looking at the objective and questions that determines which is to be collected and how it will be collected (Golafshani, 2003). Construct validity was enhanced through the process of pretesting data collection instrument. It allows the researcher to rethink and improve the instrument so as to ensure validity of conclusion. The main threat to external validity is the inability to assemble a representative sample. For this study threat to external validity were eliminated by way of randomization of the sample. This model provides an equal opportunity for the subject to be selected. The model used a very representative sample which eliminates bias and or prejudice. The model at the same time promotes internal validity.

Since the instruments used to collect data were interviews through the use of structured and unstructured questionnaires applied, these instruments were pretested through a pilot study to a small number of respondents within the sample frame. The results were used to strengthen the data collection instrument so as to increase validity and reliability and come up with credible research. Therefore, this process of randomization and pretesting eliminates possible errors with the notion of archiving that which is intended to measure (Welman et al., 2005).

To conclude, this chapter began with the description of the research design and described the procedure of research adopted, further discuss the setting of the case study model. It then focused on the sampling design by describing how research subjects were drawn from the population with subjectivity. Questionnaires (data collection techniques) were employed to collect data from subjects and instruments measured with a systematic process. Data analysis processes were outlined and lastly issues of validity and reliability were properly addressed.

CHAPTER 4: ANALYSIS OF RESULTS

4.1 Introduction

This chapter has four major sections of analysis of research results. These sections focus on the objectives of the study. Result analysis includes the type of benefits the people of Chiawa derive from nature-based tourism and how the people perceive the impact of the same benefits on their livelihoods. The second section presents analysis of results on the perceptions of the people of Chiawa towards nature conservation. The analysis of results on the perceptions of the nature and extent of limits that affect household participation in nature based tourism entrepreneurships is represented in the third section and finally respondent's perceptions on future economic activities that can uplift the livelihoods of the people of Chiawa.

As earlier stated, the main thrust of the study is to analyze the relationship between two main variables (the perceptions of residents towards nature-based tourism benefits and their support for conservation). In the analyses, univariate frequency statistics are applied to measure residents' perceptions on a number of variables which include benefits derived from tourism, types of benefits, spatial distribution of benefits in VAGs, impacts of benefits on household, perceptions on conservation initiatives, human-wildlife conflicts and wildlife, perceptions on constraints and economic expectations. Bivariate correlations and scatterplots are used to measure the following relationships.

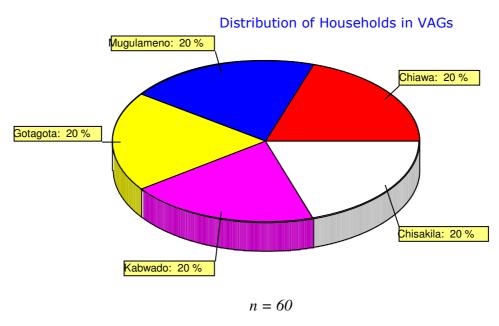
- 1. Correlations of residents' perceptions on impact of tourism on livelihoods their overall perceptions on benefits of tourism.
- 2. Correlations of residents' perceptions on HWC and perceptions on conservation initiatives and
- 3. Correlations on how the residents' percertions would be if wild animals would be removed from Chiawa GMA.

In statistics, a pearson product-moment correlations shows the strength of the relationship between continuous variables. It is used to measure the strength and relationship between two quantitative variables. Further bivariate tables and chi-square is used to measure the strength and relationship between perceptions and demographic variables. In this analysis, cross tabulations show how many cases occur in which a particular value on a variable also has a particular value on another variable.

Demographic characteristics of respondents were measured by percentage. The variables analyzed included ethnic, gender, age structure, marital status, size of households, length of stay, level of education and type of occupation. The variables are useful to the present study in understanding the characteristics of the community and how they influence respondents' perceptions on economic benefits of tourism and support for conservation.

4.1.1 Distribution of Respondent by Village Action Group

The sample chosen for the study were randomly drawn from five village action groups in Chiawa Game Management Area. Twenty percent of households were randomly selected from each village action group represented 12 households. This entails that the sample size selected for the present study was representative of Chiawa Game Management Area. Therefore, the results of the study are a true reflection of the views of the people of Chiawa. Figure 4 shows the distribution of sample size in VAGs.



Source: survey (2009)

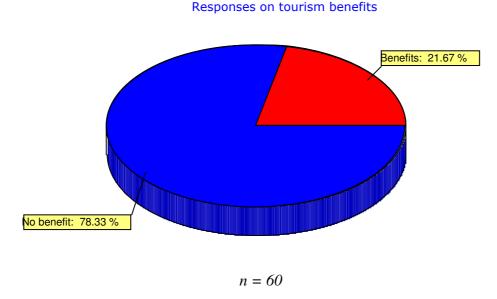
Figure 5: Distribution of sampled household in VAGs

4.2 Perceptions of the Community on Economic Impacts of Nature-based Tourism and Implications on the livelihoods of Chiawa Community

4.2.1 Perceptions of the Respondents on Nature-Based Tourism Benefits

The study revealed that very few households in Chiawa Game Management Area directly derive economic benefits from nature-based tourism. This is evidenced by figure 5 in which the majority of the respondents 78.33 percent do not directly benefit from nature

based-tourism and 21.67 percent benefit. This is not a surprising result since Chiawa GMA has no presence of tourism driven entrepreneurships owned by community residents apart from the cultural village centre funded by African Wildlife Foundation (AWF).

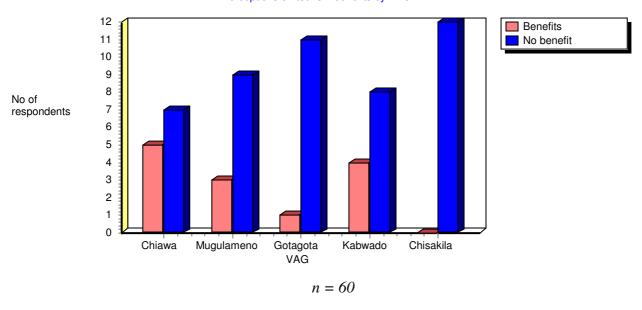


Source: field survey (2009)

Figure 6: Households that directly benefits and those that do not benefit from tourism

Further information on the distribution of benefits is presented in figure 6. There is an unequal distribution of benefits across the five VAGs. Respondents in VAGs closer to tourism activities have access and are likely to benefit more compared to those far from tourism development zone. It was revealed that residents of Chiawa, Mugulameno and Kabwado have comparative advantage when it comes to access to nature-based tourism benefits when compared to Chisakela and Gotagota.



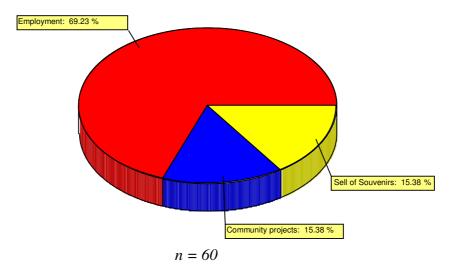


Source: survey (2009)

Figure 7: Perceptions on tourism benefits by VAG's

The study established that the presence of tourism development (tourism operations) in Chiawa GMA offered benefits to the people of Chiawa. To determine preference among respondents, three types of benefits were predetermined. This research found that the most preferred type of benefits by the people of Chiawa is sixty nine percent employment creation by tourism nature based lodges. The other types of benefits include 15.38 percent community projects and 15.38 percent selling of souvenirs to tourists according figure 7.

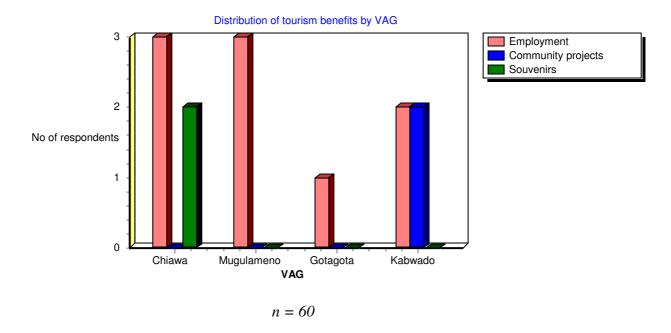
Types of tourism benefit



Source: survey (2009)

Figure 8: Showing types of tourism benefits trickle to community

As earlier mentioned in figure 7, employment is the most preferred benefit perceived by the people of Chiawa. Employment is the only opportunity for personal direct benefit. Nature-based tourism benefits in the GMA are not spread out equally in VAGs. Employment exists in all VGAs apart from Chisakile. The respondents in Chiawa and Mugulameno VAGs have a considerably higher number of people engaged in the tourism sector working in lodges, as indicated in figure 8. It was also established that apart from employment creation, the people of Chiawa benefit through nature-based tourism through community projects such as building of health and education facilities. Communities also sell various souvenirs to tourists at the cultural village centre.



Source: survey (2009)

Figure 9: Shows perceptions on the distribution of tourism benefits by VAGs

Further, the study analysed and established that the majority of employment in Chiawa Game Management Area and Lower Zambezi National Park is offered to Zambians, collectively, this accounts for 91 percent. The larger percentage of jobs go to the people of Chiawa and 16 percent to people outside Chiawa GMA, with expatriates less than 10 percent as shown in Table 2.

