

UNIVERSITY OF CAPE COAST

COMMUNITY-BASED NATURAL RESOURCE
MANAGEMENT AND LIVELIHOOD IMPROVEMENT:
THE CASE OF AMANSURI CONSERVATION AND
INTEGRATED DEVELOPMENT PROJECT (ACID) IN
JOMORO DISTRICT IN GHANA

BY

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DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

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Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

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ABSTRACT

The environment has since time immemorial been useful to human beings. However, demands of development have put a great deal of pressure on the environment to the point that it is undergoing rapid transformation which conservationists consider an unpleasant phenomenon to human beings.

The establishment of protected areas (PAs) became, and is, in fact, still an important global practical conservation tool. PAs exclude livelihood activities because they are incompatible with the conservation objectives of PAs. Although 'walls' are erected around PAs, the environment continues to experience transformation by way of dwindling biodiversity.

Consequently, Community-Based Natural Resource Management (CBNRM) emerged in the 1980s. As an approach to conservation, it advocates the integration of conservation and development. Amansuri Conservation and Integrated Development (ACID) project which is being implemented by the Ghana Wildlife Society in partnership with the Western Nzema Traditional Council in the Jomoro District of the Western Region of Ghana, is guided by the philosophy of CBNRM

Guided by the sustainable livelihood framework, a qualitative research design was used to ascertain the extent to which the ACID project had impacted on the livelihood assets of local residents. Results from the study show that though the ACID project has resulted in income generation, employment opportunities and natural resource conservation, it is playing a complementary role rather than a principal source of livelihoods in the communities.

DEDICATION

To Christopher L. Mensah and in memory of my late Father.

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ABBREVIATIONS AND ACRONYMS

ACID	Amansuri Conservation and Integrated Development
ACNR	Amansuri Community Nature Reserve
BI	Birdlife International
CBNRM	Community -Based Natural Resource Management
CESD	Centre for Ecotourism and Sustainable Development
CI	Conservation International
DFID	Department for International Development
FC	Forestry Commission
GoG	Government of Ghana
GWS	Ghana Wildlife Society
IBAs	Important Bird Areas
IMF	International Monetary Fund
ITES	International Ecotourism Society
IUCN	World Conservation Union
MA	Millennium Ecosystem Assessment
MEA	Multilateral Environmental Agreements
MoTDR	Ministry of Tourism and Diasporan Relations
MSDR	Mamiraua' Sustainable Development Reserve
NGO	Non-Governmental Organisation
PA	Protected Area
PHC	Population and Housing Census
SLF	Sustainable Livelihood Framework
SSEDSF	Small Scale Enterprises Development Support Fund
UN	United Nations

UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WB	World Bank
WNTC	Western Nzema Traditional Council
WRI	World Resource Institute
UNWTO	United Nations World Tourism Organisation
WWF	World Wildlife Fund for Nature

CHAPTER ONE

INTRODUCTION

Background to the study

The environment is fundamental to the sustenance of human life on earth. Environment is used here to describe an encompassing concept which includes four components: the atmosphere (air), hydrosphere (water), geosphere (land, minerals, and fuels), and biosphere (plants and animals). For the purpose of this study these components are loosely referred to as environmental resources or natural resources.

Humans depend on these environmental resources for their well-being. The environmental resources provide services ranging from the provision of food, water, timber, fibre and genetic resources to the regulation of water quality, waste treatment, soil formation, pollination, nutrient cycling as well as cultural services such as recreation and aesthetic enjoyment (United Nations Environment Programme (UNEP), 2006a).

The dependence on resources and products from the environment is even more critical to the sustainable livelihood of rural inhabitants (United Nations (UN), 2005). It is claimed that 4 billion people—mainly Indians, Chinese, Latin Americans and Africans who live on subsistence basis meet their basic needs directly from the environment (Epler Wood, 2005, citing Stuart, 2005). In addition, rural households often derive a significant share of their income from

natural resources (Department for International Development (DFID) et al., 2002).

The reliance on natural resources is not limited to rural communities. It is said that the economies of developing countries overwhelmingly rely on land-based resources for everything, from economic, to foreign exchange and debt payment to basic subsistence. The export of natural resources remains a major factor in the economies of many countries in Africa (UNEP, 2006a). These natural resources include timber, gold, crude oil, copper, cotton, among others. The export of these commodities generates substantial foreign exchange to the economies of developing countries especially in Africa.

Naturally, from the foregoing analysis, the environment is experiencing tremendous pressure and transformation due to the excessive and sometimes unbridled human exploitation; environmentalists consider this situation to be detrimental to human existence. The literature on environment and development is inundated with innumerable studies, reports and assessments that validate the assertion that man is transforming the environment.

The recent Millennium Ecosystem Assessment (MA) report (2005) indicates that degradation in ecosystems and their services, caused by human activities, has given rise to unprecedented transformations in ecosystems and losses of biodiversity. The Millennium Ecosystem Assessment report further stated that more land was converted to cropland in the 30 years between 1950 and 1980, than in the 150 years between 1700 and 1850. The Report concluded that as much as 30 per cent of mammal, bird and amphibian species are threatened

with extinction (UNEP, 2006b). Consequently, grave concerns have been expressed about the rapid rate of environmental transformation.

Lowenthal (1990) traces the roots of modern concerns about environmental transformations to the 18th and 19th centuries. The concerns have been expressed in the works of several authors including Malthus (1803), Marsh (1864) and Thomas, Jr. (1955). Beside these, worldwide studies of human-induced environmental transformation have increased since the 1960s. Turner, II et al. (1993) enumerate 17 global environmental assessments published in English between 1969 and 1987. Prominent among these studies are paradigm-breaking books and articles by Meadows (1972), Carson (1962) and Hardin (1968).

The environmental discourse is, however, polarized between the so-called 'Neo-Malthusians' or 'pessimists' on one hand, and Optimists or 'cornucopians' debates. The Meadows (1972), Ehrlich (1968), Hardin (1968), Carson (1962) among others, belong to the pessimist divide. The assessments of the 'pessimists' on the state of the global environment are rebutted by the 'optimist school of thought': Cole et al. (1973) and Simon (1980) inter alia as lacking credibility and challenge the predictions on the basis of statistical and data flaws.

Nevertheless, these assessments have galvanized individual countries and the international community into action (UNEP, 2002). Many international conferences and summits have been organised to promote sustainable environmental management. For instance, the Rio Earth Summit of 1992 and the UN Conference on the Human Environment, held in Stockholm in 1972 are a few of such global gatherings.

According to Mowforth and Munt (1998) one significant outcome of these congregations was the signing of agreements and the emergence of international and supranational bodies that focused on the environment. Some of the multilateral environmental agreements (MEAs) are, the Ramsar Convention (protecting wetlands of international importance), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the United Nations Convention to Combat Desertification (UNCCD) (UNEP, 2006a). The MEAs provide a framework for global and national environmental policy formulation and implementation.

It is said that Ghana's socio-economic development and growth in the past had been achieved almost exclusively at the expense of the physical and non-physical environment (Government of Ghana (GoG), 2002a). The economy of the country depends largely on the export of natural resources. For example, in 2004, earnings from the exports of cocoa, gold and timber products to the Ghanaian economy amounted to \$1,045.0 million, \$838.7million and \$211.7 million respectively. Agriculture dominates Ghana's economy; it constitutes 40 per cent of the country's Gross Domestic Product (GDP) and over 60 per cent of employment (GoG, 2006).

Furthermore, most rural dwellers in Ghana still rely heavily on their small farms and what the environment provides—bushmeat, fruits, fuel wood, charcoal, material for household goods and shelter, timber, medicines, fish, edible and usable vegetable. Sometimes, however, rural dwellers sell surpluses at the roadside to people who live in the cities (Forestry Commission (FC), 2005).

Thus, the increasing pressure from agricultural expansion, mining, timber extraction and other socio-economic factors have negatively impacted on the biological resources of the country. Hunting within and outside wildlife protected areas and forest reserves threatens several species, particularly primates, with local extinction (GoG, 2002a citing Conservation International-Ghana, 2002). The country has lost approximately 79 per cent of its forest cover since the beginning of the 20th century. Forest cover declined from 8.2 million hectares at the beginning of the 20th century to 1.7 million hectares at the beginning of 21st century. Environmental resource degradation arising out of mining and manufacturing activities has been on the rise (International Monetary Fund (IMF), 2006). Within the framework of international environmental agreements, the country has adopted measures to promote sustainable environmental management.

Consequently, Ghana has ratified many of the MEAs relating to the environment and these are further complemented by legislation. It is estimated that between 1972 and 1992 the country signed 26 of such MEAs (GoG, 2002a). These efforts provide the framework for specific actions such as research on biodiversity, protected area management, ecological restoration and management systems as well as environmental education.

Many conservation approaches have been used to mitigate the rapid environmental transformation. One of such approaches that have emerged in the conservation narratives is community-based natural resource management (CBNRM). CBNRM has been explained as a process whereby local people and communities organise themselves and play a central role in identifying their

resources and their development priorities, and in implementing natural resources management activities (World Bank, 1995). The critical goal of this new approach is to meet conservation and development goals of people whose livelihoods depend on natural resources.

Statement of Problem

In the 1980s and 1990s, CBNRM dominated the conservation literature and it has since evolved to become an important global conservation approach, especially in developing countries. Its appeal in Africa, predominantly in East and Southern Africa, has been phenomenal. Projects such as Communal Area Management Programme for Indigenous Resources (CAMPFIRE) in Zimbabwe and Administrative Design for Game Management Areas (ADMARE) in Zambia are well known examples and have motivated other programmes in Africa (Bandyopadhyay et al., 2004 citing Newman and Webster, 1993). The increasing global interest in CBNRM is explained by the interplay of several factors.

First, protected area management systems have proved inadequate in ensuring sustainable utilisation of natural resources (Barrow and Fabricius, 2002). Secondly, the Brundtland Commission, the United Nations Conference on Environment and Development (UNCED) Conventions, and Agenda 21, as well as advocacy and actions of civil society groupings, motivated African countries including Ghana to make a fundamental break with the environmental approaches that had developed during the colonial era to adopt CBNRM (UNEP, 2006a). Thirdly, CBNRM gained attention due to the disenchantment with the results of large-scale, capital-intensive, and centrally planned conservation and

development projects that excluded local populations from resource consumption (Kumar, 2005 citing Horowitz and Painter, 1986).

CBNRM has been extensively promoted in recent years as an approach for pursuing biological conservation and socio-economic objectives (Kellert et al., 2000). Bandyopadhyay et al. (2004) opined that CBNRM projects try to meet at least two complex goals: first, conservation of nature; and, secondly, economic empowerment of rural households. CBNRM projects are seen as a means to increase flows of benefits to local people and an incentive to conservation. It is further anticipated that hostilities to conservation, common with protected area management system, will be minimised through CBNRM.

The Amansuri Conservation and Integrated Development project (ACID) is a CBNRM project being implemented by the Ghana Wildlife Society (a Ghanaian conservation NGO) in collaboration with the Western Nzema Traditional Council (WNTC) in the Jomoro District in Western Region of Ghana. It is guided by the assumptions of CBNRM. The project is aimed at conserving the Amansuri Wetland ecosystem while enhancing local development through the promotion of ecotourism as an appropriate land use practice compatible with sustainable natural resource use.

The ecotourism component of the project relates to the promotion of tourism based on the scenic beauty and natural attraction of the area, the historical site of Fort Appolonia, and the popular stilt village of Nzulezo to generate local development as well as enhance the conservation of the wetland ecosystem. The development goal of the project, as summarized in the project document, states that Ecotourism and other income generating services and

occupations, based on a well functioning (wetland) ecosystem, scenic beauty and cultural richness, will have developed. Tourism services and related occupations will have contributed to the socio-economic development of the project area. The process described here foresees the project having a catalytic role (GWS, 1998).

In theory, CBNRM projects such as ACID are expected to promote local development which encourages conservation. This expectation is strongly shared by community members, implementers and sponsors of the ACID project. On the part of the communities, the Project will provide employment for the people, enhance business and generally result in local development. Also, for sponsors, the project will provide incentive to communities to participate in sustainable natural resource management activities. But to what extent is the ACID project meeting the expectations of local development and conservation since its inception in the year 2000?

A mid-term review of the Project in 2002 concluded that on one hand, the main benefits till present have been the employment generated by the project. Two villages also indicated that they have been able to accrue substantial amounts in their community accounts as a result of tourist fees collected by the project (Lanting, 2002). On the other hand, the mid-term review failed to answer the “big picture” question of the wider impact of the project on the livelihoods of households such as access to assets, livelihood strategies and outcomes. Consequently, the present study meant to investigate the wider questions of the ACID project as well as present an opportunity to unpack and assess some of the bundle of assumptions about CBNRM in general. The study further sought to find

out whether CBNRM is likely to achieve the livelihood improvement goal of the ACID project.

Specifically, the study aimed at providing answers to the following questions:

1. How has the ACID project impacted on the livelihood assets of local residents?
2. How are the strategies and mechanisms instituted to realize the development objective of the project working?
3. How has ecotourism evolved in the project communities since the commencement of the ACID project?

Objectives

The overall aim of the study was to use ACID to evaluate CBNRM as a conservation and local development tool. The specific objectives are to:

1. Assess the outcomes of the ACID intervention on the livelihoods assets of local residents;
2. Examine visitor patterns and dynamics of the eco-tourism component of the ACID project in relation to impacts on livelihood assets of local residents;
3. Assess the contribution of ACID project towards ecotourism development in the project communities; and,
4. Analyse the perceptions of various stakeholders concerning the impacts of the ACID project.

Significance of the Study

CBNRM now attracts considerable international attention as an emerging conservation paradigm with a significant fascination in developing countries. Conservation and development agencies view CBNRM as a panacea to the challenge of harmonising conservation and local development objectives. This notwithstanding, its practical implementation frequently falls short of expectation thereby attracting many criticisms. While policy statements by major conservation organisations emphasise the necessity of a shift from traditional conservation techniques, evidence to date suggests that, in practice, achievements of the CBNRM concept has been limited (Campbell, 2000). A study of the ACID project will therefore contribute to theoretical knowledge as well as provide empirical evidence on the implementation of the principles of CBNRM.

The capacity of CBNRM to sufficiently accomplish the dual goal of development and conservation engenders some controversy. Proponents of CBNRM contend that there is strong evidence that it can create incentives that foster good ecosystem management and at the same time enhance local development. Others have suggested that conservation linked with development is untenable. Several international conservation organisations as well as some donors question the efficacy of CBNRM (Worah, 2002). According to Salafsky and Wollenberg (2000), successful applicability of CBNRM is site specific and subject to local conditions and dynamics.

Based on the above therefore, the study will contribute to the debate on the practical issues regarding the success of CBNRM in Ghana. The findings will also provide the necessary feedback that will ensure the effectiveness of ACID

project and provide useful lessons that would enhance its replicability, given the increasing appeal of CBNRM in the country. The exploration of the visitor expenditure pattern and activity dynamics seeks to generate relevant information that would expand activities available to tourists at the Project site. This will enhance the capacity of ACID to fulfil its local development goal and the associated future research and policy implications.

CHAPTER TWO

CONSERVATION AND CONCEPTUAL ISSUES

Introduction

Similar to other ecosystems of the environment, wetlands are threatened by human pressure resulting from varied use. The traditional approach to conserving wetlands and other ecosystems has been through the establishment of protected areas (PAs). Originating from the United States of America and Canada in the 19th century, PAs have spread to almost every corner of the world. Whereas advocates argue that PAs constitute the most appropriate approach to conservation, opponents contend that they have been less effective in conserving global biodiversity. Instead they have brought immeasurable hardship to local people.

In order to amend the perceived shortcomings of PAs, people-oriented narratives crept into conservation practices in the 1980s and 1990s and are spreading in a whirlwind manner in both developed and developing countries. This literature review synthesises the arguments for and against PAs. It also explores the philosophy of CBNRM, its growth, successes and failures. In addition, ecotourism as a strategic component of CBNRM projects shall be reviewed. Finally, the sustainable livelihood framework would also be critically examined.

Protected Areas (PAs)

The commonest approach to conservation of natural resources has been the establishment of PAs. Almost every country possesses some form of protected area. They have been described as the centrepiece of conservation and universally acknowledged as an indispensable core of efforts to preserve biodiversity (Harmon, 2003). Protected areas are often regarded as one of the most viable tools available to nations for securing and conserving environmental capital (Dudley et al., 2005). In the opinion of Hockings and Phillips (1999), they play a cardinal role in conserving natural resources both at sea and on land. Protected Areas are therefore considered as principal mechanisms for advancing conservation policies (Mowforth and Munt, 1998).

The modern protected area management concept is traced to the age long practice of setting aside parts of areas among several ancient societies. Some historians claim that areas were specifically set aside in India for the protection of natural resources over two millennia ago (Eagles et al., 2002 citing Holdgate, 1999). It is further held that in Europe, some areas were protected as hunting grounds for the rich and powerful nearly 1,000 years ago during the renaissance. Nonetheless, the idea of protection of special places is universal: it occurs among the traditions of communities in the Pacific-“tapu” areas and parts of Africa ‘sacred groves’ (Eagles et al, 2002).

Evolution of Protected Areas

The modern protected area movement has its origin in the 19th century, particularly in the emerging “new” nations of United States of America (USA), Australia, Canada, New Zealand, and South Africa (Eagles et al., 2002).

However, the United States is specifically credited to have pioneered the protected area movement following the establishment of Yellowstone National Park in 1872. It is usually seen as the start of the modern protected area movement, being the first time the term 'national park' had been used. However, during the twentieth century the idea spread around the world (Mulongoy and Chape, 2004).

There has been a remarkable increase in the number of protected areas worldwide. Nearly every country has passed protected area legislation and designated sites for protection. The United Nations Environment Programme's World Conservation Monitoring Centre (UNEP/ WCMC) 2003 estimates put the number of protected areas throughout the world at 102,102, covering 18.8 million km², and this constitutes 12.65 per cent of the Earth's land surface. This estimate includes both marine and terrestrial protected areas. However, marine areas make up a very small component – 1.64 million km² or 8.7 per cent, with 91.3 per cent going for terrestrial of the total area protected (Chape et al., 2003).

Protected areas come in different types and sizes. In the opinion of Mulongoy and Chape (2004) PAs exhibit a spectrum of diverse ecosystems: wetlands, deserts, temperate and boreal needleleaf forest, temperate broadleaf and mixed forest, tropical dry forest, tropical moist forest, savannah, shrubland, grassland, marine and wetlands (inland). A majority (58.25%) of protected areas are less than 10km² while two of the world's largest protected areas, namely the Ar-Rub'al-Khali Wildlife Management Area in Saudi Arabia and Barrier Reef Marine Park in Australia, are estimated to be 640,000km² and 345,400km² respectively (Chape et al., 2003).

Defining Protected Areas

The World Conservation Union (IUCN), with considerable expertise in biodiversity protection spanning five decades, defines a protected area as 'an area of land /or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated resources, and managed through legal or other effective means' (World Resources Institute, 2005 citing IUCN, 1994). On the other hand, the Convention on Biological Diversity (CBD) defines it as: 'a geographically defined area which is designated, regulated and managed to achieve specific conservation objectives' (Dudley et al., 2005 citing the Convention on Biological Diversity, 1992).

Both definitions complement each other. However, the IUCN definition seems to be more specific on the inclusion of marine ecosystem because of the tendency to overlook marine ecosystems as protected areas and encourage the establishment of more marine related protected areas as they are currently underrepresented in the list of protected areas globally.

