



## TÍTULO

**ASSESSING THE ADMINISTRATIVE AND GOVERNANCE  
CHALLENGES IN THE IMPLEMENTATION OF CITES LAW  
ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA**

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UNIA MASTER'S DEGREE IN  
MANAGEMENT AND CONSERVATION OF SPECIES IN TRADE:  
THE INTERNATIONAL FRAMEWORK (13<sup>TH</sup> EDITION)

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**ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN  
THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN  
SAPO NATIONAL PARK IN LIBERIA.**

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## ABSTRACT

The Convention (CITES) is a global call to safeguard the world's flora and fauna from anthropogenic actions with concerns about the depletion of biological diversity. Globally, biodiversity are under immense pressure from human activities including illegal mining, hunting, and trade in ivory and so forth. As a country rich in forest resources, Liberia signed onto CITES since 1981 to aid the fight against the threats on its biodiversity. Despite this effort, the threats on Liberia's biodiversity still exist with actions needed.

Established in 1983, Sapo National Park (SNP) is biologically rich and contains some of the Country's endemic and rare species. Yet, the Park is under huge threats from human activities, something that has caught global attention.

This thesis assessed the administrative and governance challenges in managing the SNP and how the potential challenges affect Liberia's compliance with CITES regulations. It employed both qualitative and quantitative research methodologies: desk review of existing reports, administered questionnaires, field visit to 6 SNP communities and held Focal Group Discussions (FGDs) and a stakeholder workshop in Monrovia.

This study found that SNP is being faced with numerous administrative and governance challenges. FDA human capacity at the SNP is limited to actually manage and control illegal entries. There are about 63 park rangers presently assigned at the SNP, which is very small to manage a Park with an area 180,400 ha (considering the 2003 extension) and surrounded by 75 affected communities.

Also, this research gathered that the Government of Liberia (GoL) budgetary allotment to FDA is relatively insufficient thereby affecting conservation activities. Additionally, SNP has infrastructural and logistical limitations. There is no furnished park headquarters and ranger outposts to accommodate park staff; the Park also lacks communication equipment, vehicles and motor bikes for patrolling over the years.

Inadequate law enforcement training for park rangers is also a challenge at SNP. Moreover, there are limited alternative livelihood options around the Park which mostly lead to illegal activities within the SNP. Increasing population around the SNP is one of the management challenges being faced as demand is placed on the natural environment to provide goods and services to sustain people. Another challenge is the limited awareness creation around the Park and lack of understanding of the wildlife law amongst locales and court magistrates.



## LIST OF ACRONYMS

AEWA	<b>Africa Eurasian Water-Bird Agreement</b>
BFC	Bureau of Forest Conservation
CBD	Convention on Biological Diversity
CI	Conservation International
CITES	Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species
CPW	Chief Park Warden
CSO	Civil Society Organization
ENNR	East Nimba Nature Reserve
EPA	Environmental Protection Agency
FACE	Farmer Association to Conserve the Environment
FAO	Food and Agriculture Organization
FDA	Forestry Development Authority
FFI	Fauna and Flora International
FGD	Focus Group Discussion
FTI	Forestry Training Institute
GDP	Gross Domestic Product
GFM	German Forestry Mission
GIS	Geographic Information System
GNP	Gola National Park
GOL	Government of Liberia
IBA	Important Bird Areas
IUCN	International Union for the Conservation of Nature
LFSP	Liberia Forest Sector Project
LISGIS	Liberia Institute of Statistics and Geo-Information Services
LPMUR	Lake Piso Multiple-Use Reserve
MA	Management Authority
MOA	Ministry of Agriculture
MOE	Ministry of Education
MOJ	Ministry of Justice
MP	Management Plan
NBSAP	National Biodiversity Strategy and Action Plan
NFPIS	National Forest Policy and Implementation Strategy
NFRL	National Forestry Reform Law of 2006
NGO	Non-Governmental Organization
PPA	Propose Protected Areas
PRC	People Redemption Council
RAMSAR	Convention on Wetland of International Importance
REDD	Reducing Emission from Deforestation and forest Degradation
SA	Scientific Authority
SADS	Skills and Agriculture Service
SC	Standing Committee
SCNL	Society for the Conservation of Nature of Liberia
SNP	Sapo National Park
TCU	Transnational Crime Unit
TM	Technical Manager
UL	University of Liberia
UNEP	United nations Environmental Protection

UNEP	United Nations Environmental Program
UNODC	United Nation Office on Drug and crime
UN-REDD	United Nations-Reducing Emission from Deforestation and forest Degradation
US	United States
USAID	United States Agency for International Development
WABiCC	West Africa Biodiversity Climate Change
WCF	Wild Chimpanzees Foundation
WPAML	Wildlife and Protected Areas Management Law
WWF	World wild Foundation

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## CHAPTER ONE: INTRODUCTION

### 1.1 Background of the Study

Liberia is richly endowed with forest resources amongst other natural resources like gold, diamond, iron ore etc. The Country lies entirely in the western portion of this hotspot, the Upper Guinea forest region, encompassing more than >4 million ha of forest (*Christie et al., 2007*). The forests of Liberia are divided into two blocks; north-western and south-eastern. Accordingly, the forest ecosystem of Liberia has been described as a biodiversity hotspot that contains high species diversity, with Sapo National Park (SNP) representing one of the most intact forest ecosystems in Western Africa (*FFI, 1997*).

### 1.2 Problems Associated with CITES Implementation in Liberia

Official engagement from the Government of Liberia (GoL) towards conservation dated back to 1938, however the first mechanism – Forestry Act - through which national parks and reserves could be established was enacted in 1953. This led to Liberia signing unto CITES in 1981, thus remaining an active party to the Convention. Despite this, the protection of the nation's wildlife and the prevention of illegal trade in wildlife species remains a huge challenge for the Government of Liberia.

### 1.3 Statement of the Problem

In Liberia, SNP was the first to be gazette and legislated as a full national park. Established in 1983, SNP is being managed by FDA and headed by a Chief Park Warden who was assisted by three Zone Wardens. The Chief Park Warden is responsible for the administrative and technical day to day running of the park. Over the years, SNP has experienced illegal occupants with illicit activities being carried out. The park has experienced continuous shifting cultivation, hunting of wildlife species which threatens biodiversity conservation, illegal artisanal mining and so forth.

In addition to these, there is overlapping of mining activities, (in the areas with minerals deposits) with large parts of SNP as well as other protected areas/ forest reserve network (*DAI, 2008*). The potential exploitation of these mineral deposits could significantly affect biodiversity and forest cover in SNP, thus leading to forest degradation which could be locally extensive and permanent. The common impacts from mining stem from indiscriminant removal of the vegetation, which in turn alters the regeneration potential of forests and the availability of food and shelter for wildlife. Other impacts of concern include

habitats fragmentation and increased bush meat consumption, siltation of rivers, degradation of the lands from recurrent settlement patterns of miners, ground and surface water pollution (e.g. acidic mine drainage and high metal concentration in rivers), resulting in an impoverished aquatic environment (*Miranda et al., 2003*).

These activities undermined the purpose of the park management and are allegedly being carried out by community members, people from other counties and foreigners. In recent past, the SNP encountered many administrative (low staffing, lack of logistics etc.) challenges which make it difficult to fully implement CITES regulations in the park. Thus, these challenges have continued to create serious setback to the FDA activities in Liberia and proper management of SNP. Besides, all the above-mentioned activities defeat the purpose of the park and point to weak administrative management of the area. In recent time, a conflict ensued between the park management and community dwellers which led to the death of a park ranger and injury of few other park staff.

In an effort to curtail the illegal activities in SNP, a conference was held in July 2017 to discuss the removal of illegal occupants from the SNP and seek communities' participation in the management of the area for current and future generations. At the end of the conference, a resolution was prepared and signed onto by relevant stakeholders to protect the SNP from intruders and illicit activities. Predicated upon the above, it is evident that the administrative and logistical capacity of SNP is weak and needs to be urgently assessed with recommendations put forth. In addition, there have been unconfirmed information about illegal wildlife trade at SNP. According to information gathered, elephants and other animals were killed to collect their ivory. Hence, this research is designed to assess the administrative and governance challenges in the implementation of CITES in SNP.

#### **1.4 General Objective**

This study aims to assess the administrative and governance challenges of managing the SNP and how the potential challenges affect Liberia's compliance with CITES regulations.

#### **1.5 Specific Objectives**

Specifically, this thesis seeks to:

- ✓ Identify the administrative and governance challenges that SNP being faced with relative to CITES implementation;

- ✓ Provide information on the main threats to wildlife management and recommend strategies;
- ✓ Analyze communities' roles and responsibilities in managing the SNP; and
- ✓ Analyze the current gaps in SNP management plan/governance structure and recommend policy solutions relative to CITES.

## 1.6 Research Questions

1. What are the administrative or management challenges that SNP faces in terms of general conservation of wildlife species or habitat?
2. What are the main threats to Wildlife management at SNP?
3. How effective is the design and implementation of SNP MP in addressing threats to the priority CITES listed species?
4. How can SNP communities contribute to the management of the Park?

## 1.7 Significance of the study

This thesis is of great practical and theoretical significance. It can be used for taking legal and administrative measures and for identifying basic gaps in the implementation of CITES law enforcement in SNP. This information will enable policy makers to orientate decisions based on scientific information in law enforcement issues in the SNP. The research will also create awareness for Park Rangers, other laws enforcement officers and community dwellers who are settled within and around the SNP to protect the park from damage and keep it as their own property in favorable conditions to enforce the laws and stop illegal activities against wildlife resources in the SNP.

## 1.8 Study Area (Sapo National Park of Liberia)

SNP was established in 1983 and extended in 2003 to 180,363 ha(*see figure 1*). It constitutes a significant portion of the remaining South-east rainforest block of the Country and located in three (3) counties – Grand Gedeh, Sinoe and River Gee. The Park supports 1,500 chimpanzees, an estimated 20–25% of the national population (N’Goran *et al.*, 2010; Tweh *et al.*, 2014); but protection of the Park and its valuable resources remains a challenge. Some evidence suggests that there has been an increase in hunting activities (Tweh *et al.*, 2014) since the end of the last civil conflict in 2003. Currently, there are commercial hunting camps in the Park’s vicinity, and illegal gold mining occurs unimpeded in the Park until 2011. Back in 2010, a survey estimated that there were 18,000 miners in nine camps in the Park (Kayjay, 2010).



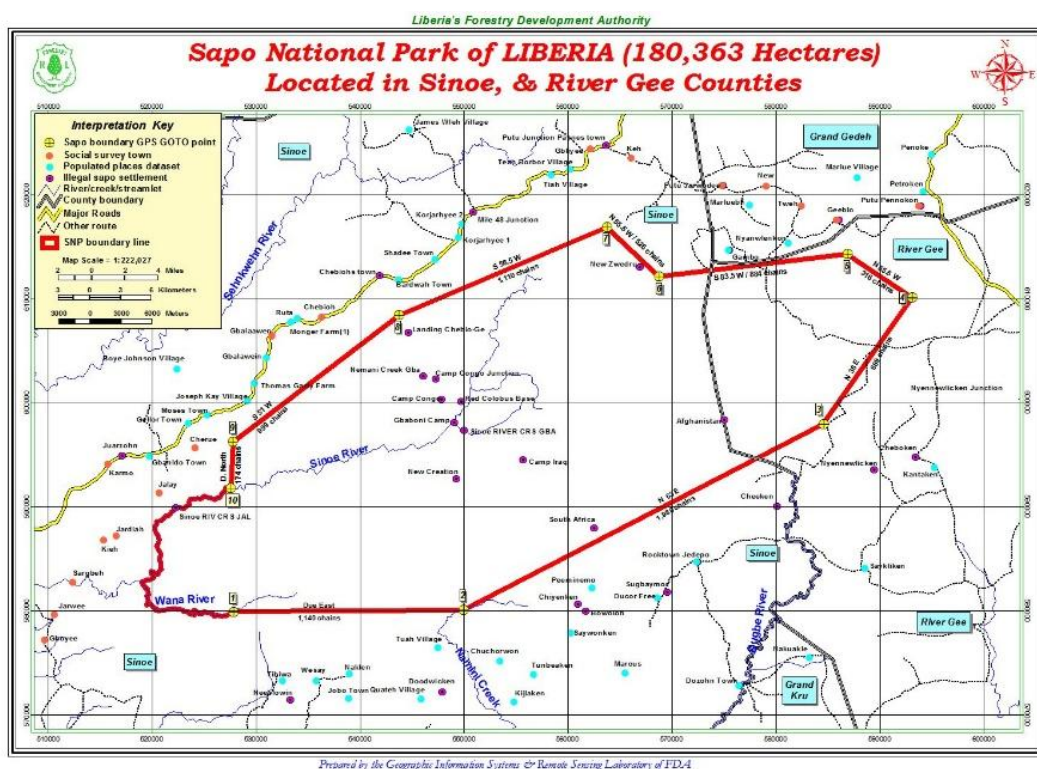


Figure 1: Map of the Sapo National Park, Liberia (Source, FDA GIS, 2019)

Although this estimate could not be verified independently, it suggests a significant increase from an unconfirmed estimate of 2,000 miners, which had been widely quoted previously, and the hundreds thought to have inhabited the Park during both civil wars (Collen et al., 2011). Artisanal mining causes environmental degradation but the dependence of miners on bush meat is likely to have placed additional hunting pressure on the wildlife resources of the Park (Vogt, 2011). Waitkuwait (2003) documented an increase in hunting signs in SNP during 2008–2010 and compared her findings to an earlier survey in which few signs of human disturbance were reported.

### 1.8.1 Sinoe County

A portion of SNP is found in Sinoe County which is located in the South-eastern region of the Republic of Liberia. It is bordered by Grand Gedeh County on the North, Rivercess County on the West, Grand Kru and River Gee Counties on the East, and by the Atlantic Ocean on the South. Sinoe covers a land area of about 3,861 Square miles (10,000 square kilometers) and has a total coastline of 86 km. Greenville serves as the County's Capital City; according to Liberia's 2008 Population and Housing Census, Sinoe County has a total population of 104,932 people.

### 1.8.2 Grand Gedeh County

Grand Gedeh County is located in the southeast part of Liberia. It is bounded in the northwest by Nimba County, and by the Cavalla River in northeast in turn forming the boundary with Cote d'Ivoire. In the southeast Grand Gedeh is bordered by River Gee and in the southwest by Sinoe County. The total land area of the County is 10,276 square kilometers, which is about 9.22% of the total land area of Liberia. Zwedru serves as the capital with the area of the county measuring 10,484 square kilometers (4,048 sq mi). As of the 2008 Census, Grand Gedeh had a population of 126,146, making it the ninth most populous county in Liberia.