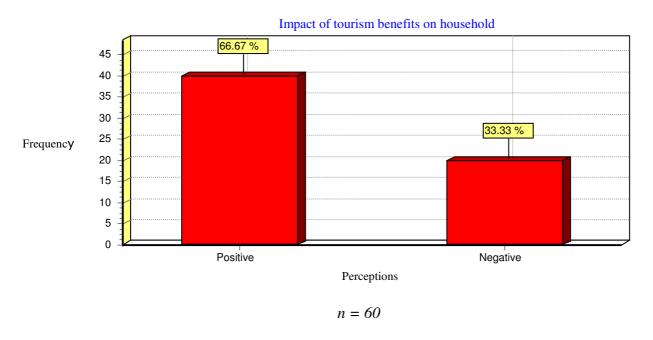
Table 2: Employment Structure and numbers in Nature based tourism (n=14)

Origins of	Protected Area					
Employees	Chiawa	GMA	LZNP		Total	
	No.	%	No.	%	No.	%
Chiawa Residents	210	79	123	70	333	75
Residents outside Chiawa	37	14	34	19	71	16
Foreigners	18	7	20	11	38	9
Total	265	100	177	100	442	100

Source: survey (2009)

4.2.2 Implications of Tourism Benefits on Households of Chiawa GMA

The study revealed that since the establishment and development of nature-based tourism in Chiawa GMA and Lower Zambezi National Park, the people of Chiawa have noted significant changes among households that are engaged in tourism employment. Figure 9 indicates the perceptions of the people of Chiawa on the impact of nature-based tourism development on the livelihoods of Chiawa residents



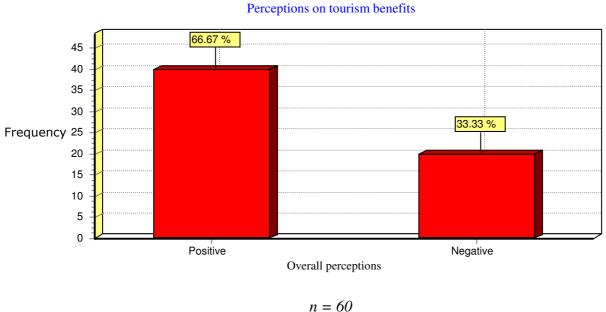
Source: survey (2009)

Figure 10: Shows perceptions on the impacts of tourism benefits on households

4.2.3 Perceptions of Chiawa People towards Tourism Economic Benefits

As initially stated, one of the objectives of the study was to examine the perceptions of the community on economic impacts of nature-based tourism on the livelihood of Chiawa Community. Consequently, this research has revealed that the people of Chiawa have both positive and negative perceptions towards economic benefits of nature-based tourism. The majority of respondents have positive perceptions (see figure 10 below).

This evidence supports the theory that tourist host community will support tourism development provided the development brings economic benefits to the community.



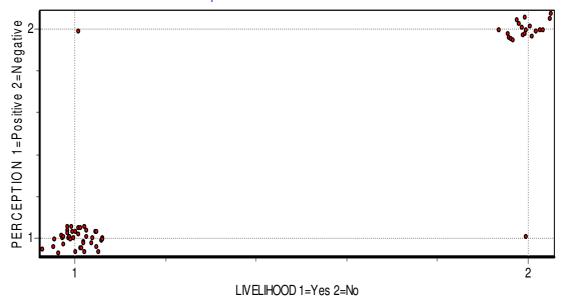
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Source: survey (2009)

Figure 11: Shows overall perceptions on tourism benefits

In examining the relationship between respondents' perceptions on the impact of tourism economic benefits in household and the overall perceptions of respondents on tourism benefits. Pearson correlation was applied to identify the relationship of the two variables. Figure 11 shows the findings of the study. It was established that perceived tourism economic impacts on livelihoods and overall perceptions on respondent are statistically significantly correlated at the 1% level (r=0.93; p=0.000) Figures 9 and 10 confirm this result.

Scatterplot of LIVELIHOOD and PERCEPTION



Note that each dot is slightly offset from its true position to avoid excessive overlap.

Source: f survey (2009)

Figure 12: Showing correlation of residents on overall perceptions towards tourism its impacts on their livelihood.

4.2.4 Analysis of Demographic Variables as Factors Influencing Perceptions of Chiawa Community

The second analysis for this study focuses on selected demographic variables on the people of Chiawa in determining whether identified variables are useful factors to influence community perceptions on economic tourism benefits. Cross tabulations were used to determine the relationships. It was established by the present study that respondents perceptions and tribe (ethnic group) were statistically significantly related at the 5% level (chi – square = 11.25; df = 4; p = 0.024) on how the community responds towards tourism development (see table 3). These findings, implies that homogeneity in a community has influence on how the community responds to new development. However, other analyzed demographic variables include gender, age, length of stay and education. The findings in tables 4, 5, 6 and 7 revealed that gender, age, residence of stay and education had no significant relationship on residents' perceptions towards tourism.

This implies that the analyzed variables were found to not be useful factors on community perceptions on economic benefits of tourism.

Table 3: Cross tabulations showing the distribution of respondents by tribe on their perceptions on tourism impacts

n = 60

PERCEPTION

	Positive	Negative	Total	
Goba	28	14	42	
Soli	3	0	3	
Tonga	2	6	8	
Chikunda	3	0	3	
Others	4	0	4	
Total	40	20	60	

Source: survey (2009)

"PERCEPTION and TRIBES are statistically significantly related at the 5% level (chi-square=11.25; df=4; p=0.024)."

Table 4: Cross tabulations showing the distribution of respondents by gender towards tourism impacts

n = 60

PERCEPTION

	Positive	Negative	Total
GENDER Male Female	19 21	12 8	31 29
Total	40	20 	60

Source: survey (2009)

 $"PERCEPTION \ and \ GENDER \ are \ not \ statistically \ significantly \ related \ (chi-square=0.83; \ df=1; \ p=0.361)."$

Table 5: Cross tabulation showing the distribution of respondents by age towards the impact of tourism n = 60

PERCEPTION

Po	ositive	Negative	Total
AGE			
18 - 30	10	6	16
31 - 40	12	3	15
41 - 50	10	3	13
51 - 60	4	6	10
61 and above	4 	2 	6
Total	40	20	60

Source: survey (2009)

"PERCEPTION and AGE are not statistically significantly related (chi-square=5.14; df=4; p=0.273)."

Table 6: Cross tabulation showing distribution of respondents by residents length of stay

Source: field survey (2009)

"PERCEPTION and DURATION are not statistically significantly related (chi-square=3.45; df=4; p=0.486)."

Table 7: Cross tabulation showing the distribution of respondents by level of education

n = 60

PERCEPTION

	Positive	Negative	Total
EDUCATION Primary Secondary	28 12	18 2	46 14
Total	40	20	60

Source: survey (2009)

"PERCEPTION and EDUCATION are not statistically significantly related (chi-square=2.98; df=1; p=0.084)."

When analyzing the findings of the relationship between perceptions of respondents and VAGs, it revealed that there is no statistically significant relation between the two tested variables using cross tabulation. Hence, in this study, spatial distribution of respondents had no influence on community perception towards tourism benefits and conservation initiatives. This was established by the finding presented in table 8.

Table 8: Cross tabulation showing the distribution of respondents by VAGs on their perception of the impact of tourism

n = 60

PERCEPTION

	Positive	Negative	Total
VAG			
Chiawa	10	2	12
Mugulameno	10	2	12
Gotagota	7	5	12
Kabwado	8	4	12
Chisakela	5	7	12
Total	40	20	60

Source: survey (2009)

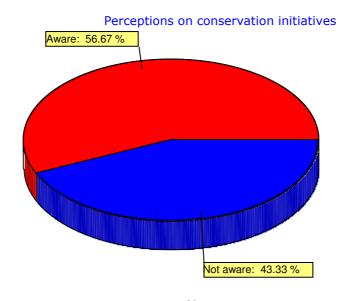
[&]quot;PERCEPTION and VAG are not statistically significantly related (chi-square=6.75; df=4; p=0.150)."

4.3 The Effects of Nature-Based Benefits on Perceptions of Respondents towards Conservation of Natural Resources

As earlier stated in chapter one, the second objective of the study was to examine the perceptions of the effects of nature-based tourism benefits on support towards conservation of nature in Chiawa GMA and Lower Zambezi National Park. Data regarding this objective was analyzed by determining frequency and identifying the relationship among variable using Pearson correlation and cross tabulation – Chi – square.

4.3.1 Perception of Respondents towards Wildlife Conservation Initiatives

As initially stated in the first chapter, in terms of natural resources management, the Zambian Wildlife Act allows the Wildlife Management Authority and the community in respective GMAs to co-manage natural resources through CBNRM arrangements. Conservation Lower Zambezi (CLZ) is another Non-government Organization (NGO) operating in Chiawa GMA and Lower Zambezi National Park. Its main mission is the protection of the wildlife in Lower Zambezi and promotion of community awareness and education. The study revealed that 56.67 percent of the respondents say they are aware of the current conservation initiative carried out in Chiawa GMA and 43.33 percent are not (see figure 12).