Categories of Protected Areas

PAs have been grouped into different categories. The categorisation is primarily guided by management objectives, accessibility and function. The most referenced categorisation is the IUCN Protected Area categories (1994-classification of protected areas). The scheme gives prominence to biodiversity conservation (see Table 1). It is worth noting that not all protected areas, however, have been assigned the IUCN categories. Protected areas that are not included in the IUCN categories constitute 33.3 per cent (34,036) of the 102,102 protected areas (Chape et al., 2003).

Table 1: IUCN Management Categories of Protected Areas

Category	Description
I. Strict Nature Reserve/Wilderness Area	PA managed mainly for science or wilderness protection.
Ia. Strict Nature Reserve	Protected area managed mainly for science.
Ib. Wilderness Area:	Protected area managed mainly for wilderness protection.
II. National Park	PA managed mainly for ecosystem protection and recreation.
III. Natural Monument	PA managed mainly for conservation of specific natural features.
IV. Habitat/Species Management Area	PA managed mainly for conservation through management intervention
V. Protected Landscape/Seascape	PA managed mainly for landscape/seascape conservation and recreation.
VI. Managed Resource PA	PA mainly for the sustainable use of natural ecosystems.

Source: Eagles et al., 2002: 10

Types of Protected Area Governance Regimes

Protected areas are governed in different ways. The type of governance regime is largely dependent on the exercise of managerial responsibility and ownership. A basic distinction between governance types, which for this discussion is drawn mostly from Mulongoy and Chape (2004) and Borrini-Feyerabend et al. (2004), can be made on the basis of who holds management authority and responsibility and can be held accountable according to legal, customary or other legitimate rights. Four main PA governance types are discussed as follows:

1. government-managed protected areas
2. co-managed protected areas
3. private protected areas
4. community-conserved areas.

Most people are familiar with government-managed protected areas probably because they are the dominant of all protected area management systems. A state body such as a Ministry or Park Agency that reports directly to the government holds the authority and responsibility and also determines the conservation objectives of the protected area subject to its management regime. In this type of governance regime, the government may or may not have a legal obligation to inform or consult other identified stakeholders prior to setting up protected areas and making or enforcing management decisions.

Protected areas managed solely by governments constitute in this regard, conventional approach to conservation. This governance regime has commonly been described in various ways by different authors: 'fortress conservation' (Turner, 2004), and 'fences and fines' approach to conservation (Newmark and Hough, 2000). Mole National Park in Ghana is a typical example of a government-managed protected area.

Co-managed protected areas are also becoming increasingly common, responding to the variety of inter-locked entitlements recognised by democratic societies. Complex processes and institutional mechanisms are generally employed to share management authority and responsibility among a plurality of actors – from national to sub-national (including local) government authorities,

from representatives of indigenous, mobile and local communities to user associations, private entrepreneurs and land-owners. The actors recognise the legitimacy of their respective entitlements to manage the protected area and agree on subjecting it to a specific conservation objective.

Private protected areas have a relatively long history, as kings and aristocracies often preserved for themselves certain areas of land or the privilege to hunt for wildlife. Such private reserves had important secondary conservation benefits. Private reserves include areas under individual, cooperative, corporate for-profit and corporate not-for-profit ownership. Conservation NGOs buy areas of land, which in some cases are large, and dedicate them to conservation.

Community-conserved areas involve governance by indigenous, mobile and local communities. It is the oldest form of protected area governance and it is still widespread. Throughout the world and over thousands of years, human communities have shaped their lifestyles and livelihood strategies to respond to the opportunities and challenges presented by their surrounding land and natural resources. In so doing, they simultaneously manage, modify and often conserve and enrich their environments.

In Community Conserved Areas, authority and responsibility rest with the communities through a variety of forms of ethnic governance or locally agreed organisations and rules. The community's accountability to the larger society remains usually limited, although it may be defined as part of broader negotiations with the national government and other partners, possibly as a counterpart to being assured, for example, the recognition of collective land rights, the respect for customary practices and the provision of economic

incentives. Some communities organise themselves in various ways, including legal forms such as NGOs to manage their resources. This may not change the governance type from community managed to private managed protected area, if the NGO remains accountable to the authority of the respective community.

In Ghana, government-managed protected areas still dominate protected area management systems. However, it is gradually losing its hegemony to co-management arrangement and community conserved areas. This follows the realisation that more biodiversity continue to become extinct in spite of the preservationist philosophy inherent in this type of management. Protected areas have not been too successful in conserving biodiversity. Many governments are currently implementing schemes that turn government managed protected areas into co-managed ones. For instance, in Ghana, the Wildlife Division of the Forestry Commission (the state park agency) has established the Collaborative Resource Management Unit within its institutional structure to create and strengthen local institutions to support wildlife conservation and to build functional linkages between the staff of Wildlife Division, local communities, civil society groups and other stakeholders. Following this, Protected Area Management Committees (PAMCs) have been established as a mechanism to engage other stakeholders in decision making. This concept has been dubbed Community Resource Management Areas (CREMA) (GoG, 2002a, and Forestry Commission, 2005).

Protected Areas in Ghana

The total land area of Ghana is estimated at 240,000 km² of which 17.4 per cent is under protection: forest reserves constituting 11.1 per cent (279), with 5.6 per cent (16) going for wildlife conservation areas and Ramsar coastal wetlands representing 0.7 per cent (5), (Forestry Commission, 2005). The wildlife conservation areas include national parks, strict nature parks, wildlife sanctuaries, resource reserves and biosphere reserves (GoG, 2002a). The estimates of protected areas in the country, however, exclude community protected areas.

Forest reserves in Ghana are managed by the Forest Services Division of the Forestry Commission while the Wildlife Division is responsible for the wildlife and the six Ramsar wetland areas. These two institutions are state agencies acting on behalf of the government of Ghana. The regime of governance of these protected areas therefore coincides with what Borrini-Feyerabend et al. (2004) identify as government-managed protected areas. Consequently, surrounding communities are prohibited by law from crossing the established borders of the protected areas. In like manner, their livelihood needs are considered incompatible with the conservation objectives of the protected areas.

The Ghana Wildlife Society with support from Birdlife International (BI) has identified thirty-six (36) sites in the country as Important Bird Areas (IBAs). The IBAs concept uses birds as indicators of habitat quality. It also provides a practical index of the diversity and condition of an ecosystem on a site-by-site basis. Therefore, it is believed that conserving and managing such sites will result in the wise use of some of the most sensitive, fragile and ecologically rich

habitats in the world. The concept was developed in Europe to advocate the conservation of sites that are nationally and globally important, and considered to be of critical importance for naturally occurring bird population, as well as biodiversity in general.

A majority (34) of the IBAs fall within the protected area systems in the country i.e. wildlife reserves, forest reserves and ramsar sites (GoG, 2002a). However, the Mount Afadjato and the Amansuri wetland were not under protection. The Ghana Wildlife Society has since initiated community-based conservation actions in and around the two unprotected IBAs to manage them as community nature reserves, using the concept of CBNRM (Ntiamoa-Baidu et al., 2001).

Sacred Groves

According to Forestry Commission (2005), there are more than 2000 sacred groves guarded and respected by local people. Sacred groves are indigenous protected area systems common in rural areas in Ghana and other African countries. They are generally small patches of forest lands set aside as sacred lands that could not be touched because they are historically linked to the spirits of dead ancestors. These lands are strictly protected by customary laws.

Sacred groves still exist in many rural communities in Ghana and are known variously as 'Abosompow/Asoneyeso' (shrine), 'Mpanyinpow' (ancestral forests), and 'Nsamanpow' (burial grounds) (Ntiamoa-Baidu, 1995). These sacred groves derived their reverence from the belief systems, norms and traditions of Ghanaian societies. Distinguished dead relatives are accorded the status of ancestors and are therefore venerated in society. These ancestors are

believed to inhabit such burial grounds and ritual sites. And for this reason, such areas are kept as sacred groves.

Resource exploitation activities such as farming, hunting and tree felling are prohibited in these places until certain rituals are performed. Because of this stringent resource exploitation regulation, sacred groves are believed to harbour economically and socially important ecological species (Appiah-Opoku, 2006).

According to Ntiamoa-Baidu (1995), a number of sacred groves have however been destroyed as a result of urban growth and infrastructural development. Disintegration of sacred groves can also be attributed to the gradual loss of influence of traditional beliefs, norms and practices among Ghanaian societies following westernisation and adulteration of the Ghanaian way of life.

Values and Benefits of Protected Areas

The significance of PAs is well-documented in the literature. In the view of Mulongoy and Chape (2004) protected areas play major socio-economic roles. These include: protection of indigenous and local people's traditional lifestyles; source of the world's drinking water; provision of fish breeding grounds and maintenance of fisheries; and the provision of space for people to enjoy recreation. According to Harmon (2003), economically, protected areas are a dynamic component of the world's largest industry, tourism, and are the foundation of one of that industry's fastest-growing sectors 'nature-based tourism'.

Eagles et al. (2002) argue that tourism based on protected areas is a large and growing part of the economy of many countries and that protected area

tourism in the USA and Canada in 1996 had an economic impact of between US\$236 billion and US\$370 billion respectively. Kakum National Park in Ghana is one of the most visited tourist attractions in the country with 73,805 visitors in 2004. Furthermore, the Park is estimated to have generated more than GH¢120,000 (One hundred and twenty thousand Ghana Cedis) in receipts in 2004 (Ministry of Tourism and Diasporan Relations (MoTDR), 2005).

The market for tourism based on the natural environment, wildlife and related pursuits is growing in popularity to the extent that national parks and their local communities are feeling pressures associated with the growing numbers of visitors. It is further estimated that the size of today's world-wide nature tourism market is between 7 and 20 per cent of the international travel market. To extrapolate from the United Nations World Tourism Organisation (UNWTO) forecast of 937 million international arrivals in 2010, a rough estimate of the international nature tourism arrivals for 2010 would be between 65 million and 187 million. Additionally, one must add a substantial number of domestic visitors to natural areas (Eagles et al., 2002).

Harmon (2003) further contends that there is a suite of values of protected areas that are difficult or impossible to quantify. Nevertheless, they lie at the heart of the protective impulse that drives the modern conservation movement. These intangible values are collectively defined as those which enrich the intellectual, psychological, emotional, spiritual, cultural and/or creative aspects of human existence and well being.

Protected Areas and Surrounding Communities

In spite of the copiously documented values and the well-elucidated conservation benefits, protected areas are consistently criticised for impoverishing and denying surrounding communities of critical resource such as arable land and hence their livelihoods. According to Borrini-Feyerabend et al. (2004), protected area approach to conservation has tended to see people and nature as separate entities thereby excluding human communities from areas of interest, prohibiting their use of natural resources and seeing their concerns as incompatible with conservation. Though protected areas corresponding to IUCN categories V and VI are assumed to accommodate human communities, more prestige seems to have been attached to those designed to exclude surrounding communities (usually corresponding to IUCN categories I, II and III). The exclusionary approach contributes significantly to poverty in areas that have traditionally depended on resources for their well-being (McShane, 2003; Millennium Ecosystem Assessment, 2005)

For Pimbert (2003), the impact of protected area management systems extends beyond social costs to include ecological costs, especially in areas where rural people are directly dependent on natural resources for their livelihoods. In the course of designating protected areas, surrounding communities are expelled from their settlements without adequate provision for alternative means of work and income. For example, the establishment of the Royal Chitwan National Park (RCNP) in Nepal in 1973 resulted in the eviction of thousands of peasants. Many of them were denied of their traditional and customary rights of resource use. Several ferry posts and commuter paths were closed (Paudel, 2006).

In addition, conflict between local communities, wildlife and park managers is a common phenomenon associated with protected area management systems. Madden (2006) reports of conflict between local communities, resident gorillas and managers of Bwindi Impenetrable National Park in Southwestern Uganda. It is asserted that the park's resident gorillas constantly forage in the village plantations immediately surrounding the park, and attack humans, leading to significant and continuing economic loss and personal injury to the local people.

In Ghana, GoG (2002a) asserts that reserves and national parks were established without offering the rightful owners adequate compensation and the owners were alienated from the resources. They were denied access to their lands and required permits to enter and use the resources. Clearly, these arrangements were unsatisfactory to the land owning entities.

Crop destruction by wildlife, especially elephants, lack of compensation, loss of access to resources, non-payment of compensation for loss of land and discriminating in employing local people as park staff constitute major cause of conflicts between local communities and managers of Kakum National Park in Ghana (Agyare, 1996). Following the exclusionary and non-involvement of local communities in protected area management, the approach has been criticized on the basis of lack of conservation social justice.

There is ample field-based evidence that conventional conservation initiatives have harmed many communities, including some of the world's poorest and most marginalized people. In this regard, some communities have been expelled from newly protected territories and involuntarily resettled, with

sometimes appalling socio-cultural and economic consequences. Some traditionally mobile communities have been forced against their wish to abandon their nomadic existence and adopt a sedentary lifestyle, with similarly tragic results, including the ecology of the settlement areas (Borrini-Feyerabend et al., 2004).

Challenges of Protected Area Management

Generally, protected areas face a plethora of challenges and as a result their effectiveness and efficiency as a conservation strategy has on many occasions been questioned. Notwithstanding this and the many criticisms however, conservation organisations such as the World Wildlife Fund for Nature (WWF International), World Resource Institute (WRI), IUCN, World Commission on Protected Areas (WCPC) and UNEP continue to advocate and support designation of protected area systems. Indeed, the number of protected areas globally has increased substantially since the first inventory in 1962. As shown in Table 2, between 1962 and 2003, the number of PAs in the world increased by over 90 per cent. Essentially, the growth rate for each decade has not been less than 40 per cent. On condition that this growth rate is maintained, by 2013 it is plausible that the number of PAs will reach 142,986.

Though the number of PAs is increasing it is not translated into commitment in terms of area. The growth in area covered by PAs does not match the increasing growth in the number of PAs as shown in Table 2.

Table 2: World Protected Areas by Number and Area (1962-2003)

Year	No of Protected Area	Area (km ²)
1962	9,214	2.4 million
1972	16,394	4.1 million
1982	27,794	8.8 million
1992	48,388	12.3 million
2003	102,102	18.8 million

Source: Chape et al., (2003)

In spite of the phenomenal increase in the number of PAs, conservation of biodiversity through the protected area systems has fallen short of expectation. Recent assessments have shown that at the global and regional scales, the existence of current PAs, while essential, is not sufficient for conservation of the full range of biodiversity (Millennium Ecosystem Assessment, 2005). It is further alleged that extinction of species continues in spite of the phenomenal growth in the number of protected areas (UN, 2005). It is estimated that over the past few hundred years, humans have increased species extinction rates by as much as 1,000 times. There are approximately 100 well-documented extinctions of birds, mammals, and amphibians over the last 100 years (Millennium Ecosystem Assessment, 2005).

Protected areas at present face several challenges that threaten their existence. Insufficient financial support for their management has become an albatross around the necks of PAs, especially those of the developing world.

According to James (1999), developing countries spend an average of \$157 per km² per year while \$2,058 per km² is expended in the developed countries. On average, the developing countries' budgets are extremely inadequate to meet their stated conservation objectives. The resultant effects of inadequate funding are lack of logistics, inadequate and untrained staff. Inability of staff to undertake on the spot policing leads to encroachment by human activities and settlements, and this is further compounded by weak law enforcement (UNEP, 2002). For instance, in Ghana, protected areas in the forest zones suffer increasing pressure from illegal farming. For example, approximately 50 per cent of Kogyae, the only strict nature reserve, is reported to have been devastated by commercial yam farming. Wildlife populations in all reserves in the country are under constant threat from illegal hunting (Ntiamoa-Baidu, 1995).

Tukahirwa (2002) also identifies over-exploitation of individual species, civil unrest and warfare, and poor relations with neighbouring communities as major threats of protected areas in Africa. In addition, Stolton and Dudley (1999) studied ten key forest countries and concluded that only 1 per cent of forest protected areas was regarded as secure and a quarter (25%) was suffering from degradation and loss.

In the midst of these challenges it is becoming absolutely difficult to continue the top-down approach to conservation, especially in developing countries. Developmental challenges of these countries have conspired against successful implementation of protected area management systems. It is becoming insensitive and morally difficult to justify adherence to the conventional conservation approach when people continue to live in abject poverty.

The introduction of protected area systems in developing countries is perceived to have distorted the erstwhile harmonious relationship between local people and natural resources, an approach noted for ignoring the needs and concerns of local people in the interest of biodiversity. This situation is compelling enough for local communities to persistently challenge the status quo. A balance is urgently required if natural resources can be sustainably utilised. CBNRM is the conservation approach expected to fulfil livelihood and conservation needs. This focus has received the endorsement of IUCN, UNEP, World Wildlife Fund for Nature (WWF International), Conservation International (C.I), and Global Environment Facility (GEF), among others. This paradigm shift is espoused in global documents such as the 'World Conservation Strategy' and 'Agenda 21' as well as other yearly conservation documents.

Wetlands and their Significance

Wetlands are generally perceived as wastelands by most people. Consequently, they suffer varied forms of exploitation without consideration for their well-being. All over the world, wetlands have dwindled due to over- use, pollution, conversion into residential use and dumping sites. These actions make wetlands the most threatened of all the earth's ecosystems. The frequent mismanagement and the degradation of several of them have affected people who rely directly on them for their livelihoods and have become more vulnerable to or have fallen deeper into poverty (Ramsar Convention Secretariat, 2004).

The Ramsar Convention's definition of wetlands includes a wide variety of habitats such as marshes, peatlands, floodplains, rivers and lakes, and coastal areas such as saltmarshes, lagoons, mangroves, and seagrass beds. It also includes

coral reefs and other marine areas no deeper than six metres at low tide, as well as human-made wetlands such as waste-water treatment ponds and reservoirs (Ramsar Convention Secretariat, 2004)

The common view that wetlands are wasteland is, however, waning following research findings that point out the tremendous values and functions of wetlands. They have been described as one of the most productive environments in the world and are the “supermarket” of biological diversity (Bhandari et al, 2003). Though wetlands cover a small part of the earth surface (0.8%), they support 12 per cent of known mammals, 25 per cent of all birds. In fact, wetlands are regarded as havens for biological diversity (Ramsar Convention Secretariat, 2004).

According to Bhandari et al. (2003), wetlands provide life support systems for people living close to them and are effective in flood control, wastewater treatment, reducing sediment, recharging of aquifers and also serve as hibernation and breeding ground for variety of birds, fish and other flora and fauna. They also act as buffer against the devastating effect of hurricanes and cyclones, stabilize the shoreline and act as bulwark against the encroachment by the sea and check soil erosion. Apart from these, they are valuable for their educational and scientific interest and provide durable timber, fuelwood, protein rich fodder for cattle, edible fruits, vegetables and traditional medicines.

The overwhelming natural beauty and the rich biodiversity of many wetlands make them ideal location for ecotourism. Bird watching, canoeing, kayaking, and recreational fishing have become important forms of ecotourism activities common to wetlands. Many of these wetlands are protected as National

Parks or World Heritage Sites. Some wetlands generate considerable income from ecotourism and recreational uses. For example, in Australia, the Great Barrier Reef Marine Park records about 2 million visitors, raising revenues in excess of US\$700 million, annually (Carr and Mendelsohn, 2003), while Kakadu in Australia, in 2005, collected over US\$ 1.162 million in revenue (Director of Parks, 2006). The ACID project's objective to harness the ecotourism potential of the Amansuri wetland therefore conforms to practices elsewhere. However, the success rate may vary depending on the biodiversity richness of the wetland.

Community-Based Natural Resource Management (CBNRM)

The need to find alternatives to protected area management systems has become a priority for conservationists. This follows the unanimous viewpoint on the inadequacy of the conventional conservation approach of merging both conservation and human needs. The challenge is to adopt a design that will not only protect natural resources but also meet the livelihood needs of communities living close to the resources. CBNRM emerged in the 1980s and 1990s as a conservation approach to fulfil this aspiration. It has since attracted considerable attention, particularly in the developing world, because of the dynamics of poverty and the dependency on natural resources.