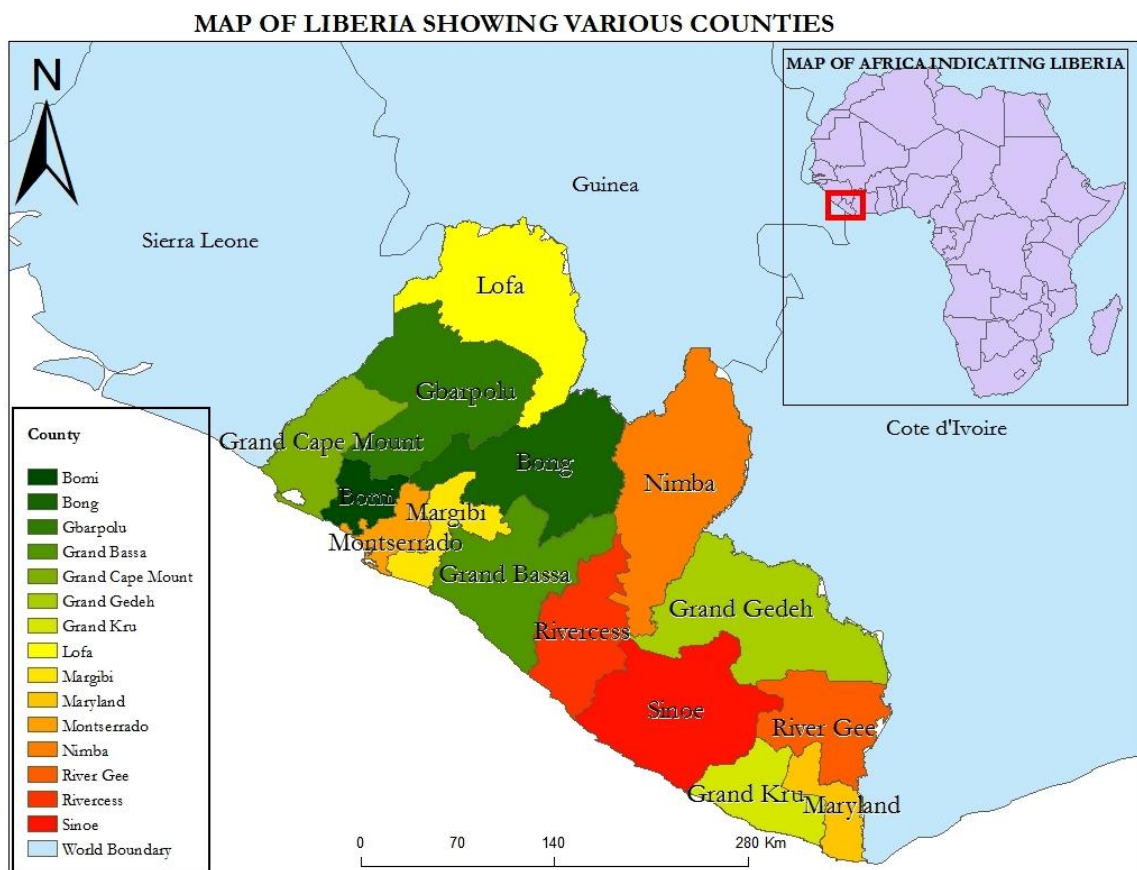
### 1.8.3 River Gee County

River Gee is one of the newest counties in Liberia. It was carved out of Grand Gedeh County, which was formerly part of the Eastern Province prior to 1964. The County was established in 2000 and has its political seat in Fish Town. As of the 2008 Census, River Gee had a population of 66,789, making it the third-least populous county in Liberia.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1 Liberia Geographical Background

As shown on *figure 2* below, Liberia is situated on the west coast of Africa and located at 6 °N, 9 °W. It borders on the West by the Republic of Sierra Leone (299km), on the North by the Republic of Guinea (590km), on the East by the Republic of Cote d'Ivoire (778km) and on the South by the Atlantic Ocean. The Country comprises 110,000 square kilometers (43,000 sq. miles) of which 96,300 square kilometers (37,190 sq. miles) is land and 15,000 square kilometers (5,810 sq. miles).



*Figure 2: Geography Map of Liberia (Source: Environmental Protection Agency (EPA) of Liberia 2019)*

Liberia is dominated by flat to rolling coastal plains that contain mangroves and swamps (World atlas, accessed December 2018). There are six (6) major rivers in Liberia including the Mano River in the Northwest and the Cavalla in the southeast. The others are Lofa, St. Paul, St. John and Cestos River. The Cavalla River is the longest among these rivers (320 miles 515km). All of these rivers flow and empty into the Atlantic Ocean. Liberia also

has several mountains with the highest being the Mount Wuteve at 4,724 ft. (1,440 m) located in Lofa County. However, Mount Nimba which peaks at 5,748 ft. (1,752 m) is shared with the Republics of Guinea and Côte d'Ivoire. The lowest point of the country is the Atlantic Ocean (*Holsoe et al. 2012*). The LISGIS, 2008 National Population Census puts Liberia's population at an estimated 3.5 million people. This information is about to be updated after the upcoming 2019 National Population Census.

## 2.2 The Forest Cover of Liberia

Situated within the tropical rainforest belt of West Africa with a total land area of 9.58 million hectares, Liberia's forests covered about 4.

million hectares or 45 percent of the land area (see Table 1). Hence, 42% of West Africa's remaining Upper Guinean tropical forest is found in Liberia (*FAO, 2001; FDA, 2006; Goll et al. 2014*).

*Table 1: Statistics Area on Land and Forest (Source: FDA, 2006)*

Land Area	Million in Hectares	Total Land Area in Percentage
Land	9.58	100
Forest	<b>4.30</b>	<b>45</b>
Protected Forest Areas	1.70	18
Unprotected Forest Areas	2.61	27

As seen in *Table 1*, Liberia has a small land area. The forests of Liberia account for a wide range of other environmental products and services that benefit Liberia and the rest of the world (*FDA, 2006*). The Country is a verdant land that is heavily forested; it has an extensive and unique biodiversity, and is considered one of the 14 centers of global plant endemism which contains over 2,900 different vascular plants species (including 225 tree species), 600 bird species, 150 mammal species; and 67 reptile species (*FDA, 2006*) as seen in *Table 2 below*.

The forest of Liberia is being managed by the FDA as mandated by the Act establishing the entity. FDA's goal for the sustainable management of the forest resources of Liberia is to provide benefits for current and future generations. Although numerous government institutions and agencies contribute toward this goal, the international community and local

civil society organizations also play a significant role and contribute to the environmental sector (FDA, 2006).

Table 2: Species threat and endemism for Liberia Source: IUCN, FAO (as cited in FDA, 2006)

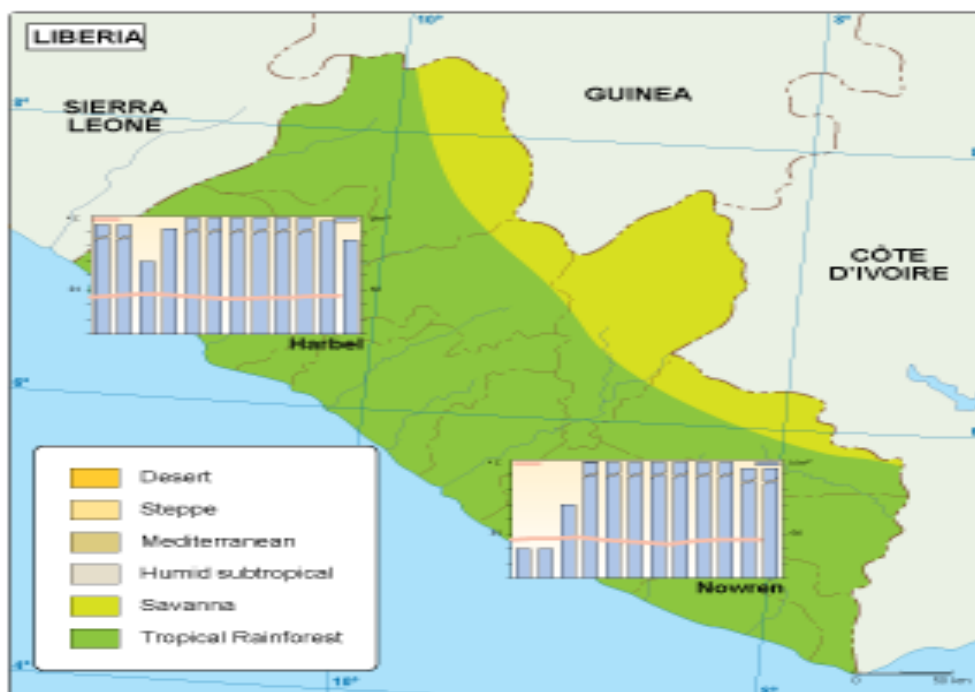
Class	Species	Endemic	Threatened
Mollusks	NA	NA	1
Birds	75	1	11
Reptiles	20	2	2
Plants	35	103	46
Mammals	45	NA	17
Amphibians	2	4	1
Invertebrates	NA	NA	1
Total	175	110	79

### 2.3 Climatic condition of Liberia

Liberia has a tropical climate that is hot and humid throughout the years as shown in *figure 3* below. The Country has two seasons; Rainy and Dry. The rainy season runs from late April to Mid-November during which time there is heavy downpour of rain. The rainfall exceeds 3,000 millimeters (118 inches) per year. (<https://www.climatestotravel.com/climate/liberia>, 2018) In the northern part of the coast, in the capital Monrovia, rainfall reaches even 5.1 meters (200 inches) per year, with a maximum in June and July. The rains are abundant already in April, and still in November and the average rainfall in Monrovia. On the other hand, the dry season runs from Mid-November to Mid-April. The mean temperature is 27°C (81°F), with temperatures rarely exceeding 36° C (97° F) or falling below 20° C (68° F). On the coast, the heat is tempered by an almost constant breeze (<https://www.nationsencyclopedia.com/Africa/Liberia-CLIMATE.html>, 2018). Yearly rainfall is as high as 510 cm (200 in) on the coast, decreasing to about 200 cm (80 inches) in areas farthest inland.

In Liberia, there are distinct wet and dry seasons with most of the rainfall occurring between late April and mid-November. Average relative humidity in the coastal area is about 82% during the rainy season and 78% in the dry, but it may drop to 50% or lower between

December and March when the dust-laden harmattan blows from the Sahara. *Figure 2* below provides a graphical pictorial of the information provided.



*Figure 3: Climatic Map of Liberia (Source: www.nationsencyclopedia.com; Retrieved: February 11, 2017)*

## 2.4 Overview of Global Conservation

The global community has been concerned about the depletion of biological diversity as far back as the 1940s, as the loss of biological resources was receiving international attention and forced the international community to set various conventions. Among the conventions, the Convention on Biological Diversity (CBD) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) are the main international initiatives agreed by a range of National Governments.

CBD is a legal instrument that seeks to achieve three objectives; conservation of biological diversity, sustainable use of its components, and ensuring fair and equitable sharing of benefits of biological resources, while CITES has been helpful in regulating the international trade of endangered species of wild fauna and flora (*Mugabe, 1998; Kumar and Asija, 2000; Lawson and Vines, 2014*). There are also other international agreements on biodiversity like the Convention on Migratory Species (CMS), the African Eurasian Water-Bird Agreement (AEWA) which both came into effect to save migratory species from illegal activities during their movement across their range.

Apart from these international conventions, some countries have developed their own laws and regulations, which help protect areas for conservation of various species from harm. Equally, most countries of the world have embarked on the enactment of a wide range of technical, policy, legislative and institutional measures that would address forest degradation and the loss of biodiversity. Those countries have also established both in situ and ex situ conservation programs. Despite these, ecological conservation cannot be confined by political barriers and, therefore, international law has been essential for conservation efforts (*Spellerberg and Hards, 1992*).

## 2.5 Enforcement of Global Conservation Legislations

Wildlife criminals often stand to gain high profits at a low risk from their activities. Former US Secretary of State Hillary Clinton described the illegal wildlife trade in 2012 as “*a global challenge that spans continents and crosses oceans.*” Such trade can no longer be viewed exclusively as an environmental concern. Although the trafficking of live animals and animal products remains serious conservation issue, this crime threatens the stability and security of societies involved at every point along the chain. It was the rise in illegal wildlife trade that prompted Mrs. Clinton to describe this phenomenon as a national security issue, a public health issue, and economic security issue (*Lawson and Vines, 2014*).

The loss of biological diversity results to a wide array of complex factors that operate in the ecosystem. One of the greatest threats to wildlife today is the ever-increasing exploitation of their habitats. Therefore, there is a need for increased co-ordination in the investigation of illegal wildlife trade. Besides, additional resources mobilization and effective deterrents mechanisms need to be put in place; thereby setting up an effective implementation of law enforcement to adequately support multilateral initiatives, protect endangered species and regulate utilization of wildlife resources.

## 2.6 History of Nature Conservation in Liberia

The concept of biodiversity conservation in Liberia started long before with the use of traditional methods and practices. According to Liberian traditional history, Poro and Sande societies were established by local communities in forested areas of the Country with the aim of preserving the fauna, flora and the water resources therein. The Sande and Poro bushes were special areas that prohibited all forms of human intrusion including trespassing, farming, hunting, fishing, fuelwood collection, pollution of water among others, and were

guided by traditional rules and regulations that were highly adhere to. Practically, those traditional methods and practices were geared towards protected areas establishment; hence, such idea has to date led to the development and establishment of sustainable research scientific institutions and brought about new discoveries through research surveys and experimentations. This new idea of biodiversity conservation has made many nations to forecast for future generation through protected areas establishment, sustainable livelihoods development, community engagement and empowerment, education and awareness raising, benefit sharing, feedback redress grievance mechanism as new phenomenon and approach for sustainable forest management and protection.

Conservation in Liberia was undertaken by the Government as early as 1938, and the first conservation legislation to be enacted was the Forestry Act of 1953, (*Ramsey & Robinson, 2015*). This Act called for the establishment of the Bureau of Forests and Wildlife Conservation within the Department of Agriculture and Commerce, as well as the establishment of Government Forests Reserves, Native Authority Forests Reserves and National Parks. Hence, the Act provided a mechanism through which the Bureau of Forests and Wildlife Conservation was created under the Ministry of Agriculture, with its function mostly on forest inventories and concession allocation; however, it was realized that the Bureau was not financial equipped to supervise the sector (*GOL, 1953*).

Exploitation of the forest was fairly limited until the latter part of the 1960s, but thereafter, between 1968 and 1970 followed a tremendous boom which continues. The German Forestry Mission to Liberia (GFM) conducted a national survey of Liberia's forests from 1960 to 1968 and came out with a 12-volume report. The GFM reports attracted logging companies in the country immediately after they were published and gave rise to the boom in logging in the country.

An Act creating the Forestry Development Authority (FDA) was approved on 1<sup>st</sup> November 1976 and published on 20<sup>th</sup> November of that year. This Act repealed all previous forestry and wildlife laws and granted the FDA the powers to issue, amend and rescind forestry and wildlife regulations. The Act defined the objectives for the forest sector, which may be grouped into three broad themes: establishing a permanent forest estate made up of National Forests and National Parks; optimizing the contribution of forestry to the national economy; and increasing public involvement in the sustainable management of the Country's forest



resources(*FDA, 1976*).The FDA is an autonomous public corporation with a management team led by a Managing Director.The policies of the FDA are formulated by a Board of Directors, mainly composed of Government ministers, with the Minister of Agriculture as ex-officio Chairman(*NFRL, 2000*).

The rich fauna found in Liberia and the key ecosystems that the country's forests provide have contributed to the allocation of several conservation designations within Liberia and across the region of West Africa. Liberia is recognized as a critical region for freshwater species including several West African endemic fish and some mammals, such as the Pygmy Otter-shrew (*Liberianfaunaflora.org/liberian-fauna9076pygmy-hippopotamus-2015-snp, 2019*).

Two components of biodiversity are cardinal: the terrestrial biodiversity, which includes the forest and savanna ecosystem and the mountain ecosystem, and the aquatic biodiversity, which comprises the Wetland and mangroves, freshwater, as well as coastal and marine ecosystems. Even though they have great potential for human and industrial development, these natural ecosystems are under continual threats of destruction as a result of neglect and mismanagement (*NBSAP, 2004*).

Conservation of biological diversity is essential for environmental sustainability and socio-economic development (*USAID, 2008*).Conserving biodiversity provides opportunity for improving the livelihoods of peoples and communities, particularly forest fringe communities whose inhabitants rely on the forests for most of their livelihoods. Like other developing countries, the Country is highly dependent on the exploitation of its biological and natural resources for the sustenance of the majority of its people especially those living in rural communities.