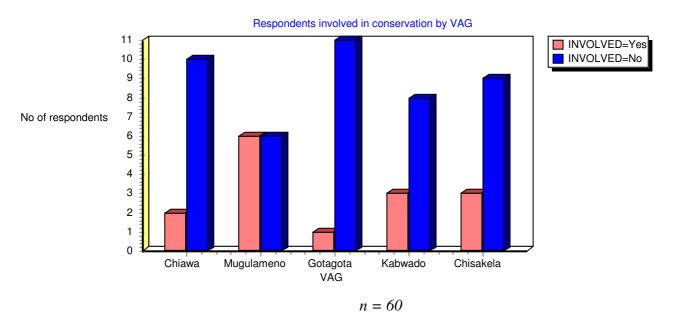


n = 60

Source: survey (2009)

Figure 13 Perceptions regarding household awareness of conservation initiatives

Figure 13 represents number of households that are directly involved in conservation initiatives.

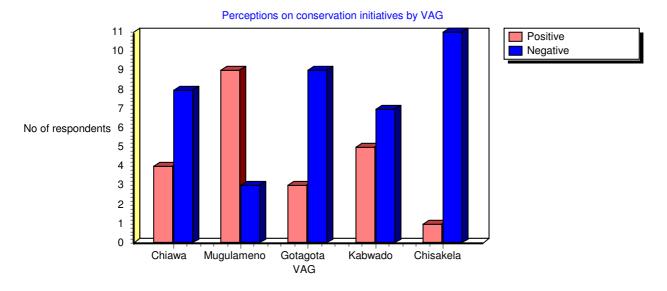


Source: survey (2009)

Figure 14: Shows the distribution of respondents involved in conservation activities by VAGs

4.3.2 Perceptions on the Impact of Conservation Initiative

It was established by the present study that both positive and negative perceptions on conservation initiatives exist among the people of Chiawa. However, the majority of people appeared to have negative perceptions on the impact of conservation initiatives. The results in figure 14 show that Chisakela, Gotagot and Chiawa VAG's had the majority of respondents with negative perceptions.



Source: survey (2009)

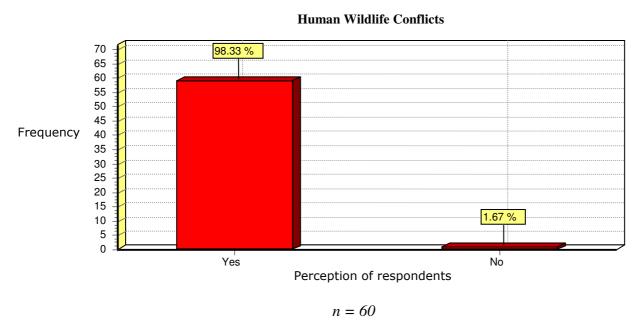
n = 60

Figure 15: Shows perceptions of respondents on impacts of conservation initiatives in VAGs

4.3.3 Human – Wildlife Interaction

Small-scale farming is the major source of income and food security in Chiawa GMA as is the practice in most rural areas in Zambia. For the case of Chiawa, small-scale farming is practiced along the Kafue and the Zambezi rivers which have high densities of elephants, hippos and crocodiles. Consequently, humans and wildlife interact and this interaction end up in conflicts, were animals threaten human life and destroy crops in peopled land. This study revealed that the people of Chiawa suffer significantly from these interactions since the majority of respondents are affected by wildlife (refer to

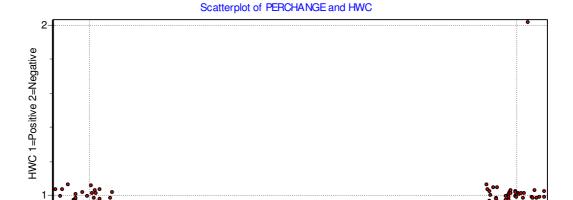
figure 15). This is not a surprising result since most farming is practiced along the banks of the two rivers.



Source: survey (2009)

Figure 16: Shows the distribution of respondents that encounter wildlife conflicts

In order to explore the relationship between respondents' perceptions of human wildlife conflicts and their perceptions towards conservation initiatives, pearson correlation was performed. Pearson correlation using scatterplot established a weak correlation at (r=0.10; p=0.451) as illustrated in figure 16.



Note that each dot is slightly offset from its true position to avoid excessive overlap.

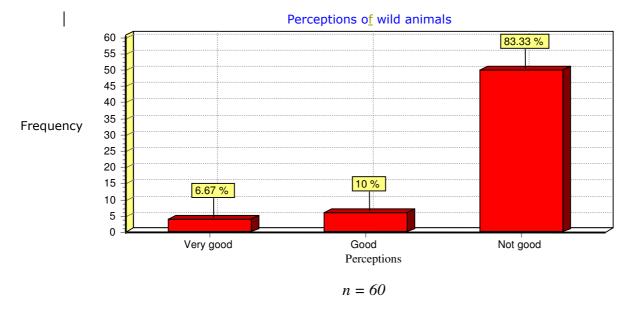
PERCHANGE 1=Positive 2=Nagative

Source: survey (2009)

Figure 17: Shows perceived change on conservation and HWC

4.3.4 Perceptions of Respondents on Wild Animals

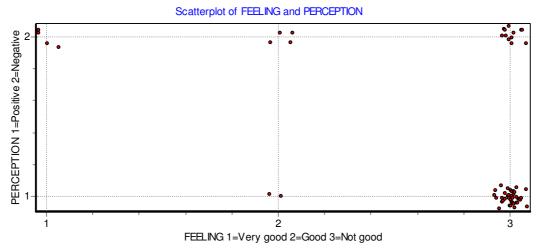
In examining the views of the people of Chiawa on how they would feel if animals were removed from Chiawa GMA to eradicate human-wildlife interaction, it was revealed by the study that the majority of the people of Chiawa claim that they would not feel good if wild animals were to be removed from Chiawa. As a result of HWC, it is expected that the people of Chiawa would develop negative perceptions and would be willing to allow wild animals to be taken away considering the suffering experienced by the community. To the contrary, figure 17 show that the people of Chiawa have other significant attachment towards wild animals apart from nature-based tourism benefits. The majority of the people believe that they have coexisted with wild animals since time immemorial and they are willing to coexist provided substantial benefits accrue to the community. This implies that, if this attachment continues, the future of nature in Chiawa GMA and LZNP is assured.



Source: survey (2009)

Figure 18: Shows perceptions of respondents on wild animals were taken out

Figure 18 revealed that respondents perceptions of human wildlife conflicts and overall perceptions showed a strong statistical relationship at the 1% level (r=-0.46; p=0.000).



Note that each dot is slightly offset from its true position to avoid excessive overlap.

Source: survey (2009)

Figure 19: Shows relationship between perceptions and feelings about wild animals

4.4 Constraints Limiting Household Participation in Tourism Businesses

The third objective of the study was to establish the nature and extent of constraints that limit household participation in nature-based tourism entrepreneurship.

4.4.1 Constraints from Focus Group Meetings in VAGs

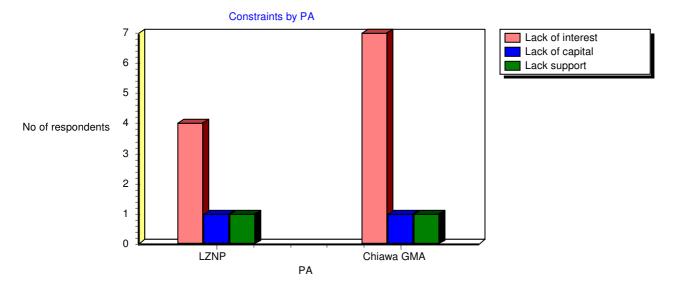
During focus group meetings, a number of challenges were identified as inhibiting new community owned businesses which include tourism development and solutions proposed to address identified programmes indicated table 9. It was established by this study that four major factors limit the people of Chiawa to engage in nature-based tourism entrepreneurship. Lack of capital was the most frequent factor followed by lack of knowledge, lack of equipment and lack of market.

Table 9: Shows constraints that limit community participation in tourism businesses

VAG	Constraints	Suggested Solutions
Kabwadu	Lack of capital	Identify sources of loans
		Seek donor funding
	Lack of knowledge	Request donors to sponsor training
	Poor community	Engender the spirit of cooperation by
	cooperation	holding regular consultative meetings
	Thieves	The police and neighborhood watch committees to work jointly
Chiawa Central	Lack of capital	Solicit donor support
	Poor local communication and roads	Councilor to send request to government
	Lack of market	Develop new markets for products
	Lack of community	Start community education classes at
	education facilities	existing schools over weekends
Mugurameno	Lack of Capital	Seek donor funding
	Lack of knowledge	Seek training assistance
Chisakila	Lack of cooperation	Promote cooperation among community members by holding regular meetings
	Lack of equipment	Seek donor funding
	Lack of knowledge	Seek training assistance
	Laziness	
Gotagota	Lack of equipment	Seek donor funding
	Lack of capital	Seek donor funding
	Lack of knowledge	

4.4.2 Constraints from Tour Operators on Factors Limiting Household Participation in Tourism Businesses.

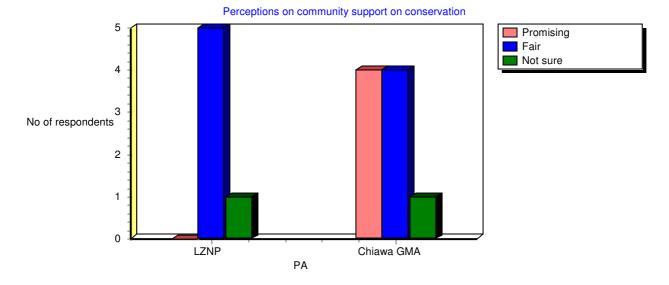
Figure 19 shows research results on factors that limit the participation of the community in tourism business. The majority of tour operators believe that the people of Chiawa lack interest to invest in tourism industry while others claim that communities do not have start-up capital and they lack support from agencies responsible for tourism in Zambia.