The influence of CBNRM in conservation practice has since been phenomenal. Several conservation projects have been designed with this new approach in collaboration with governments, international conservation NGOs, development agencies and other stakeholders. The UK's Department for International Development (DFID) (Koziell and Inoue, 2006), Norwegian Agency for International Development (NORAD) (Dalal-Clayton and Child,

2000), IUCN, Netherlands Development Agency (SNV) (Arntzen et al, 2003) and United States Agency for International Development (USAID) provide funding and technical support for CBNRM projects.

The number of CBNRM projects has increased considerably over the last two decades. For example, a sub-sample of WWF's 179 forest conservation projects in the world in 1995 indicated that 75 per cent of the projects combined social and livelihood objectives with those of biodiversity conservation (Jeanrenaud, 2002). Still, in East Africa alone, there are 171 CBNRM projects between Kenya, Uganda and Tanzania (Barrow et al., 2000).

There are many forms of CBNRM projects. However, a majority of them have evolved around existing government-managed protected areas. A decision is taken to involve nearby affected communities in some form of varying degree of co-management arrangements. For instance, the Wildlife Division of the Forestry Commission in Ghana is currently involving communities around some of the country's PAs in some form of collaborative management arrangement. Another form of CBNRM projects is community conceived and managed conservation projects with either or both technical and funding support from NGOs or development agencies. The ACID project falls under this category.

Wildlife management was common to initial CBNRM projects. Projects such as the Administrative Management Design for Game Management Areas (ADMAGE) in Zambia and the Communal Area Management Programme for Indigenous Resources in Zimbabwe (CAMPFIRE) are typical examples (Arntzen et al., 2003). However, the approach has also found its way into the management

of a variety of natural resources such as wetlands (GWS, 1998), and forestry (Brown, 1998), among others.

Since CBNRM projects are embedded with livelihood improvement objectives, varieties of alternative income generating activities are pursued. These activities may include but not exclusive to community-based ecotourism, fisheries, beekeeping, harvesting and processing of worms and fruits, and butterfly farming. For example, the ACID project in Ghana is promoting ecotourism (GWS, 1998). Similarly, the Mamirauá Sustainable Development Reserve in Brazil adopted community fisheries, forestry and ecotourism as components. The Mamirauá project provides alternative income sources for the local people and also compensates them for losses arising out of restrictions on the use of natural resources due to conservation (Koziell and Inoue, 2006).

Defining CBNRM

According to Adams and Hume (2001), CBNRM comes in varied forms and must be recognised as an approach representing a range of options. In the view of Kumar (2005), due to the multiplicity of its practices around the world, defining CBNRM is not an easy task; it is difficult to determine which terms to include. The diversity is as a result of the differences in perception each stakeholder ascribes to CBNRM. For instance, many governments demonstrate an interest in the 'participation' of 'community' owing to socio-economic and political exigencies (Thompson, 1995; and Lele, 2000). According to McNeely (1995), conservationists promote involvement of local people in wider conservation and resource management goals as a means of protecting biological diversity and habitat integrity. On the part of donor agencies, they promote local

participation for 'sustainable' management of natural resources and rural development. Non-governmental organisations (NGO) and grass-roots activists promote it to reconcile the goals of equity, development, empowerment and environmental sustainability by transferring resource management into the hands of local communities (Kothari et al, 1998).

In spite of the lack of conceptual clarity, many definitions have been suggested. Kumar (2005) defines CBNRM as comprising a range of activities practised in various parts of the world, where the co-existence of community with nature as distinct from protectionism and segregation is its central concept. This definition postulates harmony between human activities and nature that ensures a win-win scenario for both human beings and nature. CBNRM therefore aims to fulfil the aspirations of communities without destroying the base of their livelihood.

Nhantumbo et al. (2003) add the concept of 'decentralisation' by defining CBNRM as a power sharing process aimed at giving grass roots institutions the power of decision-making and rights to control their resources. In the view of Leach et al. (1999), CBNRM is a process by which local groups or communities organise themselves with varying degrees of outside support so as to apply their skills and knowledge to the care of natural resources and the environment while satisfying their livelihood needs. The outside support, in most cases, comprises funding and technical assistance. In a more concise manner, Kothari (2000) defines CBNRM as an approach that aims to meet social development priorities and conservation goals. In summary, CBNRM conveys the ideals of devolution

and integration of livelihood and conservation needs with or without outside support.

CBNRM is perceived by some conservationists and donor agencies as an African approach towards rural development and natural resource conservation because the principles the concept espouses best suited economic conditions in the continent. It aims to increase local socio-economic benefits of natural resources, which would then lead to a higher appreciation of the environment by the local population. CBNRM started in Zimbabwe in the 1980s, and has spread to several other southern African countries, notably Zambia, Malawi, Namibia, Botswana and South Africa. Many CBNRM projects are in operation in Africa: Luangwa Integrated Resource Development Project (LIRDP) in Zambia, CAMPFIRE (regarded as the first CBNRM project in the world) in Zimbabwe (Newman and Webster, 1993) and Ngorongoro Conservation Area in Tanzania (Kijazi, 1996), Annapurna Conservation Area Project in Nepal and Amoro National Park, Bolivia (Smith et al., 1998).

Besides designating projects with conservation and livelihood objectives as CBNRM, other terminologies are also commonly used. These are: integrated conservation and development projects (ICDP), (Salafsky and Wollenberg, 2000; Newmark and Hough, 2000; Hughes and Flintan, 2001; Jeanrenaud, 2002), community-based conservation (Agrawal and Gibson, 1999), and community wildlife management (Ashley and Elliott, 2003). In spite of differences in name, a common feature to all of them is 'conservation' and 'welfare' of people. While each of these terms has its own assumptions, history and contested meanings,

cognisant of the intricacies of local ecological processes and practices; and that they are more able to effectively manage those resources through local or 'traditional' forms of access (Li, 2002). For instance, it is claimed that Ghanaian societies have long lived off the land successfully using several time-tested strategies for sustainable utilisation of resources. These strategies are based on traditional beliefs, norms, taboos and knowledge coupled with experience (Appiah-Opoku, 2006).

In addition, Larson et al. (1998) put forward three assumptions that underpin CBNRM projects:

1. Diversified local livelihood options will reduce human pressure on biodiversity, leading to improved conservation;
2. Local people and their livelihood practices, rather than 'external factors', pose the most important threat to the biodiversity resources of the area in question;
3. CBNRM programmes offer sustainable alternatives to traditional protectionist approaches to resource management.

Factors promoting CBNRM

An interplay of many factors contributed to the advent of CBNRM. Firstly, the conservation community experienced a paradigm shift at the beginning of the 1980s and this played a major role in the emergence of CBNRM. There was a remarkable departure from early protectionist position to 'conservation with development' narratives. The perception that conservation and development are mutually interdependent was boosted in documents such as the 'World Conservation Strategy' and 'Caring for the Earth' (UNEP, 2002). The

growing concern for livelihoods, particularly among field practitioners, on sustainable use and recognition of indigenous knowledge and management systems provided the catalyst for the adoption of conservation in development narratives.

Furthermore, the difficulty of implementing protected management systems particularly in developing countries significantly influenced the emergence of CBNRM. According to Mowforth and Munt (1998), the majority of PAs are suffering from serious and increasing degradation as a result of large expanding agriculture frontiers, illegal hunting and logging, fuelwood collection and uncontrolled burning.

Management of protected area systems in developing countries has become an overwhelming undertaking in the midst of multiple development needs. Many governments are not able to provide sufficient funding to manage and maintain protected areas (Forestry Commission, 2005). In the light of this, CBNRM provides an opportunity to collaborate with communities to conserve natural resources.

On the contrary, a fundamental question which agitates the minds of many stakeholders (practitioners, researchers, conservationists, communities and donors) is its capacity to achieve the goals it espouses. Communities have high expectations because CBNRM engender optimism of improved livelihood. Conservationists, on the other hand, see CBNRM as a solution to the challenge of pursuing conservation in development. There are substantial indications that all is not well with CBNRM projects.

CBNRM: Reality or Rhetoric?

Hughes and Flintan (2001) catalogued a number of CBNRM projects that have led to improved livelihood and conservation conditions. Lake Mburo National Park in Uganda, for example, is reported to have impacted positively on livelihood conditions of surrounding communities. Funds from the project were used to build schools and clinics. Also, the project is said to have built the capacity of community members in health and tree nursery management. Communities were also given support to small-scale revenue earning businesses and assistance in the control of crop and damage by wild animals.

Koziell and Inoue (2006) evaluated the Mamirauá Sustainable Development Reserve (MSDR) in Brazil and revealed that the project implemented a suite of income-generating activities of which ecotourism is an element of the pack. The ecotourism component benefits the surrounding local communities through employment of 33 people as lodge workers and guides. The study further contends that this employment provides valuable source of income i.e. adding about 84 per cent to household income, and this is viewed by the communities as a very positive development with the MSDR.

CAMPFIRE in Zimbabwe is the most cited successful model project of CBNRM. Its conservation and local development benefits are well-documented in the literature. For instance, it is said that elephant populations have increased steadily while that of buffalo have been maintained since the late 1980s. In addition, poaching has been contained, the results being reduced levels of illegal off-take of wildlife populations and fish. There has also been a significant reduction in tree felling in areas that have adopted CAMPFIRE approach in the

sharing of benefits from commercial exploitation of timber. In the sphere of socio-economic impacts, CAMPFIRE supplements incomes of households (Bond and Frost, 2005). In 2001, about 80,000 households received cash dividends to the tune of US\$14.02 per household, and many of these households made social investments and built small household businesses. Beyond these, communities also enjoyed secondary benefits such as schools, clinics and community grinding mills and shops. The programme has also enhanced employment creation at local levels around successful tourism projects (Arntzen et al., 2003).

Bandyopadhyay et al. (2004) evaluated seven community CBNRM projects within the Kunene and Caprivi Regions of Namibia and report that households gain from the projects either through cash income, non-cash rewards and community level benefits. Non-cash benefits such as meat distribution accrue to households. On the other hand, the study points out inadequacy of the number of households that obtains cash income. About 12 per cent of the surveyed households reported project related income. The study therefore concluded that it was clear that CBNRM projects have not been a source of cash revenues for most households.

Several studies have also portrayed the so-called benefits of CBNRM projects as inadequate, minimal and ineffective to promoting sustainable natural resource management and rural development. In Mozambique, Nhantumbo et al. (2003) conclude that any major impact of CBNRM in improving livelihoods of the people is still a myth as the process and pace are too slow to produce any short-term significant impact. Barrow et al. (2000) also reviewed community wildlife conservation in East Africa and concluded that economic value of

resources shared among communities remains small, few jobs are created, and the degree of genuine partnership is low.

Further empirical evidence points that many conservation projects being implemented with the CBNRM philosophy, and, in fact, those touted as major success stories are experiencing problems. These problems range from lack of delivery of sufficient tangible benefits impacting significantly on people's livelihoods, to a lack of community cohesion and stable local governance. It is also unclear whether there has been much real devolution of ownership and responsibility for natural resources management (Barrow and Fabricius, 2002).

Doubts have also been expressed about CBNRM's ability to yield conservation results. Critics argue that the approach has been ineffective at conserving biodiversity. It has rather created various social problems and has resulted in a waste of financial and human resources that would have been better utilised in 'direct' support for conservation and protected area management activities (Bruner et al., 2001).

Other opponents direct their criticism to the assumptions of CBNRM and link the mixed results to a flawed and ill-conceived philosophy. Newmark and Hough (2000) argue that the lack of success of many CBNRM projects is attributable, in part, to a series of erroneous assumptions made frequently by designers of CBNRM projects. The assertion that a homogenous community exists has been vehemently contested as an 'abstraction from reality. Twyman (2000) contends that diversity of local resource use and resource users, and complexity of livelihood strategies based on natural resource in local environments are highly variable. This diversity is reflected in individuals,

gender, power relations and household differences regarding livelihood strategies and objectives. Consequently, consensus building becomes extremely difficult to achieve under the circumstance, and this impedes the success of CBNRM projects (Leach et al., 1999).

In addition, others have questioned the capacity of conservationists to implement projects with development agenda. It is seen as being outside of the mandate of conservation organisations and, more properly, the role of government and rural development institutions (Jeanrenaud, 2002). The critical issue of concern is whether attention and focus of such projects will not be skewed towards attainment of conservation goals rather than that of livelihood improvement. Equally important is the likelihood of conservation projects being designed with the tenets of CBNRM projects in order to attract funding from donor agencies.

In a review of CBNRM projects in East Africa, Barrow et al. (2000) make the following conclusions:

1. It is unlikely that CBNRM can become the main source of livelihood of the majority of people. Instead, its primary value lies in livelihood diversification and security. It also means that other sources of livelihood need to be actively promoted, for example, through the establishment of productive activities;
2. The CBNRM-benefits depend to a large extent on rich biodiversity. Some areas may therefore have a marginal CBNRM potential, and at best, bring low revenues. If CBNRM projects are launched there, the risk of failure is high and expectations should be low. Therefore, CBNRM projects need to

focus on areas with a comparative natural resource advantage with a market potential; and,

3. Community projects take a long time to mature. This may clash with the time horizon of support organisations such as donors. Most CBNRM projects are donor driven and are therefore tied to specific duration. The duration of these projects are often short for local people to feel their impacts.

Ecotourism and CBNRM

Ecotourism emerged in the tourism literature in the 1980s. Coincidentally, this period, in conservation history, also marks the advent of CBNRM. In reinforcing this connection, Epler Wood (2002) emphasises that the history of ecotourism is deeply rooted in the conservation movement. Ecotourism came to the limelight because of negative environmental impacts of mass tourism, and Gartner (1996) reiterates this by stating that ecotourism is a reaction to the excesses of mass tourism.

Ecotourism is part of an array of desirable alternatives to mass tourism, and Burton (1995) lists eight of such desirable tourism. Butler (1992) on the other hand, provides a comprehensive catalogue of 28 of such types of tourism which incorporates the list of Burton's (1995). Some of them have silently disappeared and are infrequently mentioned in the tourism literature. However, ecotourism continues to receive considerable attention. It has grown to become a dominant segment of the tourism industry, although with both euphoria and disappointments.

Defining ecotourism

Various definitions of ecotourism abound in the literature. The most cited, and the earliest definition of ecotourism is provided by Ceballos-Lascurain (1987) as: 'travelling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestation (both past and present) found in these areas' (quoted in Burton, 1995 p. 100.). Australia's National Ecotourism Strategy, on the other hand, defines ecotourism as nature-based tourism that involves education and interpretation of the natural environment and is managed to be ecologically sustainable (Goodwin, 1996 citing Commonwealth Department of Tourism, 1994). Lastly, the International Ecotourism Society (TIES) concisely defines ecotourism as responsible travel to natural areas that conserves the environment and improves the welfare of local people (International Ecotourism Society, 2007).

All the three definitions emphasise the significance of the environment as well as the need to maintain its sanctity. However, Ceballos-Lascurain (1987) adds the culture of the destination area as an element of the ecotourism product. This suggests that ecotourism is not restricted to nature but incorporates cultural manifestations of the destination areas. In addition, the International Ecotourism Society's definition envisages the contribution of ecotourism to improvement in the livelihood conditions of the local people. On this viewpoint, Page et al. (2001) claim that the goal of ecotourism is to assist in conservation and well-being of local communities. And in summing it up, Ross and Wall (1999) describe the relationship between ecotourism, conservation and local people as

positive synergistic. Broadly then, ecotourism seeks the interest of the environment, local people and ecotourists.

In the view of Gartner (1996) the benefits of ecotourism are not remarkably different from tourism in general. However, some elements distinguish ecotourism from traditional tourism, and these are: a genuine respect and knowledge on the part of the traveller, minimal impact on the local environment and culture, the conservation of biological diversity, the education of all participants, small scale and slow growth, supply-driven development, and the involvement of local people throughout the development process (Nielsen, 2001 citing Renard, 1994).

Tourism and Ecotourism Trends

Tourism is the world's largest and fastest growing sector of the global economy. The United Nations World Tourism Organization (UNWTO) estimated 800 million international tourist arrivals for the year 2005 and this represents an increase of 5.5 per cent growth over 2004 estimates. In the same year, worldwide international tourism receipts are estimated at US\$ 680 billion. In other words, more than US\$ 2 billion a day is earned through international tourism (UNWTO, 2006).

In the last decade, ecotourism has emerged as one of the fastest growing segment of the tourism industry. Since the beginning of the 1990s, ecotourism growth rate ranges between 20 – 34 per cent, annually. In 2004, ecotourism was growing globally 3 times faster than tourism industry as a whole. This phenomenal growth is stimulated by increasing demand for travel that seeks to protect the environment and enhance the livelihood conditions of local people.

For instance, it is estimated that more than two-thirds of U.S. and Australian travellers, and 90 per cent of British tourists, consider active protection of the environment, including support of local communities, to be part of a tourism establishment's responsibility (Centre for Ecotourism and Sustainable Development and International Ecotourism Society, 2005).

On the actual ecotourism market share, it is said to be extremely difficult to obtain accurate data on the size of international ecotourism arrivals, Epler Wood (2002) attributes this to the complexity in measuring ecotourism because it is defined objectively. Secondly, ecotourism is researched as nature tourism and this prevents accurate measurement about its market size.

Data on nature tourism is commonly used in estimating the size of ecotourism. However, predicting the size of ecotourism market based on the size of nature tourism, in Epler Wood's (2002) view, will yield false data because a visit to a natural area may not necessarily constitute ecotourism. Upholding this opinion, Ross and Wall (1999) contend that ecotourism is more than just visiting natural areas. Ecotourism is said to be a philosophy, a set of practices and principles which distinguish it from nature tourism (Christ et al., 2003 citing Honey, 2002). In spite of the measurement difficulty, Lindberg (1998) roughly estimates the international ecotourism arrivals to be 7 per cent of the tourism market or approximately 45 million arrivals in 1988 and projects 70 million for 2010.

Importance of Tourism to Developing Countries

Developing countries face several development challenges. Among these are poverty, diseases, debt, conflicts, environmental degradation, illiteracy and

unemployment. One of the fundamental challenges of governments of developing countries is how to generate substantial financial capital to address these teething problems and improve standard of living for the impoverished majority of the people.

Characteristically, developing countries depend on a few major agricultural or mineral products as the mainstay of their economies (Konadu-Agyemang and Adanu, 2003 citing World Bank, 2001, and Todaro, 2000). The dependence on these products renders their economies precarious due to global price fluctuations and inadequate earnings. In order to rectify this anomaly, economic diversification is perceived to be a panacea to the economic woes, and tourism is considered one of the viable options.

Tourism is recommended to developing countries as a developmental policy strategy capable of providing respite from their economic hopelessness. The justification for this suggestion is derived from the exotic culture and biodiversity of developing countries. For instance, Africa with a high number of low human development countries (30) in 2005 (UNDP, 2005), possesses tremendous potential for tourism development. Gerosa (2003) opines that the strength of African tourism lies first and foremost in its cultural and environmental resources, and in the diversity and authenticity of its products. Ancient cultures, unique natural parks, unspoiled beaches, and the fascination that the African continent still exerts on the imagination of tourists, are the elements on which the competitive advantage of African tourism is based.

In 2005, international tourist arrivals in Africa is estimated at 36.7 million and this is the best of all regions with an increase estimated at 9 per cent for the

second consecutive year, generating US\$ 21 billion. Growth was about as strong in Sub-Saharan Africa (+9%) as in North Africa (+8%) (UNWTO, 2006). Tourism is one of the main sources of foreign exchange for the majority of African countries. Tourism contributes over 2 per cent of GDP in 27 African countries (Gerosa, 2003). Tourism is asserted to possess the potential to generate economic development and is subsequently endorsed by national governments, expecting tourism to generate foreign exchange earnings, to create employment and to bring about economic benefits to developing countries with limited options for alternative economic development (UNWTO, 2002).

