

UNIVERSITY FOR DEVELOPMENT STUDIES

ECOTOURISM IMPACT ON RURAL LIVELIHOODS:  
AN ASSESSMENT OF THE WECHIAU COMMUNITY HIPPO SANCTUARY  
RESERVE IN THE WA WEST DISTRICT OF THE UPPER WEST REGION.

ALI DANGAABO MOHAMMED



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WECHIAU COMMUNITY HIPPO SANCTUARY RESERVE IN THE WA WEST  
DISTRICT OF THE UPPER WEST REGION

BY

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(UDS/MDS/0014/18)

A THESIS SUBMITTED TO THE DEPARTMENT OF AFRICAN AND GENERAL  
STUDIES, FACULTY OF INTEGRATED DEVELOPMENT STUDIES,  
UNIVERSITY FOR DEVELOPMENT STUDIES, IN PARTIAL FULFILMENT  
OF THE REQUIREMENT FOR THE AWARD OF MASTER OF  
PHILOSOPHY DEGREE IN DEVELOPMENT STUDIES.

MARCH, 2021



**DECLARATION**

**Candidate Declaration**

I hereby declare that this dissertation is the result of my own original work for the award of a Master of Philosophy degree in Development Studies. The content of this research work to the best of my knowledge has neither previously being published nor accepted for the award of any degree in this university or elsewhere. All reference materials have been duly acknowledged in the text.

ALI DANGAABO MOHAMMED .....  
(UDS/MDS/0014/18) SIGNATURE DATE

**Supervisor's Declaration**

I hereby declare that the preparation, presentation and supervision of this thesis conformed to the guidelines as stipulated by the University for Development Studies.

PROF. KANTON I. OSUMANU .....  
(NAME OF SUPERVISOR) SIGNATURE DATE



## ABSTRACT

Ecotourism has been envisaged not only as an alternative to mass tourism, but also as a livelihood diversification strategy for rural people. Researchers have presented mixed arguments regarding the relationship between CBEP's and rural livelihoods. It is highly difficult for one therefore to emphatically state that CBEP's enhances rural livelihood. This study therefore set out to examine the link between rural livelihoods by conducting an in-depth assessment of the Wechiau Community Hippo Sanctuary Reserve. Specifically, the study looked at the livelihood activities that are connected to ecotourism development in the study area, how these livelihood options contributes to sustainable livelihoods, the socio- cultural and economic impacts of tourism on local livelihoods as well as stakeholder analysis pertaining their roles in ecotourism management projects. Community- Based Ecotourism Projects premises on economic, social and environmental impacts with critical emphasis on sustainability. The research employed a cross sectional design with a mixed research approach. Questionnaires were used to collect data from 214 respondents in Kpanfa, Pellinkpari, Dochere, Dornye, Talawona and Tuole. Series of in-depth interviews were also carried out using interview guides and field observation. The study found that ecotourism has a positive economic, social and environmental impact on residents and the area at large. However, the positive relationship was not significant. There was also an issue with benefits sharing as resources were not equitable distributed among beneficiary communities. There is also an issue of inequitable distribution of project benefits due to the lack of a substantive benefit sharing scheme. It was concluded that the project has the potential of producing ecotourism benefits but if not properly managed, could lead to unequal distribution of project benefits and hence perpetuate poverty. This led to a recommendation for the Sanctuary Management Board (SMB) to develop a "Benefit Sharing Framework" which will promote equity and project sustainability.



## **DEDICATION**

I dedicate this work to my family especially my father Mohammed Issahaku and my lovely and caring mum without whom I could not have come this far.



## ACKNOWLEDGEMENTS

Glorified is Allah Almighty for his bounties, favour and strength shown me throughout this study. I am highly indebted to the individuals who contributed immensely in diverse ways to make this work a success. Many individuals have given me their talents, skills and time to aid the successful completion of this work. May Allah Almighty guide and bless them all.

I am deeply grateful to my supervisor, Prof. Kanton I. Osumanu for his tireless effort and contribution to this study. I sincerely appreciate your constructive criticisms, inputs and advice that contributed immensely to the success of this study. I wish to also acknowledge the senior members of the Faculty of Integrated Development Studies especially for their inputs during my presentations and the entire UDS fraternity as a whole

My warm appreciation also goes to the staff of the Department of Development studies from whom I have learnt so much and acquired the much-needed experience which contributed to the success of this work. My gratitude also goes to my data collection team who did me an unforgettable service.

I am equally indebted to the manager and entire staff of the Wechiau Community Hippo Sanctuary, the Paramount Chief of the Wechiau electoral area and all his sub chiefs notably the chiefs of Talawona, Kpanfa, Dornye, Tuole, Pellinkpari and Dochere. Not forgetting the role played by the Chairman of the Sanctuary Management Board (SMB) the in-depth information given me in the course of this study.

My final appreciation goes to all members of the Dangaabo royal family for their patience and care more importantly the faith they have shown in me in the course of my adventurous educational career. This study would not have been successful



without the prayer and support of you all. Any credit from this work belong to you all and I alone is accountable for any deficiency.



## TABLE OF CONTENTS

DECLARATION .....	i
ABSTRACT.....	ii
DEDICATION .....	iii
ACKNOWLEDGEMENTS .....	iv
TABLE OF CONTENTS.....	vi
LIST OF TABLES .....	x
LIST OF FIGURES .....	xi
LIST OF PLATES .....	xii
LIST OF ACRONYMS .....	xiii
CHAPTER ONE .....	1
INTRODUCTION .....	1
1.1 Background of the Study .....	1
1.2 Problem Statement .....	4
1.3 Research Questions .....	6
1.3.1 Main Research Question .....	6
1.3.2 Specific research questions .....	6
1.4 Objectives of the Study .....	6
1.4.1 Main Research Objective .....	6
1.4.2 Specific research objectives .....	6
1.5 Proposition of the Study.....	7
1.6 Significance of the Study .....	7
1.7 Scope of the Study .....	8
1.8 Organization of the Thesis Report .....	8
CHAPTER TWO .....	10
LITERATURE REVIEW AND CONCEPTUAL ISSUES .....	10
2.1 Introduction.....	10
2.2 Evolution of Ecotourism .....	10
2.3 Conceptualization of Ecotourism.....	12
2.3.1 Community-based Ecotourism.....	16
2.3.2 Ecotourism as a Form of Conservation .....	18
2.4 Impacts of Ecotourism Development.....	19
2.4.1 Economic Impacts .....	20
2.4.2 Environmental Impacts .....	23
2.4.3 Socio-Cultural Impacts.....	25
2.5 Sustainable Development and Ecotourism Linkage .....	26
2.6 Ecotourism Development in Ghana .....	30





2.7 Ecotourism and Poverty Alleviation .....	32
2.8 Evolution of Livelihood and Sustainable Livelihood .....	35
2.9 Philosophical Paradigm Underpinning the Study .....	37
2.10 Conceptual Framework .....	39
2.10.1 Sustainable Livelihood Framework .....	40
CHAPTER THREE .....	46
STUDY AREA AND RESEARCH METHODOLOGY .....	46
3.1 Introduction .....	46
3.2 Profile of the Study Area .....	46
3.2.1 Location and Size .....	46
3.2.2 Climate .....	48
3.2.3 Vegetation .....	48
3.2.4 Population .....	49
3.2.5 Tourism .....	49
3.2.6 Infrastructure .....	50
3.3 Methodology .....	51
3.3.1 Research Design .....	51
3.3.2 Data Sources .....	52
3.3.3 Target population .....	53
3.3.4 Sampling .....	54
3.3.4.1 Sample size determination .....	54
3.3.4.2 Sampling Techniques .....	54
3.3.5 Data Collection Methods and Instruments .....	57
3.3.5.1 Quantitative Data .....	57
3.3.5.2 Qualitative Data .....	58
3.3.6 Data Analysis and Presentation .....	59
3.3.7 Ethical Consideration .....	59
CHAPTER FOUR .....	60
DATA PRESENTATION AND ANALYSIS .....	60
4.1 Introduction .....	60
4.2 Characteristics of Households .....	60
4.2.1 Demographic and Social Characteristics .....	62
4.2.2 Household characteristics .....	65
4.2.3 Economic characteristics .....	67
4.3 Stakeholders and Collaborating Partners of the Wechiau Community Ecotourism Project .....	70
4.3.1 Roles of chiefs and elders .....	71



4.3.2 Roles of community members .....	71
4.3.3 Roles of the sanctuary management board (SMB) .....	72
4.3.4 Roles of the sanctuary management committee (administrative unit) .....	73
4.3.5 Roles of the district assembly.....	74
4.3.6 Role of tourists .....	75
4.3.7 Roles of non-governmental organizations (NGOs) and private operators.....	76
4.3.8 Roles of Ghana Tourism Authority (GTA), and Ghana Wildlife Division of Forestry Commission .....	77
4.4 Establishment of the WCHS and Household Livelihoods.....	78
4.4.1 Livelihood activities before ecotourism development .....	78
4.4.2 Livelihoods lost/declined as a result of ecotourism development.....	78
4.4.3 Livelihood activities connected to ecotourism.....	80
4.4.4 Contributions of ecotourism to improved livelihoods.....	81
4.4.4.1 Respondents satisfaction with ecotourism livelihood sources .....	81
4.4.4.2 Ecotourism and food security.....	82
4.5 Socio-economic Impact of Ecotourism on Livelihood Assets.....	83
4.5.1 The influence of ecotourism on household human capital.....	83
4.5.2 Influence of ecotourism in the provision of education and health care services .....	87
4.6 Ecotourism and Social Capital.....	90
4.7 Ecotourism and Financial Capital.....	93
4.8 Ecotourism and Natural Capital.....	95
4.8.1 Access to potable water and energy for cooking.....	95
4.8.2 Ecotourism and access to natural resources .....	99
4.9 Socio-Cultural Outcomes.....	101
4.9.1 Ecotourism and cultural exchanges.....	101
4.9.2 Ecotourism and social problems .....	104
4.9.3 Ecotourism and its effects on local culture and tradition .....	107
4.10 Conclusion .....	117
CHAPTER FIVE .....	118
SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS....	118
5.1 Introduction.....	118
5.2 Summary of Major Findings .....	118
5.2.1 Roles of stakeholders in ecotourism management .....	118
5.2.2 Livelihood activities connected to ecotourism development .....	120
5.2.2.1 Livelihood activities before ecotourism.....	120
5.2.2.2 Livelihood activities lost/reduced due to ecotourism.....	120



5.2.2.3 Livelihood activities caused by ecotourism development ..... 120

5.2.3 Contribution of ecotourism livelihoods to sustainable livelihoods..... 121

5.2.4 General socio-economic and cultural Impacts of the ecotourism project ..... 121

5.3 Conclusions..... 123

5.4 Recommendations..... 124

REFERENCES ..... 128

APPENDIX A..... 157

APPENDIX B ..... 165

APPENDIX C ..... 167

APPENDIX D..... 168



## LIST OF TABLES

Table 2. 1: Scholarly definitions of ecotourism.....	14
Table 2. 2: The International Ecotourism Society’s Seven Key Areas of Ecotourism	16
Table 3. 1: Population of Wa West District.....	49
Table 3. 2: Sampled Communities and Corresponding Sample Size .....	56
Table 4.1: Age, Sex and Educational Attainment of Respondents .....	61
Table 4.2: Ethnicity, Marital Status and Religious Affiliations of Respondents.....	65
Table 4.3: Household Size and Dwelling Units of Respondents .....	67
Table 4.4: Main Occupation and Average Annual Household income of Respondents .....	70
Table 4. 5: Livelihood Activities Created By Ecotourism Development .....	80
Table 4.6: Ecotourism Influence on Human Capital Development.....	84
Table 4. 7: Education Level of Respondent and Main Occupation .....	85
Table 4.8: Influence of ecotourism on education and health services provision.....	88
Table 4. 9: Influence of ecotourism on social network across occupations .....	93
Table 4. 10: Average monthly income and main occupation .....	94
Table 4.11: Sources of Water Accessed by the Study Communities.....	97
Table 4.12: Type of Fuel Wood Used for Cooking by Community .....	99
Table 4. 13: Ecotourism and Its Influence on Natural Resources by Occupation .....	100
Table 4. 14: Ecotourism and Cultural Exchange between Tourists and Locals by Occupation .....	102
Table 4.15: Ecotourism Influence on Inter- tribal Marriage by Occupation .....	104
Table 4. 16: Ecotourism Influence on Social Vices by Occupation .....	105
Table 4.17: Ecotourism Influence on Social Vices by Community .....	107
Table 4.18: Ecotourism Influence on Local Culture and Tradition.....	109
Table 4.19: Ecotourism Influence on Local Culture and Tradition by Community..	111
Table 4.20: Ecotourism Impact on Job Creation by Occupation.....	112
Table 4.21: Ecotourism Influence on Job Creation by Community .....	114
Table 4.22: Ecotourism Jobs and Wages of Employees by Occupation .....	115



**LIST OF FIGURES**

Figure 2. 1: Flows of Tourism Income and Its Impact on the Local Economy .....21  
Figure 2. 2: Sustainable Development through Ecotourism .....28  
Figure 2. 3: Sustainable Development Cycle.....29  
Figure 2. 4: Sustainable Livelihood Framework .....45  
Figure 3. 1: Map of Wa West Depicting Study Communities.....47  
Figure 4. 1: Respondents Perception on Food Security .....83  
Figure 4. 2: Influence of ecotourism on social network .....91  
Figure 4. 3: Sources of Household Water .....96  
Figure 4. 4: Source of Fuel Wood of Respondents .....98  
Figure 4. 5: Ecotourism Influence on Inter- Tribal Marriage ..... 103  
Figure 4. 6: Ecotourism Influence on Local Culture and Tradition..... 109



**LIST OF PLATES**

Plate 4. 1: Classroom Block Constructed from Tourism Revenue ..... 89  
Plate 4. 2: Health Centre Constructed from Tourism Revenue ..... 90  
Plate 4. 3: Borehole at Tuole Constructed from Tourism Revenue..... 97



## LIST OF ACRONYMS

CBT	Community Based Tourism
CBEPs	Community Based Ecotourism Projects
DFID	Department for International Development
DA	District Assembly
FAO	Food and Agricultural Organization
GDP	Gross Domestic Product
GDRC	Global Development Research Centre
GSS	Ghana Standard Survey
GTA	Ghana Tourism Authority
GTB	Ghana Tourism Board
HH	Household
IES	International Ecotourism Society
IFAD	International Fund for Agricultural Development
LI	Legislative Instrument
MDG(s)	Millennium Development Goals
NCRC	Nature Conservation Research Centre
NGO(s)	Non-Governmental Organizations
PHC	Population and Housing Census
PPT	Pro Poor Tourism
SDG(s)	Sustainable Development Goals
SL	Sustainable Livelihoods
SLA	Sustainable Livelihood Approach
SMB	Sanctuary Management Board



SMC	Sanctuary Management Committee
SPSS	Statistical Package for Social Scientist
UNCTAD	United Nation Centre for Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNWTO	United Nations World Tourism Organization
WCED	World Commission on Environment and Development
WCHS	Wechiau Community Hippo Sanctuary
WTO	World Tourism Organization
WWDA	Wa West District Assembly
WWF	World Wildlife Fund





## CHAPTER ONE INTRODUCTION

### 1.1 Background of the Study

Tourism is positioned as the largest service industry in the world, with ecotourism being its fastest growing sector, with annual growth estimates ranging from 10% to 30% (Wearing & Neil, 1999 cited in Gyimah & Okrah 2009). Historically, between 2008 and 2017, tourism rose above average at around 4% per annum for eight consecutive years, with 2017 setting a record year for international tourism. International tourist arrivals soared for eight consecutive years; a sequence of uninterrupted growth that has not been recorded since the 1960s (UNWTO, 2017). Worldwide destinations received 1,323 million international tourist arrivals in 2017, roughly 84 million more than in 2016 (UNWTO, 2017).

Tourism constitutes an important component of African economies. In developing regions of the world, tourism has often been viewed as a key strategy for diversifying out of those industries characterized by a precarious primary product dependency and declining terms of trade such as sugar, rubber, cocoa and other commodities. Tourism is also considered as a good generator of foreign exchange, a means to attract foreign investment, infrastructural development and a conduit to international connectivity. Since the mid-1990s, the sector has grown considerably, receiving double numbers in terms of visitors to Africa thus from 24 million in the period 1995 and 1998 to 48 million in the period 2005 and 2008 which further rose to 56 million in the period 2011 and 2014 (UNCTAD, 2017). International visitor numbers to the continent saw an average yearly increase of 6% between the period 1995 and 2014 by an average of 6 percent per year (UNCTAD, 2017). From 2002 until the financial crisis of 2008/09, tourist arrivals recorded particularly strong growth. The financial situation resulted in a downturn in 2010; visitor numbers saw a new boost, before finally dropping in the



aftermath of the Arab Spring. International visitor arrivals saw a rise since then but remain below the 2010 average. Estimates for 2015 indicate another decrease in arrivals, possibly linked to the Ebola outbreak in Africa.

Ecotourism draws its basis from natural and cultural landscape values such as traditional agricultural systems, rural industrial practices, indigenous music and dance, and many other historical events (Lanquar, 1995; Soykan, 1999; Gerry, 2001; Lane, 1993; Briassoulis, 2002; Catibog-Sinha & Wen, 2008; Mlynarczyk, 2002; Drzewiecki, 2001; Kiper, 2006). It incorporates a synthesis of conservation and tourism (the associated economics) designed to benefit local communities, with a particular focus on sustainability (Myburgh & Saayman, 2002). Ecotourism is generally viewed as a policy to protect pristine areas and thus contribute to biodiversity conservation. It emphasizes the exploration and studying about the natural environments and its composition together with local cultural materials. The first issue that emerges in planning for ecotourism services is the environment and its preservation (Munn, 1992; Ceballos-Lascurain, 1996; Gössling, 1999; Tisdell & Wilson, 2002; Lindsey et al., 2005; Lopez-Espinosa de los Monteros, 2002; Fung & Wong, 2007).

Studies by Neto (2002), Lowmen & Kinder (2004), Kiss (2004), IES (2006), and Baker (2008) identified ecotourism as a strategy that holds prospects for enhancing opportunities for tourism, biodiversity, and rural livelihoods. It supports local communities in areas such as jobs, revenue generation, entrepreneurship incentives, conservation of biodiversity, and socio-cultural revitalization (Honey, 2008; Kruger, 2005). Other studies have, however, argued that ecotourism only yields limited benefit (Agrawal & Redford, 2006). Notwithstanding, Tao and Wall (2009a) posits that the importance of ecotourism as a livelihood diversifying strategy for rural folks



in peripheral areas with subjugating conditions caused by climate instability with associated factors cannot be downplayed. These communities adopt alternative survival strategies to reduce their vulnerability making ecotourism central component of a set of livelihoods and a facet of livelihood diversification. One such form of diversification is Community-Based Natural Resource Management (Synman, 2013) Scherl et al. (2004) and Ellis (1999) asserts that typical rural societies are mainly confronted by high unemployment levels, no or low level of education and skill acquisition, chronic poverty levels and profound dependency on the natural environment to make a living. Households in rural poor regions rely primarily on subsistence farming. Nevertheless, rising populations and climate change impacts are placing severe pressure on rural livelihoods (Ellis, 1999; Morton, 2007; Nelson et al., 2009; Owino et al. 2012). The underdeveloped human resource base couple with the unavailability of infrastructural services results in a few alternative livelihoods available and therefore fewer people gaining employment.

Havi et al. (2013) recognized the importance of tourism as an important subsector in the services sector in Ghana identifying it as a young and promising sector. Heavy reliance on indigenous commodities show a decline in attention with a major focus on tourism as a prospective leading foreign exchange earner. Community-based tourism sites in the country, such as Bobeng-Fiema Monkey Sanctuary in Brong Ahafo, Paga Crocodile Pond (Chief Pond) in Upper East Region, Liate Wote in Volta, and the Wechiau Community Hippo Sanctuary in the Upper West Region draws tourists globally. The influx and frequency of these tourists impact the destination areas in diverse ways. The question, therefore, is about how apt ecosystem services are able to maintain synergies with rural livelihoods to achieve the much-desired poverty reduction.



## 1.2 Problem Statement

In recent years, there has been widespread interest in ecotourism, not only as a substitute to mass tourism, but also as a mechanism of advancing the economic progress and environmental conservation of a country. Its motives include biodiversity protection, sustainable resource use that can offer travelers ecological awareness, safeguarding the natural environment, and generating economic and social benefits (Bansal & Kumar, 2011; Godratollah et al., 2011; Tewodros, 2010). Ecological tourism has been envisaged as having the potential to positively impact local communities, as eco-tourists may be more interested in the historical account and characteristics of the places they visit in contrast to mass-tourists (McMinn, 1997). Wall (1997) contends that ecotourism is an ultimate resolution mechanism for dealing with many of the environmental and economic struggles of underdeveloped nations. If development meets the needs of tourists and local residents and preserves future opportunities, tourism can be sustainable. Ecotourism provides incentives, biodiversity, growth and educational opportunities to local residents. Ecotourism is thus a sustainable form of natural resource-based tourism. It mainly focuses on experience and knowledge of the natural environment and its associated features (Dowling, 1997; Fennell, 1999).

In Ghana, tourism is an enterprising economic venture and rated fourth behind gold, cocoa and foreign remittances in terms of sector performance. Tourism has also earned the country revenue that is equivalent to 6.2% of Gross Domestic Product (GDP) (Ministry of Tourism, 2010). It has been projected that Community-Based Ecotourism will be a formidable engine that will create the pathway to rural development if well planned and integrated with that of the rural agricultural sector in terms of economic diversification and livelihood enhancement in rural communities (Rogerson and Rogerson, 2010 cited Rogerson, 2012; Musasa and Mago, 2014).



Studies by Kidsadal (2001), Acheampong (2013) have all focused greatly on biodiversity conservation, ecosystem management and community participation and development. Studies on the Wechiau Community Hippo Sanctuary, which has been set as a model example of Community-Based Hippo Sanctuary is no different. Much attention has been given to biodiversity and ecosystem management, community participation and development with limited attention to livelihood enhancement. For instance, studies by Gyimah & Okrah (2009), Wuleka (2009) as well an extensive study by UNDP on Local Sustainable Development (2012) and Sheppard et al. (2010) have all focused largely on biodiversity and ecosystem conservation, poverty alleviation and community development. All these studies revealed that the Wechiau Community Ecotourism Project generates some socio- economic returns for the host communities.

A most recent study by Peprah (2018) which looked at sustainable tourism to remedy land degradation in Ghana along the Black Volta River found that the WCHS project contributes to general socio-economic and environmental sustainability and also aid in reducing land degradation. The direct contribution of the ecotourism project to livelihoods of the rural farmer is missing in literature. Quite apart from this, most of them adopted the qualitative case study approach which made it difficult to draw relationships and interdependence between and among variables. It is on the basis of the above that this study adopted the concurrent (convergent) mixed method design to assess the effects of ecotourism on rural livelihoods.



### **1.3 Research Questions**

#### **1.3.1 Main Research Question**

The main question the research sought to address was;

How has the establishment of the Wechiau Community Hippo Sanctuary, as a Community-Based Ecotourism Site affected rural livelihoods?

#### **1.3.2 Specific research questions**

The specific research questions the study sought to address were;

- I. What roles do stakeholders play in the management of the Wechiau Community Hippo Sanctuary Project?
- II. What livelihood activities are connected to ecotourism in the study area?
- III. How have these livelihood activities contributed to sustainable livelihoods in the study area?
- IV. What are the socio-economic and cultural impacts of the sanctuary?

### **1.4 Objectives of the Study**

#### **1.4.1 Main Research Objective**

The main objective that the research sought to achieve was;

To explore the nexus between ecotourism and rural livelihoods using the Wechiau Community Hippo Sanctuary as a Community-Based Ecotourism Site.

#### **1.4.2 Specific research objectives**

The specific objectives that the research sought to achieve were;

- I. To examine the roles of stakeholders in the management of the WCHSP?
- II. To assess the livelihood activities that has emerged as a result of ecotourism in the study area.
- III. To examine the contributions of ecotourism activities to sustainable livelihoods in the study area.



- IV. To analyze the general socio-economic and cultural effects of the sanctuary in the study area.

### **1.5 Proposition of the Study**

This study premises on the proposition that ecotourism development holds potentials for sustainable livelihood enhancement.

### **1.6 Significance of the Study**

The contribution of ecotourism to enhancing the living conditions of communities and nations where tourism resources are developed in the midst of local participation is deemed enormous.

The main aim of this study is therefore to create a deeper insight into understanding how ecotourism can translate into sustained rural livelihood opportunities to facilitate rural poverty reduction. Existing policies and guidelines have mainly concentrated on forest management, ecotourism development and biodiversity conservation. However, effective management of these systems is inextricably linked to rural livelihood options as rural people depends largely on the natural environment which ecological tourism sought to conserve. There is therefore the need for a balance between Community Based Ecotourism and sustained local livelihood opportunities for a friendly interaction between the two. The findings of this study will therefore provide an important dimension of incorporating sustainable local livelihood opportunities to Community Based tourism development. Recommendations from the study may also guide future policy aimed at addressing sustainable rural livelihood challenges.

This study also corresponds with Ghana's commitment to the realization of aspects of the SDGs one, two, four and five as it may aid in fighting poverty, malnutrition,



hunger, disease, illiteracy and discrimination against women, among others. On the local front it is also in line with the overall objective of the Ghana tourism policy which is geared towards assisting local economies and expanding livelihood standards of the society, especially in the area of poverty reduction.

Also, the findings of the research may also serve as a working document for policy makers, Sanctuary Managing Board and the Ministry of Tourism and other stakeholders (such as NGOs) in the tourism sector especially in drafting policies and guidelines that relates to Rural and Community Based Tourism.

### **1.7 Scope of the Study**

The study was conducted in the Wa West District of the Upper West Region. The Households in the communities that are in proximity to the Wechiau Community Hippo Sanctuary Reserve Such as Talawona, Dornye and Kpanfa were the main focus of the study. The study was limited to the livelihood options that emerged and declined as a result of the establishment of the Wechiau Hippo Sanctuary Reserve, how these livelihood opportunities contributed to sustainable livelihoods, perceptions of residents on the general socio economic and cultural effects of the sanctuary reserve on their livelihoods and the key stakeholders and the roles they play in the sanctuary management.

### **1.8 Organization of the Thesis Report**

The dissertation was organized in five chapters. Chapter one presents the overview of the analysis covering the context, problem statement, goals, the research rationale and the study methodology. Chapter Two examined relevant literature-related to the development of ecotourism, rural and Community-based tourism and the effect of





tourism on biodiversity conservation, growth of ecotourism and sustainable rural livelihoods as well as the philosophical underpinning of the study. Chapter Three provides a description of the study area, including the location, demographics, natural environment as well as the methodology of the study. The results and analysis of data was captured in Chapter 4, while Chapter 5 contained a summary of conclusions, findings and recommendations discovered in the course of data analysis.



## CHAPTER TWO

### LITERATURE REVIEW AND CONCEPTUAL ISSUES

#### 2.1 Introduction

This chapter of the research work looks into the available literature in the study domain. It would dive into the Impact of Ecotourism on Rural Livelihoods in the Wa West District and a general understanding of the concept of ecotourism. Authors and scholars in the field of ecotourism would be considered and conclusions drawn from their perspectives of the topic under discussion.