Source: survey (2009)

Figure 20: Shows constraints limiting household participation in tourism businesses

In order to explore tour operators perceptions on community support towards conservation of wildlife in Chiawa GMA and LZNP. It was established that the future of conservation is brighter considering that the majority of tour operators both from the GMA and NP perceive community support towards conservation of nature, fair and promising. This is encouraging for the future of the tourism industry which is therefore likely to grow because of community support for nature conservation. However, a few tour operators indicated that they were not certain on community support towards conservation initiatives (see figure 20).



Source: survey (2009)

Figure 21: Shows perceptions of tour operators on community support for conservation

4.5 Perceptions of Respondents on Economic Expectations

Communities were asked to give information on the activities that can uplift livelihoods of the Chiawa community. Using predetermined answers, the study found that the people of Chiawa believe that crop farming is the major economic activity that is likely to better people's lives, this is followed by tourism (see table 10). The implications are that the livelihoods of people in Chiawa community may not be uplifted because of unreliable rainfall patterns and problematic animals which have continued to reduce the crop yields.

Table 10: showing future economic activities that can improve living standards of Chiawa community

Value	N	 왕 	Cum. %
Safari hunting Safari lodge Crop farming Fishing	1 10 48 1	1.67 16.67 80.00 1.67	1.67 18.33 98.33 100.00
TOTAL	60 	100.00	

Source: survey (2009)

Table 11 below gives a summary of the opportunities identified for the establishment of new community-owned businesses in Chiawa GMA from focus group meetings.

Table 11: Shows types of business opportunities for future economic growth

VAG	Number	Type of business	
	1	Campsite along Zambezi River /on island	
	2	Lodge	
	3	Fish Farming	
	4	Poultry	
Chiawa Central	1	Community banana schemes	
	2	Fish farming	
	3	Community campsite	
	4	Bee-keeping	
Mugurameno	1	Cultural village	
	2	Game ranching	
Chisakila 1		Market gardening using irrigation	
	2	Fish farming	
	3	Rearing goats	
	4	Carpentry	
Gotagota	1 Commercial farming		
	2	Fish farming	

Source: field survey (2009)

As shown in the tables above, a number of enterprises could be started in Chiawa in order to promote the livelihoods and generate income for the local community. These were identified during focus group meetings.

- There is considerable interest in fish farming throughout Chiawa GMA. Groups to
 be involved in fish farming will need a lot of training in the management of the
 ponds so that higher yields are realized and exotic fish species do not contaminate
 the rivers. Training can be provided by the Department of Fisheries and other
 interested donor organizations.
- Processing of wild fruits a number of edible wild fruits are available in Chiawa
 GMA. The most commonly traded are masau (Ziziphu mauritiana) and mauyu

(Adisona digitata fruts). When processed these fruits can be turned into jams, jellies and various kinds of beverages.

- Bee-keeping is a conservation friendly enterprise because it encourages preservation of trees to enable bees to produce honey.
- Cultural and heritage sites within Chiawa GMA have a potential of developing businesses around them and then marketing them.

In conclusion, this chapter presented analyses of results formed on the objectives. The analysis of the results followed the procedure outlined in section 3.8. Results were presented in table and graphical distribution for easy interpretation in the following arrangement:

- The perceptions of respondents on economic impacts of nature-based tourism and implications for households;
- The perceptions of respondents on the effects of benefits for conservation of natural resources;
- The perceptions of respondents on constraints limiting household participation in tourism business;
- The perceptions of respondents on the future economic activities that seek to improve living standards in Chiawa GMA.

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CHAPTER 5: DISCUSSION AND CONCLUSION

5.1 Introduction

As initially stated in chapter one (section 1.4.1), this chapter discusses research results established in chapter four in the context of the study's objectives. Therefore, chapter five is structured in the perspective of the present study specific research objectives. The last part of the chapter forms the conclusion and provides implications and recommendations for future research examination.

5.2 The Perceptions on the Impacts of Nature-Based Tourism and Implications on the livelihoods in households of Chiawa GMA

5.2.1 Perceptions on the Impacts of Nature-Based Tourism in Chiawa GMA

The increase of nature-based tourism activities in Chiawa GMA raises the question as to whether the mushrooming of nature tourism has any impact on the welfare of the communities and households living therein. Among households living in the GMA, the majority of the households in Chiawa in all VAGs appear not to derive direct benefits from nature tourism. The GMA has no presence in the community-driven tourism enterprises apart from the cultural village centre, located in Mugulameno VAG. The cultural village centre was established by the African Wildlife Foundation in collaboration with the Chiawa community with the aim to promote cultural tourism. It is perceived that increased demand for art and crafts and other nature-based products may provide new enterprising opportunities to enable households in Chiawa to boost rural income and increase demand for locally manufactured products. According to Soda (pers comm., 2009), there is limited interaction between the host community and tourists, as a

result this has created limited tourist spending. Currently, only four lodges take clients to the cultural village centre.

It was established that resident perceptions of nature tourism benefits in Chiawa though at a low level has stimulated economic growth through job creation, community projects and selling of handicraft at the cultural village centre. Among households, employment creation was found to be the most preferred benefit type (see section 4.2.1, figure 4). Wainwright and Wehrmeryer (1998) reported similar results in their study of integrating conservation and development in GMAs. This is so because employment is the only opportunity for personal and direct benefits but mostly in menial jobs. It was established that the tourism industry in Chiawa GMA and LZNP employed residents of Chiawa GMA, residents outside Chiawa GMA and foreigners. However, the majority employed were residents of Chiawa GMA (see section 4.2.1, table 2). Luvanga and Shitundu (2003) in their study in Tanzania found similar results that a significant number of Tanzanians in the tourism industry were employed in menial jobs, while foreigners were found holding managerial positions. The uneven distribution of benefits was the source of concern by all households in Chisakila VAG; they claimed that their VAG does not benefit from nature tourism. It was established by the study that areas which are located far from tourism activities had limited access to tourism benefits compared to areas in close proximity to tourism development (see section 4.2.1, figure 5); this is consistent with AWF (2007) on the distribution of employment opportunities in Chiawa. Gillingham and Lee (1999) in their study of wildlife benefits to the community found similar results on communities along the Selous Game Reserve in Tanzania. In addition, in terms of gender and employment opportunities, the existing jobs in lodges favour men over women. In fact there is no evidence of safari lodges employing the women from Chiawa apart from "whites" employed in managerial positions. It is imperative that the CBRNM should develop a policy that will encourage equal opportunities in terms of employment for men and women in VAGs.

5.2.2 Perceptions on the Implications of Nature-Based Tourism on Household

What are the implications of nature tourism benefits on households of Chiawa GMA? Both positive and negative perceptions exist among households in Chiawa GMA on the economic implications of nature tourism. This study confirmed the contribution of the theory on the two-factor structure dimension in perceptional research (Haley et al., 2005). The majority of the communities have noted an improved living standard in households engaged in tourism employment except for Chisakila residents where the majorities have negative perceptions since nature tourism benefits are confined to VAGs in close proximity to tourism development activities. Similar findings were obtained from a question on the overall perceptions of Chiawa residents on the impact of nature tourism (see section 4.2.3., figure 7). Furthermore, a statistical test was carried out between the two variables. Residents perceived impact on livelihood and residents overall general perception were found to be statistically significantly correlated at the 1 percent level (r = 0.93; P = 0.000). This evidence correlates with Wang et al. (2006), Esu (2008), Aref (2009) and Sharma and Dyer (2009) in reflecting that the resident's perception is influenced predominantly by benefits derived from tourism. This is also consistent with the findings of Jackson (2008) that residents are willing to support tourism provided benefits exceed cost. These findings support the social exchange theory which suggests that host communities will support tourism development provided the development brings benefits which offset cost (Haley et al., 2005; Bender et al., 2008; Aref, 2009).

5.2.3 Examined Influential Factors in Perceptional Research

In understanding factors that influence perceptions of household rather than the social exchange theory, selected demographic variables were tested to reveal how identified variables influence household perceptions on nature-based tourism impacts. It was established that ethnicity was found to be a useful factor that influenced the perceptions of Chiawa residents (see table 3, section 4.2.4). The Goba people are indigenous to the Chiawa GMA. Other analyzed variables include gender, age and length of stay, education and spatial distribution of respondents. It was established that analyzed variables had no significant impact on respondents' perceptions (see section 4.2.4, tables 4, 5, 6 and 7).

Thus, they were not useful predictors. These findings are consistent with Tatoglu et al. (2000), Wang et al. (2006), Bender et al. (2008), Esu (2008) and Cooper (undated) on age and gender. Other studies found length of stay of residents to have a significant impact on respondent's perception (Haley et al., 2005; Cooper, undated). However, Tatoglu et al. (2000) in their study found education to be a useful predictor of perception. Spatial distribution of respondents in VAGs had no influence on perceptions. However, Haley et al. (2005) found spatial distribution in their study of Bath in UK to have an impact on how residents perceived tourism developments. Residents close to tourism development were found to be much more concerned about development as opposed to residents located far from tourism development.