The forest sector of Liberia is very relevant to the growth and development of Liberia especially the Gross Domestic Products (GDP). In 2002 for instance, the value of timber exports was estimated to have amounted to over USD 100 million or 60 percent of Liberia's total export revenues (*Doe, 2004*). Despite these, the forests have not been managed either to support biodiversity or to support the livelihood of the poor.

## **2.7 Protected and Proposed Protected Areas of Liberia**

There are five (5) protected areas that had been gazette by the National Legislature in Liberia; these include SNP located in the South-East, the East Nimba Nature Reserve (ENNR) found in the North-East, the Lake Piso Multiple Use Reserve (LPMUR) in the North-West, the Gola National Park (GNP) also in the North-West, and the Grebo-Krahn National Park in the South-East. These protected areas covered a total land area of about 4,548 square kilometers, which represents 4.1 % of the Liberia's forestsareas (FFI, 2018).

As already discussed under the study area, the SNP is Liberia first and largest protected area of rainforest and it was gazette in 1983 by the People Redemption Council (PRC) Government. It was named after a local tribe called Sapo (or Sao). SNP covers an area of 1,308 km<sup>2</sup> (505 sq. mi). The SNP was extended on October 10, 2003 with the total areas of 180,400 hectares from (1,804 km<sup>2</sup>). This park is located in Sinoe, River Gee and Grand Gedeh Counties and is managed by the FDA.

The ENNR was gazette on October 10, 2003, by the National Legislature and it covers an area of 11,553 hectares. It is Located in the northern part of Liberia and has border with the Republic of Guinea and the Republic Cote d'Ivoire. The Mount Nimba Range is recognized for its high fauna and flora species diversity and considered both nationally and internationally for its high conservation importance (FFI, 2018).

Equally, the LPMUR was gazette in 2011 by the National Legislature as a protected area. It covered an area of 97,159 ha (240.083 ac) and it is the only non-forest protected area in Liberia. The Reserve is located in Grand Cape Mount and Bomi Counties respectively. It also extends in the Northwest and Southeast direction from the Mano River and borders with the Po River between Bomi and Montserrado Counties. The Lake Piso Basin has gained national and international interest for its richness in biodiversity, its diverse ecosystems and its natural beauty and conservation hotspot in the Upper Guinea Rainforest. The Reserve has also been designated as an important bird area (IBA) and a wetland of international importance, a RAMSAR site(FFI, 2018).

Another forest landscape of importance is the Grebo-Krahn National Park. This Park was gazette on August 22, 2017 by the National Legislature and launched by the FDA on April 14, 2018 in Zwedru City, Grand Gedeh County. It covered the total area of 96,149.89 hectares and located in the South-East of the country. It lies at the heart of the Tai-Grebo-SapoTransboundary Forest Complex. *The Park is home to one of CITES largest populations of the critically endangered West African chimpanzee, the endangered pygmy hippopotamus,*

*western red colobus, vulnerable diana monkey, forest elephant, leopard, and other numerous threatened and endemic species.* According to WABiCC(2018), there are 300 different species of fauna and 220 species of flora which had been observed in the Grebo-Krahn National Park.

Besides, Liberia is also blessed with another reserved - GNP. This reservoir of biodiversity was gazetted on September 22, 2016, also by the National Legislature. The Park covers an area of 219,609-acre. It is located in Gbarpolu and Grand Cape Mount counties, along the border with Sierra Leone, where the park creates a trans-boundary complex of protection with the proposed Wonegizi Nature Reserve in Liberia, Sierra Leone's Gola Rainforest National Park and Zeama National Forest Park in Guinea (WABiCC, 2018).

Currently, there are eleven (11) Proposed Protected Areas (PPA) in Liberia which are closely under studies by researchers and other partners in collaboration with FDA conservation and Wildlife department for future gazetting (FFI, 2015). These PPAs include: Wonegizi Reserve Forest, Cestos-Senkwehn Forest, Foya National Forest, Grand Kru- River Gee Forest, Gbi Forest, Zwedru Forest, West Nimba Forest, Margibi Mangrove Forest, Bong Mountain, Kpo Mountain, and Gibi National Forest.

## **2.8 Overview of Liberia's Wildlife Conservation Protected Areas Management Law**

The purpose of this Act is to maintain, protect and preserve wildlife as a national heritage, and to address the central issues concerning wildlife and wildlife habitats namely: (i) management and protection of wild animals through the use of appropriate and internationally accepted best practices including but not limited to: planning tools, licensing and pricing systems, hunting rules and regulations, game ranching and breeding control; (ii) ownership of wildlife is vested in the State and related user rights shall be granted to citizenry in accordance with this law; (iii) provisions on the protection of neighboring areas and the relationship between wildlife protection and other forms of land use; and (iv) institutions enabling participation in wildlife-related decision-making and economic benefits, including consultations mechanisms, representative wildlife managing bodies, agreements between individuals or communities and public institutions and devolution of authority; wildlife resources provide a recognized socio-economic role of ensuring sustained livelihoods for forest-dependent communities, protecting the rapidly declining population of wildlife due to loss of habitat, the unsustainable harvesting of and commercial trade in "bushmeat" which are

likely to negatively impact the very people who are less likely to find livelihood and alternative food sources(WPAML,2017)

## 2.9 Threats to Biodiversity in Liberia

Several threats to biodiversity exist in Liberia today as compared to the past. One of the threats is the demand for bush meat on the local market which has been on the high increase. Some business women in Liberia are locally involved with bushmeat trade as the main source of economic and livelihood sustainability. Bush meat serve as a local diet, and animal protein which comprises about 75% of consumption, and its economic value is enormous (*Bayol & Chevalier, 2004*). Rough estimates for the cash value of Liberia's annual bush meat trade are \$US 66 million (1991) and \$78 million (2002), and it may comprise 4% or more of Gross National Product (GNP) (*Bayol & Chevalier, 2004*).

Threat to wildlife also includes deforestation, which is potentially driven by human population growth and the accompanying increase in urban food demands. According to (USAID, 2008), Liberia's tropical forests and biodiversity are under threat from several different fronts that include small scale chain saw operations for local markets and fuel wood and charcoal production (i.e. "pit-sawing"); shifting cultivation, industrial and artisanal mining, agro-industrial plantation expansion and wildlife poaching/trade/trafficking. The publication further listed other threats to include the loss of mangrove forests due to overexploitation; overexploitation of demersal fish species, over exploitation of other marine and inland fish species and competition from Alien Invasive Species.

## 2.10 CITES in Liberia

Liberia joined CITES in 1981 during the PRC government. In 2016, studies were conducted, and the results indicated CITES listed fauna and flora species in the Country. According to *CITES listings (2016)*, there are 35 plants and 151 animals CITES listed species found in Liberia. However, the only tree-like species listed for Liberia is *Cyathea camerooniana*. This is a tree fern, but not a commercially important species. As a party to CITES, Liberia been ineffective as a result of the lack of collaboration, coordination, enforcement and compliance among implementing stakeholders and other relevant institutions and agencies (*Reeves, 2004*).

Honestly, the appropriate measures for wildlife conservation in Liberia have become an increasingly important practice due to the negative effects of anthropogenic activities on

forest and savanna resources demand (Akella & Allan, 2012). This case speaks to the urgency of conservation and negative practices in two forms: at the community level, the local inhabitants have now seen and believed that most of the important plants and animal resources that were available to them before the 90s are now rare or either extinct.

To this end, the CITES Secretariat provided funding for capacity building in January 2011 for CITES Scientific Authority (SA) headed by the University of Liberia (UL) and Management Authority (MA) headed by FDA to strengthen their capacities in the implementation and enforcement of CITES law in Liberia. The workshop was attended by law enforcement agencies, civil society organization, Non-governmental organization, Custom Officer and local Authority. Participants were informed about applicable standards of protecting species in Liberia and the role of respective government authorities in the implementation of CITES.

## 2.11 Liberia's Policy and Legal Instruments relative to CITES

An act adopting the National Forestry Reform Law (NFRL) of 2006 was passed by the National Legislature, which amended the National Forestry Law of 2000 and the 1976 "Act creating the FDA". The 2006 Law recognizes the problems of the past and stresses the integration of Community, Conservation and Commercial (3Cs) forest management for the benefit of all Liberians. Specifically, Chapter 9, section 9.1 (a) of this Law encourages the establishment of Protected Forest Areas Network and Conservation Corridors thus mandating the Management of the FDA to establish a protected Forest Area Network to cover at least 30 percent of the existing forested area of Liberia, representing about 1.5 million hectares (FDA, 2006). This Section of the Law further emphasized that within one year of the effective date of the Law, the FDA shall present to the legislature for consideration and passage a comprehensive framework law for the conservation and protection of wildlife within the Republic (FDA, 2006). To date, Community, Conservation and Commercial forest management is the 3Cs approach being applied in the management of Liberia's forests.

Being the legal custodian of the forest resources of Liberia, the FDA functions cover the following: formulation of forestry policy; forest resource management; control and management of the concessions; collection of revenue from forest activities; research (include market intelligence); and training. During the course of its operations, the Entity has issued 27 regulations that deal mostly with the administration and management of forestry and wildlife activities (including forest fee charges, fines and penalties). Until now there has been

little assessment of the impact of these developments or any reformation of policy. Consequently, the FDA has remained a highly central institution, with a predominant focus on industrial round logs production. (FDA, 2000). Grimes (2017), mentioned the NFRL and the WPAML from several institutions as the primary tools for CITES implementation in the country.

## 2.12 CITES Law Enforcement and Regulation in Liberia

In Liberia, the CITES MA is the FDA and headed by the Technical Manager for the Conservation Department at the FDA while the SA is the UL and headed by the UL for the implementation of CITES in Liberia without prejudice to the generalities of section 4.1, in accordance with Article IX of the convention (NBSAP, 2006). It is the declared policy of the Republic of Liberia to:

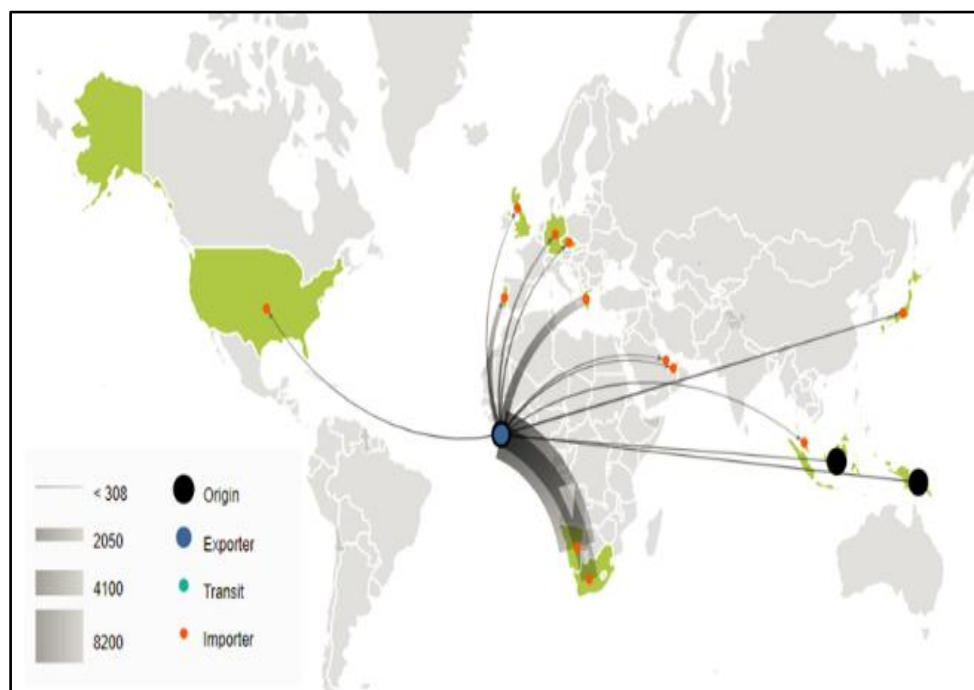
- ✓ Manage wildlife and natural resources for the benefit, utility, and enjoyment of all people in accordance with internationally accepted principles of ecologically based management; and
- ✓ Enhance the social and economic benefits by sustainable wildlife management as a source of protein, revenue generation and employment thus ensuring that wildlife resources flow to people who depend on the forests of Liberia.

In order for Liberia to give full effect to the terms of Amendments and Resolutions of the Conferences of the Parties, as they occur from time to time, MA may by order publish in the gazette and by notice to amend the list of species as contained in the appendices to the Convention.

## 2.13 CITES Trade in Liberia

Liberia is currently listed in CITES national legislation category three (3) on account of its inadequate national legislation to implement CITES law. As a result, the Country has been subject to a recommendation to suspend all commercial trade in wildlife since the 66<sup>th</sup> meeting of the Standing Committee (SC66) (March 2016). The draft legislation on the act adopting the National Wildlife Conservation and Protected Area Management Law of Liberia" was presented to parliament in May 2010 and enacted by the Senate and the House of Representatives of the Republic of Liberia in Legislature Assembled: November 2016. The Convention provides some guidance to parties on what to include in their legislation for

CITES implementation. Articles III to VII of the Convention set forth the conditions for trade in specimens of CITES listed species. Liberia has numerous environmental policies for managing and conserving forests, wildlife and other biological resources. These include Regulations 25 (1988), the National Biodiversity Strategy and Action Plan (NBSAP 2003-2004), Forest and Wildlife policy, Environmental Protection and Management Law, NBSAP (2017-2025), 2006 Forest Policy, 2006 National Forest Reformed Law, Chain of Custody Regulations 101-07,101-8,101-09, Wildlife Law of 2015 among others. However, these instruments are not specific to the protection of CITES species but present some elements for protection. *Figure 4* below provides CITES route for Liberia's export of specimen.



*Figure 4: Map of trade routes used for the export of wild specimens from Liberia; “between” 2000-2016 (Source, CITES, 2016)*

The majority of Liberia legal commercial export species are in Appendix II and III bird species. Between 2000-2016, international commercial legal trade in wild specimens of CITES listed species from Liberia focused primarily on live parrots (e.g. *Psittacus erithacus timneh*, *Poicephalus senegalus*). Illegal wildlife trafficking routes known to involve Liberia (as source, destination or transit country) link to Burkina Faso, China, Côte d’Ivoire, Equatorial Guinea, France, Germany, Guinea, Hong Kong, Madagascar, Mozambique, Nigeria, Sierra Leone, South Africa, USA (*Knap et al., 2006*).

The threat assessment mission was organized in Liberia on 27 November to 2 December 2017, and was implemented under the leadership of Miss Trokon S. Grimes, Park Biologist

and coordinated by Mr. Blamah S. Goll, FDA Head for CITES Management Authority of Liberia. The Team visited Roberts International Airport located in Harbel, 56 km from Monrovia, James Spriggs Payne Field, located 5 km from Monrovia, the Freeport of Monrovia, Bo Waterside Border Post between Liberia and Sierra Leone, Red Light and Duala Markets of Monrovia. The Team observed opened wildlife and bush meat sales, pangolins (live), primates (bush meat), antelopes (bush meat). Additionally, bags of pangolin scales were seized and stored at the Roberts International Airport (FDA, 2017).

## **2.14 FDA Acts on Poachers and Illegal Occupants at SNP**

The FDA has made several arrests of illegal occupants and poachers at almost all the protected areas in the Country. When these illegal occupants are arrested, they are usually turned over by the FDA to the Police for prosecution.

Most recently at a press conference, the FDA announced that it had cleared poachers from the SNP. According to the Authority, this will serve as a deterrent for would-be poachers and violators of the wildlife laws. Besides, the management terms this latest development as a major boost and a step forward, as per its established conservation policy (<http://www.fda.gov.lr/fda-clears-sapo-national-park-of-poachers-illegal-occupants-sends-seven-persons-to-court-for-prosecution/>, 2018). The FDA management commended the local authorities, traditional leaders, the community dwellers, and concerned collaborating partners who have made the journey a success. Making the disclosure on Wednesday September 5, 2018 informed the public that seven persons including John Wetter Jr, Abraham Abara, Prince Toe, George N. Weah, Philip Gbarblow, Saytue Toe and John Sartee, who were arrested for invasion into the SNP in violation of the wildlife and protected area management law of Liberia are currently placed behind bars waiting court prosecution.