Literature review is an important constituent of research and, as such, this chapter presents an appraisal of pertinent works on the topic under study. The aim is to obtain a sound intellect of the key notions of the topic and to identify possible gaps in existing literature on the subject under study. The review is done on relevant thematic areas based on the objectives of the study. The thematic areas are composed of ecotourism evolution and conceptualization, people and protected areas, socio economic and cultural impacts of ecotourism, evolution of ecotourism in Ghana, ecotourism and sustainable development linkage, ecotourism and poverty alleviation and ecotourism and conservation issues.

#### 2.2 Evolution of Ecotourism

Ecological tourism constitutes an essential aspect of sustainable tourism and therefore contributes immensely to sustainable development. Following the need for a system of development that will incorporate issues of sustainability, the idea of ecotourism arose in the 1980s (Buckley, 2009; Fennell, 2008a). Ecotourism has brought to light a myriad of issues that accompanies mass tourism with related environmental problems as most travelers (tourists) yearn for eco-friendly environment-based experiences (Wearing and Neil, 2009). The advocacy for an eco- friendly approach to tourism



stems from issues relating to the uneven nature of benefits sharing, cultural erosion and disturbances in natural resource conservation (Mowforth & Munt 2003; Wearing & Neil, 2009). Fennell (2008a) and Honey (2008) explained that the combined outcome of these issues is an alteration in thinking resulting in the greater recognition and activism for the welfare of local communities and natural resource preservation in the interest of sustaining the tourism industry.

Ecotourism has been used regularly by Governments and conservationists as a technique to provide legal backing to environmental conservation and sustainable administration of development activities in and around conserved fields. This is based on the postulation that ecotourism activities may stimulate economic gains (Fennell, 2008a, Wearing & Neil, 2009). Buckley (2009) and Wearing & Neil (2009) also points out that the motivation for ecotourism may also stem from the fact that it has the tendency of providing incentives to reducing some of the local community activities, such as land and forest depletion, expanding agriculture boundaries, illegal hunting, harvesting of firewood and unregulated burning, that undermine conservation. Firstly, conserved fields have massive natural resource endowments and mainly found in the fringes. Secondly, travelers are enthusiastic towards local services with reverence towards culture and customs. Finally, indigenous communities are endowed with conventional ecological knowledge because of their connection with the land that supports ecotourism (Coria and Calfucura, 2012). The bases for ecotourism development in such areas is that it has been earn marked as having the capability of fostering conservation of biodiversity and providing alternative livelihoods to sustain the well-being of local people consequently resulting in the creation and maintenance of a reciprocal interaction between the community and



conserved sites (Buckley, 2009; Fennell, 2008b; Stronza & Gordillo, 2008; Zeppel, 2006).

### **2.3 Conceptualization of Ecotourism**

The conceptual understanding of ecotourism is diverse (see Björk, 2007; Buckley, 2009; Donohoe & Needham, 2006). One of the earliest definitions of ecotourism is credited to Ceballos-Lascurain (1987) who describes ecotourism as “traveling to relatively undisturbed or uncontaminated natural areas with the specific objectives of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas” (Blamey 2001, p. 5, cited in Björk, 2007, p.26; Agyemang, 2013). Ceballos-Lascurain emphasized the natural component and this provided the starting point in understanding the nature of ecotourism. The International Ecotourism Society defines it as “responsible travel to natural areas that conserves the environment and improves the well-being of local people”. These two definitions have some common ground in that the natural environment is identified and placed at the center of ecotourism development. However, the International Ecotourism Society’s definition tends to integrate a sense of social and moral responsibility to the communities that provide ecotourism as a service.

There are many scholarly reviews of ecotourism that produced divergent understanding of the concept leading to different conclusions. As Ross & Wall (1999) indicated, there is no universal definition of ecotourism because of the wide array of perspectives, criteria, and ideas that are applied to the discipline. (Donohoe & Needham, 2006; Fennell, 2001; Honey, 2008; Weaver & Lawton, 2007; Wearing and



Neil, 2009) have all produced varied but similar definitions of the concept. For instance, Fennell (2001) in his review of 85 definitions, outlined 'variability' as the unique attribute in the literature. He also observed some commonalities amongst them and identified these features to include natural setting, conservation and sustainability. Generally, it can be said that the myriads of definitions emphasize two major focus of ecotourism: ecotourism as promoting natural resource preservation and ecotourism as a contributor to livelihoods (Cater, 2006; Fennell, 2001; Reimer & Walter, 2013; Wearing & Neil, 2009). Taking into perspective, these two elements, Stronza (2007) expound that: ecologists have advanced ecotourism as a means of incorporating conservation into development issues for local communities with eco-friendly sites. In these areas' ecotourism is a catalyst for household transformations translating into the readily availability of job avenues and additional cash income streams. Ecotourism is also seen as a conventional form of sustainable tourism. In this regard, it is often regarded as a potent force for conservation and sustainable development given that; it is a non-consumptive, market-oriented strategy to forest utilization (Wichramasinghe, 2009). Williams (2009) noted that these conceptions in combination with other similar concepts contribute to the sophisticated nature of defining the concept of ecotourism thereby causing confusion. Table 2.1 presents a summary of such definitions.



**Table 2. 1: Scholarly definitions of ecotourism**

Author(s)	Definition
World Conservation Union (Brandon, 1996)	Environmental travel and visits to relatively untouched natural areas to enjoy and appreciate the environment that encourages conservation, has a low impact on tourists and allows for beneficial socio-economic participation of local populations.
Honey (2008, p. 32-33)	Ecotourism is designed to travel to delicate, pristine and typically protected areas with little or no effect. 'It helps travelers understand, offers conservation funds, directly benefits local communities 'economic development and political empowerment, and encourages respect for different cultures and for human rights'
Wallace & Pierce (1996, p. 848)	Traveling to fairly uninterrupted natural areas for research, recreation or voluntary support. Ecotourism travel is about the flora, the fauna, the geology and the ecosystems of an area and the people (caretakers) living close by, their needs, their culture and their relationship with the land. [...]
Global Development Research Centre, GDRC (2002, p. 1-2)	'[It] actively promotes the protection of natural and cultural heritage; [it] incorporates local and indigenous peoples in its planning, growth and activity and contributes to its stability. It interprets tourists 'natural and cultural patrimony [it] provides an opportunity for individual travelers and coordinated small-scale groups tours. '
Hall and Page (2006, p. 284)	"Any type of tourism creation which is considered to be environmentally friendly and has the capacity to act as branding mechanism for certain types of tourism products,"  "Green" or "nature" tourism which is essentially a form










	of tourism of particular interest and refers to one specific segment of the market and products are produced for the segment
Ceballos Lascurain (1987) (Joshi, 2011)	Ecotourism is described as a journey to relatively untouched natural areas for the purpose to learn about appreciate and enjoy the landscape and wildlife.

Source: Author's compilation

The description that encapsulates the two critical central themes of ecological tourism and cogently reflects the interest for this research is the one by the International Ecotourism Society (TIES). It sees ecotourism as 'visits to pristinely untouched natural sites that preserves the natural ecology and enhances local livelihoods.' (See Björk, 2007:28). TIES proposed seven principles that constitute the central themes of the concept (see Table 2.2). Fennell (2008) and Wearing & Neil (2009) argues that ecotourism facilitates biodiversity conservation and maintain local well -being thus establishing symbiotic co- dependence between indigenous communities and conserved sites. Weaver (2005) adds that the associated cultural components and the education value need to be recognized.



**Table 2. 2: The International Ecotourism Society's Seven Key Areas of Ecotourism**

<b>The Seven Principles of Ecotourism:</b>	
	Ecotourism must avoid negative effects, which can damage natural or cultural ecosystem quality or character.
	Ecotourism must conscientize the traveler on the relevance of conservation.
	Ecotourism must yield direct income in order to preserve and manage Pas.
	Ecotourism must generate economic benefits for local communities that border eco-destinations.
	Ecotourism needs to stress the tourism industry's need for planning and sustainable growth.
	Ecotourism activities will aim to maintain a high proportion of income in the host region by accentuating the use of facilities and services that are local.
	Increasingly, ecotourism must be premised on infrastructure built in accordance with the climate, reduce the use of fossil fuel, conserve local plants etc.

Source: Adapted from Eshun (2011).

These guidelines are not essentially different from the principles of sustainable tourism (Eshun, 2011). Ecotourism attractiveness is advocated based on the prospects it holds in linking conservation and local livelihoods, preserving biodiversity and reducing rural poverty and achieving both objectives on a sustainable basis (Kiss, 2004).

### **2.3.1 Community-based Ecotourism**

Community-based Ecotourism refers to ecotourism activities that portray unique features such as pitched environmental concerns, proliferation of local participation and as well as substantial usefulness for the host community (WWF-International, 2001). Community-based tourism is the employment of indigenous approaches in the promotion of tourism attraction, growth and development in a locality (Gyimah and





Okrah, 2009). It is founded on the bottom -up approach while maintaining central and local collaborations.

In the case of the Wechiau Community Hippo Sanctuary, the primary stakeholders include the community members, chiefs and elders of the sanctuary communities and community representatives (SMB). The collaborating partners (Secondary stakeholders), include the Nature Conservation Research Centre (NCRC), Calgary zoo, Friends of Wechiau. The Ghana Wildlife and Forestry Commission, Ghana Tourism Authority, Environmental Protection Agency all play key roles. The development of community-based tourism projects thus relies heavily on stakeholder's collaboration with NGOs, private actors, institutions and other partners to deliver on both fronts of conservation and local development.

Buckley (2004) and Fennell (2008) stresses that ecotourism has the potential to produce increased benefits where local communities participates in the regulation of conserved areas. In this regard, ecotourism is labeled in such areas as community-based ecotourism, to try and distinguish between forms of ecotourism that recognizes and concerns of local communities, and those which just occur in natural areas (Honey, 2008). The concept also succinctly differentiates itself from ecotourism ventures which are mainly planned, organized and operated by outsiders thus generating benefits that exclude the local people (Akama, 1996 cited in Scheyvens, 1999; Conrad, 2012). Active participation is therefore seen as an important precursor of Community-based Ecotourism.

The success of Community Based Ecotourism (CBET) is assessed on whether CBET generates a variety of employment opportunities and as such contributes to livelihood enhancement or whether CBET adds value to the national tourism product through



diversification of tourism, increasing volume and economies of scale (Rozemeijer, 2001).

### **2.3.2 Ecotourism as a Form of Conservation**

Human quest for social and economic development has resulted in the continuous depletion of the environment and its finite natural resources (Nguyen & Slater, 2010, p. 5). Local ecosystems face an inadequate regeneration potential if environmental resources will continue to be neglected by reckless environmental behaviour (Bansal, 2002; Barbier, 2011). These scholarly writings thus raise issues of conservation.

The idea that poor communities depend largely on natural resources for their livelihoods has often been argued as the bases and rationale behind ecotourism as a form of conservation (Miller, 2017). The success of conservation depends on its ability to tackle poverty in all its aspects and dimensions (Pêgas et al., 2013; Das and Chatterjee, 2015b). Ecotourism replaces biodiversity degrading methods and significantly contributes to ecosystem management, conservation and sustainable community development (Wearing and Larsen, 1996; Pound, 2003; Stronza and Pêgas, 2008; Jalani, 2012; Reimer and Walter, 2013; Pêgas et al., 2013; Usher and Kerstetter, 2014; Das and Chatterjee, 2015b). However, critics have it that the consideration of ecotourism as an alternative livelihood is founded on the misleading notion of identical local communities with similar if not the same degree of negative environmental externalities (Wright et al., 2015).

The emancipation of both local communities and visiting eco-tourists through environment-based education is thus very crucial to producing positive outcomes on conservation (Wearing and Larsen, 1996; Sander, 2012). Educational programs in local communities which are geared towards environmental protection may help sensitize rural folks on the merits of natural resource management leading to changing



attitudes towards conservation (Wearing and Larsen, 1996; World Wildlife Fund International, 2001; Stronza and Pêgas, 2008; Kiper, 2013; Pêgas et al., 2013; Reimer and Walter, 2013; Usher and Kerstetter, 2014; Das and Chatterjee, 2015a). Sander (2012) advanced that educating of eco-tourists on environment related concerns may seem extraneous as they may already have developed interests in conservation. This notwithstanding, it is still essential as it may reinforce and renew these attitudes and interests. Miller (2017) citing Sanders (2012) recognizes that tourists may be educated on how and the need to reduce environmental education through ecotourism sensitization and the influence of humans in nature. They may also adore, appreciate and respect the culture of the areas they visit (Kiper, 2013). Increasing environmental awareness facilitates conservation efforts as tourists may return home and become advocates of the ecotourism destinations they visit (Sander, 2012).

#### **2.4 Impacts of Ecotourism Development**

The contributions of ecotourism to strengthening local communities and the emancipation of local people in the area of employment creation, revenue generation, entrepreneurship, biodiversity conservation, and the revitalization of social and cultural relationships is adequately emphasized in literature (Honey, 2008; Horton, 2009; Kruger, 2005). When likened to mass tourism, it is considered to be better suited in providing better sectoral interconnectivity, minimizing economic and financial leakage, and engendering sustainable development (Holden, 2008; Weaver, 2005). Akama (1996) explicitly stated that ecotourism initiatives are directed at empowering local people in order to maximize their benefits and exercise some control over ecotourism in their region. There are several scholarly views that emerged to explain the impact of ecotourism activities on the lives of local



communities and areas in which they take place. Some of the views revealed both positive and negative impacts as emanating from ecotourism (Mathieson & Wall, 1982; Weaver, 1998; Belsky, 1999; Jones, 2005; Stronza & Godillo, 2008). The positive impacts in this discourse relate to the benefits that accrue from ecotourism development whereas the negative impacts refer to the harm that may result from ecotourism development.

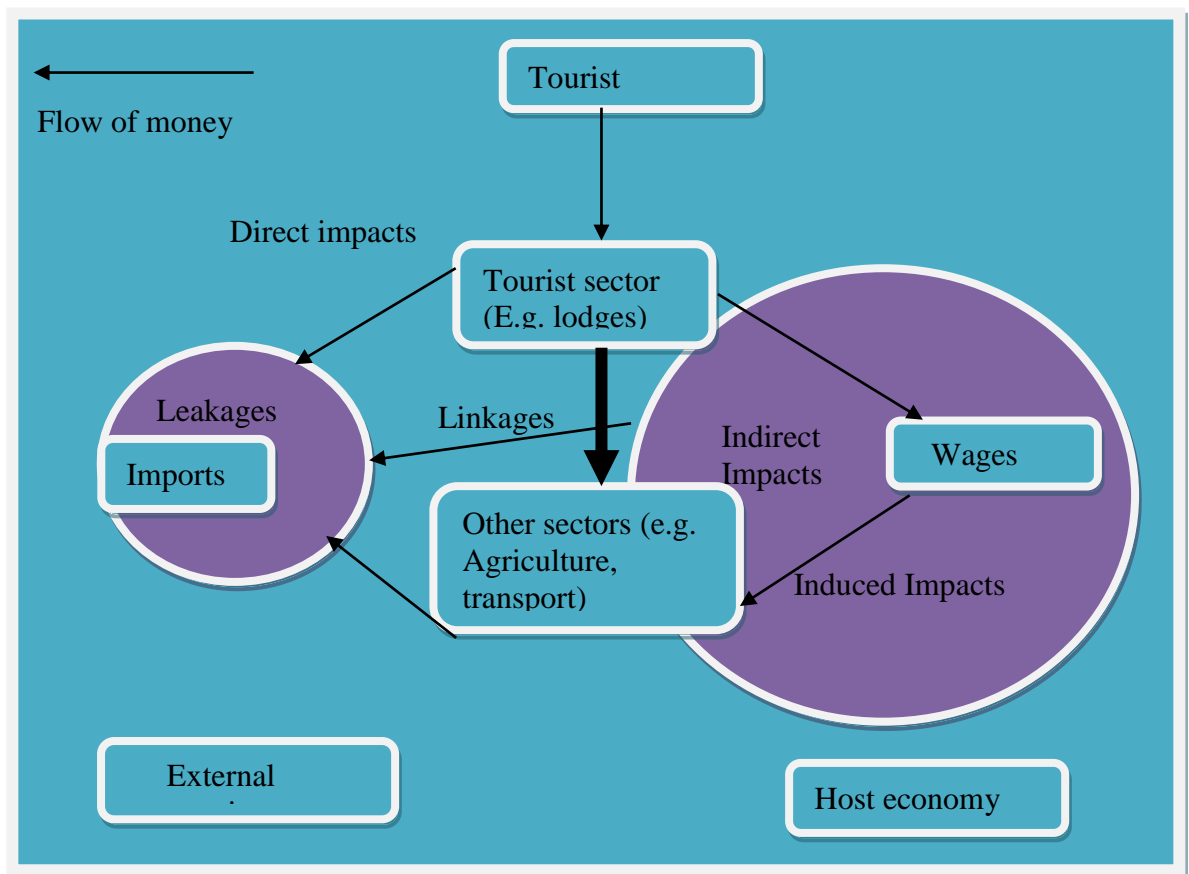
Analyses of the economic, environmental and socio-economic impact of ecotourism on local people is dominant in tourism literature (Adams et al., 2004; Barkin, 2003; Buckley, 2003; Eagles, 2002; Fuller et al., 2007; Goodwin & Roe, 2001; Kiss, 2004; Roe & Elliot, 2004; Stronza, 2009).

#### **2.4.1 Economic Impacts**

Economic gains have been cited as the rationale for ecotourism development in some countries (Page et al., 2001; Cooper et al., 2008). In the view of Afenyo (2011), most people are of the view that ecotourism development is capable of addressing socio-economic problems that are connected to natural resources. Ecotourism produces multiple indirect impacts on industries, including the manufacture and supply of goods and services (Synman, 2013). Ecotourism also provides employment in the commodities and services sector linked to a growing ecotourism industry through the multiplier effect, further impacting the local, regional, and national economy (Ntibanyurwa, 2006; Reimer and Walter, 2013, Das and Chatterjee, 2015b). Studies by Wallace & Pierce (1996) and Stronza (2007) revealed that ecotourism generated much income and hence increased personal and household incomes in the Amazonas community in Brazil and also, the Posada Amazonas eco-lodge in Peru made a profit of \$182,583 in 2004 and \$208,328 in 2005. Much (60%) of the profits were used in community development while the 40% was distributed among the families in the



community and this increased the average household income by 25% in 2006. Ecotourism is also perceived to possess some macroeconomic appeal. Due consideration is given to its contribution to the balance of payments and foreign exchange revenues, backward economic linkages, the generation of jobs and the creation of profits through the delivery of goods and services (Andereck, Valentine, Knopf & Vogt, 2005. Mitchell & Ashley, 2010; Telfer & Sharpley, 2008; Weinberg, Bellows & Ekster, 2002). Figure 2.1 shows the possible economic impacts that may result from ecotourism activities.



**Figure 2. 1: Flows of Tourism Income and Its Impact on the Local Economy**

**Source:** Meyer (2008, p. 563). Adapted from Synman, 2013

Despite the economic gains that may accrue from ecotourism development, there are possible barriers that may also threaten these economic returns and impact

beneficiaries negatively. Capital flight might result as some benefits may leak out of the ecotourism destination possibly reducing the chances of success of these sites. (Stronza and Gordillo, 2008; Das & Chatterjee, 2015b). Afenyo (2011) identified leakages of profits, inflation, seasonality, menial job opportunities, and opportunity cost to development. Das & Chatterjee (2015a) categorize the leakages to be of two types; lack of uniform benefits sharing between stakeholders and unequal benefits sharing within a community. The lack of uniformity of benefit distribution within communities and between stakeholders stems from import and export leakage (UNEP, n.d.). Millar (2016) reckoned the import leakages to result from the necessity of importing the services and goods needed in the ecotourism sector while attributing the export leakages to the monies that returns to foreign investors. Similarly, job avenues that result from ecotourism sometimes may be unable to realize the anticipated economic results probably stemming from the fact that, some do not generate the needed incentive to retain workers and this makes them unsustainable and hence makes people to return to their previous jobs. This observation was affirmed with the case of Mexican Monarch Butterfly Reserve where most of the people went back to logging because; the reserve could not achieve much of the expected economic gains (Jacobson & Robles, 1992; Barkin, 2003).

Ecotourism job creation also has its limitations. Advocates of ecotourism established that it would make available jobs that can substitute extractive livelihood methods. Studies by (Stronza & Pêgas, 2008; Novelli & Gebhardt, 2009) revealed that the advent of ecotourism jobs may not substitute extractive livelihood strategies but merely supplement them. Stronza (2008) further argues that, if ecotourism successfully replaces other forms of income generation, communities may be at risk



of leaving a diverse and stable economy making them susceptible to risks and shocks in the ecotourism sector. Stronza, 2008; Usher and Kerstetter, 2014).

#### **2.4.2 Environmental Impacts**

Environmental issues constitute the central theme of alternative tourism (Cooper et al, 2008). The contribution of ecotourism to conservation of natural areas, plant and animal species (Mathieson & Wall, 1982) and economic development (Cooper et al., 2008) has been so immense and hence the positive yields of ecotourism biological diversity can generate economic incentives to be used for environmental protection and education for stakeholders in the sector development (Ross & Wall, 1999). Mathieson & Wall (1982) noted that more than 207, 200 km<sup>2</sup> of forest land, have been set in East and South Africa to conserve and protect one of the largest wildlife populations in the world. Stronza & Pêgas (2008) noted that the conservation of a variety of plants and animal species such as the on-going sea turtle conservation in Brazil and that of the Seychelles' whale shark conservation (Rowat & Engelhardt, 2007) impacts the environment in a positive way. Some fauna conservations in Ghana including the Wechiau hippopotamus, the Mona monkeys, the Western sitatunga, white-necked rockfowl and the manatee conservations do not only boost ecotourism, but help to sustain the environment (NCRC, 2006).

In terms of environmental impact, Ecotourism is widely identified to be a protector of natural areas thereby contributing to biodiversity conservation. It basically concentrates on exploring and learning about natural attractions including, its landscape, flora, fauna and their habitats. In the planning for ecotourism activities, the environmental and conservation issues are the first to be looked at (Munn, 1992; Ceballos-Lascurain, 1996; Gössling, 1999; Tisdell & Wilson, 2002; Lindsey et al., 2005; Lopez-Espinosa de los Monteros, 2002; Fung & Wong, 2007). Rahman (2010)



further stresses the environmental sensitivity of ecotourism destinations, because ecotourism specifically involves various environmental phenomena, including watching birds, trekking, cycling, horseback riding and electrical riding on the wildlife trail in the forest, staying in natural caves, studying the flora and fauna, simple bushing, fishing, animal conduct.

Even though ecotourism is widely recognized to be a protective shield for natural areas thereby strengthening biodiversity conservation, it also poses serious threats to the natural environment. Ecotourism still remains an extractive and degradative activity capable of degrading the environment it sought to safeguard which may occur even at the lowest levels of use (Farrel & Marrion, 2001). In projects claiming to use green practices, a number of negative environmental effects have been reported. Ecotourism has been recorded to contribute to effects of soil erosion, habitat change, climate, noise and water pollution, garbage, loss of biodiversity, local flora and fauna destruction (Kruger, 2005; ScienceDaily, 2008; Novelli & Gebhardt, 2009; Das & Chatterjee, 2015a; Das & Chatterjee, 2015b). A study on environmental management indicators for ecotourism in the Tianmushan area, China, revealed that the attraction of tourists to this protected forested area for over a period of 10 years has led to trail widening and excessive root exposure along the trails causing vegetation damage (Li, 2003). The study of the Rio-On Pools in Belize also found negative externalities of ecotourism where the site was reported to have degraded water quality linked to erosion from walking paths and parking lots, pollution from improperly maintained pit toilets, litter, and displacement of flora and fauna (ScienceDaily, 2008).





### 2.4.3 Socio-Cultural Impacts

Telfer and Sharpley (2008, p. 195 cited in Synman, 2013) highlighted the distinction between social and cultural impacts. They define social impacts as “the short-term effects of ecological tourism on local residents and their lifestyles, and cultural impacts takes longer period to manifest and occur in the context of social values, attitudes and behaviours”. Ecotourism can aid rejuvenate the indigenous culture and cultural pride of a local setting (Jamal & Stronza, 2008). A study by Reimer & Walter (2013) on an ecotourism project in Cambodia affirms this view as their study revealed that the activities and efforts of visitors in the area led to the resurgence of the area’s traditional culture. Ecotourism attaches value to cultural traditions and serves as a motivation to maintain and preserve them (Whelan, 2013). Sofield (1996) as cited in Eshun & Tonto (2014) related how in the Solomon Islands the traditions of the Melanesian villagers are so interlinked with their forests, coastal reefs and associated habitats that these features are regarded as their most important social and economic resources. Sweeting (2012) also explained that local appreciation and support is vital to ensuring the success of ecotourism products and activities irrespective of how well planned they may be. A study by Wearing & Larsen (1996) revealed how in the Santa Elena rainforest project in Australia, opportunities have been created for the community to share their traditions with visitors, establish friendships, learn new languages and receive donations from tourists or conservation organizations who visit the area.

Given the appreciation of the social merits of ecotourism, there remain substantial negative impacts worthy of remembrance. Just like conventional mass-tourism, it may propagate socially related concerns such as prostitution and drug abuse (Honey, 2003; Zambrano et al., 2010), resulting from the convergence of a large number of people



from different spheres of life to share experiences and possibly consume illegal substances. Despite ecotourism aim of contributing and enhancing well-being of local communities (UNWTO, 2002), the rapid exposure to drug abuse from prostitution and other forms of abuse brought about by the tourism industry in general can be shown to contribute to the degradation of indigenous moral and cultural values (Khizindar, 2012; Zams, 2012).

Ecotourism development may also alter social arrangements and relations. Ecotourism has led to the displacement of people and loss of their assets notably land. This is very popular among poor communities who most of the times have no rights or are restricted to own lands with limited or no access to any legal representation (Honey, 2008). He made compelling argument to justify his claim by citing the Maasai Mara in Kenya and Tanzania cases in point. He related that, the Maasai people were evicted from their lands in the 1970's to make way for the establishment of the Amboseli National Park. Ecotourism has also been conceived to carry the potential to generating internal conflict, worsening discrepancies in class, gender and patronage (Belsky, 1999), which create problems as to who should be included as part of the 'community' and create long-term dependency on external support (Akama, 2004). In an attempt to increase respect and appreciation of local cultures, these cultures may be eroded given that one major area of interest to eco- tourists is the local culture (Novelli & Gebhardt, 2009).