Similarly, tourism development in Ghana has received considerable attention since the 1980s. Consequently, international tourist arrivals and tourist receipts have increased significantly. For instance, from 1993 to 2003, international tourist arrivals increased by 106.8 per cent; from 256,680 in 1993 to 530,827 in 2003. In 2005, tourism contributed approximately US\$795m to the total export earnings of the country. This makes tourism the fourth foreign exchange generator, behind inward remittance, gold and cocoa. However, in terms of growth from 2004 to 2005, tourism recorded the best growth rate of 70 per cent, inward remittance grew by 20 per cent, gold 13 per cent, and cocoa 11 per cent (MoTDR, 2006).

Ecotourism has received enormous endorsement in Ghana. It is looked upon as one of the remedies to the challenge of conserving the country's natural resources and promoting rural development. Expanding economic activities in rural areas in the country has remained a daunting task for successive post-independence governments. The level of economic activity in rural areas has

continued to be abysmally low in spite of several packages to boost economic activities. Consequently, prevalence of poverty in the country is higher in rural than urban areas (IMF, 2006).

Ecotourism is therefore perceived by government and other stakeholders as an exceptional opportunity to regenerate rural economy and, in fulfilment of this goal, fourteen Community-Based Ecotourism Projects are being implemented in Ghana. It is a joint effort of Nature Conservation Research Centre (NCRC), Ghana Tourist Board (GTB), Netherlands Development Organisation (SNV), Peace Corps (PC), Ghana and the Project Communities. It aims at alleviating poverty in rural communities in Ghana through the creation of sustainable income generating tourism activities while conserving the delicate and sensitive ecological and cultural resources in their environments. The Community-Based Ecotourism projects are funded by the United States Agency for International Development (USAID). Income realised from ecotourism activities will be used to develop the communities by providing basic amenities such as electricity, borehole water systems, toilet facilities, scholarships for brilliant school children and establishment of libraries (MoTDR, 2006).

Ecotourism and CBNRM Projects

Ecotourism principles and activities dominate CBNRM projects because it is perceived to provide economic incentive that encourages local communities to adopt conservation practices. Ecotourism enables conservationists to incorporate livelihood needs into conservation practices with little apprehension of compromising conservation objectives. If ecotourism espouses the protection

of biodiversity and simultaneously caters for livelihood needs of communities, then it becomes a useful tool to conservation of natural resources.

Ecotourism has assumed prominence as a means of supporting biodiversity conservation, particularly in developing countries. For example, by the mid-1990s, USAID had 105 projects, globally, with estimated total funding of US\$2 billion that had ecotourism components. Similarly, 32 of the 55 World Bank-financed projects that supported PAs in Africa between 1988 and 2003 included an ecotourism component (Kiss, 2004).

Natural systems provide the backbone for ecotourism development. Ecosystems such as forests, grassland, mountains, deserts and wetlands, and their unique flora and fauna provide opportunity for ecotourists to learn, appreciate and contribute to conservation of natural resources. Wetlands are steadily becoming an important ecotourism destination.

Ecotourism constitutes a fundamental strategy of the ACID project to conserve the Amansuri wetland while promoting local development (GWS, 1998). Certainly, one of the successful ecotourism projects in Ghana, Kakum National Park, demonstrates a remarkable capacity to achieve conservation and local development goals.

The adoption of ecotourism in CBNRM projects is widespread. For example, in Brazil, the Mamirauá Sustainable Development Reserve (MSDR) introduced ecotourism into its conservation efforts in order to provide an alternative source of income for the local people and also compensate them for losses arising out of use restrictions resulting from conservation (Koziell and Inoue, 2006). Ecotourism is the backbone of CAMPFIRE operations in

Zimbabwe (Arntzen et al., 2003). The ecotourism agenda is reinforced by superficial analysis which suggests that ecotourism is a promising strategy capable of meeting livelihood needs of communities involved in CBNRM projects (Turner, 2004).

Though ecotourism has attained widespread recognition as conservation and development tool, research indicates limited success. Cogent questions relating to its ability to result in substantial local development also elicit endless debates. In the view of Ross and Wall (1999), there is a wide gap between ecotourism as espoused theoretically and ecotourism practised as indicated by its on-site application. These ideals of ecotourism are confidently and superficially communicated by project implementers, and this informs the expectations of local residents.

Nelson (2004) studied the impact of ecotourism in northern Tanzania and concluded that ecotourism is far from realising its potential in the region and linked the ability of ecotourism to realise its promises to the future of local rights and decision-making authority. For Tuner (2004), though ecotourism has substantial promise, many community-based initiatives are not well-positioned to compete against state-supported areas. And a study of Makuleke Region of Kruger National Park in South Africa suggests that relying on conservation-based tourism for development is a risky business. Ross and Wall (1999) evaluated ecotourism in North Sulawesi in Indonesia and concluded that relationship between tourism, local communities and natural areas are not symbiotic. Host communities are enjoying very few benefits from ecotourism development, and the natural ecosystems are not being well-protected.

Kiss (2004) argues that although ecotourism projects generate some revenues for local communities and improve local attitudes towards conservation, its contribution to conservation and local economic development is limited. He attributed this to factors such as the small areas and few people involved, limited earnings, weak linkages between biodiversity gains and commercial success, and the competitive and specialized nature of the tourism industry. It is further postulated that projects cited as success stories actually involve little change in existing local land and resource-use practices, provide only a modest supplement to local livelihoods, and remain dependent on external support for long periods, if not indefinitely.

Exploring the contribution of ACID project to livelihood improvement and conservation will add to the debate on the success or otherwise of CBNRM projects as a tool for both conservation of biodiversity and local development.

Rural Dwellers, Poverty and the Environment

According to Cabral (2006), more than 75 per cent of the world's poor live in rural areas, and Carney (1999) predicts that this situation will prolong into the second half of the 21st Century. The story is not different in Africa, and it is therefore not a surprise when the Economic Commission for Africa (ECA), 2005) describes poverty in Africa as a rural phenomenon. This assertion is based on the wide disparity in the pattern of distribution of economic activity between rural and urban areas in favour of urban areas.

In the Ghanaian situation, it is estimated that about 9 million people in Ghana live on the equivalent of US\$1 or less per day (Forestry Commission, 2005 citing DFID, 2002). The incidence of poverty in the country is higher in

rural areas than in urban centres i.e. 49.9 per cent and 18.6 per cent, respectively (WRI, 2005). It is estimated that the majority of Ghanaians (56.2 %) live in rural areas (GoG, 2002a). Tackling rural poverty will therefore significantly address the overall poverty situation in the country.

Besides the economic isolation of rural areas, they typically have disproportionate social infrastructure such as electricity, road, health, sanitation and education relative to urban centres. For example, in Sub-Saharan Africa, while 82 per cent of urban dwellers have access to improved water source; only 46 per cent goes for rural people (WRI, 2005). Moreover, knowledge of rights and information about the way governments function is notably lacking in rural areas. This makes it hard for rural people to exert pressure for change in systems which have often actively discriminated against them both in the allocation of resources and in pricing policies for their produce (Carney, 1999).

In the midst of limited alternatives, rural dwellers depend largely on environmental services for survival. In affirming this viewpoint, the 2005 Millennium Ecosystem Assessment report states that the dependence of livelihoods on natural systems is nowhere more important than among the rural poor. Ironically, rural dwellers have been blamed for environmental degradation though this view is debated among conservationists.

In view of their reliance on natural resources, rural people are the most severely affected when the environment is degraded or their access to natural resources is limited or denied (DFID et al., 2002). Pursuing conservation is therefore absolutely in the interest of the rural poor as there is a correlation

between sound natural resource management and poverty reduction (DFID et al, 2002 citing Cambodia Interim Poverty Reduction Strategy Paper, 2000).

In spite of demonstrating the interest to pursue conservation through traditional mechanisms, rural dwellers are compelled by limited alternatives to engage in practices that tend to degrade the very base of their livelihood i.e. the environment. CBNRM, via many packages, seeks to encourage rural people to support conservation by eschewing activities considered incompatible with conservation of natural resources. The outcome is conserved natural resources and improved livelihood.

On the other hand, CBNRM is one of the activities competing for government and donor investments. In order to attract policy reforms and funding as a plausible conservation and livelihood improvement tool, CBNRM projects must show convincing results of livelihood improvements and conservation achievement. A comprehensive assessment of CBNRM projects in rural context is required. An effective conceptual framework to undertake this task is paramount in order to reveal the complete impact of ACID project on livelihoods of communities involved in the project.

The Sustainable Livelihood Framework (SLF)

Poverty has most commonly been assessed against income or consumption criteria. In this interpretation therefore, a person is poor only if his/her income level is below a defined poverty line, or if consumption falls below a stipulated minimum (Farrington et al., 2000). This approach to understanding poverty has proved inadequate. The limitation inherent in this measure is that the extent and dimensions of poverty are ignored.

The SLF (Figure 2) is a conceptual framework for analyzing causes of poverty, peoples' access to resources and their diverse livelihood activities, and relationship between relevant factors at micro, intermediate, and macro levels. It is also a framework for assessing and prioritizing interventions (Adato and Meinzen-Dick, 2002). The SLF provides a useful analytical structure for understanding livelihoods and summarising the main issues of enterprise impact (Ashley, 1999). The livelihood framework is human centred and therefore places people at the heart of issues.

Components of the Sustainable Livelihood Framework

The key components of a livelihood framework, as illustrated in Figure 2, include capital or assets, the vulnerability context, the policies, institutions and processes (or external factors) that affect livelihood strategies of people and, finally, their livelihood outcomes (Long, 2004).

Assets or capital endowments: These are the basic livelihood building blocks. Poverty analysts have shown that people's ability to escape from poverty is critically dependent on their access to assets (Ashley, 1999 citing Booth et al., 1998). Assets comprise five different portfolios:

Physical capital: This is the infrastructure that is available in a given locale, e.g. roads, buildings, water supplies, equipment and transport and telecommunication facilities.

Human capital: This relates to existing capacity, in terms of educational attainments, knowledge base and health status of people.

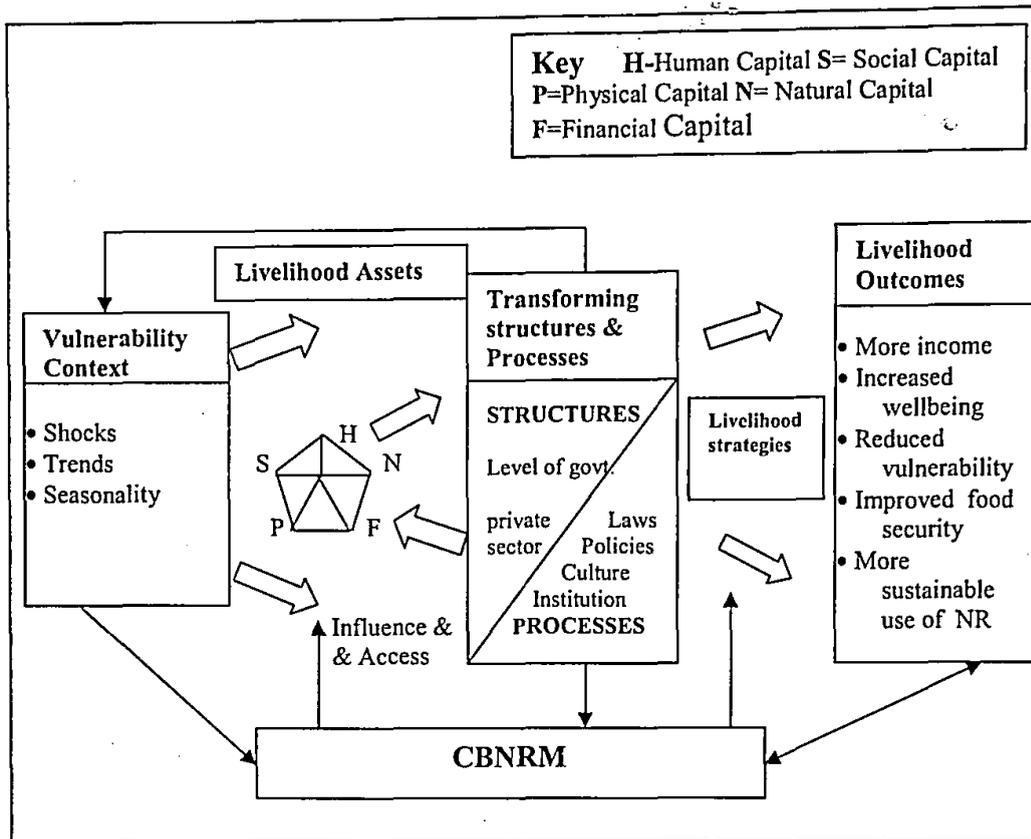


Figure 1: Sustainable Livelihood Framework and CBNRM

Source: DFID (1999)

Social capital: This relates to the range of social networks and associated links (both formal or institutional and informal) that people have access to, such as friends, family and other people who can offer support.

Financial capital: The money and cash investments that are available, such as savings, credits, income, migrant's remittances and access to credit constitute financial capital.

Vulnerability Context: The vulnerability context refers to the external environment in which people operate. Peoples' livelihoods and the wider availability of assets are fundamentally affected by critical trends as well as shocks and seasonality- over which they have limited or no control (DFID, 1999). Trends in national /international economic indicators such as prices, population; shocks such as changes in human health, natural disasters, sudden economic changes or conflict; and, seasonality of prices, production and employment opportunities tend to increase people's vulnerability.

Policies, institutions and processes: These refer to the local and external (national and international) organisational, institutional and administrative structures and arrangements that affect the ability of different individuals and groups to access resources and opportunities needed to improve or simply continue practising their livelihoods.

Livelihood Strategies: According to Ashley (1999), strategies deal with the activities people undertake in order to attain livelihood outcomes. These include the pursuit of diverse portfolio of activities including on-farm activities, off-farm activities and migration.

Livelihood Outcomes: These are components of improved livelihoods or well-being (e.g. good health, more income, reduced vulnerability, empowerment, food security, more sustainable use of the natural resource base). These are what people are trying to achieve through livelihood strategies and activities (Ashley, 1999).

Relationships within the Sustainable Livelihood Framework

The livelihood framework exhibits several significant interrelationships among the various components. The asset pentagon, which lies at the core of the livelihood framework within the vulnerability context, indicates relationships between the various assets. For instance, increased human capital can compensate for a lack of financial capital. This implies that when people are healthy and possess skills, they are able to work and earn income. Assets are both destroyed and created by the vulnerability context (DFID, 1999).

Accessibility to assets is highly influenced by transforming structures, processes, and institutions. Policies and norms may constrain people's access to assets. On the other hand, when people acquire assets they are able to contribute to policy formulation and reformation. Generally speaking, the greater people's asset endowment, the more influence they can exert (Farrington et al., 2000).

What the framework does is to provide a method for thinking about the multiple and interactive influences on livelihoods without overlooking important explanatory factors. In this respect, it provides a "checklist" of issues to be considered in designing research initiatives or programme evaluations. Not everything on the checklist can be included in one study, so prioritisation is necessary. The framework provides the advantage of allowing researchers to understand the parameters of the "big picture," and then narrow the scope of the study to what can have the highest impact or what is most relevant to the important stakeholders (including researchers). The framework may guide researchers to consider and prioritise less visible factors and local priorities that may or may not revolve around production and consumption or even physical or

financial resources, but could instead relate to education, safety, or legal rights (Ashley and Carney 1999).

Application of the Sustainable Livelihood Framework

Since its inception into the development and research field, SLF has been applied in varied endeavours with fascination. Farrington et al. (1999) reviewed CBNRM in Namibia using SLF to identify how CBNRM activities affected the livelihoods of different stakeholders; how and why their interest and participation differed; how CBNRM activities could be made more effective in supporting SL, particularly those of the poor. The study concluded that minimising costs of CBNRM projects to livelihoods was as important as maximising benefits.

Recently, Elasha et al. (2005) applied the SLF to assess the livelihood impact of climate change on the rural poor in Sudan-Sahel region. The studies were aimed at evaluating the performance of sustainable livelihood and environmental management measures for building resilience to today's climate-related shocks and for their potential for reducing community vulnerability to future climate change.

Finally, Ashley (2000) reviewed the impact of natural resource management programmes in Namibia applying the sustainable livelihood framework. The SLF was used as an analytical tool check, and the study considered the impacts of natural resource management programmes on assets, activities, livelihood outcomes, and institutions and policies. The effect of these external influences on the type of impacts generated by tourism was also considered.

The sustainable livelihood framework has endured application in different fields and geographical areas within its short period of existence. Consequently, quite a number of strengths of the framework have been documented in the literature. Ashley (2000) alludes that the SLF is a useful structure for analysing complexity which transcends economic and direct impacts of livelihoods. It facilitates exploration of indirect impacts, and views indirect linkages between activities and assets. Adato and Meinzen-Dick (2001) extol the completeness of SLF in assessment of projects and programmes. The SLF provides a rare opportunity to undertake a thorough assessment of impacts of projects on the livelihood of rural communities otherwise missed by conventional evaluation and assessment studies.

The strengths of SLF notwithstanding, some researchers have pointed out its limitations. In the opinion of Ashley and Hussein (2000), the inability of the SLF to provide clear quantifiable conclusions, incomparability and inability to replicate results due to heavy reliance of participatory techniques and qualitative data constitute major weaknesses of the framework. The issue of what constitute relevant indicators of improved and sustainable livelihoods also presents a formidable challenge in the use of the SLF. DFID (1999) prescribes adaptation of the frameworks as an antidote to the observed shortcomings.

The literature unquestionably indicates the dominance of conventional evaluation methodology in the assessments of the impacts of CBNRM projects and associated strategies on livelihoods of local residents. This approach therefore relies on income, employment and other quantitative measures as indication of success or failure of CBNRM projects.

The opinion of the people, who matter, i.e. local residents, receives little attention in the interpretation of results of such assessments. The conventional evaluation methodology gives limited attention to intangible and indirect benefits that matter to local people. On the contrary, the use of the SLF ensures that intangible benefits such as enhanced community cohesiveness and more community recognition receive a great deal of attention. Because the SLF is people-centred, it will provide a useful analytical tool to unearth the impact of ACID project on the livelihoods of the participating communities giving consideration for the viewpoint of the local residents.

The appropriateness of the SLF for the current study is overwhelming. CBNRM projects such as ACID affect the livelihood assets of local residents through income generation activities like ecotourism ventures, both direct and indirect. When communities use proceeds derived from ecotourism activities of CBNRM projects to construct school buildings and support the education of disadvantaged children, the human capital of households and the community is improved. The financial capital of individuals employed in CBNRM projects is also enhanced by the earning of wages. When the central government provides or improves access roads because of the growing importance of CBNRM project in communities as ecotourism destinations, then the physical capital of the community is improved.

Similarly, livelihood outcomes are also affected by CBNRM projects. Local residents are offered the opportunity to diversify their livelihood strategies by employment openings with associated increased income and a sense of well-being. Local residents who increase their incomes are more capable of building

livelihood assets such as acquisition of land (natural capital). However, the ability of CBNRM projects to impact on livelihood assets, livelihood strategies and outcomes can be influenced by seasonality (vulnerability context) of the tourism industry in general.

Emphasis of the current study was however placed on the impact of the ACID project on livelihood assets, strategies and outcomes of local residents. Focussing on these aspects of the SLF will facilitate concentration on salient indicators and variables and also ensure that the work is submitted within the period allotted for the study.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

Introduction

The research design, sample and sampling procedure, data collection instruments, research participants and problems encountered during field work are discussed in this chapter.