In a similar development within the Gola National Reserve, two persons were also arrested in Grand Cape Mounts County for illegally killing an elephant during a hunting spree and they are being placed behind bars waiting court prosecution (<http://www.fda.gov.lr/fda-clears-sapo-national-park-of-poachers-illegal-occupants-sends-seven-persons-to-court-for-prosecution/>, 2018).



## CHAPTER THREE: METHODOLOGY AND MATERIALS

### 3.1 Methodological Framework

As clearly shown in *figure 5 below*, in order to get an understanding of the challenges at SNP, the researcher conducted a desk review of existing literatures on CITES listed species and other management works within SNP, including its management plan. This was followed by the preparation and administration of two separate sets of structured questionnaires on the research topic. One set of the questionnaire was administered between 1<sup>st</sup> to 30<sup>th</sup> October 2018 to institutions that are directly involved with CITES Law implementation and enforcement in Liberia; these include FDA, Ministry of Justices (MOJ), Environmental Protection Agency (EPA), University of Liberia, among others. Set two of the questionnaires was administered to Chief Park Wardens, Zone Wardens and Park Rangers at the Park's Headquarters in Jalay's Town, Sinoe County from 5<sup>th</sup> to 9<sup>th</sup> December 2018.

From 5<sup>th</sup> to 11<sup>th</sup> December 2018, the researcher visited 6 affected communities of SNP; with two communities each in Sinoe, Grand Gedeh and River Gee Counties. The selection of these communities was based on recommendation from the Chief Park Warden as per the communities own involvement into illegal activities in the Park. During the researcher's visit to these communities, Focus Group Discussion (FGDs) were held with youths, women, elders as well as community leaders in order to seek their opinions and perceptions on topic. Below is the schematic of the processes/procedures used in data collection and analysis:

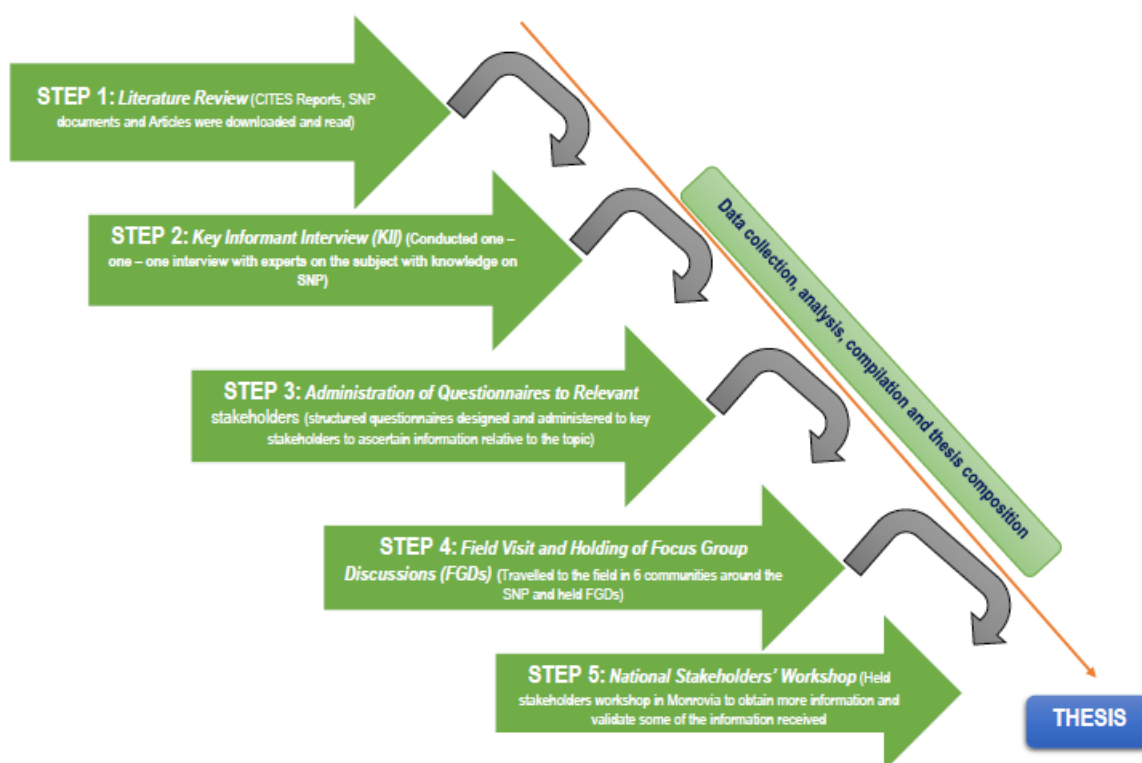


Figure 5: Thesis Methodological Framework

During the researcher’s visits to Sinoe, the FGDs were held with youths, women, elders as well as community leaders in Jalay Town and Chebioh Town respectively between December 5 to 7, 2018. Also, the same was done in River Gee from December 9 to 11, 2018 in Doodwicken and Blewriah respectively. The researcher visited Putu Jarwodee and Geeblo between December 7 to 9, 2018 respectively in Sinoe County and held two sets of focal group discussions with the youths, women, elders as well as community leaders in these areas. Note, these sites were selected in close consultation with the CPW and the selection was based on population and the frequency of illegal activities registered around these areas. Hence, below is *figure 6* which shows the SNP communities where the FGDs were held.

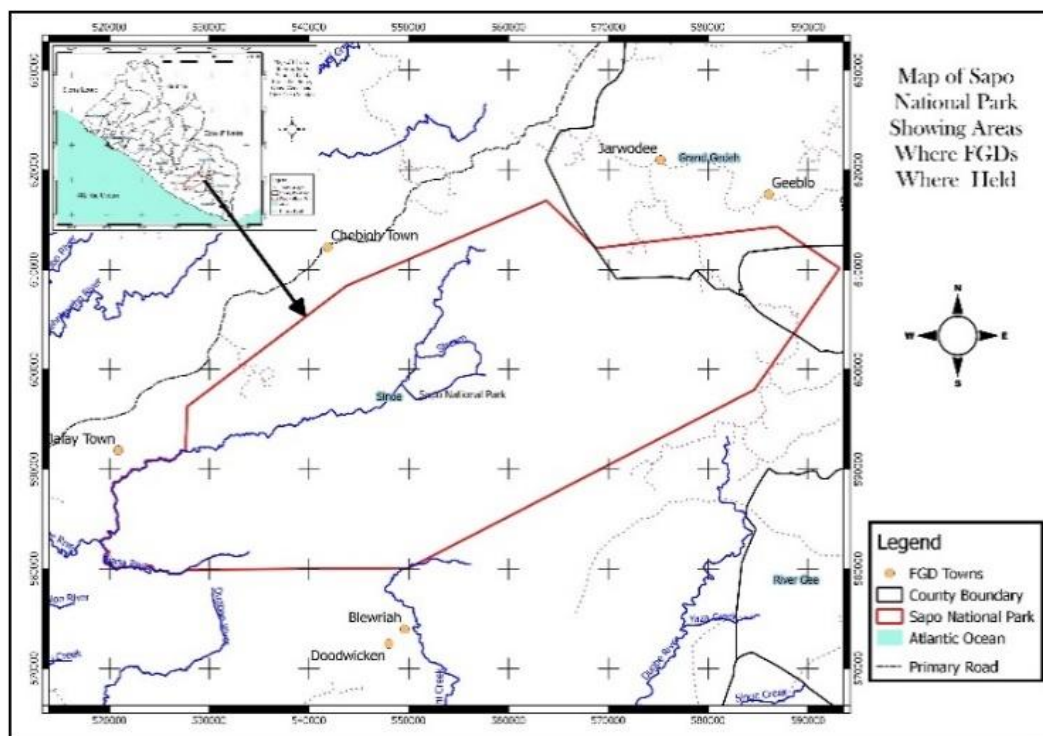


Figure 6: Map of SNP showing Communities where FGD were held (Sources: FDA and Author, 2019)

### 3.2 Research Design

This research is quantitative and descriptive in nature. The researcher used of a survey research design that best answered the questions and the purposes of the study. A survey research, according to Nworgu, (2015) is one in which a group of people or items is studied by collecting and analyzing data from only a few people or items considered to be representative of the entire population. Hence, the survey research design was accomplished using structured questionnaire, focal group discussion and workshop to survey a part of the population, and the findings were generalized to the entire population. These were augmented by a desk review of existing literatures on CITES Law.

### 3.3 Materials and Equipment

As presented in *Table 3*, the following materials and equipment were used during the study:

Table 3: Materials and Equipment

NO	Materials/Equipment	QTY	USAGE
1.	Portable Solar Plate	1	Used for charging the 12 Volts car battery
2.	Car battery	1	Provided current for charging camera battery and computers
3.	Inverter	1	Used to connect convert DC current to AC
4.	Note pad/pen	3	Used for taking note
5	Computer	2	Used to store data collection information
6	Large Camera	2	Took photo and recording information
7	Selfies stick	1	Use to set the camera for photo shooting or recording video
8	Electrical Extension code	1	Used to distribute current to devices
9	Motorbike	2	Used to areas around SNP where the vehicle was not assessable
10	Vehicle	1	Used rental vehicle from Monrovia to SNP headquarter and several communities

### 3.4 Population of the Study

The target population for this research was defined to include SNP affected youths, women, elders and community leaders; CSOs, NGOs, relevant Government institutions, CITES Management and Scientific Authorities, Chief Park Wardens, Zone Wardens and Park Rangers.

### 3.5 Sample of the Population

Practically, one basic concern of every researcher is the selection of the research's sample size. This could serve as the basis for which Marshall *et al.* (2013) pointed out that other than selecting a research topic and appropriate research design, no other research task is more fundamental to creating credible research than obtaining an adequate sample. As such, Etikan *et al.* (2016) suggested that the choice of technique to be used for selection of sample size depends on the type and nature of the study.

According to Kothari C. R. (2004), when field studies are undertaken in practical life, considerations of time and cost almost invariably lead to a selection of respondents i.e., selection of only a few items. He advised that the respondents selected should be as representative of the total population as possible in order to produce a miniature cross-section. For his part, the selected respondents constitute what is technically called a 'sample' and the selection process is called 'sampling technique. Based on Kothari C. R. (2004) experience, 213 respondents were selected through a definite procedure from the accessible

population of the study area in order to gather the expected data and information on the research topic. The *Table 4* summarizes the research population.

*Table 4: Research Population Summary*

S/N	Stakeholder Category for Structured Questionnaire	# of Stakeholders	Location
	<b>I. GoL Institutions</b>		
1.0	FDA	18	Monrovia
2.0	MOJ	5	Monrovia
3.0	MOA	5	Monrovia
4.0	<b>II. NGOs</b>		
5.0	FFI	2	Monrovia
6.0	CI	3	Monrovia
7.0	SDI	2	Monrovia
8.0	SADS	2	Monrovia
9.0	FACE	2	Monrovia
10.0	WCF	2	Monrovia
11.0	Forest Cry Liberia	2	Monrovia
12.0	SCNL	2	Monrovia
	<b>III. Research/ Academic Institution</b>		
14.0	UL	5	Monrovia
15.0	FTI	3	Monrovia
	<b>IV. Concession</b>		
16.0	Arcelor Mittal	2	Monrovia
	<b>V. SNP Staff</b>		
17.0	Chief Park Wardens, Zone Wardens and Park Rangers	10	Sinoe County
	<b>TOTAL</b>	<b>65</b>	
	<b>VI. Focal Group Discussion (Affected Communities)</b>		
18.0	Jalay Town & Chebioh Town	40	Sinoe County
19.0	Putu Jarwodee & Geeblo	40	Grand Gedeh
20.0	Doodwicken & Blewriah	40	River Gee
	<b>TOTAL</b>	<b>120</b>	
	<b>VII. Workshop</b>		
21.0	Stakeholders	28	Monrovia

### 3.6 Sampling Techniques

According to the Merriam-Webster Dictionary, sampling is the “act, process, or technique of selecting a representative part of a population for the purpose of determining parameters or characteristics of the whole population”. For this reason, Marshall (1996) highlighted that choosing a sampling method/ technique is an important step in any research project since it is rarely practical, efficient or ethical to study whole populations. He however emphasized that the selection of an appropriate method/ technique depends upon the aim of the study. This is

further supported by Ishak & Bakar (2014) who pointed out that the primary goal for selecting sampling procedure is to get a representative sample, small number of individuals but representative of the bigger population and produce accurate generalization about the population.

This research aims to assess how the administrative and other challenges of managing the SNP affect Liberia's compliance with CITES regulations and in particular the survival of few key category I species on the CITES appendices. As such the researcher chose to employ the use of Purposeful Sampling Technique the researcher recruits participants who can provide in-depth and detailed information about the phenomenon under investigation Coyne (1997), which was the case of this work.

## CHAPTER FOUR: RESULTS

### 4.1 Analysis on Respondents understanding on SNP Administrative and Governance Challenges

Of the 65 structured questionnaires distributed to various stakeholders, the response rate was 73.8% (48 participants responded, N=48) which was relatively good. Thus, this analysis is based on the responses received from research participants (48 respondents).

#### 4.1.1 General Information on the Respondents

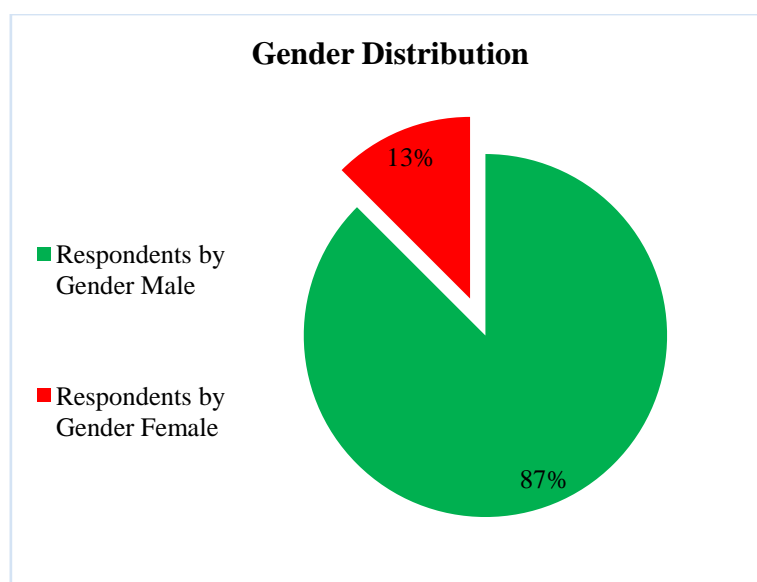
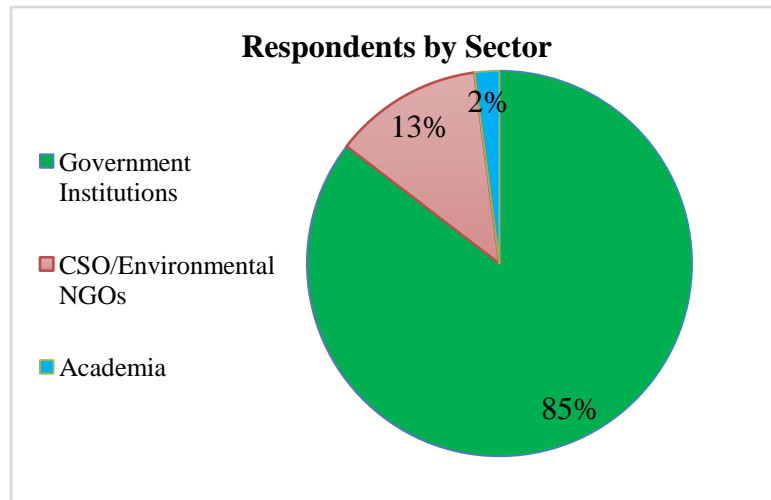


Figure 7: Gender Distribution of the Respondents (Source: Author, 2019)

As seen in *figure 7*, 87% of respondents were male while 13% female; this speaks to the fact that the forestry/environmental field in Liberia is male dominant. The respondents were drawn from the cross-section of stakeholders and comprised 85% from government institutions mainly from the FDA, 13% from CSOs and environmental organizations and 2% from academia (*see figure 8 below*). Majority of the respondents were between the ages of 18 to 45 with 45% (age 31-45) and 42% (18 -30) as shown in *figure 9 below*. Thus, majority of the respondents are with bachelor degree and professional certificate (*see figure 10 also below*).