## **2.5 Sustainable Development and Ecotourism Linkage**

Tourism is a very sophisticated undertaking and thus demands tools to aid in effective decision making to be able to cope with the competing socio-economic and environmental demands of sustainable development (Fadahunsi, 2011). Ecotourism is



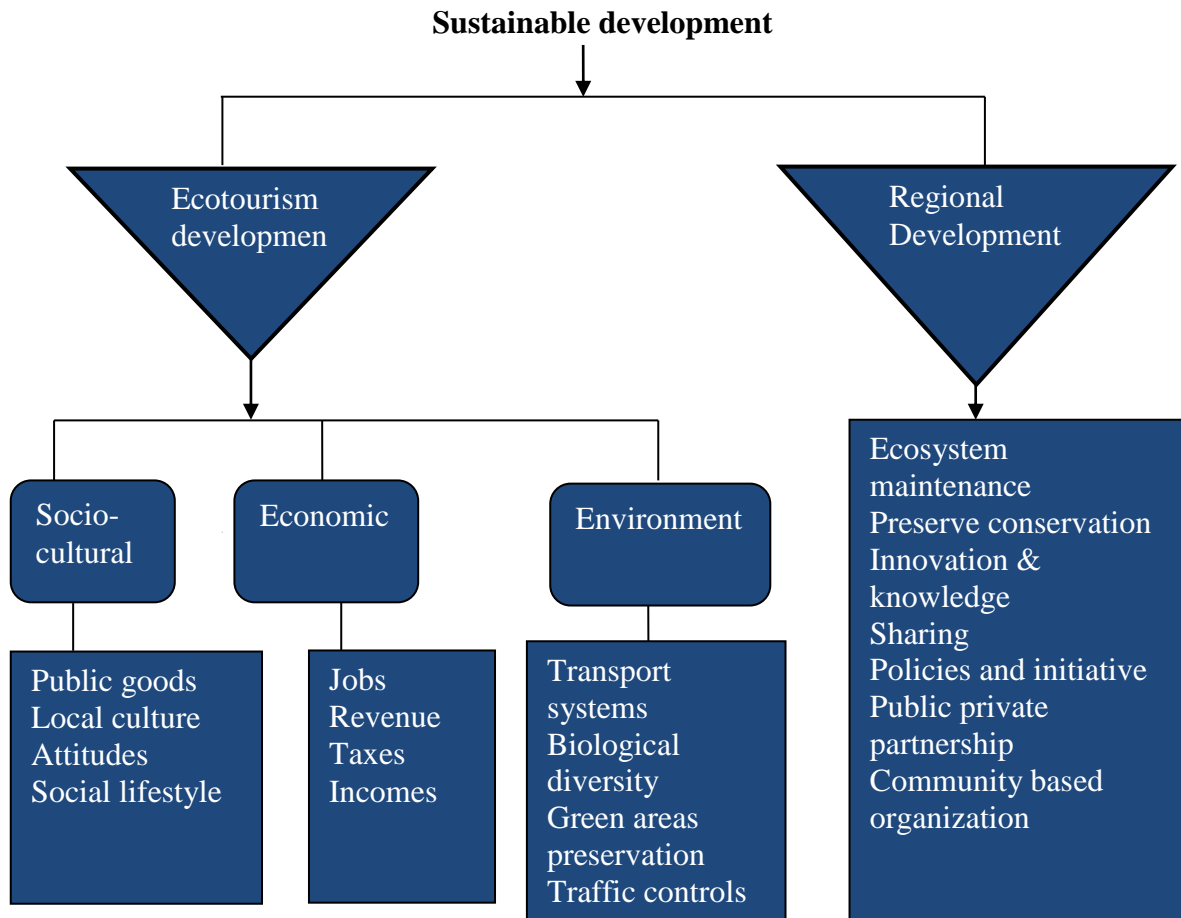
viewed as a recipe for tackling most of the developmental problems plaguing underdeveloped economies. Irrespective of how socially, economically and environmentally friendly ecotourism may appear theoretically, in practical terms its basis is still deeply ingrained in the tourism industry (Wall, 1997). In a similar vein, tourism activities can generate and create serious negative consequence on the environment. Persistent human interference in ecological sensitive areas can cause irreparable alterations in existing ecological processes. Natural resource degradation, vegetation structure, the size of the habitat patch and increasing deforestation may portray this scenario (Tourism Queensland, 2002). With reference to sustainable development and tourism, review of literature reveals definitional contestations (Liu, 2003; Sharpley, 2009). Sharpley (2009) attributed this divergence in perspectives to the ambiguous and contradictory nature of tourism, which provides opportunities for different views. On the other hand, Hunter (1997) credits the different interpretations to its flexible and adaptive nature. Given the array of perspectives of sustainable development in the tourism literature, sustainability is identified as a central theme (Sharpley, 2009; Tao & Wall, 2009b; Holden, 2008; Honey, 2008). Saarinen (2006) indicated that sustainability requires a symmetric interaction of economic, socio-cultural, and ecological elements of tourism and other systems.

Sustainable development as described in the Brundtland Report of the World Commission on Environment and Development (1987) on ecology is associated with ecotourism (Place, 1995; King & Stewart, 1992; McMinn, 1997; Stem et al., 2003). The Brundtland report by the WCED (1987) has been credited for serving as a key turning point to the emergence of sustainable tourism development (Ritchie & Crouch, 2003). Its central focus is the conservation of natural resources to ensure their continuous existence and the sustainable use of these resources in a manner that will



provide travelers with ecological knowledge (Bansal & Kumar, 2011; Godratollah et al., 2011; Tewodros, 2010). However, Fennell & Weaver (2005) maintains that the contribution of ecotourism activities to sustainable development is limited due to its inability to give economic, social and environmental concerns the attention they deserve.

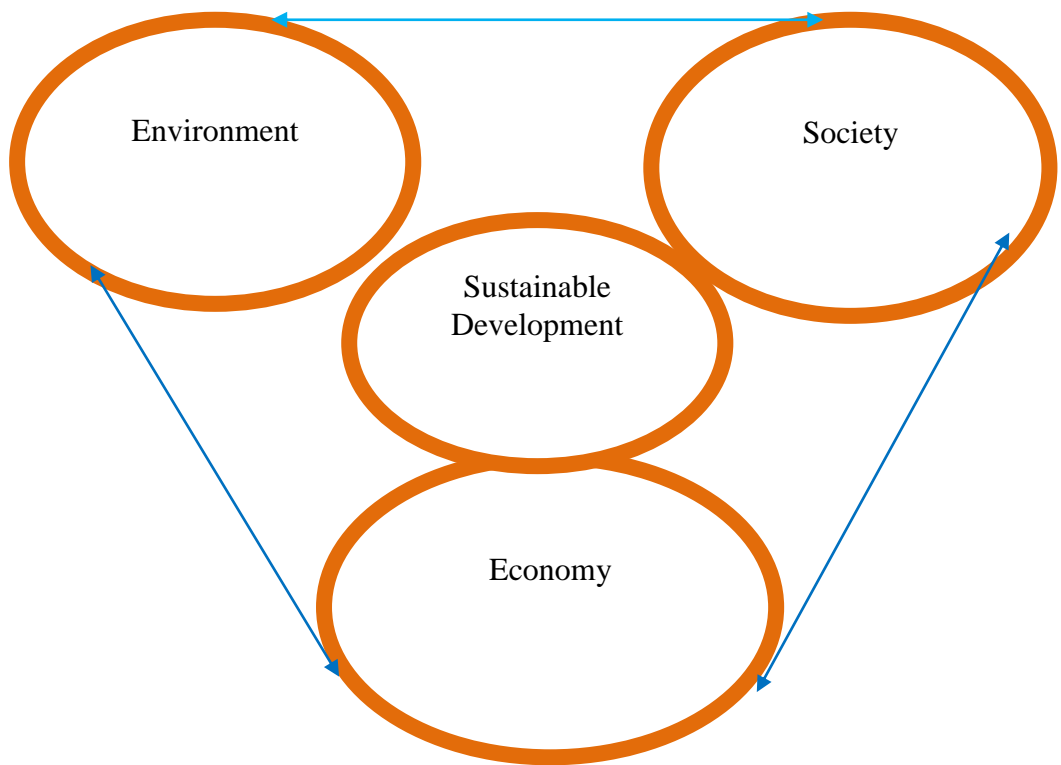
Bhuiyan et al. (2012) stresses the importance of sustainable development through ecotourism as they argue that sustainable development can occur simultaneously with ecotourism and regional development. Long term sustainability may stem from a suitable balance between the dimensions of ecotourism development. Figure 2.2 depicts sustainable development through ecotourism.



**Figure 2. 2: Sustainable Development through Ecotourism**  
Source: Modified from Bhuiyan et al. (2012)



Three pillars characterized sustainability: Environment, Society and Economy (Ayre & Callway, 2005). Medina (2005) argued that for tourism to be sustainable it should encapsulate and take account of social and economic indicators coupled with the integration of environmental sustainability. Wall (1997) further clarified that it must respect local people, be economically powerful and be responsive to the climate in which it operates in order to appreciate the positive impact of tourism on sustainable development. The various forms in which these features may manifest may vary. Figure 2.3 shows the tourism development cycle respectively.



**Figure 2. 3: Sustainable Development Cycle**

**Source:** Adapted from WCED, 1987



## 2.6 Ecotourism Development in Ghana

Tourism development in Ghana fringe on joint resource ownership. The Ghana Tourism Board (GTB, 2008) on this basis sees community engagement as a key component in the development of tourism which can diffuse its gains such as environmental conservation and the boosting of the local economy to all parts of the country. Ghana's tourist products border's around five broad areas resulting from a switch in tourist's attention from high-density activity to more personalized activities such as exploration of historical, cultural and ecological heritage, at which Ghana is richly blessed (GTB, 2000 cited in Gyasi, 2013). Cultural and Heritage tourism, Ecotourism/rural tourism, Beach tourism, Conference or Business tourism and urban tourism constitute this broad categorization. Empirical data from the Ghana Statistical Service, (2006) puts the country's tourism as the fourth highest contributor to the nation's foreign earnings contributing some 6% to GDP and directly and indirectly offer jobs to more than 250, 000 people locally. Ecotourism in the country has received continual growth due to the availability of a wide range of natural and cultural tourism resources that characterizes rural communities (Asiedu, 2002). The significance of nature-based resources to development lies in the ability of these resources to attract people in affluent societies with comprehensive welfare services and increase their patronage based on the uniqueness of the rural setting (Asiedu, 2002). If well-coordinated with the relevant authorities, ecotourism can play a significant role in enhancing local livelihoods and improve local economies. The literature provides extensive evidence on the beneficial effects of ecological tourism on the livelihoods of local resident, development of the rural economy and the elimination of poverty (see World Trade Organisation; UNCTAD 2001; Asiedu 2002; Holland et al. 2003; Mitchell & Ashley 2007; Tao and Wall 2007; Ahmadi, 2010)



The local economy particularly the agriculture sector can be diversified through tourism and also cause the emergence of new ones thus creating additional livelihood options for the rural poor (Muhana, 2007; Asiedu & Gbedema, 2011). It is often more beneficial if greater attention is placed on the connection between tourism and other economic sectors from the perspective of poverty and tourism. It is often argued that if there is an increased linkage between tourism and the local economy, it will be sufficient to cause a decline in economic leakages thus allowing gains from tourism to filter down to marginalized groups in society. For instance, World Tourism organization (WTO, 2002), indicated that one of the best ways to improve economic gains to the local community and increase its contribution to poverty reduction through tourism is to strengthen the linkages between the formal tourism sector and the local economy.

Jolly (2005) and Eshun et al. (2014) argued that most of the tourism related activities in rural areas are being undertaken by farmers for the entertainment and education of tourists. Tourism and agriculture essentially serve as key combatants in the fight against rural poverty since they hold potentials to generating increased farm revenues, making it a lucrative venture. The possibility of on-farm tourism holds prospects to generating potential income which can help farmers and rural folks to withstand the challenges that accompanies agricultural mechanization. This income can help in poverty reduction and curb rural-urban migration (Rogerson and Rogerson, 2010 cited in Rogerson, 2012). The rural poor often comprise agricultural wage earners, small holder farmers and those workers engaged in rural industrial activities such as pito brewing and pottery. Small land holdings, fragmented land development coupled with their low productivity are usually the root cause of rural poverty among rural households who depend on these land-based activities for their main livelihoods



(Arahi & Kaikan, 1998 cited in Mathembu, 2008). Mathembu (2008) contends that the poor physical and social capital base of rural communities is the main driver of out-migration from the countryside in search of better conditions in the urban centers which may be non-existent.

Agritourism is often used to represent the connection between tourism and agriculture. It is often viewed to hold greater prospects that can aid in boosting the economy since the Ghanaian economy is predominantly agrarian in nature. The potential for local economies to diversify as presented by agritourism has gained greater recognition due to a rise in research in this area (Asiedu & Gbedema, 2012; Eshun & Tettey, 2014; Eshun et al., 2014a, cited in Eshun et al., 2014b). An Integration of the agriculture sector with ecotourism can yield positive livelihoods outcomes for the rural poor. Local employment growth, increased household income, reductions in rural-urban migration incidence, improved rural livelihoods and also strengthening of the local economic base of most outlying regions in the country can be the key gains made through their integration (Asiedu & Gbedema, 2012. Rogerson (2012) added that this trend has been observed because of the inextricable link between rural communities and the agricultural sector. Many African countries on this basis have therefore adopted agritourism as one of their frequently used economic growth models in trying to unlock opportunities for the rural poor (Goodwin, 2006; Rogerson & Rogerson, 2010 cited in Rogerson, 2012).

## **2.7 Ecotourism and Poverty Alleviation**

In recent times, tourism has attracted widespread recognition among national governments, researchers, practitioners and international agencies, such as the UNWTO, as a key driver of economic growth and a valuable poverty alleviation tool





(Blake, Arbache, Sinclair, & Teles, 2008; Croes & Vanegas, 2008; Novelli & Hellwig, 2011; Scheyvens, 2007; Spenceley & Goodwin, 2007). The prospect of tourism reducing poverty is embraced by its importance for developing economies as it is one of the rapidly developing sectors in countries with high manifestations of poverty (Scheyvens, 2007). Its role has therefore been recognized in most developing countries as a means of boosting the economies of local communities by creating new opportunities (Mendoza, 2006 cited in Njole, 2011). Nature-based tourism holds prospects of providing jobs and economy of self-reliance to host communities, expand livelihood options and enrich local economies (Lindberg & McKercher, 1997).

In the view of Neto (2003), tourism generates employment opportunities for the poor in society and makes available options for local and marginalized groups. In social terms, tourism is also regarded as a key contributor to development in increasing the number, availability and improvement of important social services including health infrastructure and services, educational infrastructure, community road networks and the provision of clean and potable water. Economic gains from tourism can be directed at enhancing rural economies and creating benefits by way of infrastructure provision such as good roads, telecommunication services and creation of good drainage and sanitation scheme that recuperates the conditions of the local population (Agubeere, 2014). The development of tourism activities in any region can offer considerable benefits to local communities (Asiedu, 2002; Asiedu & Gbedema, 2011; Chok et al., 2008; Truong et.al, 2014 whilst others (Steiner, 2006; Ashley, 2006, Goodwin, 2000; Musasa and Mago, 2014) recognize the need to uncover tactics in which tourism can operate for development as it is the world's largest industry with continuous growth, particularly in Third World countries. Nowaczek et al. (2007) argues that, the emergence and continuous development of tourism activities in these



countries may provide support in realizing the goals of several local communities. The prospects of tourism particularly nature-based tourism as a poverty alleviation tool especially for local communities in many developing countries have been widely postulated. Goodwin (2000) emphasized that tourism offers great potentials to the poor especially in remote and isolated areas, where limited livelihood choices and development opportunities exist. All these may have culminated in the endorsement of the Millennium Development Goals (MDGS) by the UNWTO in 2009, which actively promotes tourism as an instrument of prosperity through sustainable development and poverty reduction.

The introduction of Pro-Poor Tourism (PPT) by the United Kingdom Department for International Development in 1999, has reinforced the potential of tourism in poverty alleviation as the approach fundamentally premises on generating net returns for the poor and guaranteeing its persistent support to combating poverty as the sector expands (Ashley & Roe, 2002; Ashley, Roe, & Goodwin, 2001; Goodwin, 2008; Zeng & Ryan, 2012). The manifestations of PPT even though reveals similar attributes with other contemporary approaches such as sustainable tourism, ecotourism, Community Based Tourism or responsible tourism, it places the concerns of the poor and poverty at the top of the agenda at all levels of intervention which uniquely differentiates it from other approaches (Ashley & Roe, 2002). These researchers further maintain that many sustainable, ecotourism, community-based and responsible tourism initiatives are good examples of PPT strategies.

A number of tourism features have been outlined to make a case that tourism, in relation to other sectors like manufacturing, is better suited for reducing poverty in underdeveloped nations on the basis that: (1) it is suitable for poor rural and coastal



areas with limited alternative growth strategies; (2) it is labor-intensive; (3) it employs a large chunk of women, young people and unskilled or less skilled individuals, who represent a high percentage of the very poor section of society; and (4) tourists visit the destination, thus providing business opportunities for related industries at the destination (Ashley & Roe, 2002; Scheyvens, 2007; Spenceley & Meyer, 2012). Regardless, like any other type of development activity, tourism can also serve as a disincentive for the poor, especially when its development results in inflations, displacement of rural settlers, disruption of social order, class disparities and alterations in cultural resources (Ashley & Roe, 2002; Bowden, 2005).

## **2.8 Evolution of Livelihood and Sustainable Livelihood**

Livelihood perspectives are noted to play a central role in rural development thinking. Livelihood has been uncovered as a dominant term in development literature. Its flexibility accounts for such dominion and popularity as it is applied in fields of development practice and enquiry as it relates to locales (rural or urban livelihoods), job (business life), social disparity (gendered, age-defined livelihood) and many more (Scoones, 2009), complex trends (sustainable or resilient lives) and many more (Scoones, 2009). Livelihood has been defined variously in the development literature. For instance, it has been construed by Chambers (1995, VI) as a means of gaining a living. In the view of the Food and Agriculture Organization (FAO, 2009), the term refers to the employment of household assets through engagements in series of activities and capacity building to generate livelihood outcomes. Gieryn (1999) explained that “livelihoods” emerged in the past decade as a boundary term, something that binds divergent perspectives and allows for interaction between disciplinary and professional divides and provides institutional bridging function



linking people, professions and practices in new ways. This often raises concerns about the origin of these perspectives.

The idea of livelihood thinking is often credited to Chambers and Conway paper of 1992. This regardless, some genealogy of livelihood thinking traced it back to the inter-disciplinary perspectives of livelihoods that overwhelmingly inspired rural development thinking and practice. One early example is often cited in the work of the Rhodes-Livingstone Institute in what is today Zambia (Scoones, 2009). This included cooperation among ecological scientist, rural anthropologists, farmers and economists on evolving rural practices and their challenges for development (Fardon, 1990 cited in Scoones, 2009). Lipton & Moore (1972) acknowledged the contributions of both economists and Marxist scholars, especially in the fields of agricultural economics and geography. Farmer (1977); Walker & Ryan (1990) analyzed a series of classical studies of the Indian rural society. They specifically reviewed the distinct impact of the Green Revolution in India and noted significant resemblance with livelihood studies, even though they focused on the microeconomics of agricultural production and household accumulation trends. Scoones further emphasized his position on the multiplicity and diversity of constituents to the origin of “livelihoods” by arguing that, “in developing the distinctive actor-oriented approach of the Wageningen School, Norman Long was referring to livelihood strategies in his studies in Zambia at this time” (Long 1984, see De Haan & Zoomers 2005 as cited in Scooned, 2009). “In almost the same period, from a different theoretical paradigm, field studies such as the classic examination of rural change in northern Nigeria by Michael Watts (1983), *Silent Violence*, provided vital arguments into the contested patterns of livelihood change” (Scoones, 2009).



Several disciplines and scholars therefore made significant contributions by providing valid insight to the term “Livelihood’ despite its popularity being credited to Chambers and Conways (1992).

The concept of livelihood is very popular in rural development literature (Ashley & Mitchell, 2010; Shen et al., 2008). It aims to holistically integrate poverty issues with development. Poverty alleviation constitutes its central theme as it is viewed to play a pivotal role in environmental destruction (Holden, 2008). According to Krantz (2001), the origin of the concept of sustainable livelihoods (SL) can be traced to the work by the Brundtland Commission on Environment and Development, “livelihoods are sustainable when they can cope with and recover from adverse trends and sudden shocks, and when they allow for maintenance and enhance its capabilities and assets both now and in the future, while not undermining the natural resource base” (FAO, 2009).

## **2.9 Philosophical Paradigm Underpinning the Study**

A research paradigm presents a researcher the opportunity to organize his thoughts around a particular world view or philosophical thinking that supports his way of thinking about the problem of study and its analysis. It is therefore crucial to consider the paradigm and or paradigms that may underpin world view of the phenomenon under study ((Grant & Osanloo, 2014). In the view of Mackenzie & Knipe (2006), paradigm is used in educational research to describe a researcher’s ‘worldview’. A philosophical worldview or paradigm as conceived by Creswell (2013) is a philosophical position that deals with the world around us and the form and nature of research that a researcher brings forth. Paradigms constitute the basic belief systems that seek to give guidance and direction to an investigator in the course of his study



(Creswell, 2012). Guba and Lincoln (1994) define the concept to refer to a set of philosophies or world views that underlies research action or enquiry. They divided paradigms into four categories namely methodology, epistemology, ontology, and axiology. According to Cooksey & McDonald (2011), epistemology is what is recognized and upheld as knowledge within the world. It deals with the basic components of knowledge, the various forms they are manifested and the medium or manner in which they are communicated to people. Davidson (2000) asserts that epistemology helps researchers to interrogate a phenomenon genuinely by posing realistic questions such as how we uncovered the truth, what is deemed as knowledge; especially in situations where factual evidence is regarded as truth. Slavin (1984) emphasized that, in an attempt to articulate answers to questions as posited by Davidson (2000), “one can draw from distinct sources of knowledge notably: intuitive knowledge, authoritative knowledge, logical knowledge, and empirical knowledge”. Forms of knowledge such as beliefs, faith, and intuition when relied upon as knowledge sources, then the epistemological basis of one’s research is said to be intuitive knowledge. Data that is sourced or collated from people knowledgeable in a particular field of enquiry, publications and books that belong to the field of enquiry, and leaders in organizations deemed to possess such knowledge, is said to be grounded on authoritative knowledge. Similarly, if emphasis is laid on reason as the surest path to knowing the truth, then this approach is called rationalist epistemology or logical knowledge while a body of knowledge is said to be empirical if attention is focused on the understanding that knowledge is best derived from sense experiences, and demonstrable objective facts (Kivunja & Kuyini, 2017).

A variety of paradigms are available for researchers and depending on the phenomenon under study, at suitable paradigm may be selected for a study. These



paradigms range from positivism to pragmatism as two polar ends of the research paradigm (Agubeere, 2014). For the purpose of this study, this research proposes pragmatism as its philosophical worldview. Cherryholmes (1992) asserts that pragmatism is popular with the work of Peirce, James, Mead, and Dewey. Writings by Murphy (1990), Patton (1990), and Rorty (1990) are also closely associated with pragmatism. Pragmatism as a worldview has been conceived by many writers to be borne out of actions, situations and consequences as opposed to positivism and post positivism that premises on conditions (Creswell, 2013). Pragmatism as a research paradigm is centered on the research problem rather than the method of approach and as such, this philosophical view is appropriate for this research since it will employ different approaches to try and understand the research problem at hand.

Pragmatism allows for the usage of multiple data collection methods. This is in consonance with the approach proposed by the study which is the mixed method approach. The mixed method of data collection involves the integration of both quantitative and qualitative data. The study intends to conduct a convergent parallel data collection. This is to say that, there will be a joint organization of both qualitative and quantitative data in order to realize a comprehensive outcome. Convergent data collection involves the simultaneous collection of both quantitative and qualitative data (Creswell, 2012). The strength of this philosophical view lies in the fact that one approach can be used to assess the efficiency of the database of the other in a like manner.

## **2.10 Conceptual Framework**

According to Mugenda and Mugenda (2003), a conceptual framework is a hypothetical model identifying the concepts under study and their relationships.



Svinicki (2010) sees it as a set of thoughts with various interrelations revealing and association between a phenomenon, event or functions and its parts. It primarily serves as the basis for observing and understanding how patterns, events, ideas, observations, concepts, and other components of experience are linked or associated.

### **2.10.1 Sustainable Livelihood Framework**

The development of a conceptual framework constitutes an important component of a research proposal despite the difficulty that surrounds its development (Veal, 2011). This study in an attempt to develop or adopt a conceptual framework will therefore carefully conduct an analysis of the key underlying concepts that the study revolves around and how they fit together. Veal (2011) proposed four steps to arrive at developing a conceptual framework. These included identification, definition, exploration of relationships between and operationalization of concepts to which he argued that the process should not be viewed as a linear one but one that is iterative (Agubeere, 2014).

The study adapted the Sustainable Livelihood Framework developed by DFID and modified by Ashley (2000). The sustainable livelihoods framework is deemed a viable tool for analysis of livelihoods in this study because it creates a connection among its constituents that are linking the broader socio-economic components of household assets, livelihood activities, outcomes of livelihoods activities, and factors mediating access to livelihood activities (Scoones, 1998; Ellis, 2000; Farrington et al, 2004 cited in Mbaiwa, 2008). The adaption of this framework stems from the theoretical and conceptual components on which it is built. The sustainable livelihood framework by DFID encapsulates a conceptual framework which stresses that assets are employed, and activities undertaken to engender an array of livelihood products (otherwise





referred to as needs or goals). The conceptual framework (see Figure 2.4) depicts the flow of natural and cultural resources and how they can be harnessed to develop ecotourism. By implication, these resources can become the fundamental building block and constituent of the tourism resource base of the study area and consequently serve as a means of attracting tourists to visit the area. Local people within the area may also acquire skills and techniques to carry out activities that will enable them to pursue their livelihood needs through the usage of the tourism resources. Ecotourism and livelihood strategies and activities are expected to interact and co-depend on each other to generate livelihood assets for local people in order to attain positive livelihood outcomes.

The sustainable livelihood approach (SLA) is developed around participatory and policy tools to demonstrate the interconnectivities between livelihood systems at both the macro and micro levels of policies which influence these livelihoods. A sustainable livelihood approach comprises a set of guidelines, policies, technologies and techniques used in decision-making with the motive of contributing to livelihoods through the design of copying strategies for improvement (SACOAST, 2009). The sustainable livelihood approach has as one of its objectives the formulation of a framework that will provide for the identification of main capitals and the interactions among them. Such strategies usually have a theoretical and methodological implementation plan based largely on participatory methods (Twigg, 2007). There is universal practice that characterized the approach on SL; its usage and application depend on the institution or organization responsible for its management. It can therefore serve as a framework for analytical purposes or as a tool for programming and planning actions, or may in itself constitute the program (Twigg, 2007).



Ashley (2000 cited in Njole, 2011) pointed out that the framework of the approach on sustainable livelihood emerged to alter development thinking especially in developing economies. The development of the approach also sought to inform our conception and understanding about the rural poor and their livelihood sources. The Sustainable Livelihood Framework attempts to conduct an enquiry into the manner in which an individual or society in a given environmental and geographical setting and condition utilizes a resource governed by institutional guidelines, conventions rules and social controls to create livelihood options towards achieving a sustainable livelihood. In this context, the resultant livelihood products are not always lasting or constructive. In reality, these livelihood products are undeniably negative with increasing poverty which the SL framework imputes on vulnerability contextual factors, livelihood assets, strategies, household outcomes, transforming structures and processes (Ludi and Slater, 2008; cited in Mihaye, 2013). Morse (2009) noted that the asset portfolios in the SL framework play a pivotal role as individuals and households employ these resources for their livelihoods.

According to DFID (2004), the vulnerability context is conceived as the essential component required to sustaining livelihood as it is the web of the external environment where people exist but beyond their control. Asset portfolios of five different types are also highlighted in the framework which includes human, physical financial, social and natural assets. People's livelihood activities are centered on and developed around these key assets (DFID, 2004; Ashley, 2000). These assets are influenced by the milieu of vulnerability, which constitute the outside forces that influence people's livelihood capabilities. Seasonal nature of livelihood activities and trends and shocks that are outside the control of the households are the foremost vulnerability contexts which characterized the livelihood framework. Accessibility to



and usage of these assets is also being affected by policies and guidelines, organizations and individual relationships, organizations and authority. The organizational structures coupled with the institutional processes connect the various elements together. Livelihood strategies entail the multiplicity of choices that individuals make in an attempt to utilize available assets. The framework also identified three broad classes of livelihood strategies namely, livelihood intensification, diversification and migration. The livelihood strategies refer to techniques which individuals and households rely upon to produce outcomes, which could either be positive or negative (Morse, 2009).