Research Design

The study relied on the qualitative research design using the case study approach to examine, understand, explore and interpret the impact of the ACID project on the livelihood assets of local residents as well as the perception of local residents on the ACID project and its contribution to ecotourism development in the project communities. Qualitative research is concerned with developing explanations to social phenomena. Among others, it seeks to find answers to questions relating to how events, programmes and interventions affect people (Hancock, 1998). The qualitative approach provides a unique opportunity to explore and solicit unlimited perspectives and opinion from participants on a phenomenon under study. The study sought to explore the impacts of the ACID project beyond employment generation, income and revenue to understand non-quantitative impacts which are not easily captured by quantitative approach.

A qualitative design was chosen for the study because it provides a depth of understanding which cannot be achieved from a structured questionnaire. The

free-flowing format of the discussions provided an insight into participants' views and concerns, while seeking to identify not only what they know and think, but also why they do so. Qualitative research is an interactive process, and, therefore, it was possible to respond to the individual condition of each participant as well as being accommodating enough to bring out new insights.

Ascertaining the extent of change to the livelihood assets of local residents, after 7 years of implementing the ACID project, constitutes impact and evaluation studies. Accordingly, the after-only design was used for the study. The choice of this design was informed by the unavailability of baseline data that will serve as the basis of comparison between pre and post-project intervention. In this regard, information on baseline was constructed on the basis of participants' recall of situations in the communities before the ACID project commenced. This was complemented by the ACID project document, progress reports and a report on socio-economic survey of the communities. These provided useful information for comparison.

According to Kumar (2005), the after-only design is widely used in impact assessment studies though it is technically faulty. In real-life, many projects operate without the benefit of a planned evaluation at the programme planning stage (though this is fast changing) in which case it is just not possible to follow strictly the sequence –collection of baseline information, implementation of the programme and then project evaluation.

Project Setting

The ACID project area is within the Western Nzema Traditional Area, located in the Jomoro District, one of the 13 administrative districts in the

Western Region. The district lies between Latitudes 04° 55' 05" 15" N and Longitudes 02° 15' 02" 45" W and is bordered on the north by Wassa Amenfi and Aowin Suaman Districts, Nzema East district on the east, La Cote d'Ivoire to the west and the Gulf of Guinea to the South. It is located in the Southwestern corner of the Western Region of Ghana. The ACID project area is about 360 km west of Accra, with the closest large urban centre being Axim, 50 km to the east.

The Amansure wetland catchment area is about 929 km² and lies on the western coastline of Ghana (04° 55' - 05° 15' N and Longitudes 02° 15' - 02° 45' W). It covers both the Western and Eastern Nzema Traditional Areas. However, the ACID project is restricted to a portion in the Western Nzema Traditional Area, about 381 km² (40% of the total catchment)

The vegetation in the Amansure wetland is described as swamp forest and is the largest stand of intact swamp forest in Ghana. Swamp forest contains fewer large trees than surrounding high forest and is also poor in species. In the swamp forest, the most common tree is *Raphia vinifera* (Raphia Palm), which grows in pure stands. The wetland is alleged to be fairly rich in biodiversity. The area is home to several species of plants and animals. Ninety-three of these species, made up of reptiles, mammals and birds, are of global and national conservation interest. Twenty-eight species of fish are recorded, five families and over 28 species of butterflies are also found in the area. Floral diversity is remarkably high, 237 species belonging to 51 different plant species are represented in the Amansure catchment. The Amansure wetland has been designated as one of the Important Bird Areas (IBAs) in Ghana. Furthermore, the area is important for

maintaining populations of endangered species and qualifies to be a Ramsar site, though not so labeled yet (GWS, 1998).

Project Inception and Goals

The ACID project was launched on 22nd April 2000, in Beyin, the paramountcy of the Western Nzema Traditional Area. The project is being implemented by the Ghana Wildlife Society (a Ghanaian conservation non-governmental organisation) in partnership with the Western Nzema Traditional Council and six communities (Beyin, Nzulezo, Ngelekazo, Miogyinla, Ebonloa, and Ekabaku). The first phase of the project was financed through the Dutch Government via its Embassy in Accra.

The aim of the ACID project is to secure and enhance the integrity of the Amansure wetland and promote local development through a planned management of the wetland. Furthermore, the project anticipates the development of ecotourism and other income generating activities based on a well-functioning wetland thereby contributing to the socio-economic development of the communities. From the foregoing, it is sufficient to conclude that the ACID project was designed on the philosophy of CBNRM i.e. conservation and development. The project is also in tandem with Ghana's Forest and Wildlife Policy statement of 1994 which seeks to promote partnership with local communities in natural resource management in the country.

The Study Communities

For the purpose of the study, three out of the six project communities were selected i.e. Beyin, Nzulezo and Ebonloa (see Figure 2). The choice of these

three communities was informed by the subjective judgement that covering all the six communities will not yield substantial advantage over the three communities.

Beyin: This coastal community with a population of 971 (GoG, 2002b) is the paramouncy of the Western Nzema Traditional Area. The project office which functions as a visitor reception centre is located in the community. Ecotourism activities and the presence of tourists in the project area are conspicuous in Beyin. Tourists alight from their vehicles in the community before boarding canoes to Nzulezo, one of the principal ecotourism destinations in Ghana. Some dining and accommodation services are also provided in Beyin. The choice of Beyin was therefore considered suitable for the current study.

Nzulezo: This village 'sits' on the Amansure wetland. The population of Nzulezo is 356 (GoG, 2002b). It is believed to be the only lake community in Ghana and it is about 5km away from Beyin. A canoe ride from Beyin to Nzulezo takes about one hour.

Nzulezo is the only tourist attraction within the project area that brings in tourists daily to the area. Consequently, it plays a vital role in the implementation of the ACID project. Nzulezo therefore could not be excluded from the purposive sampling.

Ebonloa: Unlike the other communities, Ebonloa is not a coastal community. It is 45 minutes drive from Beyin. It has a population of 636 people (GoG, 2002b). Nzulezo can also be accessed from Ebonloa. However, the community experiences minimal ecotourism activities, most probably because of

its location. Delving into the perception and opinion of local residents of Ebonloa was judged to be significant to the study, hence its inclusion in the sample.

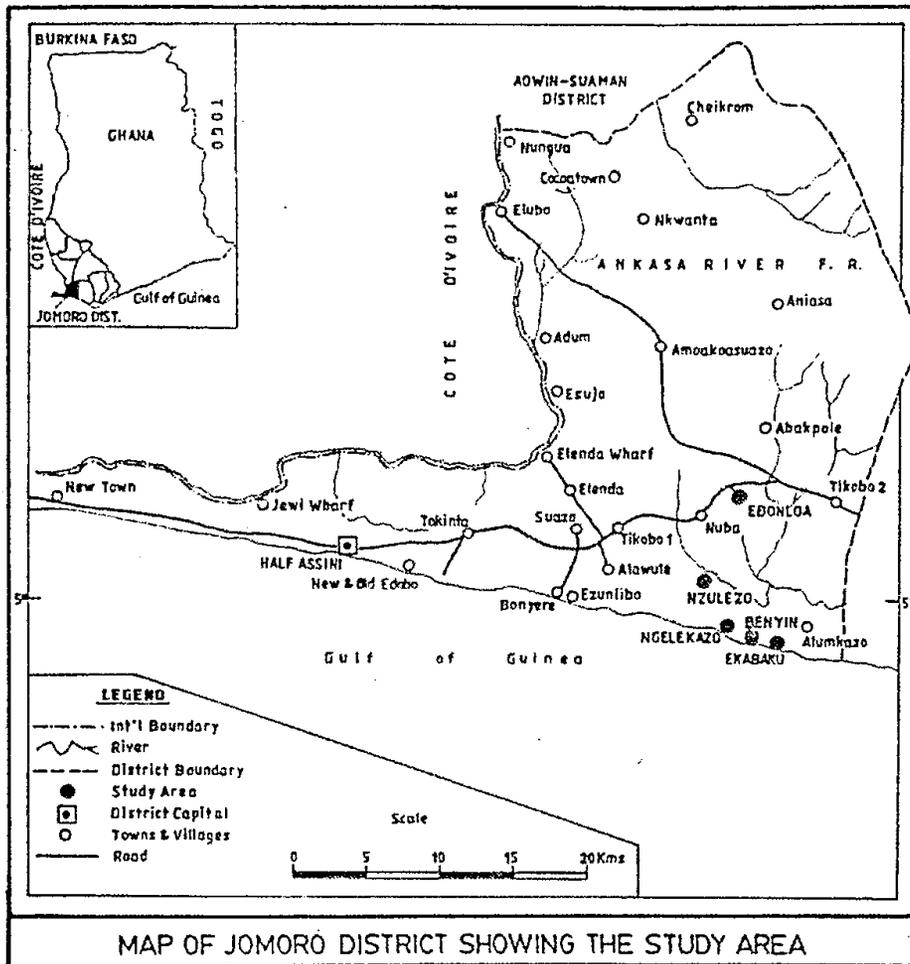


Figure 2: Map of Jomoro District Showing the Study Area

Sources of Data

Data for the study were derived from both primary and secondary sources. The primary data were collected via focus group discussions and interviews of key informants, ACID personnel and tourists. For the secondary sources a review and analysis of the following documents was undertaken:

1. The ACID project document
2. Report on socio-economic survey of communities
3. Mid-term review report of the ACID project
4. Minutes of Project Management Committee Meetings
5. Visitor record book
6. Cash entry books

The review of these documents assisted the exploration of the context and situation of the ACID project. More importantly, the analysis of the documents facilitated better appreciation of the background of the project and implementation communities. In addition to these, books, articles, and reports were also reviewed.

Research Participants

1. **Local Residents:** This group comprised local residents aged 25 and above of the three project communities selected for the study (Beyin, Ebonloa and Nzulezo). The age was fixed at 25 years because participants were required to retrospectively compare present livelihood conditions to those of the year 2000 when the project commenced. Local residents currently aged 25 would have been 18 years old as at the time of the commencement of the project. At 18 years, participants were presumed would have been old enough to make observations and judgement on conditions in their communities over the seven- year period.

One hundred and ten local residents participated in the study via focus group discussions. Due to their indirect involvement and backbench

role, the local residents were perceived to be in the position to provide insightful and candid opinions on the project.

Four focus group discussions were conducted in each of the three communities, making a total of 12. At Beyin and Ebonloa, there were 37 participants each, while at Nzulezo 36 residents participated in the focus group discussions. The ages of the participants ranged between 25 and 55 years.

Participants were grouped according to age and gender. For each age group, separate male and female groups were formed. There were between 8-12 participants in each group. In all, 54 and 56 females and males participated in the focus group discussions. It is important to note that a deliberate effort was made to achieve equal gender representation in the selection of participants.

2. Key Informants:

- i. **Opinion Leaders:** This category comprised individuals who, by virtue of their leadership positions in the communities, were considered to possess insightful information on the project. The seven opinion leaders were purposively selected from Beyin, Nzulezo and Ebonloa. In Beyin, the Tufohen, the representative of the Youth on the ACID project management committee, the Assemblyman and the Owulae or Omahen of Western Nzema Traditional Area were interviewed. The Ebusuapanyin of Nzulezo and a member of the Tourism Sub-committee from Nzulezo were

also interviewed, while another member of the Tourism Subcommittee from Ebonloa was interviewed.

The purpose of interviewing the opinion leaders was to explore their perception and opinion on the changes that have taken place in their communities as well as their views on the individual and community level benefits from the ACID project.

- ii. **ACID Project Managers:** Tasked with project implementation and hence conversant with the intricacies of the project, this category of participants was considered useful in the provision of significant perspectives and technical information on the project that could not be provided by the other research participants. The Project Manager, Community Liaison and Small Scale Enterprise Development Officer and the Tourism Officer were interviewed.
3. **Local Indigenes employed by the project:** This group of research participants were residents of the communities employed by the ACID project; 10 of them were interviewed. They comprised six tour guides, three community agents and a driver. The interview with these individuals explored issues related to their livelihood, overall impact of ACID project on livelihood assets and community level impact of the project.
4. **Tourists:** This category of respondents consists of visitors to Nzulezo departing the project area. They were included in the study for the purpose of triangulation. Twenty tourists were interviewed. Of the 20 participants, 17 were females and 3 were males. Their ages ranged from 19 to 60 years. Fifteen were between 20 and 30 years old. In terms of their

education, all the 20 indicated having attained tertiary level education; while 17 were not married. Regarding country of origin, 17 were foreigners and three Ghanaian nationals.

Sampling Method and Size

In view of the insightful and comprehensive information required to assess the impact of the ACID project on the livelihood assets of the local residents and to ultimately answer the research questions, 10 key informants thought to possess in-depth knowledge about the project were purposively selected for interviews. Normally, qualitative studies employ a form of non-probability sampling such as accidental or purposive sampling (Kuzel, 1992 cited in Sarantakos, 1998).

In the interview of the 10 indigenes employed by the project, interviewees were accidentally selected. Employees who report to work between the hours of 8am and 5 pm and were available were interviewed. After the 10th interview, it was concluded that new issues and themes were not likely to emerge from further interviews, hence the interviews with employees were considered to have reached saturation point; and, Kumar (2005) opines that this sampling procedure is acceptable in qualitative research.

Participants of the focus group discussions were initially selected accidentally, using a recruitment questionnaire that sought socio-demographic data of respondents and willingness to participate in the discussions. The essence of administering a recruitment questionnaire was to ensure that participants met the criteria of age, residency of at least seven years in the communities as well as helping the grouping of participants.

Following the administration of 120 screening questionnaires and subsequent screening, 110 local residents participated in the focus group discussion. The shortfall in the number of local residents contacted and the actual participation is explained by the failure of five people to meet the age criteria and years of continuous residency in the communities while five failed to turn up for the discussions.

In the case of tourists, those who returned to the visitor reception centre after their visit to Nzulezo and were leaving the project area were interviewed. At the end of the field work, 20 tourists were interviewed.

Research Instruments

The primary data collection methods used for generating the qualitative data for the study were in-depth interview and focus group discussion. These methods were used because they were deemed appropriate for the qualitative design adopted for the study.

The in-depth interview was applied in collecting data from key informants and the local indigenes employed by the project. The interview with key informants lasted between 60-120 minutes while interviews with indigenes employed by the project lasted between 45-70 minutes. The focus group discussions took between 90-120 minutes to complete, and was audio-recorded and transcribed. The tourists' interview lasted between 10-30 minutes. Focus group discussion was employed in collecting data from the local residents while semi-structured interview was utilized to solicit data from tourists.

In the informant and employee interviews as well as the focus group discussions, an interview guide was used. The guide dealt with the background

information of interviewees and discussed how the ACID project had impacted on the livelihood assets of the local residents. Secondary questions explored interviewees' general opinion and perspectives on the ACID project. The semi-structured interview collected background information on tourists and, more importantly, data on visitor expenditure, duration of stay of visit to the project area. Other issues considered were sources of information on the destination.

Pilot Study

A pilot study was conducted in Cape Coast from 5th to 9th March 2007. It involved a discussion with 10 people selected from the immediate environs of the Cape Coast Castle, five tourists visiting the Castle and two employees of the Cape Coast Castle.

The pilot study gave a fore knowledge of the duration of focus group discussions and interviews with key informants as well as tourists. Some of the questions were rearranged and this ensured logical arrangement of questions and deletion of repeated ones. Additionally, because of the pilot study planning for the field work was less stressful and difficult.

Field Work

Data collection for the study was undertaken from 26th March to 20th April 2007 (see Table 3). Unlike the interviews, the focus group discussions were accomplished with the help of a local co-facilitator who recorded the discussions and also translated from Twi to Nzema and vice versa, when necessary.

Table 3: Fieldwork Schedule.

Date	Task Executed
26 th -31 st March	<ul style="list-style-type: none">• Interviews with indigenes employed by the ACID project in Beyin and Tourists
2 nd -6 th April	<ul style="list-style-type: none">• Interviews with Key informants
10 th -12 th April	<ul style="list-style-type: none">• Administration of recruitment questionnaire for focus group discussion in Beyin, Nzulezo and Ebonloa
13 th -14 th April	<ul style="list-style-type: none">• Focus Group Discussion in Beyin
16 th -17 th April	<ul style="list-style-type: none">• Focus Group Discussion in Nzulezo
19 th -20 th April	<ul style="list-style-type: none">• Focus Group Discussion in Ebonloa

Source: Fieldwork, 2007

Data Analysis

According to Coffey (1996), qualitative research is a complex issue, and making sense of qualitative data is not an easy task. From the interviews and focus group discussions, considerable text data was generated. After transcribing the data, inductive approach was used to organise the data into various themes and categories using the research questions and the objectives of the study. Simple tables and matrixes were used to present sections of the results.

Challenges of Fieldwork

The challenges that emerged during data collection for the study were not different from those that confront other research works. However, of particular

interest was the familiarity between the researcher and some of the research participants, that is, employees of the ACID project. Due to the familiarity, it was anticipated that participants would be cautious with their actual perceptions and opinions on issues under discussions. This was seen as having the potential to introduce biases into the findings and conclusions. This challenge was overcome by consistently reminding participants of preserving their anonymity and the fact that the study was entirely independent of the Ghana Wildlife Society.

Another challenge was the frequent interruption of interview process during the employees' interviews. Employees being interviewed were called to duty any time tourists arrived thereby disrupting interviews. This stalled the flow of the discussions. As a remedy to the situation, tour guides who were off-duty on a particular day were interviewed.

Local residents appeared to be experiencing "research fatigue" and this was prominent in Nzulezo. Participants complained that in spite of their participation in several research works nothing much had changed in their lives and communities. It was explained to them that the study had little to do with development in their communities. They participated in the research work, albeit with some hesitation.

CHAPTER FOUR

ACID AND LIVELIHOOD ASSETS OF LOCAL RESIDENTS

Introduction

The main findings of the study are presented in this chapter. The findings have been organised into themes derived from the interview guide as well as the objectives of the study and the research questions. The main themes are the impact of ACID on the livelihood assets of local residents, that is, financial, natural, social, physical and human assets. Furthermore, issues related to visitor models (visitor duration, expenditure, tourists receipts) and the contribution of the ACID project to ecotourism development in the area are also presented.

Impact of ACID on Financial Assets

Direct Employment and Income: Employment opportunities are important channels through which people earn income. Employment and income therefore constitute important financial assets of people.

All categories of research participants identified employment of local residents by the project as a significant benefit of the ACID project. Out of 20 people employed by the project, 18 were local residents. Ten have been engaged as full-time tour guides with five as community agents. The project driver, a secretary and a messenger are all indigenes. In addition, the project provides opportunity for casual engagement of local residents. Five local residents are casually engaged to wash life jackets, clean and maintain a canal. Added to the

foregoing is the employment of four local residents as cooks and waitresses by a beach resort at Beyin. This finding agrees with the conclusion of the mid-term evaluation of the project that the main benefit of the project has been the employment of indigenes by the project.

Similarly, in their evaluation of Mamiraua' Sustainable Development Reserve in Brazil, Koziell and Inoue (2006) found that the ecotourism component of the project employs local residents as guides. In confirmation of this benefit, it is said that tourism related employment is one of the major ways in which tourism can contribute to the quality of life in host communities (UNEP et al., 2005).

The local residents employed by the project have been working for the past seven years and therefore have enjoyed considerable job security and guaranteed income over the period. This means a guaranteed income for the households of these employees, in spite of the high labour turnover that often characterises the tourism industry.

Besides working for the project, most of the local employees were found to be engaged in other livelihood activities. These activities included farming, coconut retailing, selling of fish, operation of drinking bars and management of home-stay schemes. This practice of multiple livelihood activities is quite common among citizens of developing countries and is regarded as a coping strategy geared towards supplementing household income.