2

Figure 8: Respondents (Source: Author, 2019)



by Sector

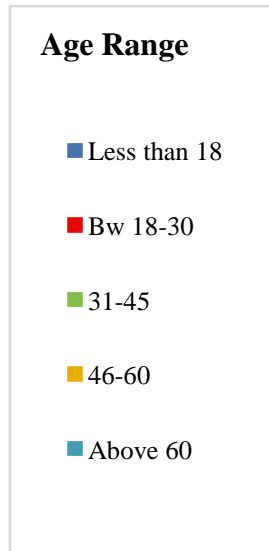


Figure 9: Age Range of Respondents (Source: Author, 2019)

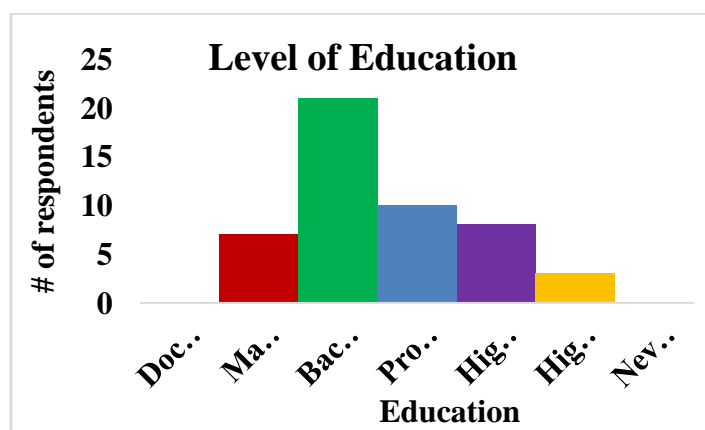


Figure 10: Level of Education of the Respondents (Source: Author, 2019)



#### 4.1.2 Knowledge about CITES Management and Challenges in SNP

From the analysis, it can be interpreted that 69% of the respondents haven't worked in SNP while 31% have worked or are currently working in SNP (*see figure 11*)<sup>1</sup>. Of the respondents who haven't worked or are currently working in SNP (N=33), all respondents – i.e. 100% - have understanding or know something about the Park (*see figure 12*) which is good for this research. Note, majority of the respondents have worked in SNP for one year and above.

As illustrated in *figure 13* below, the majority of the respondents had some knowledge about CITES as only 73% of respondents (N=48) answered that they know about CITES.

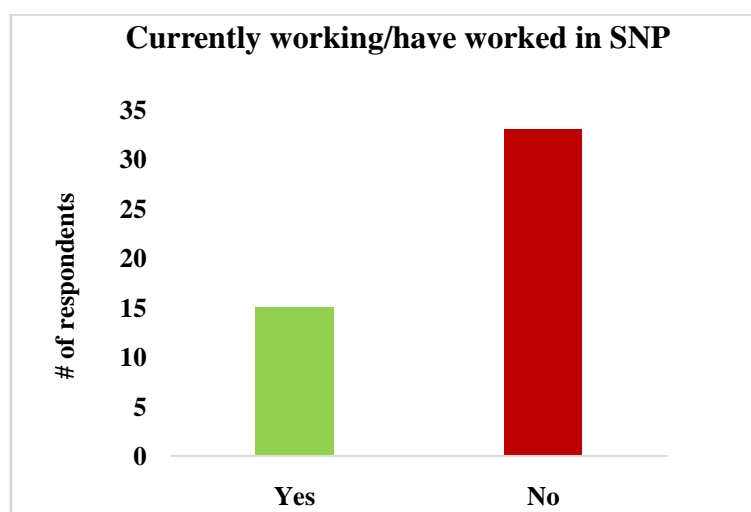


Figure 11: Respondents who have worked/currently working in SNP (Source, Author, 2019)

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<sup>1</sup>This applied to respondents who sought permanent assignment in SNP for a period of time. It doesn't mean that the respondents haven't visited or went on field trip in the area.

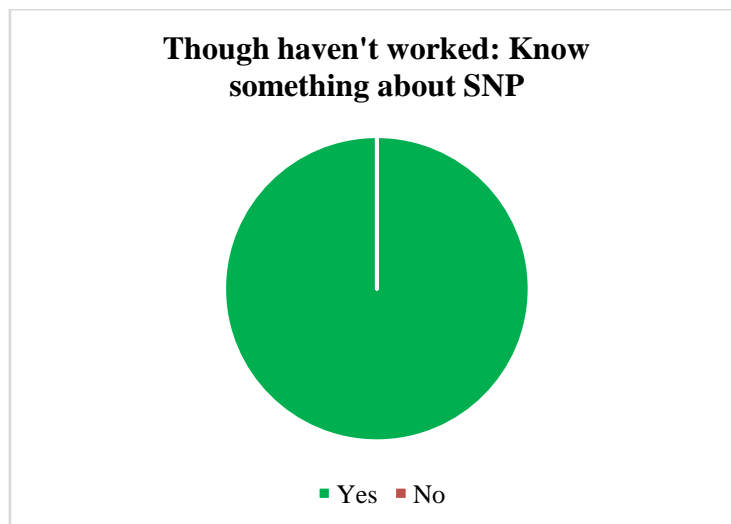


Figure 12: Respondents who haven't worked/currently working but know about SNP (Author, 2019)

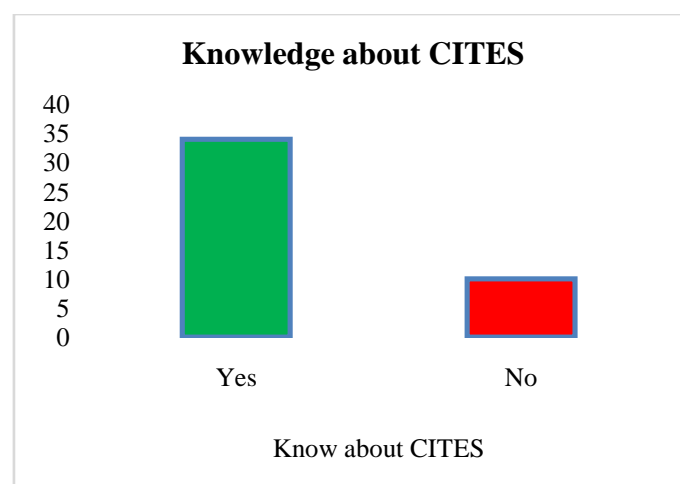


Figure 13: Respondents knowledge about CITES (Source: Author, 2019)

Table 5 below presents the respondents understanding about CITES.

Table 5: Respondents Understanding about CITES

<ul style="list-style-type: none"> <li>• An international organization set up to keep check on how trade are done specific species outlined in appendix I, II,III</li> <li>• Is an international agreement between government/ states in to ensure trade in wild animals and plants do not threaten their survivors</li> <li>• It is a species categorization based on IUCN definition</li> <li>• It is a wildlife organization aim at protecting the sale and killing of protected animals species globally</li> <li>• Convention on international trade in endangered species of wild animal or wildlife, venerable, global regulation to control &amp; protect species</li> </ul>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

- An international agreement, fighting world-wide trade in endangered species
- Has to do with the protection of endangered plants and animals
- Is an international convention on trade in endangered species of fauna and flora to which Liberia is a party
- Convention that ensure that trade on endangered species does impacts its populations

The table 6 shows the management and administrative challenges at SNP and its impacts.

*Table 6: Administrative and management challenges at SNP and its impacts*

Administrative or management challenges at SNP	Challenges Impacts on SNP
<ul style="list-style-type: none"> <li>• Lack of understanding by local authorities on the SNP management</li> <li>• Inadequate funding from GoL</li> <li>• FDA capacity to actually manage and control illegal entry into the park</li> <li>• Poaching of wildlife by surrounding communities and aliens</li> <li>• Lack of park infrastructures to accommodate park staff</li> <li>• The communities received benefits from illegal miners thus allowing them entry into the SNP</li> <li>• Weak persecution of illegal occupants (poachers, miners, hunters, traders etc.) by local authority</li> <li>• Inadequate awareness and understanding on wildlife law amongst court magistrates that carried out prosecution</li> <li>• Lack of communication equipment (base radio) for park staff to channel information to central promptly</li> <li>• Bad road network thus making some park zones inaccessible</li> <li>• Increasing Population including aliens in and around the SNP</li> <li>• Limited conservation education of SNP communities</li> </ul>	<ul style="list-style-type: none"> <li>• Local authorities are reluctant to put under control illegal activities at SNP the park is vulnerable to hunting, mining etc. which lead to the biodiversity loss</li> <li>• Deforestation and forest degradation within the SNP</li> <li>• Reduction in SNP wildlife population migration of fauna to nearby forest or save heaven</li> <li>• Influx of illegal occupants will increase in the SNP due to poor monitoring activity in SNP, artisanal miner has taken advantage of this situation and have established camps in the park thereby undermining conservation and research efforts.</li> <li>• logistical and low budgetary support have made it difficult for ranger to patrol or cover a larger portion of the park</li> <li>• People illegal enter the park without the fear of the park management</li> <li>• wildlife habitats and some medicinal plants are destroyed</li> <li>• Inadequate protection of the park</li> <li>• Tracking of illegal activities within and around SNP is difficult</li> </ul>

<b>Administrative or management challenges at SNP</b>	<b>Challenges Impacts on SNP</b>
<ul style="list-style-type: none"> <li>• Limited alternative livelihood activities within SNP communities</li> <li>• Inadequate financial incentives and logistical support for park rangers</li> <li>• inadequate law enforcement training</li> <li>• limited or irregular monitoring regiment SNP</li>   <li>• Weak judicial system especially at the FDA to follow up wildlife cases</li> <li>• Shifting cultivation and chainsaw logging activities by SNP communities and traders</li> <li>• Rangers in Liberia are not allowed to carry firearms thereby exposing them to arm carrying illegal occupants</li> </ul>	

The table 7 shows the measures or strategies employed by communities and how they were responded to.

*Table 7: Measures/Strategies Employed and Communities Responses*

<b>Measures or Strategies employed to help address SNP challenges</b>	<b>Communities responses to the Measures or Strategies to address SNP challenges</b>
<ul style="list-style-type: none"> <li>• Organized a community watch team comprising of one hundred (100) men to help park Rangers to patrol the park borders</li> <li>• FDA employed forty (40) auxiliaries to help the rangers to patrol the park</li> <li>• Constant communities awareness raising within the park</li> <li>• In the past SDI has highlighted the danger pose by the illegal activities in the park which lead to an evacuation in 2005.</li> <li>• SDI is working with CFMAs of communities near the SNP including Sewakajua and Nimopoh to strengthen their governance structures which may</li> </ul>	<ul style="list-style-type: none"> <li>• communities are informed about the law but they are stay reliance on the forest for livelihood</li> <li>• Communities have responded by helping FDA Ranger to set road block at the entrances of the park to prevent poachers from re-entering</li> <li>• Communities participate in conservation program, thus enabling more effective decision making in protecting the environment and its natural resources</li> <li>• Communities are advocating their inclusion in the planning and execution of conservation projects</li> <li>• Some of the communities around SNP are getting to know the importance of</li> </ul>

Measures or Strategies employed to help address SNP challenges	Communities responses to the Measures or Strategies to address SNP challenges
<p>contribute to increase in their knowledge regarding Park management</p> <ul style="list-style-type: none"> <li>• Continuous public awareness on wildlife species and their importance to our livelihood by FDA Community Engagement Rangers</li> <li>• We have reported some of the challenges to FDA management like; bad road network and no access to communication making the field work very difficult</li> <li>• Awareness of conservation education to communities by WCF, FDA, FFI and SCNL</li> <li>• The only thing we have done was to report the situation to the FDA management for redress</li> <li>• We had a stakeholder consultation involving all adjacent community leaders and we agreed that we all were going to play some key role in protecting SNP</li> <li>• The Park Management created awareness and asked its conservation partners to train Park staff and to also initiate livelihood program to the communities closed to the park</li> <li>• Provision of alternative livelihood activities is ongoing around the Park by environmental NGOs</li> <li>• Constant patrol and law enforcement by Park Rangers</li> </ul>	<p>protecting the Park, thereby appealing for some benefits from the government</p> <ul style="list-style-type: none"> <li>• Some communities have engaged in low land farming</li> <li>• Some communities are now helping to conserve the park by providing information about illegal activities within SNP to the rangers</li> <li>• Some communities responded positively by volunteering to work with SNP staff</li> <li>• Some communities are currently attending meetings with SNP staff</li> </ul>

As seen in *Figure 14 below*, majority of the respondents (90%) have carried out awareness in SNP on wildlife conservation, while 6% of the respondents haven't done so with 4% not responding to the question.

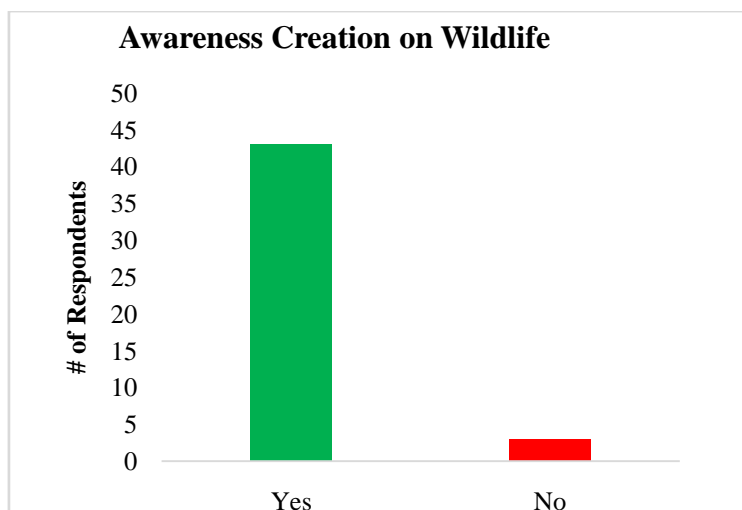


Figure 14: Awareness creation on Wildlife conservation by respondents (Author's, 2019)

#### 4.1.3 Threats and drivers on CITES listed species around SNP and strategies to address threats

The Table 8 indicates the current threats/drivers to wildlife conservation at SNP along with recommendations to address the threats.