In summary, among households, very few households directly access nature-based tourism economic benefits. Consequently, its contribution to revitalize rural economic growth is insignificant. Among the effects of economic benefits, employment was found to be significant. However, uneven distribution of available benefits is a reality and it had an impact on household perceptions. Positive perceptions were stimulated by households engaged in tourism employment whereas negative perceptions were influenced by lack of access to economic benefits.

5.3 Perceptions on the Effect of benefit towards Conservation of Natural Resources

This section focuses on the perceptions on effects of economic benefits of nature tourism on households on support towards conservation of nature resources. It tries to answer the question, if households derive benefits from tourism in Chiawa and the adjacent National Park, are the locals willing to support conservation initiatives to ensure that resources in the two areas are managed sustainably? The majority of scholars have reported and accentuated the need to integrate social ecology in the management of nature resources if they are to survive (Lewis and Carter, 1993; IIED, 1994; IUCN, 2001; Sekher, 2003). This is critical taking into consideration that tourism is anchored around wildlife in the GMA and LZNP.

5.3.1 Perceptions on Local Community Support towards Conservation of Natural Resources

As earlier stated, Zambia Wildlife Authority and the community through the Community Resource Board share management responsibility and revenue generated from non-consumptive and consumptive use of wildlife in Chiawa GMA. Firstly, the levels of awareness among households living in Chiawa GMA on conservation initiatives such as the CRB/VAG are used as a proxy for involvement of households in CBNRM. It was established by the present study that there are households which are aware and those that are not aware of the existing conservation initiatives in the GMA. However, the level of awareness among household is fifty seven percent (section 4.3.1, figure 9). Spatial distribution of household in VAGs illustrates insignificant number of households that directly participates in CRB/VAG activities. Households that participate in CRB programs were not found to have an upper hand in terms of access to nature-based economic benefits. Similar results were reported by Hamilton et al. (2009) in their recent paper, they found that households that participate in CRB programs had no comparative advantage in accessing tourism benefits around Lower Zambezi National Park.

Secondly, the perceptions of households on the impacts of the CRB on conservation of natural resources in Chiawa GMA were examined. The study revealed that a two-factor structure dimension exists among households on the effects of the CRB. Negative perceptions were the most prevalent as illustrated by figure 11 in section 4.3.2. VAGs that had the majority of households with negative perceptions include Chisakila, Gotagot and Chiawa. However, in the case of Chisakila and Gotagot, this is not a surprising result since most of the households had limited and to some extent no access to economic benefits derived from nature-based tourism as illustrated by figure 3 (section 4.2.1). This evidence is in line with the social exchange theory. In VAGs that appear to access economic benefits, people have positive perceptions on the impacts of the CRB on resource protection see (figures 5 and 6, section 4.2.1).

5.3.2 The Perception of the Impact of Human Wildlife Conflicts in Chiawa

The interaction of human and wildlife in Chiawa GMA is a reality (Stanton, 2004). The study revealed that the majority of households (98 percent) experience encounters of animal conflicts. This is not a surprising result considering the fact that most cultivation is practiced along the banks of the Zambezi and Kafue rivers with high densities of crocodile, hippo and elephants. Conflicts arise when problematic animals destroy crops in people's land. The most common form of wildlife incident involves elephant's destroying crops or attacking people. Hippos are known for destroying crops along the banks of the Zambezi and Kafue rivers. Most respondents expressed frustration due to the persistence of this interaction that poses a threat to food security in Chiawa considering that smallscale farming is the major livelihood strategy adopted by households. Furthermore, the study also examined the relationship between response on HWC and perceptions on support of conservation using Pearson correlation. This study established that the effects of HWC had no influence on households support towards conservation. However, this might not be a problem at present but in the near future if proper systems are not introduced it will be. It is envisaged that it will emerge as a factor in influencing community perceptions on the conservation of nature. Currently, the Wildlife Act has no provision for compensation regarding loss of property, injury and threat human life caused by wildlife.

However, predictably, on the assumption of the significant effects of wild animals on household food security, one would assume that the people would have negative perceptions towards wildlife. The people of Chiawa in this study confirmed that they would not feel good if wild animals were translocated from Chiawa (section 4.3.4, figure 17). Despite the massive threat to human life and property, the people of Chiawa were found to have special attachments towards wildlife. They were found to be willing to coexist with wildlife claiming their coexistence dating back from time immemorial. These finding are in line with Sirakaya et al. (2002) cited by Haley et al. (2005). They reported that personal attachment and values attached to natural resources had influence

towards the perception of residents. It is put forward that, this evidence is consistent with social representation theory.

5.3.3 Private Sector Perceptions towards Local Community support on Conservation of Natural Resources

Private sector perceptions on host community support towards conservation of natural resources was found to be fair and promising, fair was the most favourable response followed by promising as suggested by figure 20, section 4.4.2. In terms of tourism and conservation, the future of tourism is promising due to the abundant natural resources endowed in Chiawa GMA and LZNP coupled with the willingness exhibited by the people of Chiawa to coexist with wildlife considering the negative impact posed by problematic animals on peopled fields.

Similarly in this section, demographic variables were also analyzed using cross tabulation/chi–square to determine whether there was relationship between the resident's perceptions on conservation support and demographic variables. This study revealed that there is no significant relationship among tested variables. This implied that demographic variables analyzed had no influence on the perceptions of Chiawa community on support towards conservation of nature resources in Chiawa GMA and LZNP.

This section is summarized with response to the second objective the economic effects of nature tourism in Chiawa had no influence on how households support conservation of natural resources. Limited and uneven distribution of tourism economic benefits was found to have positive impacts on households. In addition, the people of Chiawa perceive CRB/VAG arrangements to have little impact on conservation. Despite the reality of human-wildlife interface, the study found that the interaction had no influence on household perceptions; consequently, the people of Chiawa claimed that they were willing to continue to coexist with animals.

5.4 Perceptions on the Constraints Limiting Household Participation in Tourism Businesses

The section focuses on the third objective of the study, it tries to answer the questions: Do the households in Chiawa GMA participate in nature tourism and if not what could be the nature and extent of constraint that limit household's participation in tourism entrepreneurships? Do the participating households get any extra benefits? Tourism in Chiawa, as earlier stated, is based on wildlife. whites as owners of tourism entrepreneurships dominate the industry. Therefore, this implies that the host community owns none of the entrepreneurships. The people of Chiawa do not appear to be taking full advantage of easy access to land acquisition and rich biological and cultural resources found in Chiawa GMA. Land ownership in GMAs in Zambia is entrusted in the local traditional leadership. For that reason, the people of Chiawa have both strengths and opportunities to source for meaningful partnerships to venture into nature-based tourism entrepreneurships. In such partnerships, the community can provide land and the partner provides financial resources for development of tourist facilities such as safari lodges. Spanceley (2003) emphasized that tourist host community that own land are properly positioned to actively participate in tourism industry. This initiative can encourage household participation and return benefits within the community. In contrast with the current scenario in which land is now owned by whites on title for 99 years, this will continue to disadvantage and deny potential benefits to the community.

5.4.1 Perceptions on the Factors that limit Household Participation in Tourism Business: Local Community and Private Sector Perspective

The study established four factors that limit household participation in nature-based tourism entrepreneurship. Lack of startup and working capital by households was the most frequent factor limiting participation followed by lack of knowledge to establish and manage tourism business. The other factors include lack of equipments and lack of tourism source markets. During focus group meetings, it was revealed that the community in the past had attempted to engage in community-based tourism by establishing a community campsite. The campsite was closed owing to low inflow of

tourists as a result of inadequate marketing. Wildlife products are demand led and require proper marketing to attract tourists.

Conversely, the private sector revealed three major factors regarding the challenges inhabiting household participation in nature-based tourism. The majority indicated that the people of Chiawa lack interest and understanding of establishing tourism entrepreneurships. The other impediments were lack of start-up and working capital and lack of support from government institutions responsible for tourism development as illustrated in section 4.4.2 in figure 16.

In this section, the objective of the study was to establish the nature and extent of constraints limiting household participation in nature-based tourism. The study established the challenges impeding household participation in tourism entrepreneurs. Local community and the private sector identified lack of finance, lack of know how and lack of interest on the part of the local community on the importance of tourism development. To close up the identified gaps, the community should envisage promotion of partnerships in which they invest land and the investors provide financial resources. Alternatively, the community can adopt the concept of community-based tourism (CBT) is tourism managed and owned by the community, for the community. By so doing, this could encourage household participation and return meaningful benefits to the community.

5.5 Opinion of Respondents on Economic Expectations

Communities were asked to give information on the activities that can uplift livelihoods of Chiawa community. Using predetermined answers, the study found that the people of Chiawa believe that crop farming is the major economic activity that is likely to better people's lives followed by tourism. However, as a result of low rainfall and the high incidence of crop damage by problem animals such as elephants and hippos, yields are generally low. Furthermore, the GMA lies within a belt that is prone to tsetse infestation hence the community cannot rear large herds of cattle, and thus suffer from lack of

draught and have to rely on hand tools. The failure of agriculture to provide sustainable livelihoods is considered as a major factor contributing to rural poverty. Therefore, nature-based tourism is the best land use option for Chiawa residents. In additional, during focus group meetings, a number of enterprises were identified and could be started in order to promote the livelihoods and generate income for the local community. See table 11.