It was also found that employees enjoy flexible working schedule. Community agents work three days in a week (Thursday, Saturday, and Sunday). Though tour guides, who reside in the community, work six days in a week, they

only become busy when tourists visit the area. This seemingly flexible working schedule permits most employees to pursue the multiple livelihood activities.

Local residents employed by the project earn reliable monthly income ranging between GH¢40 and GH ¢50. According to the employees, they spend their income on hospital bills, payment of children's school fees, remittances, funeral donations, food and clothing, among others. All the local residents employed by the project have between two to five dependents.

'I use part of my salary to take care of my wife and two children'

(Tour Guide)

The employees expressed divergent views when asked whether they were satisfied with the salary they earned. While some said they were satisfied, others indicated that the salary was too meagre. This view was common to both employees that pursue other livelihood activities and those who do not. In both key informant interview and focus group discussions, the issue of inadequate salary came up, and an upward adjustment of the salary was strongly articulated. Complaints about inadequacy of salaries in Ghana are common among salaried workers. However, generally, the tourism industry is noted for low pay, poor working conditions and little job security (UNEP and UNWTO, 2005). Relatively, in a district where about 91.5 per cent of the people are estimated to earn between GH¢10 and GH¢110 annually, the monthly salary of the ACID project employees may be considered better off than other local residents.

The indigenes employed by the project said that because the salary is inadequate they are not able to save. Nevertheless, participants claimed that their

standard of living had improved albeit minimally since their employment with the project.

My salary is too small; my needs are more than the salary and I don't even think of saving some of my salary'

(Tour Guide)

Indirect Employment and Income

Home-stay facilities (an accommodation service constructed with local materials and, in most cases, not more than five rooms owned and managed by local residents) have been established by local residents in order to meet the accommodation needs of tourists. At present, Beyin and Nzulezo have two home-stay facilities each while Ngelekazo has one. These accommodation facilities have employed local residents. About sixteen (16) local residents are casually engaged by the operators of home stay facilities to wash and cook for tourists, for a fee.

Operators of the home stay facilities also derived income from their activities. For instance, in 2005, it was estimated that three home stay facilities collectively generated a gross income of GH¢3,500. According to participants, drinking spot business in the communities, particularly in Beyin and Nzulezo, has expanded considerably. For example, in Beyin, the number of drinking spots has increased from two in the year 2000 to eight in 2007. In the case of Nzulezo, there were no drinking spots at the onset of the project but now the community boasts of four drinking spots. Three drinking spots in Beyin reported a total profit of GH¢965.70 in 2006. Participants further intimated that food vendors also benefit from the project because tourists patronise their food and therefore

increase their sales, which ultimately, has enhanced their livelihood. For example, tourists buy from ice cream vendors during their visits to the communities and this is illustrated by Plate 1.



Plate 1: Tourists buying from an ice cream vendor at Beyin

Source: Fieldwork, 2007

Small Scale Enterprises Development Support Fund (SSEDSF)

All the research participants perceived the establishment of the SSEDSF and subsequent disbursement of loans to local residents as a positive attribute of the ACID project. The fund was established by the ACID project purposely to provide financial and non-financial support to local residents to pursue alternative livelihood activities that will generate minimal impact on the natural resources of the area. The loan scheme is to serve as an incentive that will dissuade local residents from engaging in livelihood activities considered destructive to the natural environment and as well as motivate them to participate in conservation.

In pursuit of its objectives, the fund has since September 2003 disbursed GH¢23,289.80 in two batches to 116 local residents (Table 4). The loans ranged

between GH¢20 and GH¢900. Beneficiaries were expected to repay the loans within three years with, 10 per cent interest. As shown in Table 4, Ebonloa has the highest number of beneficiaries while Miegyinla has the lowest.

Table 4: Loans disbursed to Beneficiaries by Community

Community	No. of Beneficiaries	Amount Granted (GH¢)
Ekabaku	15	2,575
Ngelekazo	17	2,720
Nzulezo	15	2,145
Ebonloa	36	10,066.80
Beyin	23	4,618
Miegyinla	10	1,165
Total	116	23,289.80

Source: Fieldwork, 2007

Most participants asserted that the small-scale loan scheme has brought tremendous opportunities to the beneficiaries. This was confirmed by some loan beneficiaries who revealed that their start-up capital has increased.

“Initially, I only had GH¢120 for my coconut oil processing; however, after receiving the loan my capital now stands at GH¢350”.

(Loan beneficiary resident of Ebonloa Community)

‘People now have capital to start a business; previously most women in our communities were not working but because of the small-

scale enterprise loan scheme, people have opened stores in the communities'.

(Participant, Focus group discussion)

'People are now conveying coconut and coconut oil to Techiman and Accra, respectively, all because of the help from the small-scale enterprise loan granted by the project'.

(Tour Guide)

Interestingly, however, some of the beneficiaries intimated that the loan did not help them. According to this category of beneficiaries, they have become indebted to the ACID project because they are unable to repay the loans. They attributed their inability to repay the loans to business failure and inadequacy of the loan granted them to meet operational cost of their business activities.

The study found that of the loans granted, 57 per cent (GH¢14,654.61) had been recovered from beneficiaries suggesting that 43 per cent is still outstanding. All the beneficiaries have exhausted the period given to them to repay the loans. According to the management of the ACID project, disbursement of further funds has been suspended because of the outstanding debt.

Micro financing schemes are increasingly becoming an important channel through which the poor are assisted with capital to engage in productive ventures in developing countries. Both governmental and non-governmental organisations implement some form of micro finance schemes. It is progressively gaining recognition as a solution to lack of capital among the poor. It is against this

background that in 2004, 24 per cent of Ghana's District Assemblies Common Fund was expended on Poverty Alleviation micro credit loans to women groups in Ghana (IMF, 2006).

The local residents therefore considered the establishment of the SSEDSF component of the ACID project as commendable because it presents a unique opportunity to improve livelihood in the communities. In a survey conducted in the Jomoro District, it was revealed that as many as 97.5 per cent of the respondents reported lack of access to financial credit (Ministry of Local Government, Rural Development and Environment and Moks Publications and Media Services, 2006). Consequently, the implementation of the SSEDSF was expected to help in the provision of credit facility to local residents.

It is, however, worth noting that access to a loan facility may not necessarily bring dividend to the beneficiaries, as amply confirmed by some loan beneficiaries who said that they did not benefit from the loan. Very often, implementers of micro-credit schemes are quick to point out the amount disbursed to individuals/groups and communities without ascertaining how successful beneficiaries utilised the loans. Well-meaning micro-credit schemes have collapsed in the country because of low recovery rate. Detailed assessment of the SSEDSF among beneficiaries to answer the question of whether the scheme has really helped beneficiaries is outside the ambit of this thesis.

Project Revenue to Communities

In the view of participants, a remarkable financial result achieved by the project was the sharing of ecotourism revenue among communities. The revenue is generated through tour fees and camera charges. At the end of each year, the

accumulated fees are shared among five communities and other four stakeholders based on an adopted sharing mechanism (Figure 3).

As shown in Figure 3, out of the 10 recipients of ecotourism revenue, the Core Fund receives a greater share (20%). Collectively, the five communities receive less than half of total revenue disbursement (46%) with Nzulezo and Beyin allocated 12 per cent and 10 per cent, respectively, whilst the remaining three communities are allocated 8 per cent each.

The other stakeholders receive a total of 34 per cent i.e. the Western Nzema Traditional Council (19%), the Stool Lands (10%), and the Jomoro District Assembly (5%).

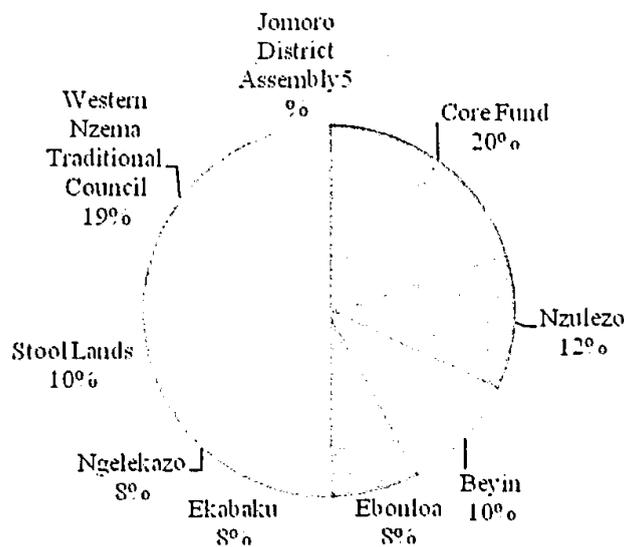


Figure 3: Sharing of project Revenue

Source: Fieldwork, 2007

The sharing mechanism has seen many revisions. From 1999 to 2002, Nzulezo and Beyin were the only recipients of revenue with 55 per cent and 45 per cent, respectively. However, in 2003, the other four project communities were

included because their exclusion was considered by the project management committee to be untenable as they are part of the project. Thereafter, all the six communities were allocated 10 per cent each. The Jomoro District Assembly (5%), the Western Nzema Traditional Council (5%), Stool Lands (10%) and Core Fund (20%) became beneficiaries in the same year. The core fund is a reserved account established for the purposes of meeting the operating cost of ACID at the end of the project life cycle. At the same time, the communities borrow from the fund, using their share of ecotourism revenue as collateral.

Again, in 2005, further changes were made to the sharing formula; Miegyinla was expunged from the beneficiaries for not contributing land towards the creation of the Amansure Community Nature Reserve and its share was added to that of the Western Nzema Traditional Council.

Table 5: Revenue Distributed to Stakeholders in GH¢ (2001-2006)

Stakeholder	2001	2002	2003	2004	2005	2006	Total
Beyin	1,916.68	2,769.79	400.66	547.41	520.57	755.34	6,910.45
Nzulezo	2,129.65	3,385.30	400.66	547.41	624.68	906.40	7,994.10
Ngelekazo	-	-	400.66	547.41	416.45	604.27	1,968.79
Ekabaku	-	-	400.66	547.41	416.45	604.27	1,968.79
Ebonloa	-	-	400.66	547.41	416.45	604.27	1,968.79
Miegyinla	-	-	400.66	547.41	-	-	948.07
Stool Lands	-	-	400.66	547.41	520.57	755.34	2,223.98
JDA	-	-	200.33	273.70	260.28	377.67	1,111.98
WNTC	-	-	200.33	273.70	789.08	1,435.14	2,698.25
Core Fund	-	-	801.32	1,094.82	1,041.14	1,510.68	4,447.96
TOTAL	4,046.33	6,155.09	4,006.60	5,474.09	5,005.67	7,553.38	32,241.16

Source: Fieldwork 2007

As indicated in Table 5, from 2001 to 2006, beneficiaries of the ACID project received GH¢32,241.16. Out of this amount, the six communities received GH¢ 21, 758.99 (67%). Nzulezo and Beyin had the greater share of the

allocation to the communities GH¢14,905.55 or 68.5 per cent. These two communities are the highest recipients of ecotourism revenue partly because they were the only beneficiaries from 2001 to 2002 and also because their percentage share is greater than the other communities as already shown in Figure 3. It also emerged from the study that all the communities that benefit from ecotourism revenue operate bank account through which allocations are paid.

The five (5) non-community stakeholders of the project have together accrued GH¢10,482.17, representing 33 per cent of total revenue disbursed to stakeholders. The core fund is the highest receiver of revenue among the non-community stakeholders i.e. GH¢4,447.96 (41.6%).

Total annual revenue disbursed to beneficiaries appeared inconsistent. Between 2001 and 2002, revenue disbursed to stakeholders increased by 34.2 per cent from GH¢4,046.33 to GH¢6,155.09. However, revenue decreased sharply by 53.6 per cent from GH¢6,155.09 to GH¢4,006.60 in 2003 and it moved up by 26.8 per cent (GH¢5,474.09) in 2004. As has been the trend, there was a marginal decline in revenue disbursement in 2005 by 5.1 per cent (GH¢5,474.11 to GH¢5,205.70). Conversely, 2006 marked another increment in revenue disbursement by 31 per cent (GH¢7,553.40). According to the management of the project, the fluctuation in revenue disbursement to the communities is due to acquisition of property and major maintenance work carried out by the project.

Utilisation of Project Revenue by Communities

During interviews and focus group discussions, it came to light that communities have used their share of revenue to execute a number of projects (see Table 6). Nzulezo has used its share of ecotourism revenue to extend

electricity to New Nzulezo (this community which is on land belongs to Nzulezo and it is inhabited by some of the people of Nzulezo). The community paid 10 per cent of the cost of the electrification project. In addition, the salaries of four teachers employed to teach in the community's primary school are paid from ecotourism revenue. Similarly, a chief's palace has also been constructed in Nzulezo from the same source.

Table 6: Projects Executed by communities with Project Revenue

Community	Project
Nzulezo	<ul style="list-style-type: none"> • Extension of electricity to New Nzulezo • Payment of salaries of four primary school teachers employed by the community. • Construction of Chief's Palace.
Ebonloa	<ul style="list-style-type: none"> • Electrification project in the community. • Construction of two classrooms for nursery school.
Beyin	<ul style="list-style-type: none"> • Maintenance of street lights • Renovation of school buildings (Primary and JSS blocks) • Organisation of Annual Kudum Festival • Hosting of Freedom Flame during Ghana@50 Celebrations

Source: Fieldwork, 2007

As with Nzulezo, Ebonloa has also extended electricity to their community as well as added two classrooms to the primary school block to enhance education in the community. This finding supports the result of Hughes and Flintan (2001) that funds from Lake Mburo National Park in Uganda were used to build social infrastructure such as schools for the project communities.

As depicted in Table 6, Beyin has expended money on the renovation of Beyin Roman Catholic Basic School, which suffers destruction anytime a rainstorm hits the area. The community also relies on their ecotourism revenue to maintain streetlights. Recently, the community hosted the 'Freedom Flame' during Ghana @ 50 celebrations and all the cost related to the hosting of the event was financed by using community ecotourism revenue. Prior to the commencement of the ACID project, local residents of all the 52 towns and communities under the Western Nzema Traditional Area were levied towards the celebration of the Annual Kundum Festival. However, since Beyin started receiving ecotourism revenue, local residents are no longer levied for that purpose because ecotourism revenue is used to organise the Kundum Festival.

On how the project has improved livelihoods in their communities, the participants made the following list:

- Food vendors increase their household income by selling to tourists;
- Drinking bar operators make brisk business because tourists patronise their services;
- Operators of home-stay facilities make profit by providing accommodation to tourists;

- The youth in Beyin earn casual wages as they ferry tourists to Nzulezo during peak days;
- The Small Scale Enterprises Development Support Fund has helped some local residents to increase household income;
- ACID has provided employment opportunity for some local residents;
- Three of the five project communities have since the inception of ACID been connected to the national electricity grid.

Impact on Natural Asset

In both key informant interviews and focus group discussions, participants claimed that several noticeable changes have occurred in the environment of the communities since the inception of the ACID project. According to participants, wild animal population in the communities has increased, particularly with reference to monkeys and bush pigs. This assertion, according to the respondents, is premised on the growing frequency of reported sighting of these animals in different locations. This finding supports Arntzen et al. (2003) reported increment in elephant population as well as illegal tree felling following the implementation of the CAMPFIRE model in Zimbabwe.

It was further found that an 83,000 hectare community nature reserve, designated as Amansuri Community Nature Reserve (ACNR), consisting of a swamp peat and a swamp forest, has been established in the project area. The reserve is protected by the ACNR and the Wetland Ecosystem Bye-Law passed by the Jomoro District Assembly, under Section 52 of the Local Government Act 359 of 1971. In the opinion of participants, the establishment of the nature

reserve is a noteworthy outcome of ACID on the natural assets of the study area. This reserve coincides with what Borrin-Feyerabend et al. (2004) describe as Community Conserved Areas.

The participants also contended that sanitation conditions in the communities have improved remarkably since the commencement of the project, with particular reference to the beach. This view was strongly supported by the local residents of Beyin.

‘I was personally using the beach as a place of convenience but I have stopped this practice’

(A resident of Beyin)

The participants attributed the improved sanitary condition to the provision of dustbins in the communities. The improvement in sanitation notwithstanding, participants unanimously alleged that some tourists litter Beyin during their visits.

Furthermore, some key informants opined that sanitary conditions in Nzulezo have deteriorated due to improper waste disposal and complexities resulting from the location of the community.

Participants felt that there has been a change in the manner local residents uses their natural assets in the following areas:

- Reduction in the hunting of wild animals for bushmeat e.g. sea turtles, birds, bush pigs;
- Harvesting of trees in the wetland on commercial basis has reduced;
- Farming activities in the wetland are no longer practised;
- Charcoal burning has also become rare in the communities; and,

- Defecating on the beach is no longer the norm.

When participants were queried on what would have caused the observed changes in the positive treatment of natural assets, the following response came out:

- Conservation education by the ACID project in the communities;
- Institution of bye-laws on the use of natural assets in the communities;
- Enforcement of the bye-laws by the traditional leaders in the various communities; and,
- Increased level of environmental awareness among local residents.

On accessibility to natural assets, some participants were of the impression that their rights to natural assets have been hindered since the commencement of the ACID project. According to them, they no longer have access to bushmeat and sea turtles because hunting has been outlawed through the byelaws promulgated in the communities. In opposition to this situation, some local residents said they would kill animals when the opportunity presented itself. This dissenting view is strong among local residents who had not benefited from the Small Scale Enterprise Development Support Fund.

On the other hand, some other local residents held the view that accessibility to natural resources has not been impeded but rather restrained-usage has been instituted. To reinforce this perception, they asserted that cutting down of trees for building purposes is allowed. In addition, alcohol distillation, which is a common occupation of the local residents of Nzulezo, is permitted at designated places within the wetland. Though the respondents conceded that some form of restrictions has been placed on charcoal burning, commercial

logging, hunting and farming in the wetland, they perceived the restrictions as being in the interest of local residents. In their view, they will, in turn, benefit by means of ecotourism. The variation in opinion notwithstanding, local residents concluded that the impact of ACID on their natural asset has been, on the whole, positive. Table 7 summarises the positive and negative impacts of ACID on the natural assets as identified by the local residents.

Table 7: Positive and Negative Impacts of ACID on Natural Assets

Positive	Negative
<ul style="list-style-type: none"> • Establishment of Community Nature Reserve 	<ul style="list-style-type: none"> • Lack of bushmeat
<ul style="list-style-type: none"> • Change in attitude of local residents with respect to use of natural assets 	<ul style="list-style-type: none"> • Crop raiding by animals
<ul style="list-style-type: none"> • General improvement in sanitation in the communities and beaches 	<ul style="list-style-type: none"> • Destruction of fishing nets by Sea turtles

Source: Fieldwork, 2007

Impact on Social Assets

Regarding the impact of the project on social assets, results from interviews and focus group discussions indicate both negative and positive impact of ACID on the local residents. According to participants, relationship

among local residents is mixed, following the implementation of the ACID project.

There are indications of community cohesion and unity of purpose among local residents. This, in the view of residents, is noticeable during community meetings organised to deliberate on the utilisation of community revenue. In addition, in the opinion of local residents, they collectively share the pride and associated happiness resulting from the growing image of the ACID project area as a principal ecotourism destination in the Western Region, and this, to them, enhances community cohesiveness and cordiality.

The disbursement of the Small Scale Enterprises Support Fund loans through trade associations formed within the communities has also promoted the support local residents extend to each other. It was found that members of these associations pay dues and meet regularly in their communities. Though the aim of these associations was to facilitate accessibility to the small-scale loans, members assist each other by means of donations in times of bereavement, marriage, naming ceremonies and other social concerns. Voluntary social support systems have, therefore, been introduced into the associations. Strikingly, most of the associations have ceased to function immediately after the disbursement of the loans.