The human assets in the framework is made up of technical know-how, skills, well-being etc. the physical assets represent resources such as transportation infrastructure, accommodation facilities, energy sources and water. Natural assets comprise resources of nature such as land, water, forest, marine resources, biological diversity and air quality. Ecotourism depends directly on these assets and these form the critical component of ecotourism attraction. Savings, cash inflows, credit etc. constitutes the financial assets. However, Ashley (2000) classified the financial asset into salaries, spontaneous earning, and communal income in tourism literature. Social assets are made up of resources such as community norms, values, social interaction patterns, relationships and other cultural artifacts.

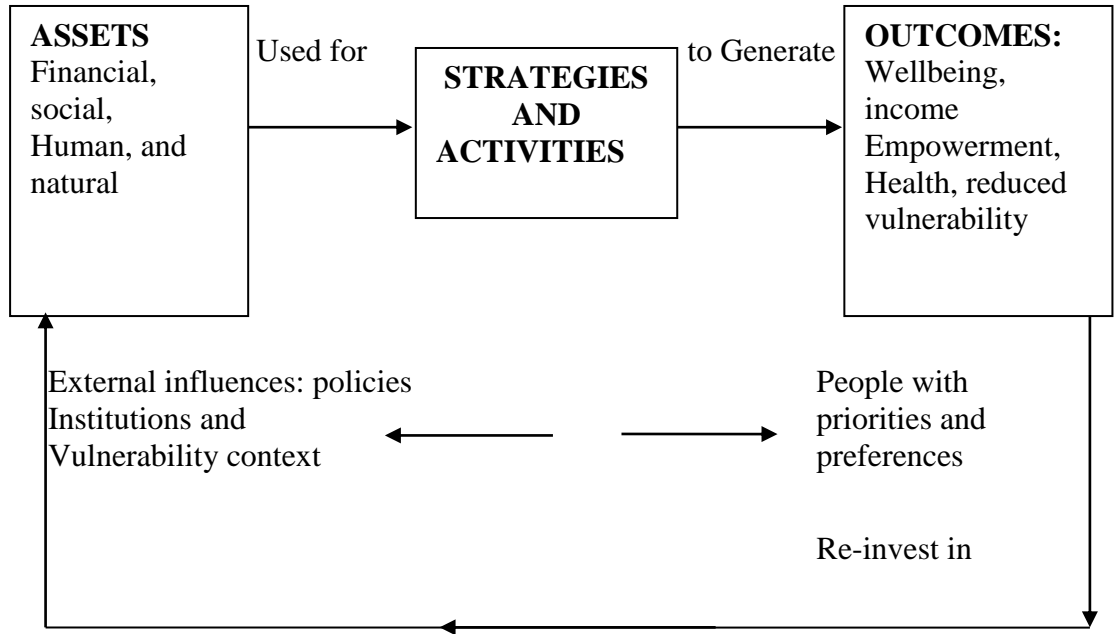
The variations and evolving perspectives on poverty, participation and sustainable development led to the development of the sustainable development frameworks (Chambers & Conway, 1992; Moser, 1998). Other writers like Arce (2003) cited in Mathembu (2008) identified the rate of decline in political essence of national states and the links they share with regional economic markets on the economic global



interdependence of the national governments motivating factor actually responsible for the development of the SLA. The Sustainable Livelihood Approach has gained widespread recognition in development literature. Its significance in the planning for development projects and programs has led to its adoption and application by an increasing number of Non-Governmental Organizations (NGOs), academic institutions, aid donors, and international intergovernmental Organizations like that of the United Nations Development Programme (UNDP), and the Foundation for International Agricultural Development (IFAD), as a means of poverty reduction (Singh and Gilman, 2000; Brocklesby and Fisher, 2003 cited in Njole, 2011 ) and applied in a lot of development related projects across the globe (see for instance Carney, 2002; Ashley, 2000 and DFID, 1997). Scoones (1998) contends that the SLA widespread application and recurrence in areas such as rural development, poverty reduction, tourism development and sometimes in environmental resource management led to its popularization and significance.

According to D'Haese & Kirsten (2003), the availability of income and a wide range of income sources is a key determinant of community sustenance as it will make it easy to diversify their income sources. In the event of shocks or economic down-turns people would always be able to switch to other economic opportunities reducing the level of risk and increasing their chances of adaptability.





**Figure 2. 4: Sustainable Livelihood Framework**

**Source:** Ashley, (2000)



## CHAPTER THREE

### STUDY AREA AND RESEARCH METHODOLOGY

#### 3.1 Introduction

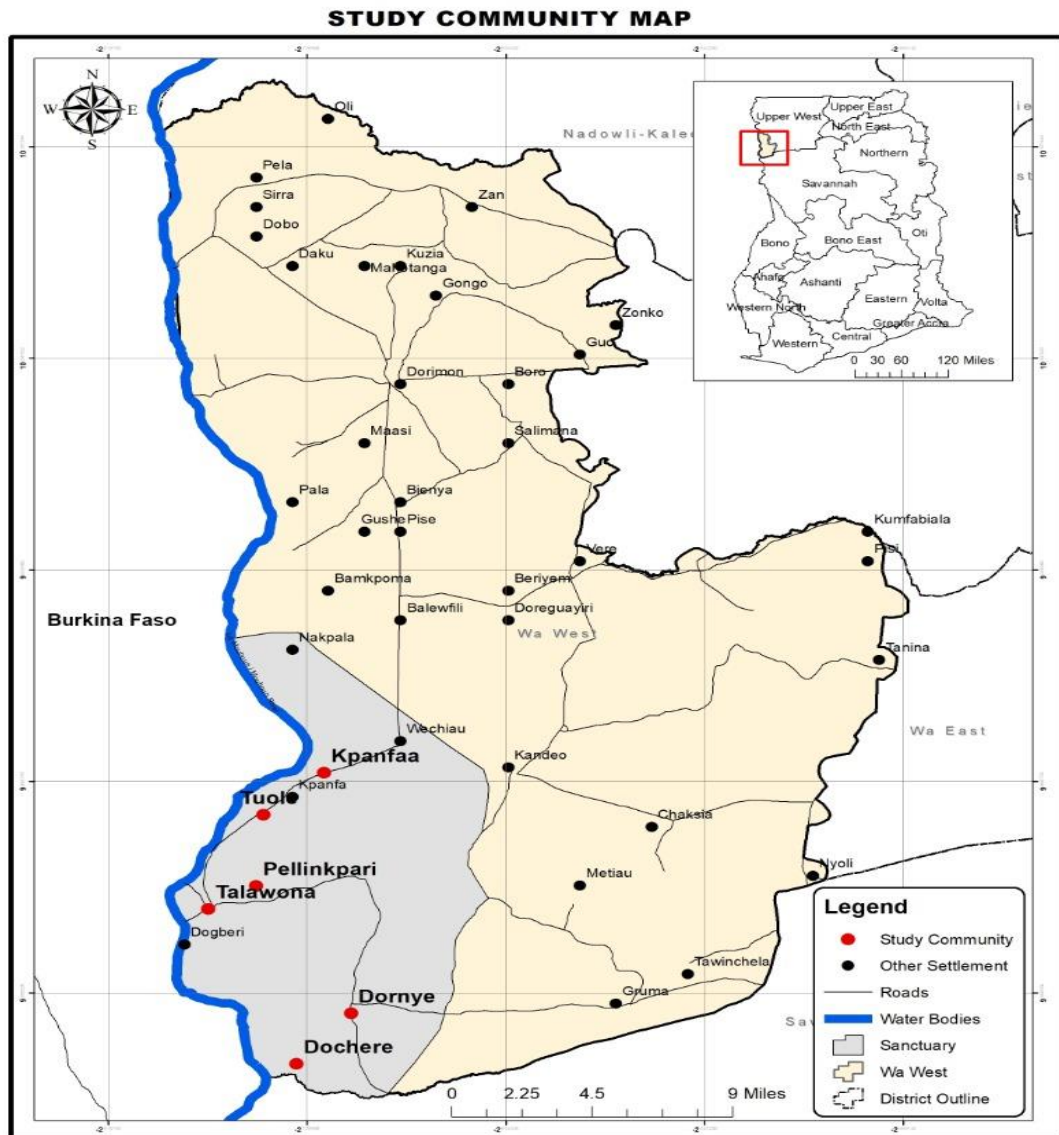
This chapter looked at where the study was conducted. It presented highlights on the background information about the area and a description of the area. The data collection procedures, sampling techniques, the instruments that were used for the data collection, and the techniques of data analysis and the major themes constituted this chapter.

#### 3.2 Profile of the Study Area

##### 3.2.1 Location and Size

The Wa West District (Wechiau District) is one of the eleven districts in the Upper West Region which was carved out of Wa District in 2004 by law (LI 1751) in pursuant to Act 463 of the Local Government, 1993. Wechiau is the capital of the district. The District (Figure 3.1) is located in the Western part of the Upper West Region, approximately between Longitudes  $9^{\circ} 40''$  N and  $10^{\circ} 10''$  N and also between Latitudes  $2^{\circ} 20'$  W and  $2^{\circ} 50''$  W (Ghana Statistical Service, 2010). It is bordered to the South by Northern Region, North-West by the Nadowli District, East with Wa Municipal and to the West by Burkina Faso. The district occupied approximately 1,856 square km of total land area representing about 10% of the region's total land area (Ghana Statistical Service, 2010). The District capital stretches about 15.0 km away from Wa Municipal by road.





**Figure 3. 1: Map of Wa West Depicting Study Communities**

Source: Wa West District Assembly

According to GSS (2014), the Wa West District lies in an advantageous position due to its closeness to Burkina Faso as the “Northern Development Initiative” which proposed the promotion of a Savannah-Sahel Regional Market amongst other initiatives.



### 3.2.2 Climate

The region's climate is similar to the three northern regions. The District has two distinctive seasons, wet and dry. The winds from the Atlantic Ocean are mostly rainy from April to August and from November to March, with the winds from Northeastern Trade from the Sahara Desert. The mean annual precipitation varies from 840 mm to 1400 mm. The area's rainfall often peaked between June and September with the tendency of high rainfall figures concentrated on a few rainy days (GSS, 2014).

The rainfall pattern in the district is characterized by heavy downpours thus, resulting in overflows. The intermittent rainfall pattern is manifested in the poor soil moisture conditions in the area. Four (4) humid months (June - September) have been computed to characterize the soil dampness situation in the area suitable only for the cultivation of crops such as millet, guinea corn, yam, groundnuts and beans. The irregular and unreliable nature of rainfall thus affects farmers' crop yields (GSS, 2014). The region's temperature is between 15 °C during the night and 40 °C during the day in the hot season (Dickson and Benneh 1988; GSS 2005). Therefore, the hot and harmattan seasons are equally periods that foreigners particularly those from the temperate regions usually visit the Northern part of West Africa because of the sunshine.

### 3.2.3 Vegetation

The vegetation of the district is one of the guinea savannah grassland types which conform to the general vegetation of the region. It constitutes trees characterized by stunted growth with little or no cover and shrubs of capricious stature and luxuriance, with grass ground cover in the wet season. A collection of tree variety namely Shea, baobab, dawadawa and neem trees are common in the district. Exotic tree genera that





also do well in the area include cashew and mango. The collection of this tree variety allows for domestic fulfillments such as for fuel wood, charcoal and fencing of gardens. The dumpier bushes and grass provide hay for livestock (Dickson and Benne, h 1988; GSS 2005) the vegetation of the region offers opportunity for tourists to see drought resistant plant species in their natural environment.

### 3.2.4 Population

The 2010 Population and Housing Census (PHC) conducted by GSS revealed a population size of 81,348 for the District, representing 11.6 percent of the regional population of 702,110 out of which 40,227(49.5%) and 41,121 (50.5%) were females (see table 3.1). The district is basically a rural district with all its population living in rural localities.

**Table 3. 1: Population of Wa West District**

Sex	Population	Percent
Male	40,227	49.5
Female	41,121	50.5
Total	81,348	100

Source: Ghana Statistical Service, 2010 PHC

### 3.2.5 Tourism

The existence of natural, cultural, historical and man-made attractions in the district is a potential for tourism attraction and may generate some form of revenue to the district. The Wechiau Community Hippo Sanctuary (WCHS) is the main tourism attraction within the study area. It is a unique community project that protects and preserves the wildlife and environment in the Upper West Region of Ghana on a 40 km stretch off the Black Volta River.



In 1998 the Paramount Chief, his sub-chiefs and local opinion leaders founded the sanctuary. These founding members, elected to rotating localities, previously rejected Ghana's Wildlife Division's proposals for a government run-hippopotamus reserve in the area due to the fear of been alienated from their lands (Asase *et al.* 2006). Instead, they elected to establish a community-managed sanctuary that would protect the hippopotami, prevent further habitat degradation, restore habitat and recover wildlife, while also assuring community participation in decision-making. Subsequently, the project has gained prominence in its provision of inimitable and unusual eco-travel experience for both Ghanaian and international tourists alike. The area has much to offer, both due to the huge diversity of wildlife and the opportunities to become immersed in the local culture and activities, which can be experienced through the local Wala and Birifor tribal life and customs.

### **3.2.6 Infrastructure**

The development of an area is closely linked to the availability of infrastructure in that particular area. These infrastructures are diverse: roads, bridges, accommodation, water supply systems, electricity and telecommunications contribute significantly to the socio-economic development of an area.

The overall infrastructure and services of the district is generally poor and this affects tourism in the district negatively. The most popular tourist attraction in the district is the WCHS which also faces serious infrastructural challenges especially in the area of transportation. In terms of transport, three major routes link the study area (WCHS) and the regional capital (Wa) that is travelling through Dorimon, Vieri and Ga roads respectively. The most widely accessed route is the Vieri road because it is the shortest route to Wechiau which leaves the road in a deplorable state throughout the year. Travelling to Wechiau is an arduous and perilous journey especially during the



rainy season due to the bad nature of the road coupled with the recent robbery activities by armed men taking advantage of the bad road networks that connect these communities. The road that connects Wechiau to the main sanctuary reserve at Talawona is of utmost concern. With the exception of a second-class road that runs from Wechiau through Tokali to Dornye, all the other roads that lead to the sanctuary are in poor condition with low accessibility during the rainy season. Tourist usually walks 2km from the Donahue lodge at Talawona via a path to the river, and the 3km route from the Calgary lodge at Tankara to the Tankara hippo wallows. An alternative route from Tokali to the river is through Dornye to Dochere or Tankara. This road is in a very bad condition, too. Once at the river visitors go up and down a boat to wallow hippos. Boat transport (locally made canoes) is popular among the locals traveling between villages in Ghana and Burkina Faso.

Three types of accommodation are available to tourists in the sanctuary, these are Home Stay, the Local compound and the Lobi compound at the Donahue and Calgary lodges located about 20km from Wechiau. The Calgary lodge is located at Tankara, about 5km south west of Talawona.

### **3.3 Methodology**

#### **3.3.1 Research Design**

Research design is a scheme of activities, strategies and or events on how one intends conducting research (Mouton, 2001). In the words of Bogdan and Biklen (2007:49), "It's the strategy of the researcher on how to organize his work." According to Sheuya (2004), survey is likely to be more appropriate in instances where the main research questions are who, what, where, how many and when the focus is on a contemporary phenomenon. Survey deals with large samples which allow findings from research to



be summarized into percentages, frequencies, statistical testing and descriptions. Yin (1984) also indicates that one of the criteria used to determine which type of research strategy to adopt is the research question. The author explains further by stating that “why” and “how” questions are more explanatory in nature hence leads to the use of case study. Gillham (2000) describes a case study as a study to address specific research questions that are based on a collection of facts from the case settings. Ritchie and Lewis (2003) see the main characteristics of a case study as a multiplicity of perspectives rooted in a particular context.

While two broad research approaches characterized the social sciences, namely quantitative and qualitative research, the study employed the mixed method which is a combination of both quantitative and qualitative approaches. This is suitable for the study because the research questions are made up of both what and how and demand both descriptive (survey) and explanatory (case study) applications.

### **3.3.2 Data Sources**

The study accessed data from two major sources namely primary and secondary sources. Primary data refers to raw data taken directly from respondents. Primary data was collected through the administration of household questionnaire. The primary data was collated through field trips to the study area for interactions with respondents and personal observations of the communities by the researcher. Secondary data, on the other hand, is a body of information which has typically been collated by other researchers which might have undergone at least one layer of analysis or series of analysis prior to its acquisition. Secondary data may comprise published and unpublished materials, media reports and data which has been cleaned, analyzed and collected for a purpose other than the intended study. The secondary data for the study was obtained from the management of the Wechiau Community Hippo Sanctuary.



### 3.3.3 Target population

The target population for the study was household heads from six selected communities from a list of twenty catchment communities which are currently being worked with by the WCHS. The study area which is made up of the twenty catchment communities was divided into three zones and two communities selected from each zone leading to the selection of Kpanfa, Tuole, Talawona, Pellinkpari, Dornye and Dochere. Talawona and Pellinkpari were purposively selected because they are centrally situated and constitute one of the divisional areas and more importantly Talawona serves as the host community of the WCHS. Pellinkpari and Tuole were also chosen purposively because they are two of the poorest communities among the twenty catchment communities. The selection of Dornye and Kpanfa was based on the simple random sampling technique and the reason was to give equal representation of communities in the northern and southern zones which fall within the development zone of the sanctuary. The division of the study area into zones namely north, south and central zones was also to assess the impact of ecotourism activities on the selected communities in relation to distance and geographical position from the core area of the sanctuary. These communities were selected because it was also practically highly difficult to conduct field work in all the communities in the study area especially with the use of the mixed method design.

Respondents who were targeted for data collection included household heads from the sampled communities, management of the WCHS, the paramount chief of Wechiau and two sub chiefs from sampled communities, one official from the Wa West District Assembly, the former chairman of the Sanctuary Management Board (SMB), as well as tour guides, rangers and boat men of the WCHSP. Households were selected using the simple random sampling technique to allow all households in the sampled



communities to be potential samples for the study. Key informants on the other hand were purposively selected because their work border on the goal of the study and they also have vital information necessary for the completion of the study. Key informants were thus engaged through in-depth interviews to extensively extract the needed information on the impact of ecotourism activities on livelihood activities in the study area.

### 3.3.4 Sampling

#### 3.3.4.1 Sample size determination

The Yamane (1973) formula was employed in calculating the sample size for the respondents (households) at 95% confidence level allowing for a 5% margin of error as shown below:

The Yamane formula of (1973) is given by: 
$$n = \frac{N}{1 + N(\alpha)^2}$$

Where  $n$  = sample size,  $N$  = total households and  $\alpha$  = margin of error.

$$n = \frac{461}{1 + 461(0.05)^2} = \frac{461}{2.15} = 214$$

Therefore, the sample size is 214 households.

#### 3.3.4.2 Sampling Techniques

Both probability and non-probability sampling methods were employed. For probability sampling; multi-stage sampling; simple random and proportionate sampling techniques, were used while purposive sampling was employed as non-probability sampling technique.



***a) Multi-stage Sampling method***

Under this sampling procedure, the researcher selects a sample in two or more stages on the basis that, the researcher cannot simply identify the population, or the population is very large (Creswell, 2012). The study area (Wa East) is constituted by numerous communities with varying features. Stratified sampling was first employed to stratify the study area into zones based on geographical location thus north, central and southern zones. This sampling technique was selected because it is suitable for a study whose population from which a sample is to be selected does not constitute a homogeneous group (Kothari, 2012).

Proportionate sampling technique was used to apportion the sample size of 214 households that was chosen from the six selected communities to form the actual sample. This was obtained by dividing the household population of each selected community by the total combined household population of the six communities and the result multiplied by 214. For example, given population of 165 households in Kpanfa and a total household population 461 of the six communities, the calculated proportional sample size in Kpanfa is 77. As such, it is expected that, using this approach, areas with larger household population will draw larger sample size as compared to their counterparts with fewer households. The result of the proportionate sampling procedure is displayed in Table 3.2.



**Table 3. 2: Sampled Communities and Corresponding Sample Size**

<b>Zone</b>	<b>Sample Community</b>	<b>Total Household Population</b>	<b>Sample Size</b>
<b>Northern Zone</b>	Kpanfa	165	77
	Tuole	39	18
<b>Central Zone</b>	Talawona	35	16
	Pellinkpari	14	7
<b>Southern Zone</b>	Dornye	190	88
	Dochere	18	8
Total sample Population and Sample Size		461	214

Source: Author's own computation based on WWDA, 2019.

This was followed by the adoption of the simple random sampling technique which was used to randomly select the households from the apportioned sample size from each of the selected communities. A list of households in the selected communities (461) was relied upon as the sampling frame for the selection of the units of analysis. Units of analysis in any investigation refer to the actual empirical units, objects and occurrences which must be observed or measured in order to study a particular phenomenon (Kumekpor, 2002).

#### ***b) Purposive Sampling***

Purposive sampling technique was employed to select two communities from the northern, central and southern zones based on some predetermined criteria. This technique was appropriate because it offered the researcher the opportunity of selecting communities which were highly impoverished alongside the host community and other communities that are entry points to the WCHS.

Purposive sampling technique was also employed to select key informants for the study; two (2) staff members of the Sanctuary Management Board (SMB), 6 members





of the SMB from the sampled communities one (1) member of the Sanctuary Management Committee (SMC), chiefs and elders of the sampled communities (2), an official from the district assembly (1), 6 tour guides, 3 rangers and 2 boatmen. This method ensured that the key individuals who had in-depth regarding the Wechiau Hippo Sanctuary were contacted.

### **3.3.5 Data Collection Methods and Instruments**

#### **3.3.5.1 Quantitative Data**

This data collection method is characterized by the coalition of information which can be analyzed numerically with the aid of data analytical software such as STATA and SPSS. This study employed household questionnaire in soliciting information from different households concerning their livelihoods and knowledge on ecotourism development. Specifically, the questionnaires were used to gather data on respondent's perceptions on the socio-cultural impact of the sanctuary, livelihood activities that emerged due to ecotourism and their contribution to sustainable livelihoods as well as the roles of stakeholders in the management of the sanctuary reserve. The questionnaire comprised both open ended and close ended questions. Questionnaire was appropriate since it offered the researcher the opportunity to collect qualitative and quantitative data in an organized, simple, and cost-efficient manner within a reasonable time period. The questionnaires were personally administered to the respondents by the researcher in the form of structured interviews with the assistance of some tertiary students who were recruited to aid the researcher in data collection. Questionnaire survey is one of several methods used in gathering primary data. In the words of Cohen and Manion (1989), this technique is a self-report instrument used for gathering information about variables of interest to an investigation.



### 3.3.5.2 Qualitative Data

Qualitative data, just like quantitative data, is founded on empirical investigation and evidence. However, qualitative research explores information from the standpoint of groups and individuals and generates case studies and summaries rather than lists of numeric data (Agubeere 2014). Semi structured interviews; in-depth interviews and participant observation were employed by the study as qualitative data collection methods.

Interviews constitute the formulation of carefully thought questions with the aim of probing and obtaining responses from respondents (Twumasi, 2001; Karma 1999; Panneerselvam, 2007). Karma (1999) & Twumasi (2001) explained that in semi-structured and in-depth interviews open-ended questionnaires are used and respondents are at liberty to give any answers or responses.

In-depth interviews were employed in soliciting information from the various key informants such as members of the SMB with considerable knowledge in the subject area to ascertain the key stakeholders engaged in the management of the sanctuary as well as the challenges they face carrying out their duties. According to Flick (2002), this method yields optimum results in situations where further probing is required for the attainment of in-depth information.

Observation was also used in the course of data collection to visualize and record some vital features that were observed. This method which involves gathering data through vision was adopted throughout the entire period of data collection in order to note and process physical benefits such as buildings and other infrastructure projects including roads, schools and other infrastructure projects that communities derived from the tourism projects. Observation provides the opportunity to take account of



activities, behavior and physical features without having to rely on the willingness and ability of people to respond to questions (Taylor-Powell & Steele, 1996). They went further to add that observation is useful when there is the availability of physical evidence, products or outcomes that can be readily visualized. Sarantakos (2005) acknowledged the advantage of observation in the fact that it provides data which respondents might otherwise feel reluctant to provide.

### **3.3.6 Data Analysis and Presentation**

Both quantitative and qualitative data analytical tools were employed. Quantitative Data from the household questionnaire survey were coded and entered into Microsoft excel and imported into SPSS after careful editing for analysis. Descriptive analysis and cross-tabulation of quantitative data was performed using the SPSS computer software and presented using frequency tables, graphs and charts. Qualitative data, on the other hand, was analyzed using content analysis and presented in the form of narrative and quotations.

### **3.3.7 Ethical Consideration**

In the course of data collection, the researcher endeavored to uphold certain code of conducts (ethics). The informed consent of respondents was first sought by presenting the aims and objectives of the study to respondents and respondents were therefore at liberty to either participate or not. Data gathered from respondents were also treated with utmost confidentiality and the findings of the study were also analyzed and presented objectively without any manipulation. The anonymity of respondents was also guaranteed by the researcher in the course of the entire research work.



## CHAPTER FOUR

### DATA PRESENTATION AND ANALYSIS

#### 4.1 Introduction

This section of the report presents the analysis of the research findings. It encompasses the major thematic areas of the study premised on the objectives. The major thematic areas include; the socio-demographic data of the respondents, and the livelihood activities that are connected to ecotourism in the study area. Other themes are perceptions of respondents on the contributions of ecotourism activities to sustainable livelihoods, the socio-economic and cultural impacts of the ecotourism project, and the roles of stakeholders in the management of the sanctuary.

#### 4.2 Characteristics of Households

This section of the study presents the socio-demographic and economic data of the respondents covered in the study. Socio-demographic data of the respondents is very crucial in determining the livelihood activities that households undertake. Table 4.1 presents a cross-tabulation of age, educational and gender distribution of household heads.



**Table 4.1: Age, Sex and Educational Attainment of Respondents**

Sex of Respondents		Highest Educational Attainment of Respondent							Total	
		No formal edu.	Lower prim.	Upper prim.	Junior sec.	Senior sec.	Tertiary	Other		
Male	Age Categories of	< 19yrs	1	2	4	4	0	0	0	11
		20-29	8	5	2	2	4	5	1	27
		30-39	30	6	0	3	2	1	0	42
		40-49	28	9	3	1	2	0	2	45
		50-59	20	0	1	0	0	1	0	22
		60+	8	0	0	0	0	0	0	8
		<b>Total</b>	<b>95</b>	<b>22</b>	<b>10</b>	<b>10</b>	<b>8</b>	<b>7</b>	<b>3</b>	<b>155</b>
Female	Age Categories of	< 19yrs	0	0	0	0	0	0	1	1
		20-29	7	1	1	2	1	0	2	14
		30-39	6	1	2	1	3	1	0	14
		40-49	8	1	2	1	3	0	0	15
		50-59	7	3	1	0	0	0	0	11
		60+	4	0	0	0	0	0	0	4
	<b>Total</b>	<b>32</b>	<b>6</b>	<b>6</b>	<b>4</b>	<b>7</b>	<b>1</b>	<b>3</b>	<b>59</b>	
Total	Age Categories of	< 19yrs	1	2	4	4	0	0	1	12
		20-29	15	6	3	4	5	5	3	41
		30-39	36	7	2	4	5	2	0	56
		40-49	36	10	5	2	5	0	2	60
		50-59	27	3	2	0	0	1	0	33
		60+	12	0	0	0	0	0	0	12
	<b>Total</b>	<b>127</b>	<b>28</b>	<b>16</b>	<b>14</b>	<b>15</b>	<b>8</b>	<b>6</b>	<b>214</b>	

Source Field Survey, 2020



The ensuing sections present the discussions on the social and demographic characteristics of the respondents.