5.6 Conclusion

This section is divided into two subsections. The first section presents conclusions of the present study based on the objectives of the research. The main objective of the study was to examine residents' perceptions of impacts of nature based-tourism and its implications on the livelihood and conservation upon which tourism is anchored.

The unit of analysis was the household and the individual tour operator. The empirical findings of the present study are compared with the existing evidence to deepen understanding. The second section provides future research implications.

In conclusion, among households, very few directly access natured-based tourism economic benefits. Generally, the perceived economic benefits trickles down to the community are far too insignificant to revitalize rural economic growth). Both positive and negative perceptions exist among households in Chiawa on the perceived impacts of nature tourism. In this study, positive perception was stimulated by household engaged in tourism employment whereas negative perception was influenced by lack of access to tourism benefits. This finding has been supported in line with the social exchange theory. Limited and uneven distribution of tourism economic benefits was found to have positive impacts on the household. This research concludes that the distribution of tourism benefits has significant relationship. Areas perceived to receive tourism economic benefits tend to have positive perceptions as opposite to those that do not. Level of attachment and value placed on wildlife was found to be a significant factor that influenced the way people perceive their assets on which tourism is anchored. This agrees

with findings in the work of Sirakaya et al. (2003) (in Haley et al., 2005; Chen and Raab, 2009). Among demographic characteristics of respondents, tribe was found to be a useful predictor of perception whereas gender, age, period of stay, education and residents spatial distribution was found not to have influence on residents' perceptions towards nature-based tourism economic benefits and support on conservation. However, this does not disapprove other findings where demographic variables were found useful predictors or influential dimension in shaping residents perception towards tourism benefits. The study also established the challenges impeding household participation in tourism entrepreneurs and suggested measures to address the challenges and encourage their participation.

The majority of people in Chiawa have claimed that crop farming is the only economic activity that can revitalize rural economic growth and improve on household food security and bring other economic developments. However, crop farming in Chiawa faces serious challenges that include low rainfall and high incidents of marauding animals that affect yields. It is therefore urged that if the people of Chiawa will not adopt strategies to address the identified challenges, household food insecurity will continue to prevail.

5.6.1 Implications for Future Research

The host community is a critical component of any tourism system. It believed that the sustainability of wildlife tourism is fundamentally dependent on social exchange theory. Conservationists acknowledge this actuality that local people support is decisive for biodiversity conservation. Therefore, understanding community perceptions in protected area management is imperative. Considering that exclusionist approach towards protected area management bred negative perceptions among residents residing within or adjacent to protected areas, negative perceptions are believed to have exacerbated loss of wildlife, to some extent extinction of certain species of fauna and flora. This being a first perceptional study, it has contributed to the body of knowledge on how the people of Chiawa GMA perceived benefits of nature tourism and effects of such benefits on residents' support towards wildlife conservation.

Several recommendations for further research emanate from the present study, therefore, the following research themes are recommended:

- 1. It will be informative to investigate household tourism income and determine the contribution of nature-based tourism towards poverty alleviation.
- 2. It will be imperative to examine tourism spending within host community and the role of the tourism private sector in poverty alleviation.
- 3. Investigation of community perceptions towards economic, cultural and environmental impacts of tourism on local communities.

CHAPTER 6: REFERENCES

Abdullah, M.B., Sanusi, S.S., Abudul, S.D. and Sawa, F.B. (2007) *Perception of Support Zone Communities Towards the Conservation of Yankari Game Reserve*, Bauchi Satae, Nigeria; Int. Jor. P. App. Scs., 1(2): 49 – 57

Adams, W.M. and Hulme, D. (2001) If Community Conservation is the Answer in Africa, What is the question? Oryx, Vol.35, 193-200

African Wildlife Foundation (2007) Chiawa Game Management Area Socioeconomic report, Karibe

Allen, L.R., Long, P.T., Perdue, R.R. and Kieselbach, S (2001) *The Impact Of Tourism Development On Residents' Perceptions Of Community Life*, University of Colorado

Ap, J. (1992) "Residents' Perceptions on Tourism Impacts", Annals of Tourism Research. 19 (4) 665 – 690.

Ap, J. and Crompton, J. (1993) "Residents' Strategies for Responding Tourism Impacts", Annals of Tourism Research. 32 (1) 47 – 50

Aref, F., Redzuan, M and Gill, S.S. (2009) *Community Perceptions towards Economic and Environmental Impacts of Tourism Communities*; CCSE, Vol 5 No. 7 Asian Social Science, page 130 – 137, *Accessed on* 25th October 2009

Aref, F. and Redzuan, M (2009) Community Leaders' Perceptions towards Tourism Impacts and Level Community Capacity Building in Tourism Development; Journal of the Sustainable Development; Vol. 2 No. 3 page 208 – 213, Accessed on 28th October 2009

Ashley, C., Boyd, C. and Goodwin, H. (2000) *Pro-Poor Tourism: Putting Poverty* at the Heart of the Tourism Agenda, Nature Conservation Perspective

Bender, M.Y., Deng, J., Selin, S., Arbogast, D. and Hobbs, R.A. (2008). *Local Residents' Attitudes Towards Potential Tourism Development*: The Case of Ansted, West Virgina: Proceeding of the 2008 Northeastern Recreation Research Symposium.

Byers, B. (2000). *Understanding and influencing behaviors: A guide*. Biodiversity Support Program, Washington D.C.: World Wildlife Fund.

Berkes, F. (2004) *Rethinking Community – Based Conservation*; Conservation Biology, Volume 18; number 3

Blake, A., Arbache, J.S., Teles, V and Sinclair (2002) *Tourism and Poverty Alleviation in Brazil*, www.unb.br/cet/neticias/

Britton, S.G.O. (1981) *Tourism Dependency and Development; A study of analysis*, Development Studies Center, National University Australia

Borrini-Feyerabend, G., Kothari, A. and Oviedo, G (2004) *Guidelines for Comanaged Protected Areas: in indigenous and Local Communities and Protected Areas: Towards Equity and Enhance Conservation*: IUCN Gland, Switzerland and Cambridge

Butler, R.W. (2006) " The concept of a Tourist Area Life Cycle of Evoluation: Implications for Management of Resources," In Butler R. (ed) The Tourism Area

Life Cycle: Applications and modifications. Channel View publications, Clevedon

Ceballos–Lascrain, H. (1996) *Tourism, Ecotourism, and Protected Areas*; IUCN, Cambridge UK

Chen, S.C. and Raab, C. (2009) *Measuring Residents reaction to Community Tourism Development*: A pilot study of a new conceptual framework, University of Massachusetts Amherst

Cooper, C. (undated) *Residents' Perceptions of Tourism Development – the case of Raglan, New Zealand Chris Ryan,* The University of WAikato Management School, Hamilton, accessed on 16th March 2009

Damm, G.A (2002) *The conservation Game saving Africa's Biodiversity*: Safari Club international African Chapter

Denman, R. (2001) Guidelines for Community-Based Ecotourism Development; WWF International, Ledbury UK

Dent, M (2008) *Protected Area Management: Systems and Approaches; Course Notes Module 3*,. Centre for Environmental and Agricultural Development. University of KwaZulu-Natal, Pietermaritzburg

Dogan, H.Z. (1987) Forms of Adjustment: Sociocultural Impacts of Tourism, Annals of Tourism Research. 16 (2): 216 – 136

Doxey, G. (1975) A Causatuion Theory of Visitor-resident irritants: Methodology and Research Inferances, Travel and Tourism Research Associations Sixth Annual Conference proceeding TTRA, San Diego

Eagles, P.F.J., McColl,S.F and Haynes, C.D.A (2002) *Sustainable Tourism in Protected Area's:* Guidelines for Planning and Management. IUCN, Glad, Switzerland and Cambridge.

Emerson, R.M. (1976) *Social Exchange Theory*; Annual Review of Sociology, Vol. 2: page 335-362, Accessed 28th October 2009

Esu, B.B. (2008). Perception, *Preference and Attitudes of Residents Towards Tourism Development*: A case of Cross River State, Nigeria, Medwell Journals page 42 – 48

Fayissa, B., Nsiah, C. and Tadasse, B. (2007) *The Impact of Tourism on Economic Growth and Development in Africa*; Department of Economics and Finance Working paper Series, Tennessee State University USA

Feldstein, H., Jiggins, J., ed. (1994). Tools for the field: *Methodologies handbook* for gender analysis in Agriculture Kumarian Press, US

Fernandez, A., Richardson, R.B., Tschirley, D. and Tembo, G. (2009). *The Impacts of Wildlife Conservation Polices on Rural Household Welfare in Zambia*; Policy Synthesis Food Security Research Project

Gillingham, S. and Lee, P.C. (1999) *The Impact of Wildlife – related benefits on The Conservation of Local People around the Selous Game Reserve*, Tanzania; Environmental Conservation 26 (3): 218 – 228, Cambridge CB 3B2 3DZ, UK

Ghosh, B.N. (2002) *Scientific Method and Social Research*, Sterling Publishers Pvt. Ltd., New Deihi

Goodwin, H. (2002) Local Community Involvement in Tourism around National Parks: Opportunities and Constraints, Volume. 5 Number 3 and 4 Chathan Maritime, Kent UK

Golafishani, N. (2003) Understanding Reliability and Validity in Qualitative Research, the Qualitative Report volume 8 Number 4, http://www.novaedu/sss/QR/qR8-4/golafishani.pdf (date accessed 17th August 2009)

Haley, A.J., Snaith, T. and Miller, G. (2005) *The Social Impacts of Tourism: A case study of Bath*, UK, Annals of Tourism Research, Vol,32, No 3, *accessed on* 13th October 2009

Hamilton, K., Tembo, G., Sinyenga, G., Bandyopadhyay, S., Pope, A., Guillon, B., Muwele, B., Simasiku, P. and Pavy, J.M (2009). *Economic and Poverty Impact of Nature-Based Tourism*. World Bank, Zambia.