Table 8: Wildlife Management current threats, drivers and Recommendations

Current threats and drivers to Wildlife Management in SNP	Recommendations to address threats and drivers
<ul style="list-style-type: none"> <li>• Bush meat trade is driving hunting in the Park</li> <li>• Hunters are not doing selective hunting thereby killing endangered and endemic species</li> <li>• There are limited alternative livelihood activities for hunters around the SNP</li> </ul>	<ul style="list-style-type: none"> <li>• The park staff and NGOs should continuously carry out conservation education</li> <li>• CITES listed species should be observed in all market places</li> <li>• GoLespecially the FDA should effectively enforce the wildlife law</li> <li>• Hunters should be trained professionally on how to hunt and when to hunt</li> <li>• Encourage fish consumption or farm animal intake for the population of Liberia</li> <li>• Research needs to be done on various species population and habitat</li> <li>• Rangers should be logistically equipped to combat illegal hunting</li> </ul>

#### 4.1.4 SNP Management Plan and Effectiveness for Implementation

As shown in *figure 15 below*, 74% of the respondents “*have knowledge*” on SNP MP while 26% “*don’t have knowledge*” on the MP. In terms of the respondents (N=35) knowledge level on SNP MP, 41% responded ‘*Moderate*’, 28% responded ‘*inadequate*’ while 31% of the respondents have ‘*adequate*’ knowledge on the SNP MP(*see figure 16*).Also, *figure 17* shows that 55% of the respondents haven’t been trained on the SNP MP while 45% have been trained on the SNP MP.

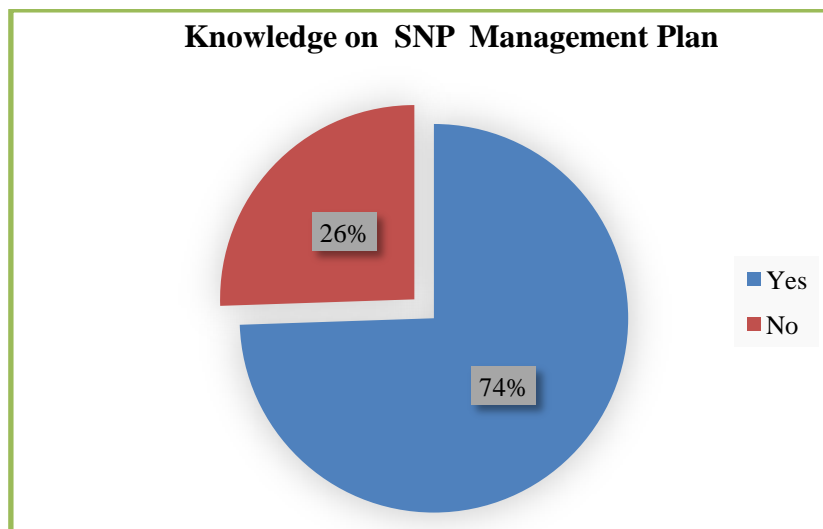


Figure 15: Respondents knowledge on SNP MP.

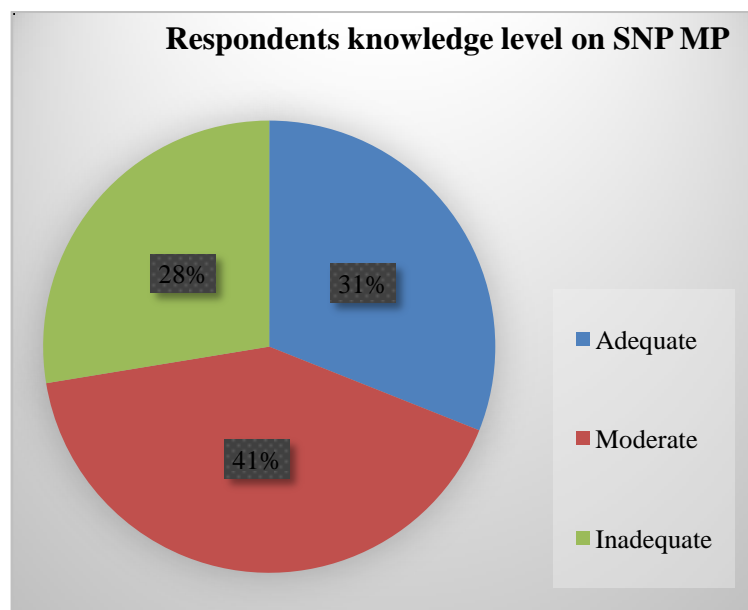


Figure 16: Respondents' knowledge level on SNP MP.

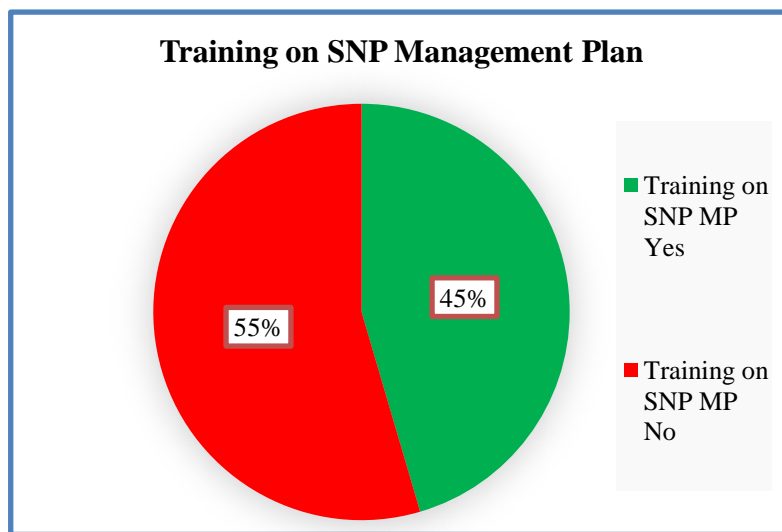


Figure 17: Respondents' training on SNP MP.

The figure 18 below shows that 9 respondents (26%) said the SNP MP is 'very effective', 13 respondents (38%) said 'partly effective', 8 (24%) responded 'ineffective' while 4(12%) responded 'very ineffective'.

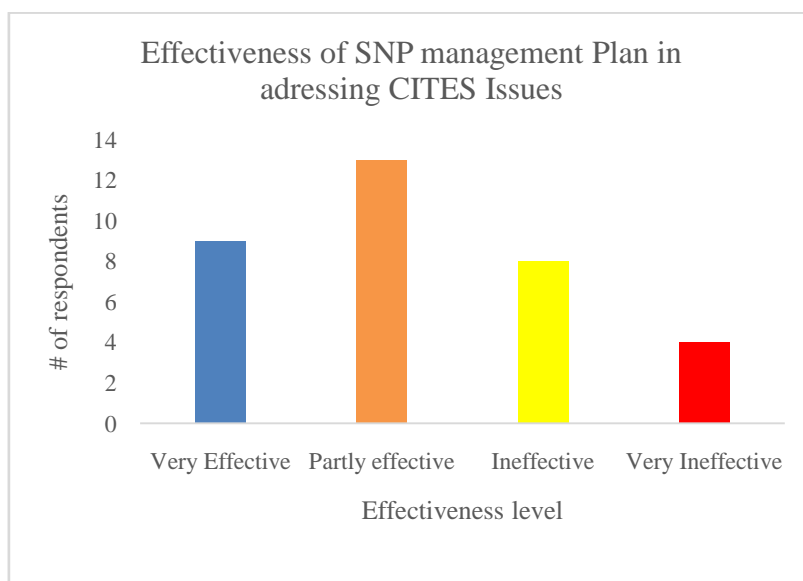


Figure 18: Respondents' effectiveness on SNP MP. (Source, Author, 2019)

The Table 9 shows the respondents suggestions on how the SNP MP can be improved by providing suggestions.



Table 9: Respondents' suggestions on SNP MP can be improved. (Source, Author, 2019)

How SNP MP can be improved?	Some strategies for SNP MP improvement
<ul style="list-style-type: none"> <li>• SNP MP has a financial budget for implementation that needs to be supported</li> <li>• The plan should include list of species that are listed by CITES and summarized vision of the plan should be read and written for communities dwellers to understanding</li> <li>• There is a need to develop a national conservation plan out of which the SNP MP can be developed</li> <li>• SNP MP can be improved by proving more roles for adjacent communities to co-manage the forest and share in the financial and materials benefits managing the forest</li> <li>• The MP should be made simple and clear for SNP staff to understanding as many of them don't have high education level</li> <li>• The MP should consider sustainable livelihood programs</li> </ul>	<ul style="list-style-type: none"> <li>• The FDA should train someone specifically in monitoring CITES activities and enforcement</li> <li>• FDA should carry out awareness creation on CITES listed species in forest communities and support to implement of MP</li> <li>• CITES needs to share knowledge with FDA and develop its MP for implementation</li> <li>• SNP management team should carry out joint patrol adjoining communities into the Park to curtail illegal activities and show them the level of destruction being carried on in the area</li> <li>• FDA and SNP management should periodically review the MP and improve it</li> <li>• More awareness in media and communities level, at school and other informative level</li> <li>• Use the local vernacular to talk about CITES listed species and encourage more local participation in the management of SNP</li> <li>• The establishment of CITES surveillance team to monitor illegal human activities especially endangered species</li> </ul>

#### 4.1.5 Potential Problems affecting CITES Implementation at SNP

As seen in *table 10 below*, 16% (79.2% of all respondents) responded that the 'lack of institutional capacity' which is characterized by no equipment, insufficient logistics to work

with etc. as a potential problem associated with implementing CITES in SNP. Also, 15.5% responded that *'inadequate budget support to the park'* while 15.1% responded that *'Poverty (limited livelihood options/alternative and employment)'* as potential problems affecting CITES in SNP respectively.

Table 10: Respondents' knowledge on problem affecting SNP. (Source, Author, 2019)

Potential Problems N=48	# of Responses in Agreement	% of Responses	% of Cases
Lack of Institutional Capacity (No Equipment, logistics etc.)	38	16.0	79.2
Limited Human Capacity (low manpower, limited number of trained ranger etc.)	34	14.3	70.8
Weak Enforcement and Monitoring	31	13.0	64.6
Inadequate budget support to the park	37	15.5	77.1
High Population around the SNP	27	11.3	56.3
Poverty (limited livelihood options/alternative, employment)	36	15.1	75.0
Limited understanding/knowledge about CITES	35	14.7	72.9
<b>Total Response</b>	<b>238</b>	<b>100.0</b>	<b>495.8</b>

## 4.2 SNP Communities understanding and Perception on CITES and SNP Administrative and Governance Challenges

### 4.2.1 General information of the Communities

As explained in the methodological section of this thesis, the FGDs were conducted in six (6) forest dependent communities (*see table 11*) to understand the communities perception on SNP administrative and governance challenges relative to CITES implementation. Of the 6 communities, Putu Jarwodee has the highest population with an estimated 4,352 people living in the community; followed by Geeblo Town and Chebioh Town with 1000 people and 969 people living there respectively.

Table 11: FGDs Communities around SNP with Location, District and Population

No.	Name of Community	Location and FDA SNP Zone	District	Population	FGD Participants		
					Female	Male	Total
1	Putu Jarwodee	Grand Gedeh County, Zone 2	Konobo Statutory	4,352	6	14	20
2.	Doodwicken	Sinoe County, Zone 3	Jorboh Administrative	650	7	13	20
3.	Blewriah Town	Sinoe County, Zone 3	Jorboh Administrative	285	11	9	20
4.	Chebioh Town	Sinoe County, Zone-1	Wedcarba	969	8	12	20
5.	Geeblo Town	Grand Gedeh County, Zone 2	Konobo Statutory	1000	7	13	20
6.	Jalay Town	Sinoe County, Zone-1	Wedcarba	521	11	9	20
<b>Total</b>				<b>7,777</b>	<b>50</b>	<b>70</b>	<b>120</b>

For the FGDs, 20 participants were selected from each of the 6 communities to discuss. In total, 120 participants took part in the FGDs of which there were 50 Female and 70 males (*see figure 19 for elaborate information*).

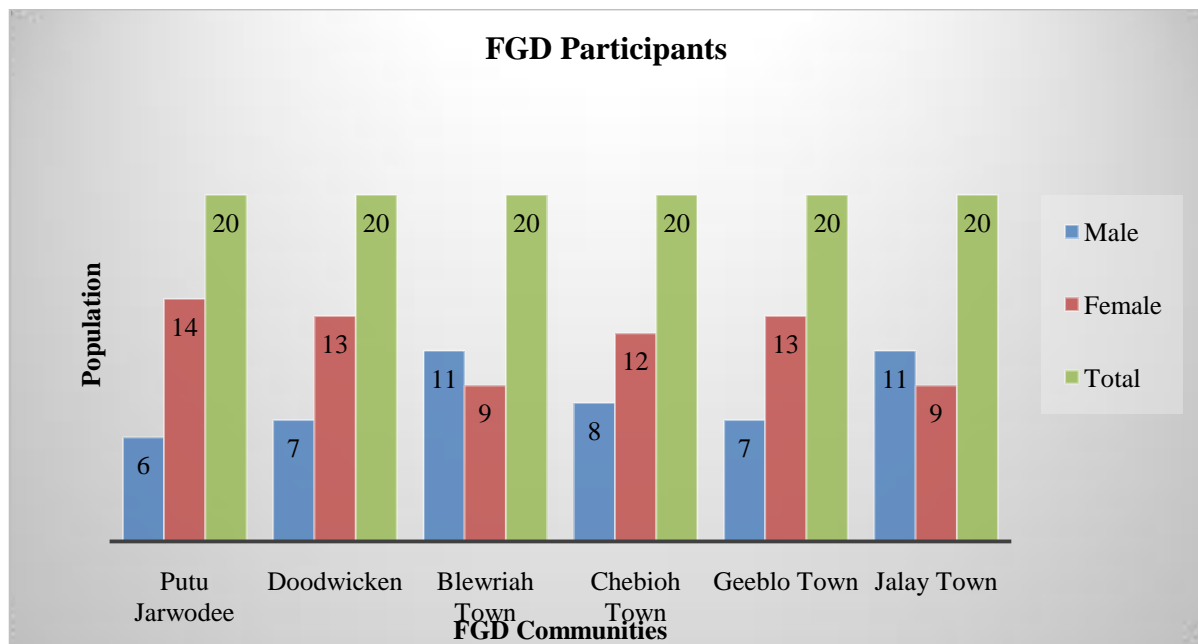


Figure 19: FGD Communities

#### 4.2.2 Communities' Knowledge about CITES

As seen in *table 12 below*, all 120 participants (100%) 'Don't know about CITES'. However, all the participants (120 people) said 'yes' to creating awareness on wildlife conservation in the respective communities. The communities responded positively to the awareness creation which was done through dramas, flyers and by the rangers and other environmental NGOs. In addition, the community watch teams are helping to create awareness on wildlife conservation.