#### **4.2.1 Demographic and Social Characteristics**

The sex, age and educational level of respondents are principal factors in determining the social and economic activities of households. The survey found that out of the total of 214 households surveyed, 72.4% were headed by males while 27.6% were headed by females (Table 4.1). This corresponds with the popular idea that males dominate over females in heading households in northern Ghana. Gender consideration is, therefore, necessary in the determination of household livelihood decisions as some females take leading decisions in some households contrary to the popular view held by many, that, the major decisions of households are mainly taken by men, who are the economic powerhouse of the family.

Also, 5.6% of the households contacted were below 19 years with 11 males and 1 female. Similarly, 41 respondents constituting 19.2% of the respondents were between the age brackets of 20-29 years with 27 males and 14 females. Also, 26.2% of the household heads were found to be within the age limits of 30-39 years out of which 42 were males and 14 were females, 28.0% with 45 males and 15 females fell within the age bracket of 40-49 years while 15.4% (22 males and 11 females) and 5.6% (8 males and 4 females) fell within the age limits of 50-59 and 60 and above years respectively.

In the area of education, majority of the respondents (59.4%) comprising 95 males and 32 females had no formal education. This means majority of the male-headed households did not undergo any form of formal education. Also, 28 of the respondents constituting 13.1% acquired basic education in the lower primary category while



7.5% acquired basic education in the upper primary division. Moreover, 6.5% of the respondents also attained junior secondary education and 7.0% (constituting 8 males and 7 females) acquired secondary/vocational and tertiary education respectively. It can thus be concluded that the survey population is highly an illiterate population and confirms the general idea that literacy is higher among urban households in Ghana than rural households. Statistically, there was significant difference between the age of respondents and their educational attainment for males (*p value of 0.000*) while no statistical significance was found between the age of respondents and their level of education for females (*p value of 0.158*) with a combined effect found to be significant (*p value of 0.001*).

The African Traditional Religion (ATR) was found to be the most dominant religion in the study area. Table 4.2 depicts that majority (65.4%) of the respondents practiced African Traditional Religion, 22.9% practiced Christianity while 9.8% belong to the Islamic faith with 2.0% practicing other religions. Out of the 140 ATR worshippers, 105 of them were married, 11 were single, 8 divorced and 16 either widowed/widower. Out of the total number of 49 Christians, 39 were married, 11 single and 1 widowed. The number married from amongst the Muslims were 16, 2 of them were still single, 1 divorced and 2 widowed. It can be observed that a significant number of the respondents (163) were married with only 22 being single. The institution of marriage is revered in typical rural African communities and this has implications for household livelihood activities.

Regarding ethnicity, majority (138) constituting 84.6% were Birifors, 3.3% (7 respondents) were Walas, 6.5% (14 respondents) were Dagaabas while 4.7% (10 respondents) belong to the Hausa ethnic group with the remaining 2 respondents (0.9%) belonging to other minority ethnic groups namely Sisaalas and Lobis



respectively. Out of the 138 Birifors, 100 of them practiced the ATR, 33 also belong to the diversity of Christian denominations with the most dominant been the Roman Catholics, 2 of them were practicing Muslims and the remaining 3 respondents practiced other set of faiths aside the three popular religions mentioned. The 7 walas found in the study area were all practicing Muslims. Similarly, the Hausa people (10) all practiced the Islamic religion. Also, out of the 14 Dagaabas, 6 respondents each practiced the ATR and Christianity respectively while the remaining 2 belong to the Islamic faith.





**Table 4.2: Ethnicity, Marital Status and Religious Affiliations of Respondents**

Ethnic Composition of Respondents			Religious affiliation of respondents				Total
			ATR	Christianity	Islam	Other	
Birifor	Marital Status	Married	100	33	2	3	138
		Single	10	9	0	0	19
		Divorced	8	0	0	0	8
		Widowed	15	1	0	0	16
	Total		133	43	2	3	181
Wala	Marital Status	Married	0	0	5	0	5
		Single	0	0	2	0	2
	Total		0	0	7	0	7
Dagao	Marital Status	Married	4	6	2	0	12
		Single	1	0	0	0	1
		Widowed	1	0	0	0	1
	Total		6	6	2	0	14
Hausa	Marital Status	Married	0	0	7	0	7
		Divorced	0	0	1	0	1
		Widowed	0	0	2	0	2
	Total		0	0	10	0	10
Other	Marital Status	Married	1	0	0	0	1
		Divorced	0	0	0	1	1
	Total		1	0	0	1	2
Total	Marital Status	Married	105	39	16	3	163
		Single	11	9	2	0	22
		Divorced	8	0	1	1	10
		Widowed	16	1	2	0	19
	Total		140	49	21	4	214

Source: Field Survey, 2020

#### 4.2.2 Household characteristics

The type of housing unit and the number of people that it supports (household size) are key variables in socio-demographic analysis. From Table 4.3, 30.8% of the



households reside in compound houses, majority (58.4%) lived in semi-detached houses while 4.2% indicated that they were living in flat/apartment buildings with the remaining 6.5% dwelling in other forms of housing structures. Majority (103) of the respondents constituting 48.1% had a household size of 11 to 15. Out of the 103 respondents, 18 were recorded in Kpanfaa community, 7 at Tuole, 16 at Talawona, 7 at Pellinkpari 53 at Dornye and the remaining 2 at Dochere. From this number, 23 were found to be residing in compound houses, 71 were living in semi-detached houses, 5 were occupying flats/apartments while the remaining 4 respondents were occupying other forms of dwellings. Again, 6.2% comprising 13 of the respondents had household sizes ranging between 1 and 5 out of which 10 lived in compound houses, 1 lived in semi-detached house and 2 occupied flats/apartments. Similarly, 47 (22.0%) of the households constituted sizes between 6 to 10 with 24 of them occupying compound houses, 14 lived in semi-detached houses, 2 respondents lived in flat/apartments and other forms of housing structures recorded 7 respondents. The household size category of 16-20 constituted 34 (16.0%) of the respondents out of which 9 were residing in compound houses, 22 occupied semi-detached houses and the remaining 3 living in other forms of dwelling units. Household that constituted over 20 members recorded 17 respondents representing 8% with all of them living in semi-detached residences.



**Table 4.3: Household Size and Dwelling Units of Respondents**

Name of community/Categories of household size		Type of Dwelling Unit				Total	
		Compound house	Semi-detached house	Flat/apartment	Other		
Kpanfaa	HH Size	1-5	8	0	0	0	8
		6-10	17	6	0	2	25
		11-15	8	7	2	1	18
		16-20	2	9	0	3	14
		21+	0	12	0	0	12
	Total		35	34	2	6	77
Tuole	HH Size	6-10	1	5	0	1	7
		11-15	1	4	1	1	7
		16-20	0	4	0	0	4
	Total		2	13	1	2	18
Talawona	HH Size	11-15	3	11	1	1	16
	Total		3	11	1	1	16
Pellinkpari	HH Size	11-15	2	5	0	0	7
	Total		2	5	0	0	7
Dornye	HH Size	1-5	2	1	2	0	5
		6-10	6	2	2	3	13
		11-15	8	43	1	1	53
		16-20	7	7	0	0	14
		21+	0	3	0	0	3
	Total		23	56	5	4	88
Dochere	HH Size	6-10	0	1	0	1	2
		11-15	1	1	0	0	2
		16-20	0	2	0	0	2
		21+	0	2	0	0	2
	Total		1	6	0	1	8
Total	HH Size	1-5	10	1	2	0	13
		6-10	24	14	2	7	47
		11-15	23	71	5	4	103
		16-20	9	22	0	3	34
		21±	0	17	0	0	17
	Total		66	125	9	14	214

Source: Field Survey, 2020

#### 4.2.3 Economic characteristics

The main occupational activities of individuals and the incomes that accrue from these activities are vital considerations in demographic surveys. The occupation of respondents may determine to a large extent the average earning they received



monthly and annually. The survey therefore gathered data on the major livelihood activities of respondents. Table 4.4 depicts that 59.3% (127 respondents) were earning below GHS500 annually from which 113 were farmers and 6 respondents were engaged in petty trading, 5 were employed in the tourism sector and 3 were engaged in other income generating activities. Again, 34 of the respondents (representing 16.0%) were earning between GHS500-599 out of which 26 were farmers, 2 of them were working in the tourism sector, 1 was involved in trading and the remaining 5 were employed in other sectors. Also, 16 respondents constituting 7.5% were earning between GHS600 and 699, amongst them were 2 traders, 10 farmers, 1 tourism sector employee and 3 were engaged in other income generating activities. Similarly, 7.5% (16 respondents) were earning between GHS700 and 799 out of which 5 were traders, 2 farmers, 1 tourism sector employee and 8 working in other sectors. In furtherance, 5 out of a total number of 8 respondents (representing 3.7%) were traders, 2 farmers and 1 tourism sector employee were earning between GHS800 and 899. Only 0.9% comprising 2 respondents were earning between GHS900-999 with 1 respondent each engaged in trading and farming respectively. A total number of 11 respondents representing 5% were earning above GHS1000 annually all of whom were employed in the civil/public sector.

The survey also revealed majority of the household heads (154) representing 72.0% engaged in farming as their main livelihood activity from which a good number (113) were earning below GHS500, 26 were earning between GHS500 and 599, 10 were earning between GHS600 and 699 2 respondents (1 each) earning between GHS700 - 799 and GHS800-899 annually with the same number (1 respondent) earning between GHS900-999. Also, 20 respondents representing 9.0% out of the 214 respondents were engaged in trade as their major income generating activity. Out of this number, 6



were earning below GHS500, 1 was earning between GHS500-599, and 2 were also receiving annual incomes between GHS600 and 699. 10 respondents (5 each) received annual incomes ranging between GHS700-799 and GHS800-899 respectively with 1 respondent also receiving on average GHS900-999 annually. All the respondents 11(5.0%) who were public sector employees were all receiving average annual incomes above GHS1000.

In addition, 9 respondents representing 4.2% out of the 214 households surveyed were employed in the tourism sector out of which majority (5 respondents) were earning below GHS500 while 2 were receiving average annual incomes within the range GHS500-599 with the remaining 2 respondents (1 apiece) earning within the income range of GHS600-699 and GHS700-799 respectively. 20 (9.3%) respondents were also employed in other sectors aside those mentioned above from which 6 respondents (3 apiece) were earning average annual household incomes ranging below GHS500 and between GHS600-699 respectively. 5 respondents received annual incomes averaging GHS500 and 599. Majority from within this category (8 respondents) earned between GHS700 and 799 while the remaining 1 respondent received between GHS800 and 899 from his engagements in his line of employment.



**Table 4.4: Main Occupation and Average Annual Household income of Respondents**

	Average Annual Household income							Total
	Below Ghc500	Ghc500-599	Ghc600-699	Ghc700-799	Ghc800-899	Ghc900-999	>Ghc1000	
Trading	6	1	2	5	5	1	0	20
Farming	113	26	10	2	2	1	0	154
Civil servant	0	0	0	0	0	0	11	11
Tourism sector	5	2	1	1	0	0	0	9
Other	3	5	3	8	1	0	0	20
<b>Total</b>	<b>127</b>	<b>34</b>	<b>16</b>	<b>16</b>	<b>8</b>	<b>2</b>	<b>11</b>	<b>214</b>

Source: Field Survey, 2020

#### **4.3 Stakeholders and Collaborating Partners of the Wechiau Community Ecotourism Project**

According to Groenendijk (2003), a stakeholder refers to all individuals, actors and groups who affect and/or are affected by decisions, policies and activities of a project.

Two categories of stakeholders were identified based on this definition. These are the main stakeholders or primary stakeholders (those who are being directly affected by the decisions and actions taken on the project) and secondary stakeholders/collaborators and development partners (those who affect the decisions and actions taken on the project). Key informant interviews revealed the following as the main stakeholders of the project; the people living within the catchment communities, chiefs and elders/tendambas, and community representatives (SMB).

The secondary stakeholders include the District Assembly, EPA, Ghana Tourism Authority, Nature Conservation Research Centre (NCRC), Wildlife Division of the Ghana Forestry Commission, Calgary Zoo, and the Centre for Africa Wetlands (CAW). Groenendijk (2003) contends that the secondary stakeholders in projects management play instrumental roles in protecting and promoting the vulnerable



groups (voiceless and generations unborn). The key roles played by these stakeholders are discussed in the ensuing sub-sections.

#### **4.3.1 Roles of chiefs and elders**

The principal stakeholders of the WCHS are the chiefs and elders of the sanctuary communities who played a leading role in the sanctuary's establishment, as revealed by key informants. They are, therefore, the patrons of the project. This assertion was affirmed by the vice chairman of the SMB who also doubled as a sub-divisional chief of one of the communities. He thus outlined the following as the roles of the chiefs and council of elders;

- ✚ The chiefs and elders ensure the continuous existence of the project (sustainability) by taking meaningful decisions.
- ✚ At the community level, the chiefs and elders of the various catchment communities sees to it that bye-laws are strictly adhered to.
- ✚ They also make sure they feed their subordinates (community people) with information regarding decisions taken at the board level.
- ✚ The chiefs and elders collate complaints (grievances) of community members for submission to the SMB.
- ✚ The patrons and their council of elders also manage and resolve conflicts of community members as well as conflicts within the SMB and CREMA Management Committee (CMC).

#### **4.3.2 Roles of community members**

One major advantage of the community-based resource management approach is that, the success or otherwise of the project solely resides in the people and, as such, every one becomes a major stakeholder in the project. Such is the case of the WCHS where



the roles of community members cannot be downplayed. All the respondents unanimously agreed that they have one or two roles to play if the project is to be successful. Conservation of the protected area was largely identified as the core role of community members, as revealed by the respondents. Other roles of the community members include; adhering to the bye-laws of the sanctuary and also attending meetings and sensitization durbars organized by the patrons and board members of the project.

#### **4.3.3 Roles of the sanctuary management board (SMB)**

The SMB is at the apex of the management hierarchy of the WCHS since it was founded in 1998. The board comprises the three lead patrons/chiefs: Tokali Naa, Gurungu Naa and Wechiau Naa (Paramount Chief) of the area; six executive members (chairman, vice chairman, secretary, assistant secretary, treasurer and assistant treasurer); 2 representatives from each sanctuary community; and the manager of the WCHS (a non-voting member). In an interview with the former chairman, he noted that, the major goal behind the formation of the SMB was to among other things ensure the continuous existence of the project and also conserve and protect, the natural resources in the area including sustaining the Hippo population and other wildlife in the area. A respondent noted that:

*“The success of this project is what matters to us. We are here today because of the wisdom of our great chiefs who conceived the idea of this project and we will not do anything to undermine their efforts. We will, therefore, continue to follow their lead and help build a legacy for our young ones to inherit. This can only be done through sacrifice and communal responsibility of all the people and communities within this jurisdiction” ... (Executive Member, SMB)*

He went further to note the following as the key roles of the SMB:





- ✚ The SMB legislate and enforce bye-laws to ensure the protection and preservation of the conserved area (core zone) and part of the development zone of the sanctuary. For instance, hunting, farming fishing and other human activities are prohibited within a 40 kilometre radius of the core zone.
- ✚ The SMB also constitute the highest platform for dealing with people's grievances and also a conflict resolution body for all issues that relates to the Hippo sanctuary.
- ✚ The management decisions of the revenues that accrue from the project and the possible interventions (projects to be undertaken) by the sanctuary are also taken by the board on behalf of the people.

#### **4.3.4 Roles of the sanctuary management committee (administrative unit)**

The Sanctuary Management Committee (SMC) liaises between the SMB, community members and tourists. In other words, it is the intermediary body of the sanctuary and responsible for the day-to-day operations of the sanctuary. The Manager is at the peak of its hierarchical order of workers supported by a secretary, a senior tour guide, junior tour guides, rangers and caretakers. Only the manager is a member of the SMB. In an interview, the manager revealed the following as the roles of the administrative unit

- Implement projects as directed by the SMB.
- Take account of and manage all the assets of the sanctuary (lodges, canoes, etc.)
- Record and report revenues to the board.
- Implement and monitor the progress of the sanctuary.
- Undertake sensitization exercises with community members.



The administrative unit is also the agency charged with the responsibility of enforcing the bye-laws of the project through some of its staffs including rangers and tour guides. They thus ensure that the following bye- laws are adhered to;

- ✓ No hunting of hippos,
- ✓ No poaching in the core zone,
- ✓ No cutting of economic trees for firewood and charcoal production,
- ✓ No fishing,
- ✓ No picking of oysters,
- ✓ No bush burning, and
- ✓ No polluting of the water bodies.

#### **4.3.5 Roles of the district assembly**

The Wa West District Assembly (WWDA) is the central government’s representative and development machinery for undertaking local level development. The District Assembly Common Fund is often the most relied upon source of funding for implementing and undertaking local level development. It sometimes, however, generates revenues internally to fund its development activities. The assembly is mandated to identify the resources that can propel development and tap these resources to undertake a people-centered development. The survey found that the activities of the assembly towards supporting the development of the Hippo sanctuary in the past were immense. However, the role of the assembly in recent times has been latent. A key informant expressed his dissatisfaction with the current leadership of the assembly making reference to the past leadership. He explained that:

*“The road that leads to the host community (Talawona) was constructed by the then Wa District Assembly. Currently, the assembly is having a hard time maintaining the road. I don’t know whether they are unwilling to help us or they don’t have the*



*financial muscle. Personally, I think they are just reluctant” ... (Board Member, SMB)*

This revelation is inconsistent with the view of Gunn (1994) cited in Amoako (2016) who maintained that the formulation of plans, enforcement of regulations that relates to tourism destinations coupled with infrastructure provision and public sensitization on tourism is a major preoccupation of the public sector.

Another key informant mentioned the following as some of the roles of the district assembly:

- i. Support staff of the sanctuary in the strengthening of the bye-laws of the sanctuary.
- ii. It also received a certificate of devolution from the central government through the Ministry of Natural Resources on behalf of the sanctuary and, therefore, can aid the sanctuary in the conservation of resources as may be contained in the ministry’s certificate
- iii. The assembly also collaborates with the sanctuary in the delivery of projects such as boreholes. Through this collaboration, the assembly is able to deal with the issue of effort duplication.
- iv. The assembly also aids the sanctuary in decision making.

#### **4.3.6 Role of tourists**

Tourists are the fundamental motives behind the establishment of ecotourism sites since they constitute the backbones of the monetary and non-monetary providers of benefits to the host communities of such projects. The roles of tourists, as revealed by a key informant, includes the payment of entry and user facility fees, adhering to



directives of tour guides and also critiquing of the project in order for improvements to be made.

#### **4.3.7 Roles of non-governmental organizations (NGOs) and private operators**

Interviews with several key informants revealed that NGOs and private operators have played substantial roles in the development of the WCHS. Respondents identified numerous development partners who took interests in the ecotourism project and has contributed in one way or the other towards its development and sustainability. A key informant mentioned the following:

*“Our development partners have really helped the sanctuary a lot. Some of our associates, such as Calgary Zoo, NCRC, CAW and the Friends of Wechiau (a U.K. based organization) have done so many things that we cannot even mention all. The Calgary Zoo and Friends of Wechiau have been our constant sources of funding. They have sponsored and continue to sponsor us with lots of money. The Calgary Zoo has also doubled as our technical advisors who give us technical advice on the management of the sanctuary. It also provides training for staff through skills development workshops. It is through the support of the Calgary Zoo that the Lodge at Talawona (host community) was built. The Friends of Wechiau on the other hand has established a mutual trust fund in the name of the sanctuary in which they deposit their contributions all the time. The NCRC, as a development partner, provides management with technical and financial support. In addition, it lends a hand in building the capacities of the staffs to enable them undertake their duties effectively.*

An administrative staff member noted that: *“.... The roles played by the NCRC are the same as that of the CAW.* He further explained that:

*“..... the NCRC linked the sanctuary with the CAW to replace them in their service provision. The support from these agencies has also enabled the sanctuary to award scholarships to over 55 students within the catchment communities into Senior High Schools and tertiary institutions” ... (Tour Guide, Wechiau).*



These revelations from respondents agrees with Gunn's (1994) assertion, that the private sector plays a key role when it comes to the creation of space, activities and artifacts towards the development of natural reserves.

#### **4.3.8 Roles of Ghana Tourism Authority (GTA), and Ghana Wildlife Division of Forestry Commission**

The Ghana Tourism Authority (GTA) and Wildlife Division of the Forestry commission have played complementary roles in the development of the sanctuary. An administrative staff at the Hippo sanctuary revealed that the GTA support the project through the provision of technical support and also render marketing and advertisement services for the sanctuary both locally and internationally. He further added the capacity building role of the GTA in strengthening the skills level of staff members. This revelation was affirmed during in an interview with a member of the GTA at the regional office in Wa, when he said that:

*“We were called in the initial stages by the chairman at the time to give them some expert advice on the approach to take to successfully implement the project. We gave them our unrelenting support since it was a very promising project. Two recommendations were made – either to operate as a Community Based Ecotourism project or as a National Park of which they chose the former. Our outfit dialogued with the NCRC to support them technically and financially which they did and have been doing over the years” ... (Official, Regional Tourism Division, 2020).*

The role played by the Ghana wildlife of the Forestry Commission was outlined by key informants among other things as; assistance in the acquisition of a certificate of operations to operate the project as a resource conservation project spelling out some rules and regulations guiding natural resource management and conservation. This was affirmed by one of the patrons of the project who passed the following comment:



*“Though we had our suspicion that Hippos were living in the Black Volta around our area, it was the Wildlife Division who gave us confirmation about the true existence of the Hippos in the area through a research they undertook and official declaration of the zone as Community Resource Management Area was made by them”.*

#### **4.4 Establishment of the WCHS and Household Livelihoods**

##### **4.4.1 Livelihood activities before ecotourism development**

Data collated revealed that, traditionally, households sustained their livelihoods primarily through crop farming, hunting, fishing charcoal production and the collection of shea nuts and other fruits. The collection of shea nuts was mainly done by females while hunting was a predominantly male activity which was done to provide meat for the household. Livestock production was also mentioned by a key informant as a main livelihood activity before tourism development. Livestock such as cattle served double purposes as they were either sold directly for money income or their services were often rendered (through ploughing) for some form of income.

Fishing was mainly done by the Hausa people that settled at Talawona and Tuole while crop farming was popular with the Birifors who constituted the majority in all the six study communities. A male respondent at Kpanfaa noted that:

*“In the past, people also engaged in birds trapping through the use of trap cages (a woven material produced from the stalk of maize and millet plants). The target was always singing birds which were often sold to gain some form of income”.*

An elderly woman at Tuole also revealed during the survey that oyster collection was another activity that she used to engage in before ecotourism development.

##### **4.4.2 Livelihoods lost/declined as a result of ecotourism development**

The advent of the Community Based Ecotourism Project (WCHS) has caused some lost or decline in traditional livelihood activities in the study area. Respondents were



asked through questionnaire interviews and key informant interviews to make a list of the livelihood activities that have been lost or reduced as a result of ecotourism in the study area. Farming in the core zone, subsistence and group hunting, charcoal production, oyster collection, and wood harvesting were identified as some of the major livelihood activities that declined as a result of the development of ecotourism. While some of these activities were abandoned, others saw a decline. Farming in the core zone has been abandoned completely and the area is now reserved for wildlife conservation and ecotourism development. An informant noted that:

*“One cannot farm in the core zone anymore since it is punishable by the laws of the sanctuary. Some of the prohibitions are being flaunted by some people, but no one can farm in the zone because it is not a daily activity that one can just undertake without being noticed by the authorities” ... (65 years old man, Kpanfaa).*

Subsistence hunting and group hunting have been reduced, according to a key informant. He exclaimed as follows:

*“It is true that people are prohibited from hunting. But it is not something that has been abandoned. It is being regulated and people are sometimes permitted to hunt using a quota system” ... (Tour Guide, Wechiau)*

The harvesting of economic trees in the area is prohibited and has been replaced by nuts and berry collections. The felling of trees for charcoal production is a highly prohibited activity as revealed by some respondents and, therefore, charcoal production has reduced drastically. The collection of oysters was said to be abandoned completely as a result of ecotourism while fishing also declined substantially following the advent of ecotourism in the area. A key informant indicated:



*“I would not say these livelihood activities have been lost or declined. It is just a mere trade off as some alternative livelihoods were generated with more economic benefits than the traditional livelihood activities” ... (50 years old ranger, Tuole)*

#### 4.4.3 Livelihood activities connected to ecotourism

Household questionnaire survey was used to establish the livelihood activities that were caused by ecotourism in the study area. This is important in ascertaining whether there is a connection between livelihood activities and ecotourism development in the study area. Respondents were asked to tick from a list of livelihood activities those connected to ecotourism (see Table 4.5 for details).

**Table 4. 5: Livelihood Activities Created by Ecotourism Development**

Community	Economic Activity (%)					Total
	Informal cultural activities	Sale of crafts	Formal employment	Employment in shea industry	Others	
Kpanfaa	68.8	63.6	29.8	31.9	20.0	36.0
Tuole	0.0	13.6	7.0	8.5	20.0	8.4
Talawona	12.5	4.5	9.6	2.1	6.7	7.5
Pellinkpari	0.0	0.0	5.3	0.0	6.7	3.3
Dornye	18.8	4.5	47.4	51.1	40.0	41.1
Dochere	0.0	13.6	0.9	6.4	6.7	3.7
Total	100	100	100	100	100	100

Source: Field Survey, 2020

The table indicates that majority 53.0% of the respondents saw formal employment as the major livelihood activity in the study area. This is probably due to the fact that community members are aware of the various employment opportunities that emerged as a result of the establishment of the WCHS. Some of these formal employment avenues mentioned by respondents include tour guides, Sanctuary rangers and boatmen. This was followed by employment opportunities offered by the shea butter





processing factory that was established by the Savannah Fruits Company Limited in collaboration with the WCHS with 22.0% of the respondents identifying it as a major livelihood activity that emerged as a result of ecotourism in the study area. Also, 10.0% identified the craft industry as a livelihood activity as tourists, especially international tourists, always take interest in locally produced cultural artifacts such as beads, huts and clay pots and baskets. Finally, 7.0% respondents identified informal employments in cultural activities, such as the performance of cultural dances to entertain visitors and 7.0% indicated other employment avenues aside those mentioned. Aside the above activities, data collated from key informant interviews and participant observation revealed additional livelihoods that were not captured during the household questionnaire survey. These include the training of people within the sanctuary communities on dry season farming, bee keeping and organic groundnut cultivation. The above finding corroborates Jones, (2005) and Stronza & Godillo, (2008) views that ecotourism yield some dividend in the form of local employment for host communities.

#### **4.4.4 Contributions of ecotourism to improved livelihoods**

Ecotourism is seen as a livelihood diversification strategy for local people living in eco-destinations and thus holds prospects of contributing to livelihood sustenance in these areas through job creation.