Husbands, W. (1989) "Social Status and Perceptions of Tourism in Zambia". Annals of Tourism Research. 16 (2): 237 – 253.

IIED (1994) Whose Eden, An Overview of Community Approach to Wildlife Management. IIED, UK

IUCN (2005). Benefits beyond boundaries, proceedings of the fifth IUSN Worlds Parks Congress, IUCN, Glad, Switzerland and Cambridge

IUCN (2001 World Commission for Protected Areas Draft Strategic Plan. IUCN, Gland, Switzerland

Jackson, L. A. (2008) Residents Perceptions on the Impacts of Special Events Tourism; Journal of Place management and development; Volume: 1 issue 3, Emerald, accessed on 13th October 2009

Jamieson, W., Goodwin, H. and Edmunds, C. (2004) Contribution of Tourism to Poverty Alleviation Pro – Poor Tourism and The Challenges of Measuring Impacts, www.haroldgoodwin.infor/resources/povertyallivation

Lewis, D. and Carter, N. (1993) Voices from Africa: Local perspectives on Conservation. WWF

Luvanga, N. and Shitundu, J. (2003) *The Role of Tourism in Poverty Alleviation in Tanzania*, Research report No. 03.4, University of Dars es Salaam. *Accessed April* 2009

Mason, P. and Cheyne, J. (2000) Resident's Attitudes to Proposed Tourism Development, Annals of Tourism Research. 27 (2), 391 - 411

Ministry of Tourism Environment and Natural Resources (1998), *Tourism Police of Zambia*; Government Printers, Lusaka Zambia

Ministry of Finance and National Planning, 2006: Fifth National Development Plan, Government Printers, Lusaka Zambia

Moscovici, S. (1961) *La Psychanalyse, son Image et son public*, Paris: presses Universitaries de France

Moscovici, S. (2001) Social Representations: explirations in Social Psychology, ed Gerard Duveen New York: New York University Press.

Neysmith J. (2008) Investigating non-regulatory barriers and incentives to stakeholder participation in reducing water pollution in Pietermaritzburg's

Baynespruit• Environment & Development Thesis, Centre for Environmental and Agricultural Development. University of KwaZulu-Natal, Pietermaritzburg

Nicholas, P., (1991). Social survey Methods: A field guide for Development worker, Oxford, Oxfam.

Nyambe, N. and B.A. Nkhata (2001) *CBNRM Benefits and Cost Sharing: A Case Study of Chiawa District. In Richardson, G. and S. Johnson, editors*: Challenges to Developing CBNRM and Effective Participatory Environmental Policy Processes in Zambia. IUCN Regional Office for Southern Africa, Harare, Zimbambwe. ISBN-0-7974-2360-5.

Pratt, B., and Loizos, P., (1992). Choosing Research Methods: *Data methods for development workers*, Oxfam. Oxford

Reisinger, Y. and Turner, L. (2003) *Cross-Cultural Behavour in Tourism:* concepts and Analysis, Oxford: Butterworth and Heinemann

Roe, D., Ashley, C., Page, S. and Meyer, D. (2004) *Tourism and the Poor:* Analysing and Interpreting Tourism Statistics from a poverty perspective. PPT Partnership London

Sekhar, N. U. (2003) Local People's Attitudes towards Conservation and Wildlife Tourism around Sariska Tiger Reserve, India; Rogaland Research.

Sharma, B. and Dyer, P. (2009) Resident's Involvement in Tourism and their Perceptions of Tourism Impacts; Volume 16 issue 3, Benchmarking; Emerald

Sinclair, M.T. (1998) *Tourism and Economic Development*; A Survey, Journal of Development Studies, Volume 34, issue 5

Spencellay, A (2003) *Tourism, Local Livelihood, and the Private Sector in South Africa*: Case studies on the Growing Role of Private Sector in Nature Resources Management Sustainable Livelihood in South African Research paper 8

Stanton, C. (2004) Faces of the Valley, African Wildlife Foundation Publication

Strasdas, W (undated). *The Ecotourism Training Manual for Protected Area Managers*: German Foundation for International Development (DSE) Centre for Food, Rural Development and the Environment (ZEL) Feldafug and Zschortau, Germany.

Tatoglu, E., Erdac, F., Ozgur, H. and Azakli, S. (2000) *Residents Perceptions of the Impacts of tourism in a Turkish Resort Town*. Online: http://www.opf.slu.cz/vvr/turecko/pdf *Accessed on 13th October 2009*

Tsundoda, T. and Mendinger (2009) *Economic and Social Impact of Tourism on a Small Town: Peterborough New Hampshire*; J. Services Science and Management, 2: 61 – 70. *Accessed 16th October 2009*

Tembo, G., Bandyopadhyay, S. and Pavy, J.M. (2009) *Impact of Nature Resources Conservation Policies on Household Consumption around Zambia's National Parks*. Policy Synthesis Food Security Research Project Zambia:http://www.msu.edu. *Accessed 11th December 2010*

Walpole, M.J. and Goodwin, H.J. (2001) *Local Attitudes Towards Conservation* and *Tourism Around Komodo National Park, Indonesia*, Durrel Institute of Conservation and Ecology, University of Kent, Canterbury, Kent UK

Wang, Y. P., fister, R.E and Morais, D. B. (2006) *Resident's Attitudes Towards Tourism Development A case study of Washingtone, NC*: Proceedings of Northeastern Recreation Research Symposium GTR-NRS-P-14

Wainwright, C., and Wehrmeyer, W. (1998) *Success in Integrating Conservation and Development?* A Study from Zambia; World Development Vol.26 No. 6,pp.933-944; Elsevier Science

Wayakone, S., Shuib, A. and Mansor, W.W. (1997) Resident's Attitude Towards Tourism Development In DONG HAU SAO Protected Area, LAOS, Thai J. For 16: 43-56, accessed 15th April 2009

Welman, C., Kruger, F. and Mitchell (2005) *Research Methodology, Third Edition*, Oxford University Press, South Africa

World Tourism Organisation (2003) *Tourism Vital role on global plan for poverty alleviation. Http: www.hospitalitynet.org*

World Tourism Organization (2004) indicators for sustainable development for tourism destinations. A Guide Book. World Tourism Organization, Madrid, Spain

World Tourism Organisation, (2005) *Tourism 2020 Vision*, Africa, Vol. 1, Madrid, Spain

World Tourism Organization (2006) *Tourism Market Trends: World Tourism Overview and Tourism Topics*. World Tourism Organization, Madrid, Spain

World Tourism Organization (2009) *Indicators of Sustainable Developmentt for Tourism Destination: A Guidebook*; www.unwto.org/pub/doc accessed on 17th June 2009

United Nations Development Programme (2003) Reclassification and Effective Management of the National Protected Area Systems. UNDP, Zambia

United Nations Economic and Social Council (2007) Regional Study on the role of tourism in Socio-Economic Development, UNESC

Yin, R. K. (1984). *Case study research: Design and methods*. Newbury Park, CA: Sage

Yutyunyong, T. and Scott, N. (2009) *The Integration of Social Exchange Theory and Social Representations Theory: A new perspective on residential research*, University of Queensland, Australia. *Accessed 15th October 2009*

Zambia Wildlife Authority (2008) *Draft General Management Plan for Lower Zambezi National Park*: Chilanga, Lusaka

Zambia Wildlife Authority (2008) Draft General Management Plan for Chiawa Game management Area: Chilanga, Lusaka

Zhang, J., Inbakaran, R. J. and Jackson, M. (2006) 'Understanding Community Attitudes towards Tourism and Host-guest interaction in the Urban border region'. Tourism Geopraphies, Vol. 8 no. 2, 182-204

Zhang, J. (2008) *Understanding Host Community Attitudes towards Tourism and Residents-tourist Interaction*: A Socio-Behavioral Study of Melbourne's Urban-Rural Frunge; PhD thesis, RMIT University, Australia

Zucker D. M. (2001) *Using Case study Methodology in Nursing Research*. The Qualitative Report, Vol 6, No. 2.http: www.nova.edu/sss/QR/OR62/zucker.htm, *accessed* 15th August 2009

Appendix I: Consent letter

24th July 2009

Sydney Tembo,
University of KwaZulu-Natal
Centre for Environment, Agriculture
and Development (CEAD),
Private Bag X01,
Scottsville, 3209,
South Africa

Dear Dr. Mr./Mrs./Ms.