The indication of community cohesion notwithstanding, there were strong signs of division and envy among local residents. Local residents are divided between loan beneficiaries and non-beneficiaries. Local residents who have not received loans from the Small Scale Enterprises Development Support Fund appeared aggrieved and blamed beneficiaries who are yet to repay their loans as

preventing them from accessing the loan facility. Furthermore, their failure to obtain loans from the fund seemed to influence their perceptions and impressions about the achievements of the ACID project.

‘The ACID project advised us to form an association as a condition for us to benefit from the loan scheme. However, none of our members, to date, has received a loan. As a result, our Association has collapsed’.

(A fisherman in Beyin community)

‘Some of the non-beneficiaries threatened to resume hunting of animals from the wetland because, according to them, they have no alternative source of livelihood’.

‘I stopped hunting bush pigs because I thought I would also benefit from the loan to enable me to engage in trading. However, up to date, I have not been given the money and I have no option but to go back to hunting. One bush pig can fetch me about GH¢60’

(A resident of Eblonloa)

Impact on Physical Assets

It is clear from the study that there has been a change in the physical assets of local residents in the communities. According to participants, the ACID project has influenced the provision of some social facilities in the communities.

As shown in Table 8, a 312-meter Walkway (streets and alleys) in Nzulezo has been reconstructed by the project in order to improve upon the living conditions of residents of the community. The walkway is similar to a road in any community situated on land. It is a raised platform on which people walk and this

facilitates the movement of residents and people who visit Nzulezo. It also connects the various houses in the community. Without the walkway, movement within the settlement would have been hindered and the village cannot receive tourists. Therefore, in the view of participants from Nzulezo, the walkway is a significant change that has occurred in their community.

Table 8: Direct and Indirect Impacts of ACID on Physical Assets of Residents

Direct	Indirect
<ul style="list-style-type: none"> • Construction of Walkway in Nzulezo 	<ul style="list-style-type: none"> • Extension of electricity to Ekabaku, New Nzulezo and Ebonloa
<ul style="list-style-type: none"> • Construction of a Canal linking Beyin and Nzulezo 	<ul style="list-style-type: none"> • Construction of school building
<ul style="list-style-type: none"> • Provision of visitor reception centre at Beyin 	<ul style="list-style-type: none"> • Maintenance of local market in Beyin • Provision of mobile telephone facility (MTN and One-Touch)

Source: Fieldwork, 2007

Residents of Beyin and Nzulezo felt that the construction of a canal is one of the direct additions to the physical assets of their communities. The purpose of the canal was to ease the problem of the canoes commuting between Nzulezo and the surrounding communities. This becomes extremely difficult during the dry

season when the water level in the lagoon recedes drastically to the extent that transportation by dugout canoe becomes laborious. Nevertheless, a majority of the local residents pointed out that the construction of the canal has not eased transportation between Nzulezo and the main land much as expected. According to them, during the dry season, the canal is not usable because of low water level and commuters and tourists continue to walk for over 30 minutes before boarding the canoes to Nzulezo.

The construction of a visitor reception facility at Beyin by the ACID project was also mentioned as a direct result of the project. The facility, which is made of three offices, a conference room and washrooms, serves as the secretariat of ACID as well as point of call for tourists.

In addition, participants indirectly linked the ACID project to the present availability of electricity, telephone facilities and some school buildings in the communities. The residents asserted that through ecotourism funds, electricity has been extended to three out of the five communities that were not connected to the national grid prior to the commencement of the project. However, Ngelakazo is in the process of getting connected to electricity but Nzulezo has not done so because of technical difficulties in relation to its location on lagoon.

Furthermore, it became known that mobile telephone providers i.e. MTN (formerly Scacom Ghana Limited) and Ghana Telecom (One Touch) have extended their services to the communities. This, the local residents attributed to the growing popularity of the area as a major ecotourism destination in the country. It was claimed that the project formally requested for the extension of telephone services to the area in order to meet the communication needs of

tourists. It is, however, difficult to attribute the extension of telephone services to the area by the two companies to the ACID project. This is because of the nationwide expansion drive by the two companies. Conceivably, the facilitating role of ACID cannot be overlooked.

Impact on Human Assets

The human assets of residents have been affected directly and indirectly by the ACID project. In the interviews of local residents employed by the project, participants revealed that they have benefited from on-the-job training programmes organised by the ACID project aimed at enhancing their skills and knowledge. It was revealed that in 2001, tour guides were trained in communication skills, tour guiding, hygiene, forest protection, first aid and providing interpretative services.

It was also mentioned that selected teachers in the communities, tour guides and community agents have been trained in snail and grasscutter rearing as well as leafy vegetable farming. Additionally, in connection with the operation of the Small Scale Enterprises Development Support Fund, petty traders, chop bar operators, farmers, in the project communities, have also been trained in simple accounting and record keeping, business creation and improvement. Interestingly, in spite of the training, there were no traces of grasscutter or snail farms in the communities. A critical issue of concern is how the acquisition of knowledge is used by beneficiaries to improve upon their livelihood and how it benefits other members of their families and the communities at large.

One significant indirect impact of the ACID project on the human asset of the project communities is the use of income by local residents employed by

the project, to educate their children, specifically. Further to this, these local residents use their income for medical expenses on themselves and families. These expenses go a long way to improve the quality of human assets of the communities. Similarly, the construction of school buildings and payment of salaries of teachers help to expand the human capital-base of the local residents through enhancement in the knowledge and skills of the people in the long term.

CHAPTER FIVE

CONTRIBUTION OF ACID TOWARDS ECOTOURISM DEVELOPMENT IN THE PROJECT AREA

Pre-ACID Ecotourism in the project area

Ecotourism commenced in the project area when tourists started visiting Nzulezo in 1983, following a pioneering promotional work of an indigene of the community then working with the Ghana Tourist Board in Takoradi. Nzulezo is a stilt village on Lake Amansure supporting buildings made of thatch and raffia palm on a raised platform of wood and raffia palm. Tourists were fascinated at how the inhabitants could build their village on water; their desire to know how the villagers live constituted the main purpose of visit to Nzulezo.

According to the participants, prior to the commencement of the ACID project, ecotourism was haphazard, uncoordinated and lacked professionalism. A few untrained local residents ferried tourists from Beyin to Nzulezo at a fee mostly determined through bargaining. A standardized fee was not charged and neither were receipts issued to tourists. Whatever was earned from their services accrued to the individuals who provided the services. On arrival at Nzulezo tourists were also charged but those funds were managed by a committee of residents which periodically rendered accounts to the chief and elders of the community. Statistics on tourist arrivals and receipts were not well collated and kept.

The ACID project assumed management responsibility of ecotourism in Nzulezo immediately after the launching of the project in 2000. According to the local residents, the coming of ACID has institutionalised and formalised ecotourism in their communities. This feat, according to them, was made possible through the training and employment of local residents as tour guides, construction of a visitor reception centre, accountability through the issuance of receipts to tourists and other promotional activities undertaken by the ACID project.

Visitor Arrivals and Revenue

From the point of view of the participants, the number of tourists visiting the communities has increased considerably since the project started. Though data on tourist arrivals before the commencement of the ACID project is non-existent, the local residents confirmed that they see more tourists now than before the project started. This view was upheld during key informant and employee interviews and this has also reflected in ecotourism receipts accruing from tour fees.

Indeed, as shown in Figure 4, tourist arrivals have been increasing since the year 2000 when the ACID project commenced. Between 2000 and 2006, annual tourist arrivals increased from 2494 in 2000 to 6155 in 2006 (146.8 %). Nonetheless, the growth has been erratic. Tourist arrivals increased by 16.7 per cent from 2000 to 2001 and grew by 43.4 per cent in 2002. However, the growth rate plummeted to 10.9 per cent in 2003 and further declining growth rates were recorded in 2004 (4.8%) and 2005 (3%) but picked up in 2006 (22.8%).

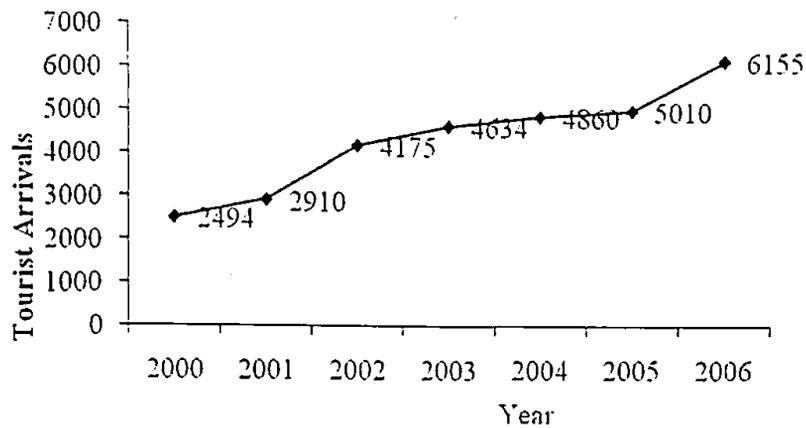


Figure 4: Tourist Arrivals at Nzulezo

Figure 4 shows tourist arrivals at Nzulezo by Ghanaian nationals and foreigners. By nationality, foreign nationals dominated tourists' visitation from 2000 to 2001, constituting 87 per cent and 83 per cent, respectively; Ghanaians being in the minority. However, by 2002 Ghanaian visitors have outnumbered the foreign nationals by 251. In absolute terms, there has been a consistent annual increase in the number of Ghanaian visitors from 2002 to 2006 whereas arrivals for foreign nationals recorded deeps in 2002 and 2005 as depicted in Figure 5. The observed trend shows a gradual improvement in the interest of Ghanaians to pursue domestic tourism. The fluctuating nature of tourist arrivals for foreign nationals explains the erratic growth that has characterised overall tourist arrivals.

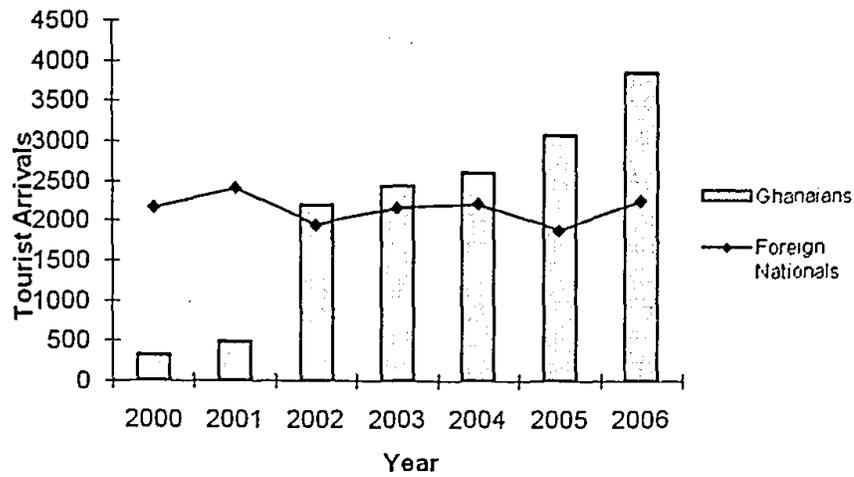


Figure 5: Tourist Arrivals at Nzulezo by Ghanaians and Foreign Nationals (2000 -2006)

Ghanaians visit in groups (see Plate 2), especially at weekends and on public holidays. They hardly spend the night at the destination. Visit by foreign nationals, on the other hand, is spread evenly throughout the week. This pattern of visits by Ghanaians and foreign nationals compares to that of other destinations in the country, notably Kakum National Park and Cape Coast Castle where Ghanaians constitute a greater chunk of the arrivals.

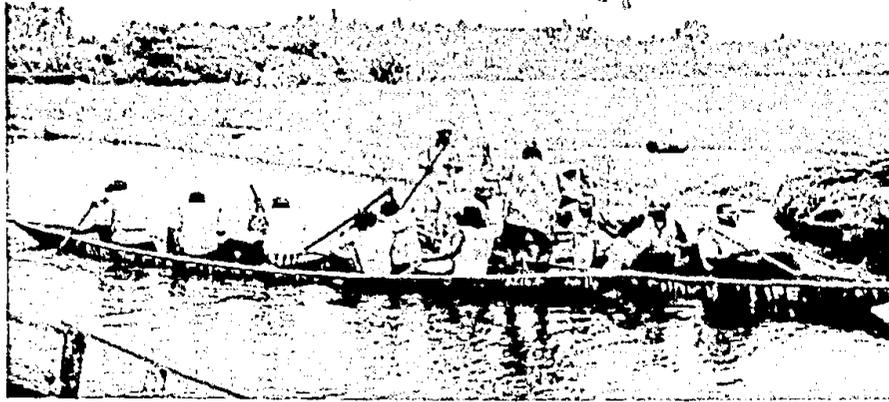


Plate 2: Visitors on their way to Nzulezo

Source: Fieldwork, 2007

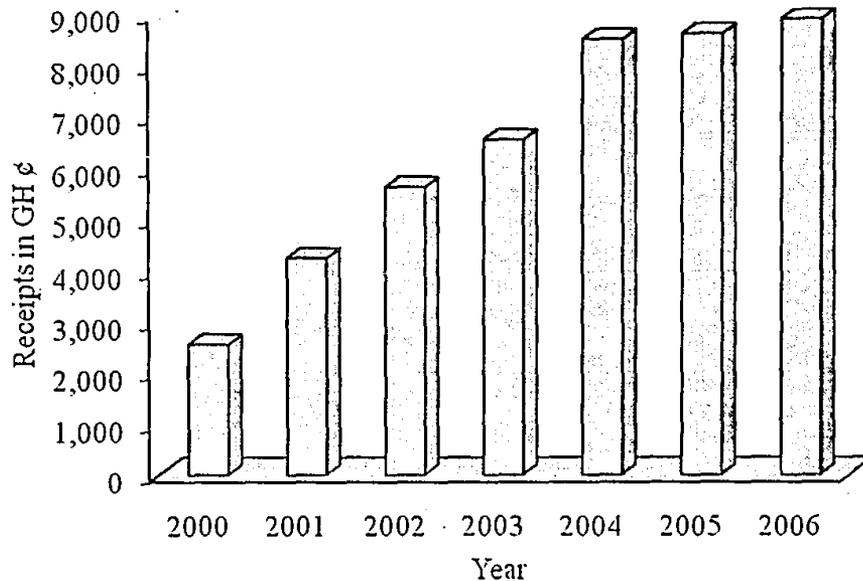
Nevertheless, foreign tourists contribute over 70 per cent to tourist receipts at the destination. This is explained by the price discrimination policy adopted by the ACID project. A foreign tourist pays about 65.5 per cent more than what the Ghanaian visitor pays. As shown in Table 9, an adult foreigner pays GH ₵6.80 while their Ghanaian counterpart pays GH ₵2.50 which is less than what is paid by a foreign student (GH ₵4.80). A Ghanaian student, on the other hand, pays GH ₵1.50.

Table 9: Visitor Fees Charged at ACID project Site

Category of Visitor	Tour Fee(GH₵)
Ghanaian Student	1.50
Ghanaian Adult	2.50
Foreign Student	4.80
Foreign Adult	6.80

Source: Fieldwork, 2007

Tourist receipts have increased since the inception of the project. As shown in Figure 6, over a six year period, (2000-2006), tourist receipts have grown from a paltry GH ₵2,569.80 in 2000 to GH₵ 8,929.34 in 2006, representing 247.4% per cent in growth.



Source: Fieldwork, 2007

Figure 6: Tourist Receipts at the Project Site (2000-2006)

As with tourist arrivals, the growth rate of tourist receipts has also been erratic. A remarkable growth (65.7%) was achieved in 2001(GH₵4,259.30) over 2000 (GH₵2,569.80) but this fell to 32.7 per cent (GH₵5,652.40) in 2002. This has been the trend until 2004 when growth rate edged up to 29.8 per cent (from GH₵6,583.60 in 2003 to GH₵8,552 in 2004). However, further dips were recorded between 2005 and 2006. As can be observed from Figure 6, from 2004 to 2006 increment in tourist receipts was marginal.

Ecotourism Product

After seven years of the ACID project, Nzulezo, the village on stilts, continues to be the major attraction that draws tourists to the project area. Ecotourism in the project area, therefore, revolves around Nzulezo. The focus of Nzulezo as the kingpin attraction in the project communities was substantiated during interviews with tourists when an overwhelming number of them indicated a tour of Nzulezo village as their main purpose of visit. Though respondents mentioned other activities such as relaxing and swimming at Beyin beach, the core activity was the visit to Nzulezo. However, evidence from the study indicates that some effort is being made by a private entrepreneur to diversify the ecotourism product through the construction of a crocodile pond (Plate 3).



Plate 3: A Crocodile Pond under construction at Beyin

Source: Fieldwork, 2007

Though the local residents commended the project, they bemoaned the over-dependence on Nzulezo. In their view, this situation has limited the revenue generation potential of the ecotourism component of the ACID project which

ultimately affects revenues that accrue to the communities. The local residents further expressed disappointment at the inability of the project to harness and develop other potential attractions in the communities.

Length of Stay and Expenditure Patterns

It was also established that virtually all tourists visiting the project area do not stay over-night. After a visit to Nzulezo, most tourists depart the area. The average length of stay at the destination was found to be less than 24 hours. A few tourists, however, spend the night in the home stay facilities and at the beach resort in Beyin.

Tourists spend money on tour fees, donation to Nzulezo village, drinks, accommodation and food. Expenditure on tour fees was common to all tourists and this constituted about 90 per cent of tourist expenditure. Only a few tourists, however, reported expenditure on accommodation. This is expected because of the less than 24 hour length of stay that the area records.

According to the literature (UNEP and UNWTO, 2005) there is a strong relationship between the diversity of attractions and tourists activities on one hand, tourists' length of stay as well as tourist expenditures at a destination area on the other hand. Bed-nights and tourist expenditure are increased the longer tourists stay in a host community. This creates extra employment and income generation opportunities which go a long way to reduce poverty levels in the host community. It is quite difficult for residents of the ACID project area to derive much benefit from ecotourism activities under the present circumstances, given the short visitor length of stay and its associated low visitor expenditure.

Accommodation Facilities

Accommodation for tourists has undergone considerable change since the commencement of the project. Hitherto, the few tourists that expressed the desire to spend the night at the destination area were accommodated in Fort Appolonia and in private home facilities at Beyin. Currently, there are five home stay facilities in the area.

A beach resort has also started operation since February 2007. Plate 4 below shows a lodge and restaurant at the Beyin Beach Resort.

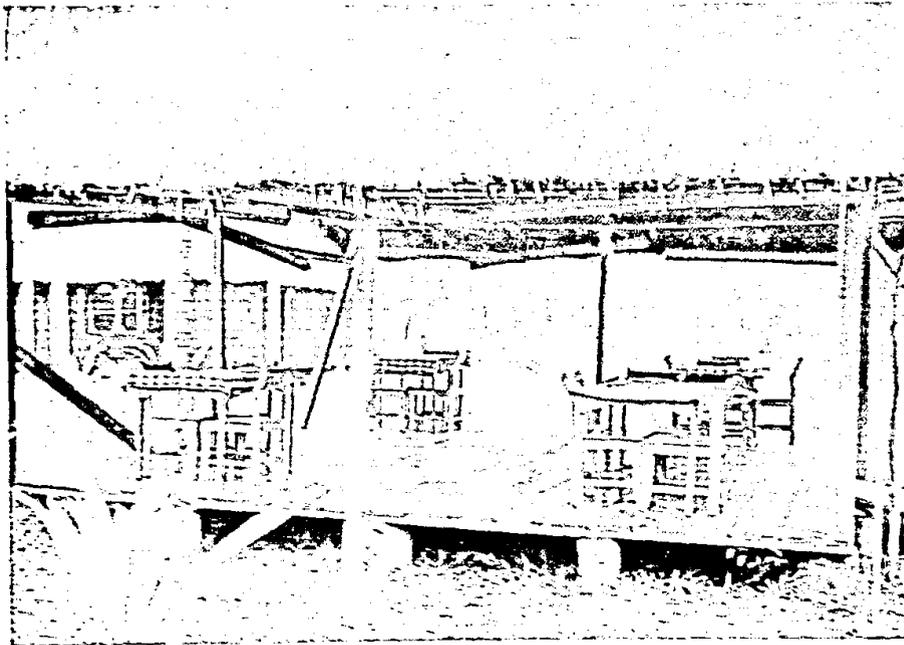


Plate 4: A section of Beyin Beach Resort

Source: Fieldwork, 2007

A 20-room accommodation facility is being constructed at Nzulezo while another 30-room hotel is under construction at Beyin. Plate 5 shows the 30-room hotel under construction at Beyin.