##### **4.4.4.1 Respondents satisfaction with ecotourism livelihood sources**

Respondents were asked if they were satisfied with the livelihood options that emerged as a result of ecotourism. An overwhelming majority (81.3%) of them indicated that they were not satisfied with ecotourism livelihoods. A good number of them expressed dissatisfaction with the benefits and distribution of ecotourism employment. A respondent narrated that:



*“Though the WCHS has created a number of jobs, most of the people who have been employed directly are mainly from Wechiau while we only have to rely on the indirect benefits such as performing of cultural dances and the sale of craft artifacts” ... (42 years old man, Tuole)*

Another respondent lamented as follows:

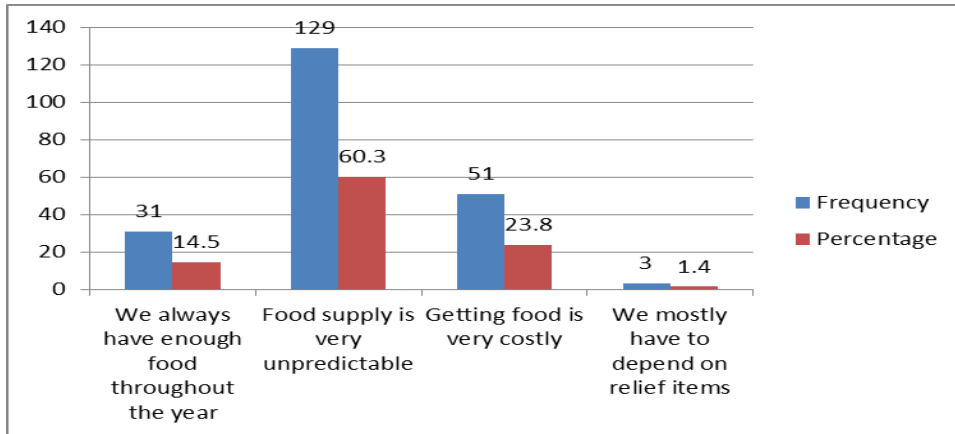
*“I have not gained anything personally from the ecotourism project. It has rather reduced my income earnings because I have been prohibited from fishing which was my major source of income” ... (29 years old male, Talawona)*

Other respondents, who were dissatisfied with ecotourism livelihoods, acknowledged that the project was yielding some benefits even though it can still do more. Some 18.7% of the respondents were however satisfied with ecotourism livelihoods. The reason may be that this group of respondents are directly benefiting from the project.

#### **4.4.4.2 Ecotourism and food security**

Perceptions of respondents were sought through household questionnaire survey to establish if ecotourism has indeed contributed to food security (Figure 4.1). Majority (60.3%) of the respondents indicated that food supply has been very unpredictable, downplaying the role of ecotourism in providing food security. The unpredictable nature of food supply is attributable to the irregular rainfall pattern experienced in the region given that most of the respondents are into subsistence agriculture. This agrees with the findings of Agubeere (2014) and Njole (2011) who both found that food security have been unpredictable in ecotourism destinations. On the other hand, 14.5% of the respondents indicated they had enough food to live on from one farming season to the next. This batch of respondents may have alternative sources from which they earn income or may be engaged in some form of dry season farming. However, 23.8% said they had difficulty in obtaining food as it is very costly while 1.4% depended on relief food for their living.





**Figure 4. 1: Respondents Perception on Food Security**

Source: Field Survey, 2020

#### 4.5 Socio-economic Impact of Ecotourism on Livelihood Assets

##### 4.5.1 The influence of ecotourism on household human capital

Average household size was employed in assessing human capital. According to Azam and Gubert (2005), “Household comprised a group of individuals who produce in common on at least one field, receive food out of a common store and eat from a single pot”. Household size on the other hand refer to the total number of individuals that a household head supports in terms of the provision of basic requirements such as food, clothing, education and shelter. This reflects the view of Azam and Gubert (2005) who explain household size to typically comprise of the family head and all other dependent members of the household; his wives, his young brothers etc.

Table 4.6 above revealed household size category of 11-15 as the highest with 48.0% followed by household size 6-10 with 22.0% and 16-20 with 16%. The lowest was recorded by household size 1-5 with 6.0%. This is true reflection of a typical rural African household where family ties and networks are very intense giving birth to the extended family system. Also, traditional rural families also depend on household labor for agriculture production and as such families still give birth to many children.



More so, children are also viewed in these societies as wealth and therefore the desire to have many children even though this has implication for livelihood sustenance.

**Table 4.6: Ecotourism Influence on Human Capital Development**

Household Size	Frequency	Percent
1-5	13	6.0
6-10	47	22.0
11-15	103	48.0
16-20	34	16.0
21 and above	17	8.0
Total	214	100.0

Source: Field Survey, 2020

Another critical variable that was utilized in evaluating household human capital is education and the level of skill acquisition of the household head interviewed. Ashley (2000) stressed the importance of education in projecting the skills development of individuals as it will help in expanding their employment options and encourages that local communities be emancipated to take a vision towards this direction. The survey revealed a troubling circumstance as majority (59.4%) of the respondents in the study area had no formal education. The few that had educational backgrounds were mostly those that acquired basic education with a hand full of them attaining secondary/vocational and tertiary education. Regarding the educational level of respondents and its effect on human capital development, results were assessed



through a cross-tabulation of respondent's level of education and the major livelihood activity of households (Table 4.7).

**Table 4. 7: Education Level of Respondent and Main Occupation**

Level of education	Main occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
No formal edu.	55.0	70.8	0.0	22.2	40.0	59.4
Lower primary	15.0	13.0	0.0	22.2	10.0	13.1
Upper primary	5.0	5.8	0.0	22.2	5.0	7.5
J.H. S	15.0	4.5	0.0	11.1	20.0	6.5
S.H.S/vocational	10.0	1.9	9.1	11.1	20.0	7.0
Tertiary	0.0	0.0	90.9	0.0	5.0	3.7
Other	0.0	2.6	0.0	11.1	0.0	2.8
Total	100	100	100	100	100	100

Source: Field Survey, 2020

The study revealed farming as the dominant economic activity in the study area with 154 respondents representing 72.0% of the entire survey population. Out of the total number of 154 farmers, majority (70.8%) had no formal education, 13.0% attained basic education in the lower primary division, and 5.8% acquired upper primary education 4.5% had Junior Secondary School (JSS) education, 1.9% had secondary/vocational education and 2.6% received other forms of education specifically non formal education. The reason for the majority of respondents employed in the farming sector not attaining any formal education may be attributed to the fact that one does not require any formal educational background before or certificate venturing into farming in Ghana. Another reason may also be that, traditionally, most communities in the study area lacked educational infrastructure



which denied them the privilege of attending schools. This was corroborated by a male respondent during an interview who evinced that:

*“Our children use to access education from Wechiau which was the only community around with a school. During the rainy season, they encounter serious difficulties in attending school because of a big valley between Kpanfaa and Wechiau. Sometimes they are prevented from going to school because of the water level at the valley. The most worrying part is that they will go to school and cannot even return home when they are caught up by a heavy downpour” ... (47years old man, Kpanfaa Community)*

On the contrary, 90.9% respondents out of the total number of 11 public sector employees attained tertiary education with only 1 respondent receiving secondary/vocational education. This is because a minimum of secondary school certificate is the prerequisite for employment in the civil/public service. A tertiary qualification is often desired most of the times. This may explain why all the public sector employees had a minimum of secondary/vocational education. Also, the trading sector which comprised 20 respondents representing 9.0% had majority of its respondents (11) not receiving any formal education, 7 acquired basic education (3 attended lower primary, 1 upper primary and the remaining 3 had JSS) and 2 acquired secondary education. Just like farming, there is no law or any conditionality that requires one to acquire any form of formal education before engaging in trade. Moreover, majority of those in the trade sector engaged in petty trading activities such as the buying and retailing of grains, pito brewing and shea butter sales as revealed by Peprah (2018). The tourism sector with 4.0% of the respondents also had a fair number of its employees (7 respondents) attaining some form of formal education even though majority of them (6) acquired basic education with only 1 respondent attaining secondary/vocational education with 2 respondents not receiving any form of formal education.



This revelation conforms to the finding of Agubeere (2014) who conducted a similar study at Paga. It however contradicts the suggestion of Njole (2011) the tourism sector requires some level of formal education preferably college education. Tourism is a diverse and complex enterprise, Richie (2005). This diversity therefore will translate into different forms of employment some of which may require formal education particularly higher education and others may not. The case of the respondents employed in the tourism sector as revealed in this study is worth citing as many of them were rangers and therefore do not need any form of higher education as their jobs centered on the activities of the locales in the various communities. Other sector employments which also constituted 9.0% (20) respondents recorded much higher percentages in terms of higher educational attainment as 6 respondents had secondary/vocational education, 2 attained tertiary education, 3 attained basic education (JSS) and the remaining 7 had no formal education. The results revealed that formal education, particularly higher education, is a prerequisite for employment in the public sector while working in the farming and other sectors does not require any certificate. Statistically, the results depict a significant difference between the level of education of household heads and their main occupations (*p value of 0.000*).

#### **4.5.2 Influence of ecotourism in the provision of education and health care services**

Households were asked during questionnaires survey to establish whether ecotourism have a direct bearing on the provision and access to education and health services. Responses were ranked on the scale of strongly agree, agree, neutral, disagree and strongly disagree (Table 4.8).



**Table 4.8: Influence of ecotourism on education and health services provision**

Level of Agreement	Percent
Strongly Agree	9.3
Agree	53.3
Neutral	12.1
Disagree	19.2
Strongly Disagree	6.1
<b>Total</b>	<b>100</b>

Source: Field Survey, 2020

From the Table 4.8, 9.3% of the respondents strongly agreed that ecotourism has impacted the provision of health services and increased the accessibility of these services to households. Another 53.3% of the respondents agreed that ecotourism play a direct role in the provision of educational infrastructure and that of basic health infrastructure. A respondent during an interview remarked that:

*"When you were coming, did you see a nice building along the road? It is a school that was built for our children to access education. The School was built by the Wechiau Community Hippo Sanctuary. Some people always say it is the white people who also visit the sanctuary that built it. For me, it is the sanctuary since we did not know or see white people here when the project was not there" ... (A 53-year-old woman, Tuole)*

Moreover, 12.1% of the respondents were neutral regarding ecotourism and infrastructure provision probably owing to the fact that they are oblivious of any health or educational infrastructure or any form of support services rendered by the sanctuary or they did not want to take side on the issue being discussed. However, 19.2% and 6.1% of the respondents disagreed and strongly disagreed that ecotourism development in the area has any consequence on education and health in the study area. These respondents may be likened to those that held a neutral perspective.





Additionally, respondents who disagreed strongly may be wary of the fact that these facilities are situated in other communities at the expense of their respective communities. This is because there is no barrier to accessing any education or health facility that is brought by ecotourism development because the project is a community-based project and all the catchment communities are stakeholders of the project. The pictures below evince an indication of the education and health infrastructure provision function of the WCHSP.



**Plate 4. 1: Classroom Block Constructed from Tourism Revenue**

Source: Field Work, 2020





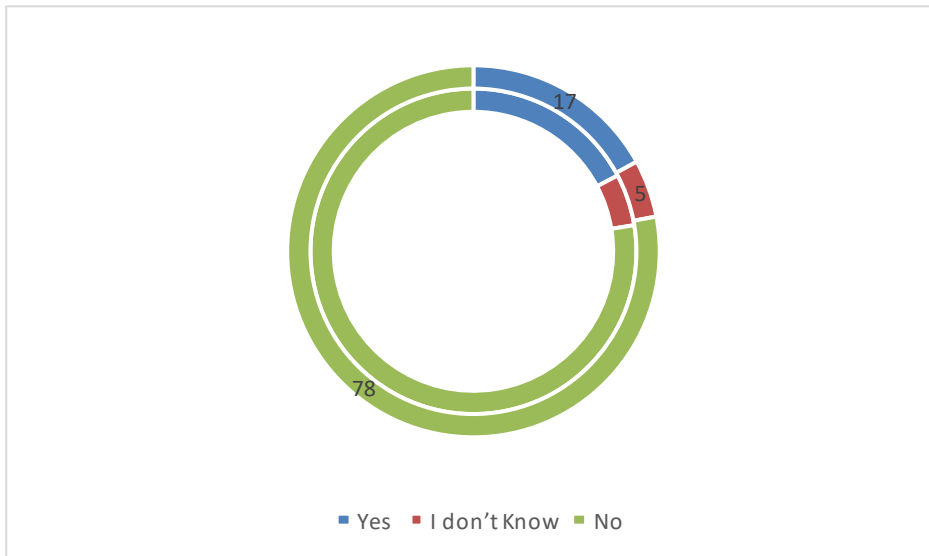
**Plate 4. 2: Health Centre Constructed from Tourism Revenue**

Source: Field Work, 2020

#### **4.6 Ecotourism and Social Capital**

Social network is used here to refer to the extent of social integration and the number of individuals that one may come into contact with or interacted with particularly resulting from ecotourism. Results from Figure 4.2 indicates that majority (78.0%) of the respondents were of the view that the number of people they know is not attributable to ecotourism in the study area. This might be due to the cohesive nature that characterized most rural communities. Social relationships and networks are very intense and may have been formed over the years through the performance of funeral rites and the celebration of local festivals. Conversely 17.0% of the respondents attested that ecotourism has increased their social networks and relationships through the meeting of new friends, both local and international, as a result of the ecotourism project in the area. 5.0% of the respondents on the other hand were indifferent on the matter owing to reasons only known to them.





**Figure 4. 2: Influence of ecotourism on social network**

Source: Field Survey, 2020

Regarding the occupations of respondents and their opinions on the effect of ecotourism on social network, a significant statistical difference was found between the two variables with a *p value* of 0.000. An overwhelming majority (88.9%) of the respondents in the tourism sector admitted to tourism playing an instrumental role in building and strengthening their social networks. The reason may be that most of the respondents, due to the nature of their jobs, are in continuous interaction with a diversity of individuals from different backgrounds and orientations as tourists usually frequent their work places. A respondent narrated that:

*“I have had the opportunity to associate and interact with all manner of people across Ghana and beyond. Some years back, a group of tourists from Tanzania visited our facility and I was fortunate to take them on a tour. Because of the in-depth knowledge and stories, I shared with them about the sanctuary, they were amazed and asked whether I obtained a degree in Tourism and Hospitality Management. I said not at all, they promised to take me to Tanzania for a one-month capacity building program in their next visit. Two months later they came back and took me to Tanzania. For this*



*alone, I should be very grateful to the founders of the ecotourism project” ... (34-year-old Tour Guide, Wechiau).*

As shown in Table 4.9, only 11.1% of the respondents employed in the tourism sector indicated that tourism did not have any influence on their social network. It is possible that their work does not directly involve tourists as they may largely have to do with the locales in the community. Also, 54.5% of the public sector employees admitted to the role of tourism in their social networking with 1 respondent being neutral and the remaining 4 respondents also disapproving of the influence of ecotourism on their social networks. Again, 9.1%, 20.0% and 25.0% from the farming, trading and other sectors acknowledged the role that ecotourism played in building their social network. Conversely an overwhelming majority of respondents from the farming and trading sector (84.4% and 80.0%) disassociated themselves from the idea that ecotourism has any bearing on their social networks. This may imply that they have other sources from which they build and increased their social networks. For instance, those who engaged in petty trading may develop some form of relationships with the people that they encounter during trade dealings. One fundamental principle of social capital is the creation of social networks. This statement affirms the view of Njole (2011) who asserts the creation of social network through tourism is vital as it provide the avenue for business operators to familiarize themselves with customers, employees and also create a major platform for the advertisement of products. Ecotourism thus present avenues for interaction among various stakeholders such as community members, government institutions (DAs) and other development partners to interact among themselves. Secondary benefits may also result through the marketing of local products to tourist.



**Table 4. 9: Influence of ecotourism on social network across occupations**

Influence on social network	Main occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
Yes	20.0	9.1	54.5	88.9	25.0	17.3
Not sure	0.0	6.5	9.1	0.0	0.0	5.1
No	80.0	84.4	36.4	11.1	75.0	77.6
Total	100	100	100	100	100	100

Source: Field Survey, 2020

#### 4.7 Ecotourism and Financial Capital

The financial capital of households was assessed through a questionnaire survey using the average monthly incomes that accrue to households from the various economic activities that they engage in (see Table 4.10). From Table 4.10, it can be observed that farming contributes less to household income with majority (35.7%) of the respondents receiving below GHS50.00. The reason that accounts for this may be due to the subsistence nature of production for the households who engaged in agriculture. Most rural households produce mainly for household consumption and only sell their surplus to acquire other basic household needs. This is in line with the findings of Peprah (2018) in the same area whose study revealed majority (75.5%) of the respondents produce to feed their families with only 18.1% and 6.4% producing for sale and both consumption and sales. This is further worsened by the seasonal nature of agriculture in northern Ghana. Most households who engage only in farming may find themselves unemployed during the dry season all of which contributes to their low incomes. Tourism employment also contributes less to household incomes besides farming with 22.2% of the respondents employed in the tourism sector receiving below GHS50.00 on the average every month. The reason as explained by



some respondents was that their salaries were irregular as it is dependent on the number of visitors they receive and guide on a tour.

**Table 4. 10: Average monthly income and main occupation**

Household monthly income	Main occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
<GHS50	15.0	35.7	0.0	22.2	20.0	29.9
50-99	10.0	48.7	0.0	33.3	30.0	40.2
100-199	15.0	10.4	0.0	44.4	20.0	12.6
200-299	20.0	3.9	0.0	0.0	20.0	6.5
300-399	20.0	1.3	0.0	0.0	10.0	3.7
400-499	20.0	0.0	9.1	0.0	0.0	2.3
500+	0.0	0.0	90.9	0.0	0.0	4.7
Total	100	100	100	100	100	100

Source: Field Survey, 2020

A 45-year-old boat man at Talawona revealed that:

*“For some of us, our livelihoods are not secured since we do not receive fixed salary. We are only paid when we take tourists on our boat or canoe to see the Hippos and this is also dependent on the number of tourists. This is not the only problem here because my job is also seasonal. More visitors come during the dry season than the rainy season and we are mostly out of business during the peaked months of the rainy season”.*

On the other hand, public sector employments contribute more to household incomes than any other economic activity as disclosed by the respondents in the civil/public sector. Over 90.0% of the respondents indicated that they received average monthly incomes of over GHS500.00 while the remaining earn between GHS400-499. This is not surprising as many public sector workers are on fixed salaries and, therefore, are guaranteed of their monthly incomes. The trading sector is the second largest



contributor to household income with 20.0% apiece of respondents employed in the sector receiving between GHS300-399 and 400-499 respectively. This is because those who engage in trading activities receive income on daily bases and trading is an all season round activity even though it may also experience some downturns during the rainy season.

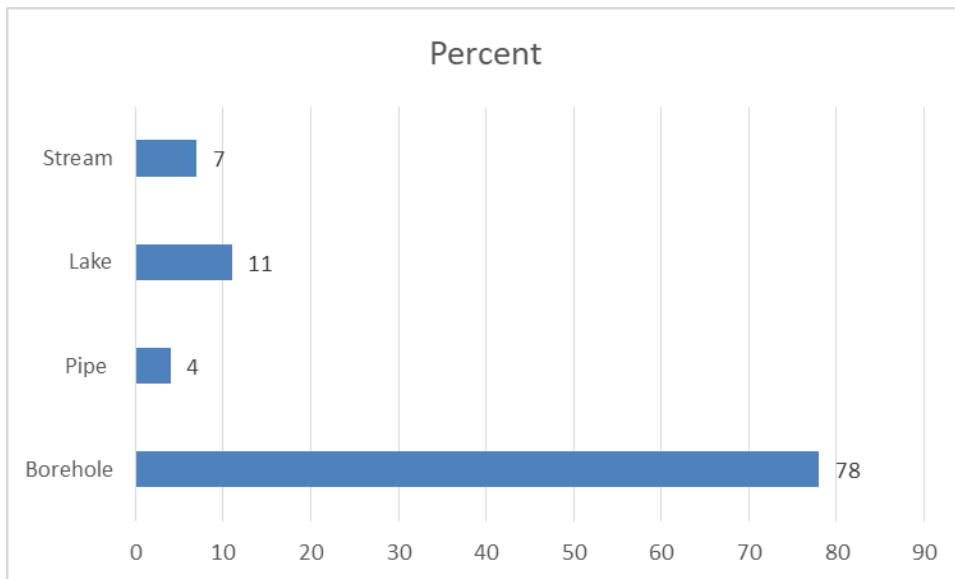
#### **4.8 Ecotourism and Natural Capital**

The role of natural assets in the pursuit of local livelihoods is very significant as most rural households derive their livelihoods from the natural environment. Natural capital comprises natural assets and how they aid in natural resource provision geared at economic production (OECD, 2009). Natural capital was estimated to comprise 36% of the fortune of developing economies (UNEP, 2013). The natural capital used for purposes of this study include all-natural resources found within and outside the conserved area of the WCHS such as land, water, Biodiversity (wildlife and trees) and other resources that local livelihoods thrive on.

##### **4.8.1 Access to potable water and energy for cooking**

The data indicate that 82.0% of households surveyed had access to safe and potable water while 18.0% mentioned that they did not have access to clean and safe drinking water. Majority (78.0%) relies on borehole water, 4.0% on pipe borne, 12.0% depend on the Black Volta and 7.0% on a stream (see Figure 4.3).





**Figure 4. 3: Sources of Household Water**

Source: Field Survey, 2020

Results were also compared across the six sampled communities and mixed results were produced. The survey indicates that majority of households in Kpanfaa, Tuole, Dornye and Talawona had access to clean and safe drinking water with 90.9%, 66.2%, 92.0% and 81.3% respectively whereas majority of households from Pellinkpari and Dochere who indicated they did not have access to clean and safe water depend on the Black Volta Lake and a Stream with 71.4% from Pellinkpari and 37.5% from Dornye accessing water from the lake while 28.6% and 62.5% also access water from the stream. It can, therefore, be deduced from the results that the majority of respondents with access to clean and safe drinking water (82.0%) access their water from boreholes (evident from plate 3) with 77.0% depending on borehole water. One of the respondents acknowledged the role of the Sanctuary in borehole water delivery as follows:

*“I used to depend on water from the lake for my household activities. The lake water is not safe for drinking even though it serves other purposes because people swim it and animals also drink from it. Thank God that the WCHS implemented this*





important initiative of providing boreholes to the sanctuary communities. I am not bothered of water any more” ... (44year old woman, Kpanfaa community).

**Table 4.11: Sources of Water Accessed by the Study Communities**

Water Source	Occupation (%)						Total
	Kpanfaa	Tuole	Talawona	Pellinkpari	Dornye	Dochere	
Bore hole	90.9	66.7	18.8	0.0	92.0	0.0	77.6
Pipe	0.0	0.0	62.5	0.0	0.0	0.0	4.7
Lake	6.5	33.3	18.8	71.4	1.1	37.5	10.7
Stream	2.6	0.0	0.0	28.6	6.8	62.5	7.0
Total	100	100	100	100	100	100	100

Source: Field Survey, 2020



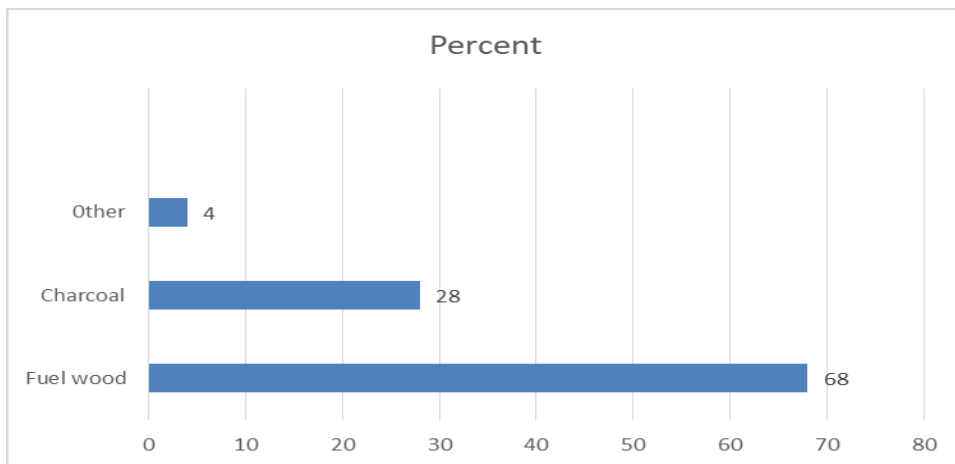
**Plate 4. 3: Borehole at Tuole Constructed from Tourism Revenue**

Source: Field Work, 2020

Similarly, respondent’s views were sought to establish the sources of energy that households depend on as a source of energy for cooking. Majority of the respondents



indicated they relied on charcoal and fuel wood as their main source of fuel for cooking (see Figure 4.4).



**Figure 4. 4: Source of Fuel Wood of Respondents**

Source: Field Survey, 2020

When results were compared on the type of energy sources that households use for cooking across the various communities, no significant statistical relationship was established (*p value of 0.145*) as depicted in table 4.12. Majority (68.2%) of the respondents from all the six study communities relied on fuel wood as their major energy source for cooking. 61.0%, 88.9%, 62.5%, 100.0% ,67.0%, and 87.5% from Kpanfaa, Tuole, Talawona, Pellinkpari, Dornye and Dochere all depended heavily on fuel wood for cooking. Only approximately 4.0% of the respondents indicated they depend on other sources of energy while the remaining 28.0% percent depended on Charcoal. It can, therefore, be deduced from the above data that over 90.0% of households relied on natural resources as their source of energy.



**Table 4.12: Type of Fuel Wood Used for Cooking by Community**

Source of Fuel	Occupation (%)						Total
	Kpanfaa	Tuole	Talawona	Pellinkpari	Dornye	Dochere	
Fuel wood	61.0	88.9	62.5	100.0	67.0	87.5	68.2
Charcoal	36.4	11.1	25.0	0.0	28.4	12.5	28.0
Other	2.6	0.0	12.5	0.0	4.5	0.0	3.7
Total	100	100	100	100	100	100	100

Source: Field Work, 2020

#### 4.8.2 Ecotourism and access to natural resources

Respondents views were also solicited to ascertain whether ecotourism influence their access to natural resources. Responses were ranked on the scale of strongly agree, agree, neutral, disagree and strongly disagree. The survey found that 19.2% strongly agreed and 26.2% agreed that ecotourism activities in the area always prevent people from the utilization of natural resources. This finding is consistent with the view of Brokington (2007) who maintain that wildlife and other natural resource conservation hampers people access to natural resources thereby limiting their access to and usage of these resources. The majority of the respondents who strongly agreed and agreed that ecotourism denied people access to natural resources were farmers with 23.4% and 29.9% respectively (Table 4.13). The reason for this may be that they may be unaware of the rules and by-laws regulating natural resource usage and may also consider those resources that fall within the core zone. A key informant in an interview narrated that:



“The activities of the sanctuary do not prevent people from the utilization of natural resources. The issue is that some local people are still not aware of the rules and by-laws that regulate their activities. It is only the resources that are within the conserved area that people are not allowed to exploit. Even with that people are permitted to enter the core zone to access essential resources such as medicinal plants” ... (38-year-old tour Guide, Wechiau).