Informed Consent Form for: - Study on economic benefit of nature based tourism on the livelihood of Chiawa Community

I am current pursuing a Masters Degree course in Environment and Development specializing in Protected Area Management (PAM), at the University of KwaZulu-Natal, Pietermaritzburg Campus South Africa. The course is divided into two, course work and research. So far I have qualified to proceed to the next and final phase, which is research. As a requirement of this course, my research will study on the economic impact of nature-based tourism in Chiawa Game Management Area. The unit of analysis will be community perception on perceived benefits. Chiawa Game Management Area is a protected area where human being and wildlife co-exist. Nature based tourism is one of the commercial land use option practiced. Chiawa is boarded by Lower Zambezi National Park, which is one of the prime nature based site for Zambia.

From the regional context, Lower Zambezi National Park and Chiawa Game Management Area has been understudied in the subject of tourism. In order to understand the actual output of tourism studies of this nature became inevitable. Therefore, in order

to fulfill the aim of this study, I have developed a questionnaire, which will be administered face to face through interviews. It is hoped that the interview will take approximately 40 minutes. If you are willing to take part in the research process, I shall be very grateful since the data, which you will provide, will be of valuable use to my research. In addition, participation in this interview is voluntary and no payment is expected. As you agree to participate you will be required to fill in declaration form on the next page.

I would like to further notify you on the issue of confidentiality and anonymity when participate in this questionnaire survey. The University of KwaZulu-Natal has a policy on ethical code of conduct that requires that all research students strictly oblige by completing an ethical clearance application form

I will be very grateful if you will be able to assist me with my research during this process. If you will be interested I will be more then happy to make available to you a summary of this report once completed.

Should you require any further information, do not hesitate to contact me or my supervisor on the following contact;

Yours sincerely

Sydney Tembo

Contacts Details;

Supervisor

Dr. Mark Dent

University of KwaZulu-Natal,

Centre for Environment, Agriculture and

Development (CEAD),

Private Bag X01, Scottsville, 3209,

South Africa

Email dent@ukzn.ac.za

DECLARATION

I(full names of p	participant) hereby		
confirm that I understand the contents of this document and the nature of the research project,			
and I consent to participating in the research project.			
I understand that I am at liberty to withdraw from the project at any time, should I so desire.			
SIGNATURE OF PARTICIPANT	DATE		

NOTE:

Potential subjects should be given time to read, understand and question the information given before giving consent. This should include time out of the presence of the investigator and time to consult friends and/or family.

Appendix II: Household Questionnaire

An examination of the economic impacts of nature based tourism on community livelihoods and on conservation (The case study of Chiawa Game Management Area)

Interview questions for Household

	1
1.	Demographic Information
	• Village Name:
	• Number of household:
	• Name of interviewee:
	• Tribe:
	• Age: Sex:
	• Marital status () 1 = Married 2 = Singe 3 = Widowed 4 = Separated/Divorced
	• Level of Education () 1 = Primary 2 = Secondary 3 = College/University
	• How long have you stayed in the village?:
	• How big is your household? Adults () Children ()
2. \$	Social Economic Activities
1.	What is your main occupation? () $1 = \text{Farmer } 2 = \text{Business } 3 = \text{Tourism-}$
Pho	otographic 4 = Tourism – Hunting 5 = Fisherman = 6 = Logger 7 = Civil service 8 = er (specify)
Bu	What is the main source of income for the household? () 1 = Agriculture 2 = siness 3 = Fishing 4 Self employment 5 Sale of Timber 6 = Civil service 7 other ecify)
3. 1	Kindly, indicate the number of your family employed in the following activities:

Business Male () Female ()
Agriculture Male () Female ()
Safari hunting Male () Female ()
Camps/lodges Male () Female ()
Other Male () Female ()

- 4. In your opinion, which of the following activities provides the best opportunities for future economic development for Chiawa? () 1 = Safari hunting 2 = Camps/Lodges 3 = crop farming 4 = Fishing 5 = Small business 7 = other (specify)
- 5. Overall, how do you rate this community as a place live in? () 1 = Very good 2 = Good 3 = Okay 4 = Not good 5 Bad
- 6. Does nature based tourism presently benefit you in any way? () 1 = Yes 2 = No
- 7. If yes, please rank the main benefits with "1" being the most preferred use: ()

 1 = source of employment 2 = community development projects 3 = sale of farm produce

 4 = sale of souvenirs
- 8. Do you experience human wildlife conflicts in this area? () 1 = Yes 2 = No
- 9. If yes, what control methods do you apply to mitigate human wildlife conflicts?

 1 = Scaring 2 = Fencing 3 = Firing in the air by Wildlife Authority 4 = Chiri Fencing
- 10. How effective are these methods? () 1 = Very effective 2 = Effective 3 = Not effective
- 11. In your opinion, do you think tourism can address some of the issues associated with wildlife problems? () 1 = Yes 2 = No
- 12. If yes how? () 1 = Source of employment 2 = alternative income 3 = other

- 13. Have you noticed any changes in people's livelihood in your community as a result of nature based tourism development as land use option? () 1 = Yes 2 = No
- 14. If yes how do you perceive these changes? 1 = Positive 2 = Negative

Conservation awareness initiatives

- 15. Do you have conservation initiatives in your area? () 1 = Yes 2 = No
- 16. Are you involved in any conservation initiatives? () 1 = Yes 2 = No
- 17. If yes, how are your involved? 1 = sensitizing community 2 = communal development programs 3 = other specify
- 18. Have you noticed any changes in your community as a result of these initiatives? () 1 = Yes 2 = No
- 19. If yes how do you perceive these changes? 1 = Positive 2 = Negative
- 20. How are the programs helping out the community to understand the importance of Conservation in Chiawa and LZNP? 1 = Raise awareness 2 = gain support for conservation 3 = Community to realize benefits
- 21. In your view, how would you fee if the wild animals were removed? () 1 = Very Good 2 = Good 3 = Not good

I thank you for taking time to participate in this research interview

Appendix III: Tour Operator's Questionnaire

Interview questions for Safari Operators/Business persons

Safari Operators/Business Persons Profile

1.	Name of operator/business:				
2.	Position of interviewee in the company:				
3.	Contract details:				
	Address:				
	Tel:				
	E-mail:				
4.	State your immigration status:				
	1 = Citizen	2 = Established resider	at $3 = \text{Non-resident}$		
5.	What is the nature of you	or business? () $1 = Ph$	notographic tourism 2 =		
	Safari hunting 3 = Comm	nercial Farming 4 = Sm	all business		
6.	How long have you been	operating in this area?			
	1= 10 years and above	2 = 5 years and abov	e $3 = 5$ years and less.		
_					
7.	• • • • • • • • • • • • • • • • • • • •	•	= local community () 2 =		
	outside Chiawa () 3 =	Foreigner ()			
8.	How much taxes does yo	ur company nay as a res	gult of your business		
0.	operating annually:	ur company pay as a res	ant of your ousiness		
		2 = \$20,000 and 10	ess $3 = \$5,000$ and less		
		2 = \$20,000 and is			
9.	State the means of how n	nost of your clients get t	o your area of business;		
		,	Public transport		
			•		

10. On which natural and cultural assets (shown below) is your business product based on?

1 = Wildlife

2 = Landscape

3 = Traditional ceremonies

11. Approximately what percentage of your clients are interested in Community/cultural activities:

1 = 60%

 $2 = \le 40 \%$

 $3 = \le 20\%$

12. How often do you market community /cultural activities in your area?

1 = Often 2 = Occasionally 3 = Rarely

13. Have you given any technical assistance (in-kind and/or financial support) to any community tourism activity in your area?

1 = Yes 2 = No

14. Do local communities supply any local goods and services to your tourism business (e.g. crafts, food products)?

1 = Yes often 1 = Yes sometimes 3 = No never

15. What opportunities (e.g. business joint ventures, long term supply contracts, Permanent employment, gain life saving skills, etc.) are there for local Communities in your area to benefit more from tourism directly and indirectly?

Directly

1 = Very high

2 = High

3 = Low

Indirectly

1 = Very high

2 = High

3 = Low

- In your view what constraints from the list below do community tourism activities in your area face? (Tick where appropriate)
 - a. Lack of interest and understanding of tourism;
 - b. Lack of working and start up capital;
 - c. Communities do not see any benefits;
 - d. Lack of support from agency institutions in charge of tourism.
- Estimate the amount of income generated through tourism (revenues/donations) given to local communities through developmental projects?

 $1 = \le $20,000 \text{ per year}$

 $2 = \le $5,000$

 $3 = \le $1,000$

Estimate the number of households in your community benefiting from any Tourism development projects:

 $1 = \le 100$

2 = < 50

 $3 = \le 20$

19 In your view, do you think nature based tourism has positive impact on household livelihood?

1 = Yes

2 = No

If yes please specify

20. Lastly, how do you perceive community support towards conservation of natural resources in Chiawa?

1 = Very Promising 2 = Fair

3 = deem

Appendix IV: Check list of questions for Focus Group

- 1. What are the socioeconomic activities taking place in Chiawa?
- 2. Does tourism currently exist in your community?
- 3. What are the most beneficial things natures based tourism has brought to your community?
- 4. How does the community participate in conservation initiatives to nature resources?
- 5. Has nature based tourism provided opportunities for new community owned businesses?
- 6. Are you happy with the current flow of benefits raised from nature-based tourism?
- 7. What is the community general perception towards nature based tourism?
- 8. What are the constraints limiting household participation in nature based tourism