Table 12: Summary of Communities understanding about CITES and Responses

Do you know about CITES?			Have you (community member) ever created awareness on wildlife conservation to the communities?		How have communities responded to awareness? (explain briefly)
Community	Yes	No	Yes	No	
Putu Jarwodee	0	20	20	0	Community responded positively. <ul style="list-style-type: none"> <li>- WCF created awareness on Chimpanzee through culture performing and drama</li> <li>- FDA Ranger have been creating awareness on those animals species, such as Pigmy hippopotamus, Zebra duiker, Leopard and elephants</li> </ul>
Doodwicken	0	20	20	0	Positively <ul style="list-style-type: none"> <li>• No person should killed animals</li> <li>• FDA created awareness on the killing of protected animals</li> <li>• No one should do mining and hunting in the park</li> <li>• Protect the animals for the unborn generation</li> <li>• No fishing and farming in the park</li> </ul>
Blewriah Town	0	20	20	0	Positively <ul style="list-style-type: none"> <li>• They told us the important of our animals such as elephant, Buffalos, chimpanzee and leopard and we should not killed them</li> <li>• FDA say no want should killed protected animals</li> <li>• Community watch team told us not to killed all animals that is protected by law</li> </ul>
Chebloh Town	0	20	20	0	Positively <ul style="list-style-type: none"> <li>• FDA and WCF created awareness on wildlife killing</li> </ul>

Do you know about CITES?			Have you (community member) ever created awareness on wildlife conservation to the communities?		How have communities responded to awareness? (explain briefly)
Community	Yes	No	Yes	No	
					<ul style="list-style-type: none"> <li>• FDA told us to protect the park</li> <li>• FFI say, no hunting and they brought poster and picture of those protected animals for us to see</li> <li>• FDA told us that affected community surrounding the park should be the want to protect the park from illegal activities</li> <li>• NGOs that are working with FDA to create awareness on the protection of wildlife species are: WCF, FFI, CI and SCNL</li> <li>• They used poster and calendar from 1997 up to present to create awareness on protected wildlife species of Liberia</li> </ul>
<b>Geeblo Town</b>	0	20	20	0	<p><b>positively</b></p> <ul style="list-style-type: none"> <li>• Not to killed protected animals</li> <li>• They told us about the important of our protected species</li> <li>• No want go into the park to do mining, hunting and fishing</li> <li>• We learn about the chimpanzee and those protected animals by dramatizing and culture dancer</li> <li>• We should protect the animals species for the present and future generation</li> <li>• We the community dwellers should help FDA to bring those illegal hunters from the park by providing FDA with information</li> <li>• FDA always have awareness on the biodiversity and the important of fauna and flora species</li> </ul>
<b>Jalay Town</b>	0	20	20	0	<p><b>Positively</b></p> <ul style="list-style-type: none"> <li>• Don't killed protected animals in the park</li> </ul>

Do you know about CITES?			Have you (community member) ever created awareness on wildlife conservation to the communities?		How have communities responded to awareness? (explain briefly)
Community	Yes	No	Yes	No	
					<ul style="list-style-type: none"> <li>• Don't do the following in the park, no mining, hunting, fishing and farming</li> </ul>

Comment?

#### 4.2.3 Community Knowledge on SNP

The communities have adequate knowledge about SNP. They know that the park was created by law and that's against the law to hunt and farm in the park. During the FGDs, communities informed that no settlement should be in the park and that they have told their children no to go in the park carry out illegal activities. As shown in *table 13 below* all the participants know about SNP. In fact, all the communities 'agreed' that FDA staff from SNP carried out awareness (often in Doodwicken, Blewriah Town, Jalay and Chebioh Town), very often in Geeblo Town and 'not often' in Putu Jarwodee.

*Table 13: Communities knowledge about SNP (Author's, 2019)*

Do you know about SNP?	Please tell me what you know about SNP?	Rating on communities' understanding on SNP.	Have you ever been trained/ awareness created by staff from SNP on managing the park?	How often have SNP staff created awareness?



Community	Yes	No		Adequate, Moderate, Inadequate	Yes	No	Not often, Often, Very often
<b>Putu Jarwodee</b>	20	0	<ul style="list-style-type: none"> <li>• The park is protected by law</li> <li>• SNP have more natural resources and should be protected for the future generation</li> <li>• FDA and the communities dwellers protect SNP</li> <li>• No trans passing in the park</li> <li>• FDA and WCF are the want that come here to create awareness on Chimpanzee and it importance to the lives of humans</li> </ul>	Adequate [x]	20	0	Not often [x]
<b>Doodwicken</b>	20	0	<ul style="list-style-type: none"> <li>• SNP have animals and minerals</li> <li>• SNP is our reserve forest</li> <li>• SNP is a natural supermarket (harvesting of medicinal plants, rattan, food etc.)</li> <li>• No Farming and fishing in the park</li> <li>• SNP have natural resources</li> </ul>	Adequate [x]	20	0	Often [ x]
<b>Blewriah Town</b>	20	0	<ul style="list-style-type: none"> <li>• FDA been telling us not do the following such as hunting, mining, trapping, farming, logging and fishing in the park</li> <li>• No settlement in the park</li> <li>• No harvesting of NTFP in the park</li> <li>• No pit sawing in the park</li> <li>• No lighting of bush fire in the park</li> </ul>	Adequate [x]	20	0	Often [ x]

Do you know about SNP?			Please tell me what you know about SNP?	Rating on communities' understanding on SNP.	Have you ever been trained/ awareness created by staff from SNP on managing the park?		How often have SNP staff created awareness?
Community	Yes	No			Adequate, Moderate, Inadequate	Yes	
<b>Chebioh Town</b>	20	0	<ul style="list-style-type: none"> <li>• SNP was created by the GOL for the protection of animals and plants</li> <li>• SNP is located in three counties, Gd. Gedeh, Sinoe and River Gee and each of these counties carries a percentage of the following, (1)Sinoe county have 80% (2) Gd.Gedeh 15% while (3)River Gee 5%</li> <li>• It is prohibited for people to do illegal activities in the parks such, as farming, mining and logging in the park</li> </ul>	Adequate [x]	20	0	Often [ x]
<b>Geeblo Town</b>	20	0	<ul style="list-style-type: none"> <li>• We told our children not to enter the park to carry on illegal activities</li> <li>• We the community were the want that give order to remove illegal poachers from the park</li> <li>• No illegal activities is allow in the park</li> <li>• SNP have a lot of animals and plants</li> </ul>	Adequate [x]	20	0	Very often [ x]

Do you know about SNP?			Please tell me what you know about SNP?	Rating on communities' understanding on SNP.	Have you ever been trained/ awareness created by staff from SNP on managing the park?		How often have SNP staff created awareness?
Community	Yes	No			Adequate, Moderate, Inadequate	Yes	
			<p>species and also have some natural resources</p> <ul style="list-style-type: none"> <li>• SNP was set aside as a reserve for the unborn generation</li> <li>• They told us not to killed the animals because, they have the right to live and they are like human</li> <li>• We should not continue to killed the animals or else they will finish and our unborn children will not see them</li> <li>• We should not do fishing, hunting and farming to the park</li> <li>• We should protect the park by eaten some and keeping some</li> </ul>				
<b>Jalay Town</b>	20	0	<ul style="list-style-type: none"> <li>• SNP was established in Jalay Town</li> <li>• SNP was established for only educated people, but not for non-educated people, since 1983 there has been no changes in term of development as it was promised by the FDA</li> </ul>	Adequate [x]	20	0	Often [ x]

Do you know about SNP?			Please tell me what you know about SNP?	Rating on communities' understanding on SNP.	Have you ever been trained/ awareness created by staff from SNP on managing the park?		How often have SNP staff created awareness?
Community	Yes	No			Yes	No	
			<ul style="list-style-type: none"> <li>FDA usual create awareness on the protection of wildlife</li> </ul>	Adequate, Moderate, Inadequate			Not often, Often, Very often

#### 4.2.4 Fauna threatened in SNP Communities

Table 14 below presents the animals which are threatened in the different communities as gathered during the FGDs with Maxwell duiker, Black deer and Bush boke dominating. In fact, Black deer is the common amongst the all the 6 communities.

Animals considered threatened by communities during the FGD are herein found on table 14 below.

Table 14: Animals Threatened in FGD Communities (Source, Author's, 2019)

No.	Name of Community	Location and FDA SNP Zone	Animals Mostly Threatened in Community (Common Name and Scientific name)
1	Putu Jarwodee	Grand Gedeh County, Zone 2	<ul style="list-style-type: none"> <li>• Bay duiker (<i>Cephalophus dorsalis</i>)</li> <li>• Maxwell duiker (<i>Cephalophus maxwelli</i>)</li> <li>• Black duiker (<i>Cephalophus niger</i>)</li> <li>• Jintink's duiker (<i>Cephalophus jentinki</i>)</li> <li>• Red river hog (<i>Potamochoerus porcus</i>)</li> <li>• Brush-tailed porcupine (<i>Atherurus africana</i>)</li> <li>• Sooty mangabey</li> </ul>
2.	Doodwicken	Sinoe County, Zone 3	<ul style="list-style-type: none"> <li>• Maxwell duiker (<i>Cephalophus maxwelli</i>)</li> <li>• Black duiker (<i>Cephalophus niger</i>)</li> <li>• Lesser spot noise monkey (<i>Cercopithecus petaurista</i>)</li> <li>• Campbell's I monkey (<i>Cercopithecus camballi</i>)</li> <li>• Jintink's duiker (<i>Cephalophus jentinki</i>)</li> </ul>
3.	Blewriah Town	Sinoe County, Zone 3	<ul style="list-style-type: none"> <li>• Maxwell duiker (<i>Cephalophus maxwelli</i>)</li> <li>• Black duiker (<i>Cephalophus niger</i>)</li> <li>• Lesser spot noise monkey (<i>Cercopithecus petaurista</i>)</li> <li>• Muna monkey (<i>Cercopithecus mano</i>)</li> <li>• Brush-tailed porcupine (<i>Atherurus Africana</i>)</li> <li>• Marsh cane rat (<i>Thryonomys gregorianus</i>)</li> <li>• Squirrel (<i>Paraxerus poensis</i>)</li> <li>• African wood mice (<i>Hylomyscus</i>)</li> </ul>
4.	Chebiah Town	Sinoe County,	<ul style="list-style-type: none"> <li>• Maxwell duiker (<i>Cephalophus</i>)</li> </ul>

No.	Name of Community	Location and FDA SNP Zone	Animals Mostly Threatened in Community (Common Name and Scientific name)
		Zone-1	<p>maxwelli)</p> <ul style="list-style-type: none"> <li>• Black duiker(Cephalophus niger)</li> <li>•</li> <li>• Yellow back duiker ( cephalophus silvicultor)</li> <li>• Brush-tailed porcupine (Atherurus africana)</li> </ul> <p>Zebra duiker (Cephalophus zebra)</p> <p>Jintink’s duiker(cephalophus jentinki)</p>
5.	Geeblo Town	Grand Gedeh County, Zone 2	<ul style="list-style-type: none"> <li>• Blackduiker ((cephalophus niger)</li> <li>• Horn ball bi</li> <li>• Lesser spot noise monkey(Cercopithecus petaurista)</li> <li>• Muna monkey(Cercopithecus mona)</li> <li>• Brush-tailed porcupine (Atherurus africana)</li> </ul> <p>Marsh cane rat (Thryonomys gregorianus)</p> <ul style="list-style-type: none"> <li>• Maxwell duiker (Cephalophus maxwelli)</li> </ul>
6.	Jalay Town	Sinoe County, Zone-1	<ul style="list-style-type: none"> <li>• Zebra duiker(Cephalophus zebra)</li> <li>• Black duiker (Cephalophus niger)</li> <li>• Marsh cane rat (Thryonomys gregorianus)</li> </ul> <p>Sooty mangabey (Cercocebus atys)</p> <ul style="list-style-type: none"> <li>• Squirrel (Paraxerus poensis)</li> <li>• Jintink’s duiker(cephalophus jentinki)</li> </ul>

The Table 15 shows Strategies Communities Recommended to Improve CITES Implementation at SNP.

Table 15: Strategies recommended by communities to improved CITES implementation at SNP

No.	Name of Community	Strategies Communities Recommended to Improve CITES Implementation at SNP
1	Putu Jarwodee	<ul style="list-style-type: none"> <li>• Provide job opportunities through establishment of Eco-guard. In so doing, hunters from the affected communities should be given preference.</li> <li>• FDA should provide vocational training school in SNP affected community for conservation studies</li> </ul>
2.	Doodwicken	<ul style="list-style-type: none"> <li>• Building fish pond for affected communities dwellers around SNP</li> </ul>

No.	Name of	Strategies Communities Recommended to Improve CITES
		<ul style="list-style-type: none"> <li>• Employment opportunities</li> <li>• Livestock raising</li> <li>• Micro-load</li> <li>• Bad road conduction/fixing of bridges</li> <li>• FDA should provide vocational training school for conservation purpose around the affected communities in SNP</li> </ul>
3.	Blewriah Town	<ul style="list-style-type: none"> <li>• Provide livelihood alternative mean to affected Communities around SNP</li> <li>• Job opportunities</li> <li>• Provide training for farmer to improved crop production</li> <li>• FDA should build both academic and vocational school to trained the surrounding affected communities on Soap making, Tailoring, Construction and conservation activities</li> <li>• FDA and partner should provide Agricultural tools and improved network system around the park for information sharing on illegal activities</li> <li>• We respect the wildlife law of Liberia, this is while we have a lot of animals in this part of the park and we need continue awareness on the protected species by providing poster around the various communities in SNP</li> </ul>
4.	Chebioh Town	<ul style="list-style-type: none"> <li>• FDA should provide livelihood alternative to affected communities around SNP</li> <li>• FDA should provide human capacity building by training more communities dwellers for the protection of the park</li> <li>• FDA should Provide employment opportunities and community developments</li> <li>• FDA should provide skill training for those who have not been to school</li> </ul>
5.	Geeblo Town	<ul style="list-style-type: none"> <li>• Information sharing to other communities on the important of wildlife and plants</li> <li>• Benefit sharing</li> <li>• Community should help FDA to get illegal occupants from the park</li> <li>• Provide information to FDA on illegal activities</li> <li>• Provide livelihood alternative to affected communities</li> <li>• Information destination to other community around the park</li> <li>• help FDA, as a community dwellers to arrest illegal poachers in the park</li> </ul>
6.	Jalay Town	<ul style="list-style-type: none"> <li>• Employment Opportunities</li> <li>• Livelihood support and development</li> <li>• FDA should establish training center for ranger recruitment for sustainable use of the park</li> </ul>

No.	Name of	Strategies Communities Recommended to Improve CITES

### 4.3 Analysis of Experts understanding on SNP Administrative and Governance Challenges

The Boxes 1 to 5 show the interviews with key informants.

*Box 1: Interview with Mr. Theo Freeman, Former Technical Manager, Conservation Department, FDA.*

During our discussion, Mr. Freeman provided the following information and recommendations:

- Conservation department is not receiving the support as per the NFRL of 2006, Land rental fees collected annually from logging activities, 10% of the total revenue collected should go to conservation department for the operation of managing these protected areas, but the central Government has failed to allocate these funds to the FDA thus making conservation efforts to be very difficult;
- The construction of Ranger post in the three (3) zone have been lacking in SNP, making illegal activities to increase;
- FDA Management has not be supplying Ranger with food ration for monthly patrol, causing large increase in hunting and mining;
- Management should provide monthly rental payment, stipend and logistical supply for the smooth operation of Park Rangers in SNP;
- Medical facility need to be built at the park headquarter, such as clinic and provide First Aid Kit to various zone within the park;
- Training of park Rangers to Fire Arm and equipment uses;
- Management should provide livelihood alternative means to affected communities surrounding SNP;
- Strengthened wildlife law and ensure enforcement to the fullest;
- Ensure weekly or monthly patrol of Ranger at SNP; and
- Creating awareness on CITES and the wildlife law for enforcement at SNP.

*Box 2: Interview with Mr. Burton Kawa, Chief Park Warden (CPW), SNP*

During the interview, the CPW made the following points:

- ✓ There are seventy five (75) affected communities around the SNP, so you know



what that means;

- ✓ Since SNP was established, how many persons have served as Chief Park Warden in SNP from 1983 up to present? There are nine (9) chief park wardens;
- ✓ How many rangers assigned at SNP presently? SNP has about 63 park rangers presently employed by FDA. In addition, Wild Chimpanzee Foundation (WCF) is funding about 100 persons from the community watch team. 15 Bio-monitoring teams are being supported by Fauna and Flora International (FFI), 3 Junior Conservation assistants supported by Liberia Forest Sector Project (LFSP) and 34 Site Support Groups are being supported by Society for Conservation of Nature in Liberia (SCNL);
- ✓ What are the administrative challenges SNP faces? Conservation programs are lacking at SNP due to limited budgetary support for No livelihood support to communities dwellers, farming, mining and hunting activities ongoing in the Park. Besides, the mining licenses have been issued to some miners to carry on mining activities adjacent to the park and they cross over into the park and mine;
- ✓ No communication equipment is available at the SNP and GSM network is only in few parts of the park;
- ✓ Chimpanzee species are being threatened more than other species;
- ✓ The relationship between the park rangers and the communities dwellers is fairly good, comparing to recent past;
- ✓ The court doesn't prosecute illegal poachers when they are arrested by the park ranger and taken to court;
- ✓ FDA legal department doesn't follow up on wildlife cases in court;
- ✓ When poachers are being charged under the wildlife law and taken to court, the Chief Park Warden makes a follow-up and serves as a state witness

**What are the Administrative gaps presently at SNP in terms of staffing?**

SNP doesn't have park administrator, financial officer, park Biologist, wildlife Officer. In short, SNP is under staffed with limited rangers to cover the park boundaries.