**Table 4. 13: Ecotourism and Its Influence on Natural Resources by Occupation**

Opinion	Occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
Strongly agree	15.0	23.4	9.1	0.0	10.0	19.6
Agree	15.0	29.9	9.1	11.1	25.0	26.2
Neutral	25.0	18.2	9.1	0.0	25.0	18.2
Disagree	25.0	19.5	27.3	22.2	20.0	20.6
Strongly disagree	20.0	9.1	45.5	66.7	20.0	15.4
Total	100	100	100	100	100	100

Source: Field Survey, 2020

On the other hand, some respondents were neutral, majority of whom were traders and people employed in other sectors with 25.0% apiece from these two categories. The reason may be that they are not directly involved in the use of natural resources and may not have any knowledge concerning activities pertaining to the sanctuary or may have been neutral for reasons only known to them. Majority (66.7%) of respondents that work in the tourism sector and those employed in the public sector (45.5%) on the contrary strongly disagreed that ecotourism activities in the area denies local communities' access to natural resources. These groups of respondents are those that were aware of the rules and by-laws governing the utilization of



resources in the area and also knew the worth of resource conservation. The access of local people to natural resource is a paramount precursor to the avoidance of potential resource conflict and a crucial tool for intensifying participation. Ecotourism in the area does not in any way serve as a bane to access and utilization of natural resources.

#### **4.9 Socio-Cultural Outcomes**

Social and cultural artifacts are key players in the development of rural communities as they may either be compatible or incompatible with some investment's decisions in these communities. Household questionnaire was employed to collate respondents' views regarding some social outcomes on the scale of strongly agree, agree, neutral, disagree and strongly disagree.

##### **4.9.1 Ecotourism and cultural exchanges**

Ecotourism involves the movement of people from their home countries or regions to pristinely natural areas for leisure, pleasure and experience of natural landscape. This movement often results in the interaction of foreigners and locals from which cultural diffusion may emerge as a by-product. The study therefore collated responses from respondents through a household questionnaire survey to establish whether ecotourism influences cultural diffusion. Respondents were therefore asked to rate their levels of agreement on this item. Significant variation was observed in the opinions of respondents across the various occupations (*p value of 0.000*). Majority (40.7%) of the respondents moderately disagreed that ecotourism has an impact on cultural diffusion with 7.0% strongly agreeing with this item. 23.8% were neutral on the matter with 22.0% and 6.5% agreeing and strongly agreeing that ecotourism results in cultural exchange between local people and tourists (see Table 4.14).



**Table 4. 14: Ecotourism and Cultural Exchange between Tourists and Locals by Occupation**

Opinion	Occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
Strongly agree	0.0	5.8	0.0	44.4	5.0	6.5
Agree	25.0	18.2	36.4	44.4	30.0	22.0
Neutral	35.0	21.4	36.4	0.0	35.0	23.8
Disagree	25.0	47.7	27.3	11.1	25.0	40.7
Strongly disagree	15.0	7.1	0.0	0.0	5.0	7.0
Total	100	100	100	100	100	100

Source: Field Survey 2020

Table 4.14 indicates that majority of respondents in the tourism sector (44.4%) strongly agreed that ecotourism results in the exchange of local culture of residents with that of the culture of tourists with 5.8% and 5.0% from the farming and other sectors also strongly agreeing with this assertion. 25%, 18.2%, 36.4%, 44.4% and 30.0% from the trade, farming, public, tourism and other sectors agreed moderately to this item. On the other hand, 15.0%, 7.1% and 5.0% from the trading, farming and other sectors strongly disputed that ecotourism results in cultural diffusion with (25.0% from the trade sector, 47.4% from the farming sector, 27.3% from the public sector, 11.1% from the tourism sector and 25.0%) disagreeing moderately with this item.

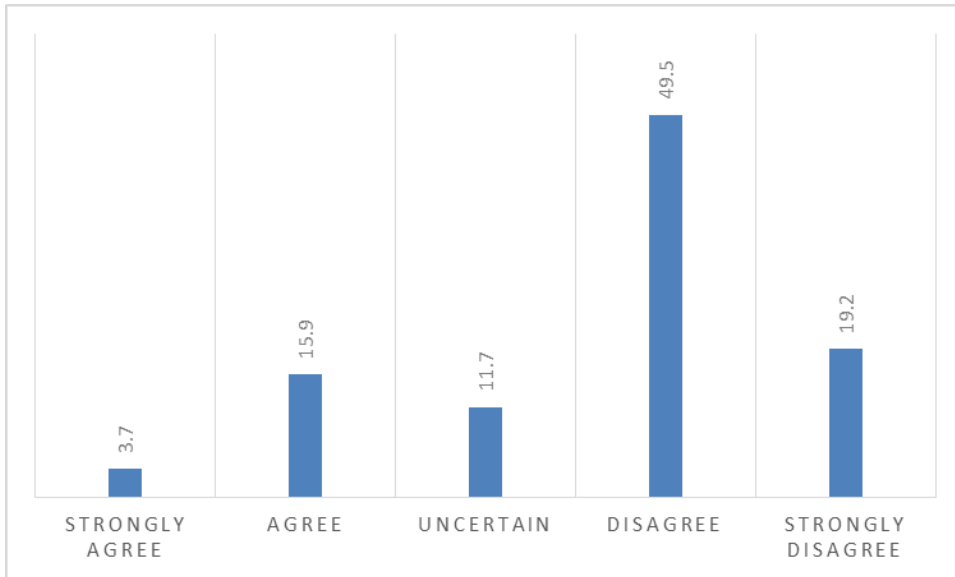
The study also gathered data through household questionnaire to establish whether ecotourism in the area has resulted in inter-tribal marriages between locals and visiting tourists. Majority of the respondents (49.5%) disagreed that ecotourism



encourages inter-tribal marriage in the study area with 19.2% disagreeing strongly to this effect. A respondent explained that:

*“Marriage in this area is determined by culture and religion. Our culture does not prohibit us from marrying from another tribe and once it is not a taboo it means one can marry from a tribe of your choosing. Inter-tribal marriage has nothing to do with ecotourism” ... (62-year-old woman from Dochere).*

Some 11.2% of the respondents were neutral on the matter while 15.9% and 3.7% of the respondents agreed and strongly agreed that ecotourism has resulted in increased tribal marriage in the area (Figure 4.5).



**Figure 4. 5: Ecotourism Influence on Inter- Tribal Marriage**

Source: Field Survey, 2020

The results revealed no significant statistical difference (*p value of 0.132*) in the perceptions of local people across the various occupations on the effect of ecotourism on inter-tribal marriage (see table 4.15). Majority of the respondents (50.0%) in the trading sector, 46.8% in the farming sector, 90.9% in the public sector, 33.3% in the tourism sector and 55.0% in other sectors) disagreed when called upon to express



their opinions on the subject with 25.0%, 22.1%, 0.0% 11.1% and 5.0% from the mentioned sectors also strongly expressing their disagreement on the matter. While some respondents were uncertain and did not align themselves with any side, some others (10.0% in the trade sector, 15.6% in the farming sector, 0.0% in the public sector, 22.2% in the tourism sector and 30.0% in the other sectors) agreed that ecotourism influences inter-tribal marriage with only 5.2% of respondents in the farming sector strongly consenting to this assertion.

**Table 4.15: Ecotourism Influence on Inter- tribal Marriage by Occupation**

Opinion	Occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
Strongly agree	0.0	5.2	0.0	0.0	0.0	3.7
Agree	10.0	15.6	0.0	22.2	30.0	15.9
Neutral	15.0	10.4	9.1	33.3	10.0	11.7
Disagree	50.0	46.8	90.9	33.3	55.0	49.5
Strongly disagree	25.0	22.1	0.0	11.1	5.0	19.2
Total	100	100	100	100	100	100

Source: Field Survey, 2020

#### 4.9.2 Ecotourism and social problems

Ecotourism may result in the mass movement of foreigners and other local travellers into ecotourism destinations as in the case of the WCHS. It is often believed that some of these tourists carry their social lifestyles such as their choice of dresses and other habits including smoking and drinking to these areas. Other forms of social vices such as robbery and pickpocketing and gambling may also emanate from within the host community all of which may be extraneous to the local lifestyle and culture which





may generate problems in the eco-friendly destination. This resonates Synman's (2012) assertion that local people particularly the youth are prone to emulating some behavioural attitudes and lifestyles of visitors. This observation is also consistent with the findings of George (2010) who opined that ecotourism activities give birth to social vices such as drug abuse, alcoholism and gambling. Respondents were, therefore, asked to express their opinions if ecotourism gave rise to some social problems such as drug abuse, indecent dressing and pickpocketing (see Table 4.16).

**Table 4. 16: Ecotourism Influence on Social Vices by Occupation**

Opinion	Occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
Strongly agree	0.0	10.4	0.0	11.1	10.0	8.9
Agree	20.0	11.0	9.1	11.1	30.0	13.6
Neutral	10.0	22.1	18.2	11.1	15.0	19.6
Disagree	25.0	33.8	27.3	22.2	25.0	31.3
Strongly disagree	45.0	22.7	45.5	44.4	20.0	26.6
Total	100	100	100	100	100	100

Source: Field Survey 2020

Table 4.16 revealed no statistical significance (*p value of 0. 317*) in the opinions of the respondents across the various occupations on the influence of ecotourism on social vices such as prostitution, indecency and drug abuse. Majority of the respondents (45.0% in trade, 22.7% in farming, 45.5% in the public sector, 44.4% in tourism and 20.0% in other sectors) strongly disagreed that ecotourism results in social vices in the study area with an accompanying good number (25.0%, 33.8%,



27.3%, 22.2% and 25.0%) in the above-mentioned sectors moderately disagreeing to this effect. The respondents mentioned that these social vices may be caused by some other factors and not ecotourism. A respondent affirmed that:

*“Social vices like prostitution, alcoholism and drug abuse have nothing to do with the tourists that come to watch the Hippos. Many of them are always students who have no money to engage in most of these activities. Besides most of the tourists especially the local tourists do not pass the night here. A few international tourists do sleep here may be for a day or two. Most of these bad practices are behavioural which are most likely caused by watching of video contents on televisions and mobile devices” ... (45year old man, Dornye).*

A key informant on a similar account narrated that:

*“Ecotourism does not in any way contribute to social vices such as drug abuse, prostitution, pickpocketing at all. The only social challenge that may be as a result of tourists especially the white tourist has to do with the kind of dresses their ladies wear (miniskirts and show your stomach). The unfortunate thing is that such dressing is prohibited and frowned upon by the local culture but normal to these white people and because they have their own reasons for such dressing, we cannot do anything about it” ... (35 years old tour guide, Wechiau)*

Conversely, 20.0% from the trading sector, 11.0% in farming, 9.1% in the civil/public sector, 11.1% in tourism and 30.0% in other sectors agreed that ecotourism contributes to social problems in the study area with 10.4% in the farming sector, 11.1% in the tourism sector and 10.0% in other sectors strongly embracing this assertion.

Statistical difference was however obtained when the results were compared across the six study communities (*p value of 0.000*). 16.9% Of the respondents from Kpanfaa, 11.1% from Tuole, 3.4% from Dornye and 12.1% strongly agreed that ecotourism in the area results in social vices with no respondents from the two communities (Talawona and Pellinkpari) that constituted the central zone strongly agreeing with



this statement. 18.2%, 11.1%, 18.8%, 14.3% and 10.2% from Kpanfaa, Tuole, Talawona, Pellinkpari and Dornye respectively also moderately agreed with this item. 32.5%, 5.6%, 12.5%, 14.3% and 14.8% from the communities mentioned above were impartial on the subject. On the other hand, majority of the respondents (66.7% from Tuole, 50.0% from Talawona, 42.9% from Pellinkpari, 28.4% from Dornye and another 50.0% from Dochere and 6.5% from Kpanfaa) strongly asserted that ecotourism in the area has not in any way contributed to social problems in the study area with 26.0%, 5.6%, 18.8%, 28.6%, 43.2% and 37.5% of the respondents from Kpanfaa, Tuole, Talawona, Pellinkpari, Dornye and Dochere moderately disagreeing that ecotourism contributes to social problems in the area.

**Table 4.17: Ecotourism Influence on Social Vices by Community**

Opinion	Community (%)						Total
	Kpanfaa	Tuole	Talawona	Pellinkpari	Dornye	Dochere	
Strongly agree	16.9	11.1	0.0	0.0	3.4	12.5	8.9
Agree	18.2	11.1	18.8	14.3	10.2	0.0	13.6
Neutral	32.5	5.6	12.5	14.3	14.8	0.0	19.6
Disagree	26.0	5.6	18.8	28.6	43.2	37.5	31.3
Strongly disagree	6.5	66.7	50.0	42.9	28.4	50.0	26.6
Total	100	100	100	100	100	100	100

Source: Field Survey, 2020

#### **4.9.3 Ecotourism and its effects on local culture and tradition**

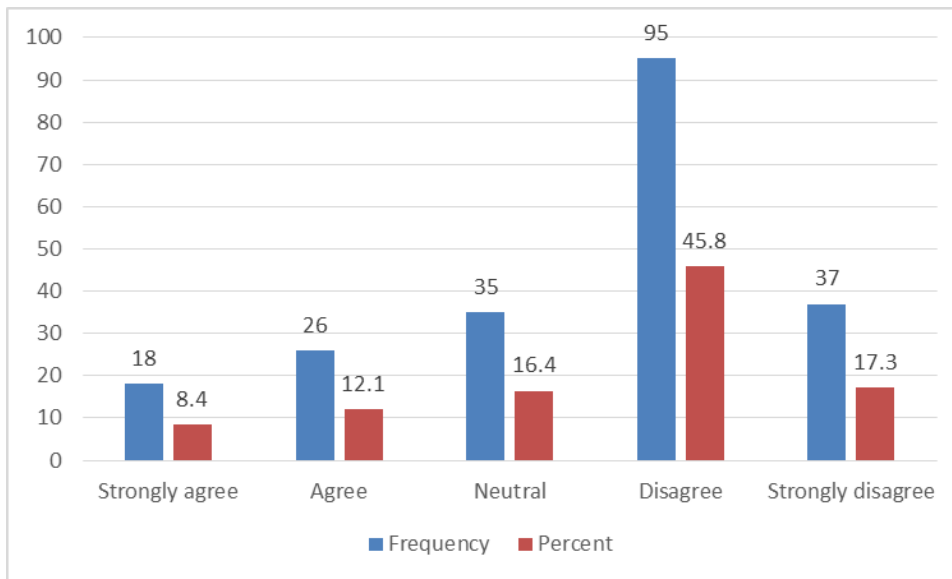
The influence that ecotourism has on the tradition and culture of local people has witnessed intense arguments as it involves the mass influx of people into tourism



destinations bringing about the interaction of people from different cultural backgrounds and orientations. The activities of these travellers may influence economic activities and other essential social artefacts in the destination areas like tradition and culture which may either be negative or positive.

Injole (2011) argued that the global movement of people away from their home to different areas as a result of tourism in many instances is blamed for its role in altering the culture and tradition of the destination areas. Citing Beck 2000 & Wicker 1997, he further opined that tourism is a key attribute of globalization with the two creating people indulgence that the world is becoming a global village whereby the local community precincts described in a container mode are becoming pervious and strenuous to maintain. Respondents were therefore employed to rate their perceptions as to whether ecotourism activities had some effects on local culture and tradition or not. Majority of the respondents (45.8%) disagreed fairly that ecotourism influences their precious traditional culture and tradition with 17.3% strongly disagreeing to this effect. Also, 16.4% of the respondents were not certain as to whether ecotourism has affected their local culture and tradition while 8.4% of the respondents agreed strongly that ecotourism has changed their local culture and tradition with 12.1% agreeing fairly with this statement (see Figure 4.6).





**Figure 4. 6: Ecotourism Influence on Local Culture and Tradition**

Source: Field Survey, 2020

Respondents’ opinions were not varied when compared across the five major occupations (p value of 0.492) on the influence of ecotourism on traditional culture and tradition (See table 4.18.)

**Table 4.18: Ecotourism Influence on Local Culture and Tradition**

Opinion	Occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
Strongly agree	5.0	9.7	0.0	11.1	5.0	8.4
Agree	20.0	11.7	9.1	22.2	5.0	12.1
Uncertain	30.0	12.3	18.2	11.1	35.0	16.4
Disagree	30.0	48.1	54.5	33.3	45.0	45.8
Strongly disagree	15.0	18.2	18.2	22.2	10.0	17.3
Total	100	100	100	100	100	100

Source: Field Survey, 2020



The results above indicate that a large number of the respondents (30.0% in the trading sector, 48.1% in the farming sector, 54.5% in the public sector, 33.3% in the tourism sector and 45.0% in other sectors) disagreed that ecotourism development has negatively affected their precious traditional culture and tradition with an accompanying 15.0%, 18.2%, another 18.2%, 22.2% and 10.0% from the mentioned sectors strongly disagreeing on this item. This finding disagrees with that of Agubeere (2014) who conducted a similar study at Paga and affirms the finding of Featherstone (1993) that ecotourism negatively influences local culture supported by what has been described as the creation of the global culture and the homogenization of culture characterized by the global movement of people especially tourists. The results, however, affirmed the finding of Amoako (2016) who conducted a study in the same area and revealed that ecotourism development has limited influence on the culture and tradition of local people who are beneficiaries of the ecotourism project in the area. In support of this claim, a key informant noted that:

*“Ecotourism if properly understood does not only protect and conserve the natural environment and its resources. It also premises on preserving and protecting the local culture and tradition of the local indigenes. Most of the tourists especially the white people that come here take greater interest in the local culture of the people including their cultural dances, traditional buildings and even taboos” ... (Executive member, SMB)*

While some respondents were indifferent on this issue, some others (20.0% in trading, 11.7% in farming, 9.1% in the public service, 22.2% in tourism and 5.0% in the other sectors) agreed with the assertion that ecotourism negatively influence local culture and activities in the study area with a few (5.0%, 9.7%, 0.0%, 11.1% and another 5.0%) from the mentioned sectors strongly agreeing that ecotourism has negatively influenced their traditional culture. A respondent noted that:



“Now some of our young boys will just go and shave part of their head while another part remains bushy and others will pull their trousers down and struggle to walk. We don’t know where all these lifestyles are from if not ecotourism” ... (45years old woman, Talawona).

Results from the six communities also supported the views of the respondents across the major occupations that ecotourism development does not affect local culture and tradition negatively with majority of the respondents (62.5% from Kpanfaa, 38.9% from Tuole, 37.5% from Talawona, 42.9% from Pellinkpari, 36.4% from Dornye and 25.0% from Dochere) in fair disagreement with some others (10.4%, 33.3%, 31.2%, 14.3%, 17.0% and 25.0%) strongly disagreeing that ecotourism negatively influence local culture and tradition in the study area (see table 4.19).`

**Table 4.19: Ecotourism Influence on Local Culture and Tradition by Community**

Opinion	Community (%)						Total
	Kpanfaa	Tuole	Talawona	Pellinkpari	Dornye	Dochere	
Strongly agree	11.7	5.6	0.0	0.0	8.0	12.5	8.4
Agree	2.6	5.6	6.2	14.3	21.6	25.0	12.1
Neutral	13.0	16.7	25.0	28.6	17.0	12.5	16.4
Disagree	62.3	38.9	37.5	42.9	36.4	25.0	45.8
Strongly disagree	10.4	33.3	31.2	14.3	17.0	25.0	17.3
Total	100	100	100	100	100	100	100

Source: Field Work, 2020



#### 4.6.1 Economic Outcomes

The perceptions of local people were sought through a questionnaire survey to assess their opinions on the economic impacts of ecotourism.

##### 4.6. 1.1 Ecotourism and Job Creation

Respondents perceptions were ranked on a 5-Likert scale of strongly agree (SA), Agree (A), Neutral (N), Disagree (D) and Strongly disagree (SD) as regarding ecotourism and job creation

**Table 4.20: Ecotourism Impact on Job Creation by Occupation**

Opinion	Occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
Strongly agree	5.0	14.9	0.0	11.1	20.0	13.6
Agree	25.0	27.9	27.3	44.4	30.0	28.5
Neutral	5.0	17.5	36.4	33.3	5.0	16.8
Disagree	35.0	33.1	36.4	0.0	15.0	30.4
Strongly disagree	30.0	6.5	0.0	11.1	30.0	10.7
Total	100	100	100	100	100	100

Source: Field Survey, 2020

The results revealed that 13.6% of the respondents strongly agreed that ecotourism creates a number of jobs of varying nature to local people. 28.5% also moderately agreed that job creation is one of the advantages of ecotourism in the area. On the contrary 30.4% and 10.7% disagreed and strongly disagreed that numerous jobs are been created as a result of ecotourism in the study area while 16.8% were impersonal on the issue of ecotourism and job creation.





In terms of occupational ranking, the results were varied across the various occupations. 8.5%, 19.9%, 11.1% and 20.0% of respondents in the trade, farming, tourism and other sectors strongly agreed that a wide range of jobs are being created by ecotourism. For those working in the tourism sector, it has employed them directly and that is the reason for them constituting the majority of respondents with strong conviction that different jobs are being created by ecotourism. For the farmers who also strongly agreed that numerous jobs were being created by ecotourism, the sector is likely to create indirect jobs for them. This got a collaboration from a female respondent at Dornye who said; *“The WCHS has helped me a lot because of the shea butter factory and buffer stock. They always buy the shea nuts at a higher price than the local business women which is always worse during shea season when prices fall. Because of the buffer stock, I have expanded my territory of shea nut collection and this has increased my income”* No respondents from the trade and other sectors neither strongly agreed or agreed with the job creation impact of ecotourism as they do not feel the sector has any influence on job creation. A petty trader retorted;

*“I would not say ecotourism does not benefit local communities. But in terms of jobs creation, I don't think it is doing well because even the fewer employees of the sanctuary are leaving their post because of the lack of motivation. I know a young lady who served as a tour guide for only a short while. When I confronted her she said she was not getting any thing for playing tour guide” ... (45years old woman, Dornye.)*

A key informant however revealed that ecotourism has created numerous employments for local people. He indicated that the WCHS has directly employed over 40 staff members some of which include manager, tour guides, ranger and caretaker. It is therefore possible that because most people are unaware of these



employments as they may only know only those that their community members are employed in.

There were variations in local opinions across the various communities as engagement levels were also varied. Majority of respondents from Talawona (43.8%) strongly agreed that ecotourism creates numerous jobs for people residing in the area with 50.0% also agreeing moderately that ecotourism creates a variety of jobs for local residents (see table 4.21). This is not surprising since Talawona is the host community of the Wechiau Community Hippo Sanctuary (see table 4.21)

**Table 4.21: Ecotourism Influence on Job Creation by Community**

Opinion	Occupation (%)						Total
	Kpanfaa	Tuole	Talawona	Pellinkpari	Dornye	Dochere	
Strongly agree	26.0	0.0	43.8	0.0	2.3	0.0	13.6
Agree	50.6	5.6	50.0	14.3	12.5	12.5	28.5
Neutral	10.4	33.3	6.2	0.0	20.5	37.5	16.8
Disagree	13.0	50.0	0.0	14.3	46.6	50.0	30.4
Strongly disagree	0.0	11.1	0.0	71.4	18.2	0.0	10.7
Total	100	100	100	100	100	100	100

Source: Field Survey, 2020

#### 4.6.1.4 Ecotourism Jobs and Wages of Employees

The amount of money an individual receives from an employment avenue determines to a large extent his ability to access essential basic requirements and social services like food, shelter, clothing, education and health services. The impact of ecotourism employment on rural livelihoods abound in literature. Whereas some researchers viewed ecotourism as an essential tool of poverty alleviation ((Blake, Arbache,



Sinclair, & Teles, 2008; Croes & Vanegas, 2008; Novelli & Hellwig, 2011; Scheyvens, 2007; Spenceley & Goodwin, 2007), others contend that the capacity of ecotourism to solely influence poverty levels significantly in rural areas of Africa is negligible (Butcher, 2006). Synman (2013) stresses that the direct impacts of income from employment are obviously the most significant poverty reduction benefits of ecotourism in rural areas. The study therefore employed a questionnaire survey to assess the level of agreement of respondents on their opinions on the wages that may result from ecotourism employment. The results are summarized in table 4.22.

**Table 4.22: Ecotourism Jobs and Wages of Employees by Occupation**

Opinion	Occupation (%)					Total
	Trading	Farming	Civil/public service	Tourism sector	Others	
Strongly agree	40.0	23.4	63.6	55.6	20.0	28.0
Agree	40.0	22.7	9.1	22.2	25.0	23.8
Neutral	15.0	22.1	0.0	11.1	20.0	19.6
Disagree	5.0	22.7	9.1	11.1	25.0	20.1
Strongly disagree	0.0	9.1	18.2	0.0	10.0	8.4
Total	100	100	100	100	100	100

Source: Field Survey, 2020

The table above present results of ecotourism jobs and the ranking of responses of respondents across the five major occupations on the wages that result from ecotourism direct employment. Over 50.0% of the respondents agreed that ecotourism jobs may pay lower wages (with 28.0% strongly agreeing to this assertion and 23% in fair agreement). 28.5% on the other hand-held contrary views (with 20.1% disagreeing fairly and 8.4% strongly disagreeing) that ecotourism jobs may pay lower



wages. 20.1% of the respondents fail to take sides for reasons that may be known to them.

Majority of the respondents that conceded strongly that ecotourism jobs may pay lower wages were employees from the public and tourism sectors with 63.6% and 55.6% respectively. This is not surprising as many of the public sector employees were teachers who also doubled as tour guides of the Wechiau Community Ecotourism Project. A key informant revealed in an interview;

*“If I was solely depending on my salary as a tour guide of the community ecotourism project, I would have abandoned the job by now. Many young people from this community were recruited as tour guides of the sanctuary project and most of them abandoned the job because of the nature of the wages. We don’t even receive fixed salaries; our payment is always on commission basis which depend on the number of visitors you receive and guide on a tour around the conserved area. If within a month, you don’t receive any tourist, it means no commission for you. This is why most of them quit because they could not build their livelihoods on only the commission” ...* (34-year-old guide, Wechiau). A ranger who was also employed directly by the sanctuary shared a similar sentiment during an interview;

*“The amount of money I receive as wages from my employment as a field ranger is small. Even though I receive a token as wages, it is not also regular even though I was supposed to be paid by management every month. This makes the work demoralising” ...* (54-year-old man from Pellinkpari).

This results thus affirms the finding of Butcher (2006) who asserts that the ability of ecotourism to solely contribute significantly to alleviating poverty in rural communities is limited.



#### **4.10 Conclusion**

This chapter examined the roles of the various stakeholders and collaborating partners in the management of the WCHS, examined how the ecotourism project contributed to sustainable livelihoods in the study area, assessed the livelihood activities connected to ecotourism in the area and analyzed the general socio- cultural impacts of the Sanctuary project. Roles of the following stakeholders were looked at; Community members, chiefs and elders, tourists, SMB, SMC, Calgary Zoo, NCRC, District Assembly, Wildlife division of the Ghana Forestry Commission, GTA and EPA.

The study found the community members and patrons of the project as the main (primary) stakeholders of the project with communal responsibility for ensuring the sustainability of the project. The secondary stakeholders provided technical and financial support to running the project. Some traditional livelihood sustaining activities were lost and others declined due to the advent of the ecotourism project. On the other hand, the project also caused the emergence of new livelihood sources as revealed by respondents. However, majority (81.3%) were not satisfied with ecotourism livelihoods with a good number expression dissatisfaction with the distribution of ecotourism employment and benefit sharing and for that matter improved and sustained livelihood. On socio- cultural analysis, mixed results were found. Whereas ecotourism activities yielded some positive outcomes, there were associated problems and challenges to contend with.



## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This section of the research presents a recap of the major issues of the entire thesis report. Conclusions were drawn which are informed by the key emerging findings of the study. Based on the findings and conclusions, relevant policy recommendations and suggestions were made for further investigations.

#### 5.2 Summary of Major Findings

The emerging findings as revealed the analysis of data are presented in line with the objectives of the study.

##### 5.2.1 Roles of stakeholders in ecotourism management

The research findings revealed a number of stakeholders and collaborative partners in the development and management of the WCHS project. The stakeholders were classified under primary and secondary stakeholders. The community members, representatives (SMB), chiefs and elders constituted the primary stakeholders. The secondary stakeholders, on the other hand, comprised the Ghana Tourism Authority (GTA), Nature Conservation Research Centre (NCRC), Calgary Zoo, Wildlife Division of the Ghana Forestry Commission, Environmental Protection Agency (EPA), tourists and NGOs. These groups of stakeholders played various roles.

The chiefs and council of elders were the principal stakeholders of the project and responsible for ensuring its long-term sustainability. They also constitute the highest council for resolving conflicts among community members and SMB members and play intermediary role between community members and SMB by relaying information and decisions taken by the board to their members. The community



members are responsible for conserving the protected areas of the sanctuary, adhering to by-laws set by the sanctuary management, participating in communal labour and attending sensitization programmes organised by the patrons of the project and the SMB. The SMB is the highest body of the WCHS project with oversight responsibilities. The SMB takes day to day decisions of the sanctuary, legislate and enforce bye-laws, take major decisions and the revenues and projects of the sanctuary as well as the organization of meetings and sensitization programmes. The SMC is the administrative arm of the WCHS project. Its primary roles include; management of the assets of the sanctuary, implementation of projects on behalf of the SMB, recording and reporting of revenues and expenditures to the SMB, monitoring progress of projects and the enforcement of bye-laws on behalf of the SMB.

Tourists are the fundamental motive behind the establishment of ecotourism sites since they constitute the backbones of the monetary and non-monetary providers of benefits to the host communities of such projects. The roles of tourists, as revealed by a key informant, included the payment of entry and user facility fees, adhering to directives of tour guides and also criticizing of the project in order for improvements to be made. The district assembly is the representative of the central government with the mandate of undertaking local level development by tapping into potentials of the district. One major potential of the Wa West District is the Wechiau Community Ecotourism Project which the district assembly has given enormous support in the past. The district assembly was revealed to be playing latent roles in the development of the WCHS in recent times. The roles of collaborative partners, such as Calgary Zoo, NCRC, CAW, GTA and Wildlife Division of the Ghana Forestry Commission, were also key to the sustenance and conservation of the project. These organizations



provide the sanctuary with both financial and technical expertise in the management and conservation of resources in the area.

## **5.2.2 Livelihood activities connected to ecotourism development**

### **5.2.2.1 Livelihood activities before ecotourism**

The research found that traditionally, people sustained their livelihoods through engagements in subsistence agriculture, subsistence hunting, fishing and the collection of nuts and berries. Hunting was mainly done by males while the collection of nuts and berries was predominantly a female activity. Harvesting of wood for the production of charcoal was revealed as a popular livelihood activity being undertaken jointly by males and females. Oyster collection was also mentioned by respondent settlers around the Black Volta as a traditional livelihood activity.

### **5.2.2.2 Livelihood activities lost/reduced due to ecotourism**

The study found that the advent of ecological tourism has led to the loss in some livelihood activities including oyster collection and the harvesting of economic trees such as the shea tree and Baobab for fuel wood and charcoal production. Other livelihood activities such as farming have reduced due to the prohibition of farming in the core area. Subsistence hunting and fishing also saw a decline due to some regulations that were enacted by the sanctuary to conserve some wild animal species.

### **5.2.2.3 Livelihood activities caused by ecotourism development**

A number of livelihood activities were discovered to have emerged due to ecotourism development in the study area. Formal employment in the ecotourism sector, employment in the shea factory, employment in informal cultural activities, the sale of craft and artefacts among others were revealed as some of the livelihood activities caused by ecotourism in the study area. Majority of the respondents (53.0%)





indicating formal employment in the ecotourism sector as the major livelihood activity that emerged from the ecotourism project while a good number (22.0%) also pointed out that the employment in the shea factory was a major activity that resulted from ecotourism in the study area.

### **5.2.3 Contribution of ecotourism livelihoods to sustainable livelihoods**

On ecotourism livelihood activity's contribution to sustainable livelihoods, an overwhelming majority (83.0%) of the respondents surveyed were dissatisfied with the livelihoods caused by ecotourism development, and 63.0% of the respondents felt that food security was still a major issue of contestation which they still battle with due to the rain-fed agriculture practiced in the area. Majority 72.0% of the respondents were into subsistence agriculture which is a seasonal economic activity which confirmed the idea that most rural communities in Ghana are founded on agricultural activities with engagements in subsistence production. The contribution of ecotourism livelihood activities to sustainable livelihood was insignificant as revealed by respondents in the survey. Some respondents in ecotourism formal employment revealed that they received no salaries from their jobs and only have to rely on commissions and tips from tourists which are also irregular. Those on fixed monthly salaries also complained of low wages paid by management which sometimes do not even come at all. More than half (51.0%) of the respondents were affirmative that ecotourism jobs pay low wages with some respondents seeing it as a management deficiency which has to do with greed and lack of accountability.

### **5.2.4 General socio-economic and cultural Impacts of the ecotourism project**

The research findings revealed that majority (84.0%) of the local people own houses, and means of transport (75.2%) while less than half (48.0%) of the respondents own mobile phones. However, the types of physical asset owned by households were



varied among the five major occupations. Public sector workers constituted the highest percentage of respondents that owned block houses with iron sheet roofs and the most convenient means of transport. Similarly, there were variations in the type of house respondents owned across the six study communities. Dornye recorded the highest (50.0%) number of respondents with block houses and iron sheet roof ownership while no respondent in Pellinkpari own block house with iron sheet roof. On the contrary, respondents in the farming sector constituted majority of respondents who owned mud houses with thatch/mud roofing. Majority (82.0%) of households in the study area had access to safe and potable water with a good number 78.0% relying on borehole water and only 4.0% on pipe borne water. Majority (68.0% and 28.0%) of respondents depend on fuel wood and charcoal as their major source of energy for cooking with only 4.0% depending on other energy sources with limited variation across the study communities. The utilization of these natural resources was influenced by ecotourism in the area which prohibits the exploitation of these resources especially in the conserved area of the WCHS.

Mixed results were found in terms of the positive economic, environmental and socio-cultural effects produced by ecotourism. For instance, almost the same percent of respondents, 42.1% and 41.1%, agreed and disagreed with the job creation function of ecotourism. Whereas some people agreed that ecotourism creates a variety of jobs for local residents, others held divergent perspectives on the matter. On the prices of goods and services, a significant number of the respondents (66.0%) disapproved with the statement that ecotourism has resulted in price hikes in the study area.

Majority of respondents were affirmative on the infrastructure and social amenity provision role of the ecotourism project as many of them were positive that ecotourism has contributed to the provision of educational and health infrastructure in



the study area with variations in opinions of respondents among the five major occupations. The findings also revealed that ecotourism was recognised to have increased the attractiveness and appearance of the area's local environment, increased peoples' awareness on conservation practices, although in several instances, it leads to the littering and pollution of the natural environment.

On the negative socio-cultural effects of ecotourism, such as prostitution, criminality and indecent dressing, respondents cited some other factors other than ecotourism to be the causes of these immoral practices. Personal behavioural attributes, youth exposure to some video content on television as well as the recent proliferation of social media (with bad content) were said to be the major sources of criminality and other immoral practices. Ecotourism was, however, partially blamed for some forms of indecent dressing practices of teenage girls in the study area.

### **5.3 Conclusions**

In the first place, the diversity of roles that the different stakeholders and collaborating partners play is decisive for the promotion of ecotourism and local development. The success and sustainability of the project is heavily linked to the continuous cordial relationship between the primary stakeholders and secondary stakeholders in the performance of their respective roles as a crack in the relationship stemming from either side may have far reaching consequences on the project.

Secondly, sustained livelihood is crucial to the wellbeing of local people, ecotourism activities, it however, influences the livelihood strategies of local people in ecotourism destinations in diverse ways thereby making it a very complex undertaking. The WCHSP has altered the livelihood activities of residents in the study area as it caused a decline and abandonment of some traditional livelihood activities



and the emergence of new ones whose contributions to the livelihoods of the rural households are limited.

The study also concludes that ecotourism has contributed to livelihoods of the local people even though its contribution has not been significant especially in transforming the livelihoods of farmers on whose activities it had a direct bearing. The study again conclude that respondents are not satisfied with ecotourism livelihoods and advocates for the creation of more livelihood activities and improving on the existing ones in order to enhance and sustain rural livelihoods.

Finally, the WCHS Project generated benefits for beneficiaries in the catchment communities. However, respondents were very passionate about the sharing of these benefits as they lamented the lack of equity in the distribution of ecotourism benefits by the SMB. This is in line with Amoako (2016), citing Blake et al. (2008), that ecological tourism can only stimulate economic growth effectually and help alleviate poverty if leading stakeholders in ecotourism management can effectively deal with issues relating to unequal benefit sharing. From the research findings, ecotourism may abound in the study area, but due to poor management and unequal benefit sharing, beneficiaries may continue to ravish in perpetual poverty.

#### **5.4 Recommendations**

- The study recommends for the design and implementation of a strategic policy framework to facilitate a benefit sharing process of the WCHS among catchment communities. This will help deal with the unequal distribution of financial and economic benefits among beneficiary communities. Therefore, there is the need for the SMB to hold a multi-stakeholder engagement to



discuss and dialogue for the adaption of an equitable benefit distribution procedure coupled with a stringent financial management system. This will help inculcate some level of commitment among beneficiary communities towards the long-term management and sustainability of the project.

- The study also recommend that the SMB should create more sustainable alternative livelihood sources while improving upon existing ones for most communities within the “Core Zone” who had some of their livelihoods lost/reduced as a result of the by-laws enacted by the WCHS project. This can be done by intensifying economic linkages between tourism and other sectors, especially agriculture which was revealed as the major livelihood activity practiced by the majority of the local people, and also encouraging networking of similar and different businesses in the local area. This balance is necessary in order for the achievement of conservation practices within the core zone. If people have their traditional livelihoods replaced with new and better livelihoods, the flaunting of sanctuary regulations will be reduced if not completely eradicated. This will in the long run lead to an improvement in the quality of life of the local communities, visitor satisfaction will be enhanced at the same time while protecting future opportunities through natural resource conservation.
- The study further recommends for the correction of management and operational inefficiencies. The operational challenges were found to have direct effects on the benefits that communities derive from the ecotourism



project. The SMB and SMC should adopt a devolved information sharing structure for the dissemination of tourism livelihood information to increase access and broaden participation. The ready availability of ecotourism related livelihood information increases local peoples' appreciation of ecotourism activities thereby strengthening their desire to fully participate and cooperate with ecotourism regulations. This if carefully and properly administered will guarantee increased accountability and clear mistrust on the part of management since lack of symmetry on ecotourism benefits sharing was recurrent in the reportage of respondents with embezzlement of tourism revenue being greatly emphasized.

- The study also recommends that the district assembly should break away from its latent role in the activities of the WCHS by adopting a more comprehensive and enthusiastic approach in the affairs of the project. The assembly should move from just merely providing its representation to attend board meetings and effectively employ its planning, coordination and implementation functions to aid the SMB to cautiously and effectively manage the site. Even though Community Based Ecotourism sites by default are supposed to be independent, the role of government (DAs) is crucial in ensuring their success through the creation of an enabling environment for ecotourism to thrive.
- One fundamental problem that respondents who were employed in tourism related jobs reported was the low wages paid by the sector and the irregularity of payment systems as well as the lack of fixed salary for some workers in the



tourism industry. This constituted one of the major reasons for the low patronage of the ecotourism project and should as a matter of urgency be taken up by management to deal with the frustrations of their employees and make it more appealing in order to attract more people into the sector. The study, therefore, recommends that ecotourism employment should be made more attractive by improving the mode of payment and increasing the wages and salaries of ecotourism employees.



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**APPENDIX A**

**UNIVERSITY FOR DEVELOPMENT STUDIES  
DEPARTMENT OF AFRICAN AND GENERAL STUDIES  
ECOTOURISM AND RURAL LIVELIHOOD: AN ASSESSMENT OF THE  
WECHIAU COMMUNITY HIPPO SANCTUARY IN THE WA WEST  
DISTRICT**

**HOUSEHOLD QUESTIONNAIRE**

Greetings, \_\_\_\_\_ is my name, an enumerator assisting in data collection for a research conducted by Mr Mohammed Dangaabo Ali for the award of Mphil Development Studies from the University for Development Studies- Wa campus. We are interviewing a section of households in six communities in the Wa West District intended at establishing a linkage between Ecotourism and Rural Livelihood; An in-depth assessment of the Wechiau Community Hippo Sanctuary. I guarantee that the information provided would be treated with utmost confidentiality and purposely used for academic work.

**Interview Code:** \_\_\_\_\_

**Interview Date:** \_\_\_\_\_

**Name of Community:** \_\_\_\_\_

**SECTION A: SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS**

**PART ONE: DEMOGRAPHIC DATA**

What is your Gender, Marital status, Age, Religious and Ethnic affiliations?

Q1. Gender		Q2. Age		Q3. Marital status		Q4. Religion		Q5. Ethnicity	
1	Male	1	≤ 18yrs	1	Married	1	ATR	1	Birifor
2	Female	2	19-28yrs	2	Single	2	Christianity	2	Wala
		3	29-38yrs	3	Divorced	3	Islam	3	Dagao
		4	39-48yrs	4	Widowed	4	Other	4	Hausa
		5	49-58yrs	5	Other			5	Other
		6	≥ 59yrs						

**Q6. What is your highest educational attainment?**

1	No formal education	
2	Lower Primary	
3	Upper Primary	
4	Junior Secondary	
5	Senior Secondary	
6	Tertiary	



7	Other, specify.....	

**Q7.** Who is the head of your household?

1	Self		4	Relative	
2	Mother		5	Others, (specify).....	
3	Father				

**Q8.** What is your household size?

Sex		Age Range			Total
		0-14yrs	15-64yrs	65+	
1	Male				
2	Female				
Total					

**Q9.** Do you hold any position in this community?

1. Yes [ ] 2. No [ ]

**Q10.** If yes, what position do you occupy?

1. Assembly Man [ ] 2. Religious leader [ ] 3. Chieftaincy [ ] 4. Youth group leader [ ] 5. Leader of any association [ ] 5. Others, specify [ ].....

**Q11.** What is your main occupation?

1. Trading [ ] 2. Farming [ ] 3. Civil/public servant [ ] 4. Tourism sector [ ] 5.

Other, Specify.....

**Q12.** What is your average household income?

	Income source	Annual	Monthly
1	Trading		
2	Farming		
3	Public/Civil service		
4	Tourism sector		
5	Others.....		

**Q13.** What is your average monthly household expenditure.....

.....

**Q14.** Which of the following areas does your household spend on? (Multiple choices allowed)

1	Food	
2	Education (school fees, books, uniforms etc)	
3	Transport	
4	Fuel expenses (Petrol, Diesel )	
5	Medical expenses	
6	Flash light, battery, lamp	
7	Alcohol/ Cigarette	
8	Other expenses	



**Q15.** Which of the following assets do your household own?

	ASSET	YES	NO
1	Tricycle (motor king)		
2	Television set		
3	Mobile phone		
4	Bicycle		
5	Radio		
6	Grinding mill		
7	Car		
8	Cattle		
9	Other, specify.....		

**Q16.** Do you think your possession of the above assets is related to tourism? 1. No 2. Yes  
3. I don't know

**Q17.** What type of housing unit/ structure do you occupy?

1. Compound house [ ] 2. Semi-detached house [ ] 3 Flat/ apartment [ ] 5.  
Other,  
Specify.....

**Q18.** Do you have access to clean and safe water? 1. Yes 2. No (if yes go to qn. 30)

**Q19.** If yes in Q17, from where do get your water from? 1. Borehole 2. Pipe borne 3. Lake 4. Other, Please specify.....

**Q20.** What type of energy do you use for cooking? 1. Fuel wood 2. Charcoal 3. Electricity 4. Other, please specify.....

**SECTION B: STAKEHOLDERS AND THEIR ROLES IN THE SANCTUARY MANAGEMENT**

**Q21.** Do you know the main stakeholders in the creation and management of the sanctuary?

1. Yes [ ] 2. No [ ]

**Q22.** If yes for Q 21, make a list of the stakeholders?

- a. ....  
b. ....  
c. ....  
d. ....

**Q23.** How would you assess the level of interaction among the stakeholders?

1. Very Good [ ]  
2. Slightly Good [ ]  
3. Average [ ]  
4. More room for improvement

**Q24.** Are they members of your community that participate in the sanctuary management?

1. Yes [ ] 2. No [ ]

**Q25.** If yes in Q24 above, are you satisfied with their level of participation?

1. Yes [ ] 2. No [ ].

Explain your opinion.....



**Q26.** What do you think can be done to consolidate stakeholder’s interaction?

- a. ....
- b. ....
- c. ....

**SECTION C: LIVELIHOOD ACTIVITIES THAT RESULT FROM TOURISM DEVELOPMENT**

**Q27.** Are any of your family members employed in any tourism- or conservation related business?

1. Yes [ ] 2. No [ ]

**Q28.** If yes, in Q17 above, mention them?

.....

**Q29.** What is the average monthly income your household generates from tourism?.....

**Q30.** In your own estimation, which of the following ranges does your household income from tourism falls on?

1. Below 100.00 (GhC)	2. 100.00-500.00 (GhC)	3. 500.00-1000.00 (GhC)	4. Above 1000.00 (GhC)

**Q31.** What benefits has your household so far derived from your community-based tourism project? Please tick those that apply to you

1	Assistance to funerals (e.g., funds, vehicles etc)	
2	Scholarships for students	
3	Assistance for disabled people	
4	Assistance for orphans	
5	Provision of basic needs (e.g., food, clothing etc)	
6	Other, specify.....	

**Q32.** Make a list of the traditional livelihood activities before ecotourism?

- a. ....
- b. ....
- c. ....
- d. ....

**Q33.** Which of the following livelihood activities by your household declined as a result of tourism?

1	Livestock farming	
2	Crop farming	
3	Fishing	
4	Hunting	
5	Wood harvesting	
6	Others.....	

**Q34.** What reasons accounts for the decline in livelihood activities mentioned in (Q14) above?





	Name of Livelihood Activity	Reason (s) Why it Declined
1		
2		

**Q35.** Make a list of livelihood activities that are caused by tourism development in your community?

1	Employment in informal cultural activities ( storytelling, dancing.....	
2	Sale of Craft (e.g. Baskets, bags, beads...) to tourists	
3	Formal employment (Managerial role i.e., accountant secretary tour guide)	
4	Other, specify	

**SECTION D: LOCAL PEOPLE OPINIONS ON HOW LIVELIHOODS DERIVED FROM TOURISM CONTRIBUTES TO SUSTAINABLE LIVELIHOODS**

**Q36.** Has there been any positive change on your household as a result of tourism development?

1. Yes  2. No

**Q37.** If yes, what have your livelihoods *gained* due to tourism development?

.....

**Q38** If no, what have your livelihoods *lost* due to tourism development?

.....

**Q39.** How do you describe your household income from tourism development in the last 5-10 years?

1. Has significantly increased   
 2. Has fairly increased   
 3. Has remained constant   
 4. Has fairly decreased   
 5. Has significantly decreased   
 6. I receive no income from tourism related activities

**Q40.** From the list provided, mark any you consider to be the main sources of your household income?

1. Employment from tourism  2. Farming  3. Fishing  4. Tourism and farming   
 5. Farming and fishing  6. Other, specify.....

**Q41.** What would you say about food security to your household?

1. We always have enough food supply throughout the year   
 2. Food supply is very unpredictable   
 3. Getting food is very expensive (we always have to buy)   
 4. We mostly depend on relief food

**Q42.** Are you satisfied with the livelihood sources generated from tourism?

1. Yes  2. No

**Q43.** If No, what do think can be done to improve and ensure their continuity?

.....



**SECTION E: EFFECTS OF TOURISM DEVELOPMENT ON LOCAL LIVELIHOODS**

**Q44.** In your opinion, how does tourism development affect the culture of community over time? Respond to the following items based on your perception by ticking strongly agree (SA), agree (A), uncertain (U), disagree (D) and strongly disagree (SD)

Statement	SA	A	U	D	SD
<b>Socio-Cultural (positive)</b>					
1. Tourism has increased our sense of belonging and solidarity					
2. Tourism has resulted in more cultural exchange between tourists and residents					
3. Tourism has encouraged intertribal marriage					
4. Tourism have increased my social network					
<b>Socio-Cultural (negative)</b>					
5. Promotion of tourism can bring about conflict between visitors and local people.					
6. Tourism has changed our precious traditional culture.					
7. Tourism contributes social problems such as crime, drug use, prostitution, and so forth in the community.					
8. Family disruption					



**Q45.** The following statements are about the economic effect of tourism in your community. Please tell us how much you agree or disagree with each statement. [1=Strongly Disagree, 2=Disagree, 3= Neutral, 4=Agree, 5=Strongly Agree]

Statement	SA	A	N	D	SD
<b>Economic (positive)</b>					
1. Desirable jobs are being created by tourism.					
2. One of the most important aspects of tourism is that it creates a variety of jobs for the residents in the community.					
3. Local businesses benefit the most from tourists					
4. Tourism contributes to infrastructure provision and Social Amenities					
5. Tourism brings more investment to the community 's economy					
6. Tourism generates tax revenues for local governments					
7. Our standard of living has increased due to tourist spending in the community					
<b>Economic (negative)</b>					
8. The prices of many goods and services in the community have increased because of tourism.					
9. The cost of living in the community has increased because of tourism.					
10. Tourism development rarely employs local staff for senior management positions.					
11. Improves investment, development, and infrastructure spending					
12. Jobs may pay low wages.					
13. The local residents are denied access to natural resource					

**Q46.** The following statements are about the environmental effects of tourism in your community. Please tell us how much you agree or disagree with each statement. [1=Strongly Disagree, 2=Disagree, 3= Neutral, 4=Agree, 5=Strongly Agree]

Statement	SA	A	N	D	SD
<b>Environmental (positive)</b>					
1. Improvement of the area 's appearance (visual and aesthetic)					
2. Increase awareness of conservation					
<b>Environmental (negative)</b>					
3. Construction of hotels and other tourist facilities have destroyed the natural environment.					
4. Tourism can result to pollution and littering					



in our area making it untidy.					
5. Loss of natural landscape and agricultural lands to tourism development					
6. Destruction of flora and fauna (including collection of plants, animals, rocks, coral, or artifacts by or for tourists)					
7. Disruption of wildlife breeding cycles and behaviors					



## APPENDIX B

**UNIVERSITY FOR DEVELOPMENT STUDIES  
FACULTY OF INTEGRATED DEVELOPMENT STUDIES  
DEPARTMENT OF AFRICAN AND GENERAL STUDIES**

**ECOTOURISM IMPACT ON RURAL LIVELIHOOD: AN ASSESSMENT OF  
THE WECHIAU COMMUNITY HIPPO SANCTUARY IN THE WA WEST  
DISTRICT**

### IN-DEPTH INTERVIEW GUIDE FOR KEY INFORMANTS

#### Introduction

The purpose of this interview guide is to establish a linkage between ecotourism and rural livelihoods: An assessment of the WCHS as a Community-Based Ecotourism Site. It would be extremely appreciated if you could complete this questionnaire. The findings of this study would be solely used for academic purposes. You are guaranteed of total confidentiality.

Thank You.

#### **SECTION A: LIVELIHOOD ACTIVITIES CONNECTED TO TOURISM DEVELOPMENT**

1. What livelihood options does tourism present to local people?
2. Before the establishment of the WCHS, what were the major sources people in the catchment area derives their livelihoods?
3. What livelihoods do you think declined as a result of the WCHS establishment?
4. In your opinion, what do you think can be done to broaden and increase livelihood sources from tourism?
5. Do you think local people are satisfied with the livelihood sources that emanates from tourism development?

#### **SECTION B: HOW LIVELIHOODS GENERATED FROM TOURISM CONTRIBUTES TO SUSTAINABLE LIVELIHOOD**

1. What are the gains that people in the catchment area receive from tourism?
2. Do you think tourism contributes to livelihood sustenance in the catchment area?
3. What would you say about food security in the catchment area?
4. How does tourism contribute to sustainable livelihoods?
5. What do you think can be done to sustain livelihoods generated from tourism?
6. What linkage can you draw from conservation and livelihood strategies?

#### **SECTION C: SOCIO- ECONOMIC IMPACT OF TOURISM**

1. What benefits does the WCHS provide for people in the catchment area?
2. What negative influence does the sanctuary have on catchment communities?
3. What factors militate against ecotourism development in the area?
4. How are you dealing with those challenges?
5. Do you think the social and economic benefits outweigh the negative consequence?



**SECTION D: STAKEHOLDERS AND THEIR ROLES IN SANCTUARY MANAGEMENT**

1. Who are the main stakeholders in the sanctuary management?
2. Are they any members or group of individuals from your community who are key stakeholders in the sanctuary management?
3. What are the roles played by the various stakeholders?
4. Are stakeholders given equal opportunity in the sanctuary management?
5. Are they other stakeholders that play subsidiary role?
6. Are they stakeholders that live outside the catchment communities?
7. What is the management hierarchy of the WCHS??



**APPENDIX C**

**UNIVERSITY FOR DEVELOPMENT STUDIES  
FACULTY OF INTEGRATED DEVELOPMENT STUDIES  
DEPARTMENT OF AFRICAN AND GENERAL STUDIES  
ECOTOURISM AND RURAL LIVELIHOOD: AN ASSESSMENT OF THE  
WECHIAU COMMUNITY HIPPO SANCTUARY IN THE WA WEST  
DISTRICT**

**INTERVIEW GUIDE – TOUR GUIDES AND RANGERS**

1. What is your main occupation?
2. What alternative income generation sources are you engaged aside your main occupation?
3. Are the alternative sources of income related to tourism?
4. Which of the income sources earn you more income than those related to tourism and those that do not?
5. Do you employ others?
6. In your opinion how do tourists perceive your services?
6. Do people still encroach on the core zone of the sanctuary?
7. Which areas of the tourism sector do you think need improvement?
8. Which other suggestions would you propose to promote tourism in the WCHS?



**APPENDIX D**

**UNIVERSITY FOR DEVELOPMENT STUDIES  
FACULTY OF INTEGRATED DEVELOPMENT STUDIES  
DEPARTMENT OF AFRICAN AND GENERAL STUDIES  
ECOTOURISM AND RURAL LIVELIHOOD: AN ASSESSMENT OF THE  
WECHIAU COMMUNITY HIPPO SANCTUARY IN THE WA WEST  
DISTRICT**

**These questions are to be answered by the WA - West District Assembly**

**Interviewee..... Witness.....  
Date.....**

- . What are some of the tourism potentials of the WCHS?
2. What are the various plans and strategies put in place to promote tourism development and by whom?
3. Which of these plans or strategies has the most beneficial effect in the catchment communities?
4. Who are those benefiting the most apart from those involved in tourism directly?
5. What are the strengths in terms of tourism development in the WCHS?
6. What are the weaknesses in terms of tourism development?
7. What is the contribution of the District Assembly/state in tourism development here?
8. Could you please suggest necessary improvements that can be initiated to boost tourism development in the area?