Plate 5: Hotel under construction at Beyin

Source: Fieldwork, 2007

Awards

The ecotourism component of the ACID project area has received recognition from the Western Regional Office of the Ghana Tourist Board. During the 6th Western Region Tourism Awards in 2003, the project won the 'Community Initiative in Tourism Promotion'. Again, at the 7th Western Regional Tourism Awards in 2006, the 'Visitor Attraction of the' was awarded to the project area.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter concludes the study by way of summarising the entire work. Particular attention is paid to the objectives and research questions of the study as well as the procedures and methods used to accomplish the objectives. Significant findings of the study and conclusions thereof are also discussed. Finally, appropriate recommendations are made generally on the project and suggestions for future research.

Summary

The study sought to examine and investigate the contribution of the ACID project to improving the livelihood of residents of the project communities. The sustainable livelihood framework was adopted to explore the changes that have occurred in the livelihood assets, strategies and outcomes of the local residents, which are attributable to the ACID project.

A qualitative design was employed for the study. The choice of this approach was informed by the adaptation of the sustainable livelihood framework for the study which largely allows the use of qualitative methodology. Nevertheless, this was supplemented with quantitative data collected from secondary sources, where necessary, to improve reliability of the study.

To appropriately establish the contribution of ACID to livelihood conditions of the local residents, the after-only design was used. This design was

used because of the absence of a baseline data. Consequently, much emphasis was placed on residents' recall of livelihood conditions. In addition to this, documentary analysis was also undertaken and this constituted an essential component of the data collection process. Focus group discussions were conducted for local residents of Beyin, Ebonloa and Nzulezo. The management of the ACID project and opinion leaders within the communities were also interviewed to provide expert opinion on the project because of their knowledge and involvement in project activities.

Conclusions

It was evident from the study that the ACID project has introduced a number of changes into the livelihood assets of the local residents. First and foremost, the financial assets of the communities have seen some transformation. The Project has added to the portfolio of occupations in the communities by way of job openings created for some local residents. This inference confirms the conclusion of the mid-term review of the project that employment of local residents by the ACID project was the main benefit of the project. In another perspective, some newly established accommodation facilities in the communities have also engaged the services of some local residents. Nonetheless, employment opportunities were found to be limited to only a few community members. This confirms the conclusion of Barrow et al. (2000) that in East Africa a few jobs were created by community wildlife projects. Given the size of the ecotourism component of the project, it is clear that the ACID project could not have engaged more than it currently does.

Clearly, from the results of the study, the Project has also impacted on the household incomes of local residents. Those in regular employment of the Project and other ecotourism service providers earn regular wages which they expend on themselves and their dependents. It is also worth noting that the wages are augmented by engagement in other income earning activities. This, therefore, suggests that the wages are insufficient to single-handedly meet household needs of local residents employed by the project and other ecotourism institutions in the communities.

In addition, the findings from the study also indicated that the Small Scale Enterprises Development Support Fund (SSEDSF) has resulted in the expansion of household incomes of the project communities. Through the SSEDSF, more community members have received direct financial benefits from the project. Given the fact that employment opportunities have been limited with small-scale ecotourism projects such as the one being implemented by the ACID project, loans granted to local residents via the SSEDSF ensured that more local residents had direct financial benefit from the project.

The implementation of SSEDSF is highly commended and hailed by the communities. However, the suspension of the disbursement of loans constitutes an enormous worry to the local residents. There are strong indications of some local residents resorting to hunting of animals as a demonstration of their discontentment towards the deferment of the loan scheme. The argument is that if the project is unable to provide direct benefit to all section of the local residents then the resultant effect is non-compliance to regulations established to guide the usage of environmental resources in the communities.

The view that conservation is less successful without local development is gaining credence. If the SSEDSF scheme is to contribute to the realisation of the developmental objective of the project, then its successful implementation is vital to the achievement of the overall goals of the project. It is also worth noting that the ability of the ACID project to stimulate local development in the communities is critical to the continuous collaboration, goodwill and support that the project has enjoyed from the communities since its commencement.

The ACID project has made a considerable contribution to the development of ecotourism in the communities. The project has injected professionalism into the hitherto haphazard and disorganised administration of ecotourism. Both tourist arrivals and receipts have increased ever since ACID took off in the area. Nzulezo has gained prominence as an important tourist attraction in the Western Region and the country at large. Entrepreneurs are beginning to take advantage of the investment opportunities associated with ecotourism development in the communities.

This significant progress notwithstanding, the project has been less successful in expanding the ecotourism product in the communities. In the seventh year of its operation, Nzulezo is still the only attraction in the locality and the main purpose of visit for virtually all tourists. Visitor experience is limited to Nzulezo and tourists appear satisfied with the boat ride to Nzulezo. Though the project has a strong natural resources conservation inclination, there is minimal addition of nature interpretation to the experience of tourists. The flora and fauna of the area are barely included in the itinerary. In view of the foregoing, it is not surprising that the area has a short visitor stay and low visitor expenditure. This

situation limits the revenue inflow of service providers such as drinking bar operators, food vendors and operators of accommodation facilities and the community at large.

Although the project involves six communities, evidence from the study shows that ecotourism activities are fundamentally limited to Beyin and Nzulezo. Consequently, commercial activities relating to tourist visits are also concentrated in these communities. As a result, residents of the other communities are not so enthused about the project's financial returns.

Ecotourism revenues distributed to the communities have nevertheless proved useful to the communities. The revenues are expended on community projects that benefit all members of the community. In other words, communities have been empowered to undertake self-help projects without recourse to the central and local government authorities.

Unlike some CBNRM projects where revenue is disbursed on household basis, in the ACID project the income from ecotourism is allocated to communities instead of households. This flexibility of decision-making regarding revenue distribution and utilisation is a major feature of community-managed protected areas. At present this is not the case with government-managed protected areas in the country.

It is clear from the study that communities appreciate the conservation effort of the ACID project and feel that the impact of the project on natural assets of the communities has been positive. Interestingly, the appreciation of natural assets being demonstrated by the residents is conditional: insofar as the ACID project stimulates development in a community then conservation of natural

resources is acceptable to its members. On the other hand, conservation without development is unsatisfactory. This finding confirms the conclusion of Turner (2004) that local communities do not value conservation in itself and, for that matter, community participation in natural resource management without development will jeopardize conservation.

Physical assets in the communities have seen some transformation and this change is attributable to the ACID project. The provision of electricity and school buildings through ecotourism revenue is a point in case. Indirectly, the extension of mobile telephone services to the communities is also as a result of the growing reputation of the project area as an important ecotourism site in the country.

The above conclusions are, however, made mindful of possible limitations of the study. First, by the design of the study, establishing causality becomes difficult. For instance, the alterations that have occurred to the livelihood assets of the communities could have happened naturally or due to other factors unrelated to the ACID project. Secondly, the study did not pursue quantitative probing into the contribution of ACID to household income of local residents, especially beneficiaries of the loan scheme, employees, food vendors and operators of accommodation facilities and drinking spots. Thirdly, the purposive sampling used in the selection of participants has the potential of introducing bias. The involvement of different categories of participants was undertaken purposely to reduce the impact of bias on the findings of the study. Fourthly, relying on participants' recall to establish the basis of pre-project intervention is problematic because of the possibility of memory relapse.

Recommendations

Based on the findings and conclusions of the study, the following recommendations are made:

- The project should critically consider harnessing the other untapped tourist attractions in the communities with the view to providing tourists with a wide variety of tourist opportunities. A wide range of attractions and activities will enable the project to address the issue of short visitor duration and low expenditure patterns.
- As a matter of urgency, efforts should be made to ensure that the Small Scale Enterprises Development Support Fund becomes functional and effective. Again, the Fund should be reviewed and streamlined to remove the bottlenecks that militate against its smooth operation.
- In the area of research, there is the need to conduct a quantitative study to establish the impact of the project on the livelihood of community members.
- It is also important to study the SSEDSF to uncover issues relating to its contribution to household incomes of beneficiaries.

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APPENDIX 1: FOCUS GROUP DISCUSSION GUIDE FOR LOCAL RESIDENTS

This discussion forms part of an M. Phil research work being carried out at the Department of Geography and Tourism, University of Cape Coast. The study seeks to assess the contribution of the ACID project to improving livelihood conditions of communities participating in the project in the Jomoro District of the Western Region of Ghana.

I shall be seeking your views and perspectives on the impacts of the project. The information you provide will be used mainly for the study and your name will not be associated with the comments you make.

GENERAL INFORMATION

Date of FG _____

Time FG began _____

Time FG ended _____

Location of FG _____

Number of FG participants _____

Language of interview _____

Icebreaker: ask participants to introduce themselves and the jobs they do.

1. What types of jobs do people in your community do?
2. Which of the jobs depend on Ecotourism?
3. What development has ACID brought to your community?
4. What changes have you observed in your community over the past five years?
5. Which of the changes do you consider positive?
6. Which of the changes do you consider negative?
7. In your opinion, what has caused these changes?

Expectations of local Residents

8. What were your expectations just before the project started?

9. Why did you form the expectations?
10. To what extent has the project fulfilled your expectations?
11. In your view, has the ACID project made any contribution to the livelihood of the people in your community?
12. On the whole, do you consider the impact of the project positive or negative?
13. What business and trading opportunities has the ACID project brought to the community?

Financial Impacts

14. How has the ACID project impacted on your finances (income)?
15. How has ACID helped to increase income and wages of local residents?
16. Does your community receive funds from the Project/ecotourism?
17. How much does the community receive?
18. Who receives the funds?
19. Do you consider the funds allocated to your community sufficient?
20. How are these funds used? (Ask for specific examples)
21. How has the project helped to improve livelihood conditions in the communities?

Human Impact

22. What results have been achieved by ACID in education and training in the communities?
23. Do you think ACID has made any contribution to improving the skills and knowledge base of local residents?

Social Impact

24. What results have been achieved by ACID in strengthening relationships in the communities?

25. In what ways have social networks changed and evolved since the inception of ACID?

Physical Impact

26. What types of infrastructure and social facilities have been developed in the communities since ACID started?

27. Which ones do you think are directly or indirectly linked to ACID?

28. What role did ACID play in the development of the infrastructure?

Natural Impact

29. What will you consider to have been the impact of ACID on natural resources in the communities?

30. Are natural resources used more sustainably than before?

31. Has the ACID project restricted local residents' access to natural resources?

32. Do you think the local residents understand and appreciate conservation efforts in their communities?

**APPENDIX 2: INFORMAL INTERVIEW GUIDE FOR ACID
PERSONNEL**

This interview forms part of an M. Phil research work being carried out at the Department of Geography and Tourism, University of Cape Coast. The study seeks to assess the contribution of the ACID project to improving livelihood conditions of communities participating in the project in the Jomoro District of the Western Region of Ghana.

I would like to solicit your views and perspectives on the impacts of the project. The information you provide will be used mainly for the study and your name will not be associated with the comments you make.

Date:

Interviewer:

Interview Code #:

A. General Information about Interviewee Personnel

1. What is your gender? Male Female
2. Where are you from?
3. Age: 21-30 31-40 41-50 51-60 Over 60
4. Educational Background
5. What is your marital status
6. Do you have children?
7. If yes, how many children do you have?

B. Impact on Financial Assets

8. What is your job title?

9. How long have you worked with the ACID project?
10. How would you describe your employment?
 - a. Full-time
 - b. Part-time
11. What work were you doing before your appointment with the ACID project?
12. How many hours in a day do you work for ACID?
13. Apart from your work with ACID, what other activities do you undertake that earn you income?
14. On the average, what is your monthly income today?
15. How do you spend your salary?
16. How regular is the salary?
17. What percentage of your salary do you save?
18. Are you satisfied with your salary? Yes No
19. If no, explain
20. How many people depend on your for their livelihood?
21. What other job opportunities are there in the community?
22. Where else could you have worked in the community?
23. Has your standard of living improved since your employment with ACID? Yes No
24. In times of financial difficulty, how do you survive?
25. Do you receive support from ACID in times of financial difficulty?
26. If yes, describe the nature of the support?

C. Perspectives on project impacts

27. In your opinion, how have the communities benefited from the ACID project?
28. What economic changes in the community have you noticed in the last 5 years?
29. What do you regard as the main positive effects of ACID on your community?
30. What do you regard as the main negative effects of ACID on your community?
31. Has your attitude towards the project changed since its inception? and why?
32. What were your expectations prior to the implementation of the project?
33. How has the project met your expectations?

D. Impact on Natural Assets

34. What environmental changes have you noticed in the community in the last 5 years?
35. What has caused the changes?
36. How has the ACID project restricted local residents' access to natural resources?
37. In what ways have ACID helped to conserve natural resources in the communities?
38. How has the attitude of local residents towards natural resources changed in the communities since the inception of the ACID project?

39. Overall, how do you consider the impact of ACID on natural resources in the community? Positive Negative

E. Impact on Social Asset

40. How would you describe relationships among people in your community?

41. How useful is ACID to building relationships in the community?

42. How do you feel about the growing image of ACID project area as ecotourism destination?

43. Do you think the ACID project has played any role in enhancing the image of communities?

44. Are there social groups in the communities?

45. If yes, kindly describe these groups?

46. What are the functions and purposes of these groups?

47. Are there conditions for joining these social groups?

48. If yes, what are the criteria for joining these social groups?

49. How helpful are these social groups in times of difficulty or need?

50. What role does ACID play in the functioning of these social groups?

F. Impact on Physical Assets

51. What infrastructure and social facilities are there in your community?

52. What types of infrastructure and facilities have been developed in the past five years?

53. Who funded the provision of these infrastructure and social facilities?

54. Which of the infrastructure and social facilities did ACID influence their provision?

55. Do you think the infrastructure was provided based on the growing image of Benyin and Nzulezu as ecotourism destinations?

56. Do you think ACID has played any role in building this image?

57. If yes, please explain

G. Impact on Human Assets

58. How long have you worked in your current position?

59. Have you received on- the-job training since being employed?

60. How would you describe the health status of people in your community?

61. Are there adequate health facilities in the community?

62. How accessible are health facilities and services to local residents?

63. What is the role of ACID in the functioning of these health services?

APPENDIX 3: INTERVIEW GUIDE FOR TOURISTS

This interview forms part of an M. Phil research work being carried out at the Department of Geography and Tourism, University of Cape Coast. The study seeks to assess the contribution of the ACID project to improving livelihood conditions of communities participating in the project in the Jomoro District of the Western Region of Ghana.

I would be seeking your views and perspectives on your visit. The information you provide will be used mainly for the study and your name will not be associated with the comments you make.

Thank you

A. Demographic Characteristics

1. What is your gender?
2. How old are you?
3. What is your educational background?
4. What is your Marital Status?
5. What is your country of origin?
6. What work do you do?

B. Visitor Models/Patterns

7. How many times have you visited this place?
8. What is the aim of your visit?
9. How long will you be/ were you here?
10. Whom are you here with?
11. How much do you expect to spend here?

12. What do you expect to spend your money on?
13. What activities do you expect to undertake during your stay?

C. Destination Image

14. Why did you choose this particular place?
15. From what source did get information about this place?
16. Would you like to visit this place again? why
17. Would you recommend this place to your friends and relatives and why
18. What is your general impression about your visit?
19. Are you satisfied in with your visit?
20. What activities do you think should be added to the list of activities at this place?

APPENDIX 4: INTERVIEW GUIDE (KEY INFORMANTS)

General Information

1. Name of organization/Community:
2. Location:
3. Name of interviewee:
4. Phone number:
5. Date of interview
6. Interviewer
7. Interview start time
8. Interview end time
9. Total time for interview (total number of minutes)

This interview forms part of an M. Phil research work being carried out at the Department of Geography and Tourism, University of Cape Coast. The study seeks to assess the contribution of the ACID project to improving livelihood conditions of communities participating in the project in the Jomoro District of the Western Region of Ghana.

I shall be seeking your views and perspectives on the impacts of the project. The information you provide will be used mainly for the study and your name will not be associated with the comments you make.

A. General Questions

1. What is your position or title?
2. What are your general job duties and responsibilities?
3. How are you involved in the ACID project?

4. Approximately, what percentage of your time is spent doing work related to ACID?

B. Financial Impacts

5. What do you feel are the important financial results that have been achieved by ACID?

6. How has ACID helped to increase income and wages of local residents? (Explore issues related to accessibility, quantum, and beneficiaries, type of financial assistance, number that has benefited)

7. How well do you think ACID has responded to the needs and priorities of communities? What specific examples immediately come to mind?

8. How do communities receive funds from the Project/ecotourism?

9. How much do the communities receive?

10. Who receives the funds?

11. Do you consider the funds allocated to the communities sufficient?

12. How are these funds used? (ask for specific examples)

13. How transparent and accountable are funds managers to local residents?

14. How has the project helped to improve livelihood conditions in the communities?

15. What is your opinion on the present employment structure of the ACID project with respect to the quantity and level of local residents employed by the project?

Human Impact

16. What results have been achieved by ACID in education and training in the communities? (prompts: type of training, accessibility, educational infrastructure)
17. Do you think ACID has made any contribution to improving the skills and knowledge base of local residents?

Social Impact

18. What results have been achieved by ACID in strengthening relationships in the communities?
19. In what ways have social networks changed and evolved since the inception of ACID?

C. Physical Impacts

20. What types of infrastructure and social facilities have been developed in the communities since ACID started?
21. Which ones do you think are directly or indirectly linked to ACID?
22. What role did ACID play in the development of the infrastructure?

D. Natural Impact

23. What will you consider to have been the impact of ACID on natural resources in the communities?
24. Are natural resources used more sustainably than before?
25. How has ACID project restricted local residents' access to natural resources?

26. Do you think the local residents understand and appreciate conservation efforts in their communities?

E. Perception on the Potential of ACID project

27. What are your general impressions on the project since it started?

28. In your opinion, is the project capable of making meaningful contribution to development in the project communities?

29. In what way has the District Assembly helped in the implementation of the project?

30. What other institutions have helped in the implementation of the ACID project?

31. What roles have these institutions played in the implementation of the Project?

32. How do you compare ecotourism in the ACID project area to other sites in the Western region?

33. What would you consider to have been the major challenges of implementing the ACID project?

34. How were these challenges dealt with?

**APPENDIX 5: Recruitment of FGD Participants
(Screening Questionnaire)**

1. Gender? Male Female
2. Age: 21-30 31-40 41-50 51-60 Over 60
3. What work do you do? -----
4. What is your house number? -----
5. Educational Background (a) No formal Educ (b) Basic (c) Secondary (d)
Tertiary
6. Have you lived continuously in this community for the past 5 years?
Yes No
7. Have you heard of the ACID project? Yes No
8. Are you willing to share your opinion on the ACID project? Yes
No
9. What is your name? -----