**What are the enforcement problems at SNP?** SNP has limited man power (Ranger patrol alone), no patrol equipment as follows, no rain gear, no boat for river patrolling etc.

*Box 3: Interview with Mr. Jerry Yormah, Technical Manager for Commercial Forestry, FDA (Former Manager, PPA)*

During our discussion, the below information and analysis were provided by Mr. Yomah:

- ✓ The challenges being faced at SNP in term of management? There is no conservation program put into place due to the lack of budgetary allotment by the Authority;
- ✓ Development partners are not directly supporting FDA financial with funding in managing these protected areas, but they themselves are serving as implementers for their project. At times, you don't tangibly see or feel they impact of what they're doing in those areas;
- ✓ The major threat for fauna and flora in SNP are lack of sustainable alternative livelihood activities for affected communities;
- ✓ The slow implementation of SNP MP is due to budgetary constraints for park administration to carry out its function accordingly;
- ✓ The 10% that conservation department should receive from land rental fees as per the NFRL of 2006 is not being allocated to the department for its operations;
- ✓ The welfare of park rangers is not being looked at in SNP and other protected areas by the Authority; and
- ✓ Management needs to train more Rangers for the protection of the park to combat illegal activities affecting the smooth operation of SNP.

*Box 4: Interview with Jallah B. Johnson, Deputy Protected Areas Manager (former CPW)*

**Problem Affecting CITES Law enforcement in SNP:**

- ✓ No awareness on CITES listed species
- ✓ SNP is under staff
- ✓ Less Trained manpower at SNP
- ✓ Poor Eco-tourism management problem at SNP
- ✓ Low Conservation activities at SNP
- ✓ Low Community participation in the management aspect of SNP
- ✓ Limited livelihood activities in SNP
- ✓ Poor Prosecution of wildlife cases by the judiciary at SNP
- ✓ Lack of communication equipment's, base radio at SNP

**What can FDA do to minimize those illegal activities in SNP?**

FDA management should provide those basic facilities to ensure SNP management carries out its function successfully.

*Box 5: Interview with John K. Flomo, CPW Wonegizi Proposed Protected Reserve (Former Zone Warden at SNP)*

Box xxx: Interview conducted with **John K. Flomo, CPW, Wonegizi Proposed Reserve and former Zone Warden, SNP**

How can the administrative challenges at SNP be addressed?

- ✓ FDA should provide logistical support to SNP management
- ✓ FDA should train park rangers
- ✓ Law enforcement agencies, ex. The court should cooperate fully with the SNP administration

What are the threats to biodiversity conservation at SNP?

- ✓ Hunting due to Bushmeat trade which is the lucrative business

What are the traditional conservation area in SNP?

- ✓ It is found in zone one (I) and they do not eat chimpanzee, it is a taboo

How can SNP ranger be effective in term of patrol?

- ✓ Provide patrol materials
- ✓ Protected gear
- ✓ Provide tent for camp
- ✓ Medication
- ✓ Provide lodging for park ranger
- ✓ Good training for ranger

What can SNP management do to avoid mining activities within the park?

- ✓ Effective patrol and enforcement
- ✓ Court prosecution of illegal miners within the SNP
- ✓ Local authority participation in the SNP management

CITES implementation of fauna and flora species?

- ✓ Communities are not aware of CITES
- ✓ There should be continuous engagement with communities on CITES

#### 4.4 National Stakeholders Workshop Findings

On February 26, 2019, a national stakeholder workshop was held in Monrovia; specifically, at the FDA's headquarters in Whein Town. The researcher identified and brought together twenty eight (28) participants from diverse stakeholder groups in a workshop in order to discuss and identify strategies that can be used to overcome the Administrative and

Governance Challenges at SNP and provide Concrete recommendations on how CITES Law should be enforced at the Park (see annex for stakeholderlisting).

#### 4.4.1 Identify Strategies that can be used to overcome the administrative and governance challenges at SNP

The administrative and governance challenges at SNP identified by the workshop participants included:

- ✓ Limited trained staff at SNP;
- ✓ Inadequate Logistics, limited community participation and empowerment
- ✓ Weak law enforcement mechanism to the lack of national Database for Park.

These are listed in Table 16 along with some strategies, that when considered, will help to overcome the challenges.

*Table 16: Administrative & Governance Challenges at SNP & Strategies, Stakeholder Workshop (Source: Author's, 2019)*

S/N	ADMINISTRATIVE & GOVERNANCE CHALLENGES AT SNP	STRATEGIES TO OVERCOME THE CHALLENGES
1.0	Limited trained staff at SNP	Carry our training needs assessment; identify and recruit additional rangers, and provide the requisite training for them
2.0	Inadequate Logistics and equipment	Provide the necessary logistical support: transportation (vehicle), communication (VHF radio, internet), equipment (GPs compasses, Binoculars, Camera etc.); uniforms, rain gears, etc; put in place the needed infrastructure: ranger posts
3.0	Limited community participation and empowerment	Strengthen community engagement and participation in the management of SNP; provide alternative livelihood for community dwellers around SNP
4.0	Weak law enforcement mechanism	Training of Judiciary on CITES and Wildlife Laws; develop appropriate regulations to enforce these laws; create the necessary awareness to all major stakeholders (law enforcement agencies and judiciary)
5.0	Lack of national Database for SNP	Train SNP Rangers in data collection; conduct research survey (Bio-monitoring); establish database for all fauna and flora species found in SNP

#### 4.4.2 Recommendations on how CITES Law should be enforced at SNP

Table 17 provides concrete recommendations on how CITES Law should be in enforced at SNP. The workshop stakeholders believe that by enforcing CITES Law at the international, national and community levels at SNP, the management objectives of the Park can fully be achieved.

*Table 17: Recommendations on CITES Law Enforcement at SNP from the National stakeholder Workshop*

S/N	Level of Enforcement of Cites Law at SNP	Strategies for Enforcement
1.0	International	CITES should: provide funding for training SNP staff, provide technical guidance for the revision of national conservations and wildlife law; especially ones that are to be implemented at SNP, provide funding for research at the SNP and develop long term plan for the Park
2.0	National	Train staff at SNP, provide logistic for law enforcement and join security officers at the Park, create awareness on the importance of CITES listed species, provide training for the judiciary, join security and law enforcement officers at SNP, the Ministry of Education (MoE) should integrate CITES activities into our national curriculum and enforce the teaching of said activities in all secondary schools in Liberia.
3.0	Community	The Government; through FDA should encourage and empower communities to monitor and report all illegal activities at SNP, encourage them to apply traditional norms in the implementation of CITES laws at the Park, the management team at SNP should develop project proposals on CITES Law enforcement and implement same at the Park

Apart from the above, participants also identified the issues of inadequate funding from national government to support SNP management, limited institutional collaboration and coordination, as well as Liberia's porous borders as some of the constraints/ challenges that are hindering CITES Law enforcement at SNP. However, they collectively provided the below way forward for the implementation of CITES Law at SNP and Liberia at large:

- ✓ Establishment of national species working group;
- ✓ Development of field guides for CITES in Liberia;
- ✓ Establishment of a national confiscation unit;
- ✓ Establishment of sub-national bio-monitoring working group;

- ✓ Development of a list of some keystone species (pigmy hippo, chimps) for Liberia; and
- ✓ The revision of the 2016 Wildlife & Protected Areas Management Law of Liberia to align with CITES protocol.

#### 4.4.3 Stakeholders that participated in the workshop

- ✓ Conservation International
- ✓ Custom
- ✓ Environmental Protection Agency
- ✓ Farmer Association to Conserve the Environment
- ✓ Forestry Development Authority
- ✓ Fauna and Flora International
- ✓ Forestry Cry Liberia
- ✓ Interpol
- ✓ Liberia National Resource Management & Environmental Consultant
- ✓ Ministry Of Agriculture
- ✓ Ministry Of Justice
- ✓ Society for the Conservation of Nature of Liberia
- ✓ Sustainable Development Institute
- ✓ Transnational Crime Unit
- ✓ University Of Liberia
- ✓ United Nation Office on Drug and Crime
- ✓ Wild Chimpanzee Foundation

## CHAPTER FIVE: DISCUSSION

### 5.1 Administrative or management challenges that SNP faces in terms of general conservation of wildlife species or habitat

Though SNP was the first gazette Park in Liberia, it has and continued to face numerous administrative and management challenges overtime in conserving wildlife and protecting its habitat. As seen in *Table 15 shown previously*, one of the major challenges is that the FDA manpower/human capacity at the SNP is limited to actually manage and control illegal entry. In fact, according to the CPW at SNP, “*SNP has about 63 park rangers presently employed by the FDA*”, which is very small to manage a Park with an area of 180,400 ha (considering the 2003 extension) and surrounded by 75 affected communities; This implies that a ranger is expected to patrol or manage about 2,862 ha of forestland which is not practical and realistic. As a consequence, poaching of wildlife by aliens and surrounding communities due to the lucrative bushmeat trade is widespread in the Park thus affecting wildlife population and habitat.

Conservation of wildlife is expensive and requires funding, something which is lacking in the case of SNP. This research gathered that the GoL budgetary allotment to FDA is very small thereby affecting conservation activities. To worsen the matter, the funding that the FDA’s Conservation Department should receive as per the NFRL of 2006 is not forthcoming. This information was gathered from former senior staff of the Conservation Department who stated that “*Land rental fees collected annually from logging activities, 10% of the total revenue collected should go to conservation department for the operation of managing these protected areas, but the central Government has failed to allocate these funds to the FDA thus making conservation efforts to be very difficult.*” However, it is worth mentioning that other development partners and NGOs are helping with conservation works around SNP including the WCF which is funding community watch teams; FFI which is supporting bio-monitoring activities; and the LFSP which has assigned 3 conservation assistants to the SNP; amongst others.

Additionally, SNP has infrastructural and logistical limitations. SNP lacks park infrastructures like furnished park headquarters and ranger outposts to accommodate park staff. On the other hand, the Park lacks communication equipment (base radio etc.) to enable staff communicate to park and central headquarters especially in case of emergencies.

Furthermore, the Park has been lacking vehicles and motor bikes for patrolling over the years though recently those items are being provided by the LFSP; thus, these challenges are contributing to limited and irregular monitoring regime at SNP. Besides, inadequate law enforcement training for park rangers is also a challenge. Unlike other countries, rangers in Liberia are not allowed to carry firearm thereby exposing them to arm carrying poachers and illegal miners. Hence, Park management cannot be possible in the absence of these basic materials, equipment and facilities.

As mentioned above, SNP has many surrounding communities which depend on the forest for livelihoods – hunting, fishing, farming, mining, chain-sawing etc. This research gathered that there are limited alternative livelihood options around the Park and at such there are many cases of illegal activities within the SNP. According to information received, communities received benefits from illegal miners thus allowing them entry into the SNP. However, when these illegal occupants are caught by rangers and forwarded to the judicial authority at the local level, the prosecution process is weak compounded by weak judicial system especially at the FDA to follow up wildlife cases. Thus, the local authorities at the county lack the basic understanding on SNP management; they need to help FDA manage the park for current and future generations.

Increasing population around the SNP is one of the management challenges being faced. As population increases, the demand is placed on the natural environment to provide goods and services. To curtail this, the FDA and partners need to provide livelihood support (lowland farming, fishery, animal husbandry, cash crop production etc.) to communities around the Park. Another challenge is the limited awareness creation around the Park and lack of understanding of the wildlife law amongst locales and court magistrates.

## **5.2 SNP communities understanding and contribution to the management of the Park**

Forest communities played an important role in managing SNP. Rural forest communities are the best managers of the forest since they live around the fringes. Firstly, it's worth mentioning that all 120 community members (participants of the FGDs) *don't know about CITES*, however all the participants (120 people) said 'yes' to creating awareness on wildlife conservation in the respective communities.

Communities to some extent are contributing to wildlife conservation. For instance, the Doodwicken community established a law that no one should kill animals. They told their



children no to enter the park for fishing or hunting; furthermore, the community told their young people not to mine in the park.

Also, in the BlewriahCommunity, the watch team told the community not to kill animals that are protected by law and about the important of our animals such as elephant, Buffalos, chimpanzee and leopard and we should not kill them. In addition, the community dwellers of Geeblo promised to help FDA bring those illegal hunters from the park by providing FDA with information. They realized the need protect the animal species for the present and future generation. In conclusion, all the communities responded positively to helping FDA manage the SNP.

All the participants from the communities have “adequate knowledge” about SNP. They know that the park was created by law and that is against the law to hunt and farm in the park. During the FGDs, communities informed that no settlement should be in the park and that they have told their children no to go in the park carry out illegal activities.

During the FGD, communities recommended strategies to improve CITES implementation at SNP. Amongst the strategies, Putu Jarwodee recommended that job opportunities be provided through the establishment of Eco-guards. The Doodwicken community proposed that FDA should provide vocational training school for conservation around SNP. The provision of livelihood activities and information sharing on the importance of wildlife were key amongst the strategies proffered by the communities. In addition, communities offered to arrest illegal poachers and turn them over to the local authority.

### **5.3 How effective is the design and implementation of SNP MP in addressing threats to the priority CITES listed species?**

Currently, SNP has a draft MP that is yet to be validated. This plan is designed to be implemented over a five-year period and used as a manual by the FDA and its staff at SNP to guide the many stakeholders on what to do and how to do it. The draft MP contains the following:

- ✓ Draft Plan
- ✓ Status of the Park
- ✓ Assessment of baseline information
- ✓ Evaluation of policy and legislative context

- ✓ Review of Plan Outline
- ✓ Vision and Strategic Objectives
- ✓ Review of Park Values
- ✓ Develop draft for stakeholder review
- ✓ Assessment of key issues and SWOT (Strength, Weakness, Opportunity and Threat) analysis
- ✓ Plan implementation
- ✓ Monitoring and progress evaluation

Development of the first management plan for SNP began in 1985 and was completed in 1986. It was produced after a series of studies and surveys by international technical consultants, with assistance from some FDA staff. There was little consultation with local communities and other stakeholders. However, much of the background information in that Plan remains valid and has been used in the current work. It could not be implemented because of the civil war.

The MP of the Park is a blueprint that provides a framework for decision making and a set of strategies and guidelines for the management and supervision of the Park. But despite the existence of this Plan, illicit activities still exist in SNP. The Park continues to experience hunting, poaching/ trade/ trafficking of wildlife species, illegal artisanal mining and shifting cultivation by illegal occupants. This proof to the fact that the Park's management regimes have over the years, experienced some level of challenges in the effective implementation of the Management Plan.

In addition, during the administration of the research questionnaire, respondents' views and opinions were gathered on the effectiveness of the design and implementation of SNP MP in addressing threats to the priority CITES listed species as seen in *figure 18 above*. At (N=34), about 9 respondents (26%) said that the Management Plan of SNP is 'very effective' in addressing threats to the priority CITES listed species, while 13 respondents (38%) said that they partly agreed with the effectiveness of the Plan in addressing same. On the other hand, 8 respondents (24%) responded 'ineffective' while 4 respondents (12%) viewed it as being 'very ineffective'. In general, respondents believed that the ineffectiveness of the design and implementation of SNP Management Plan in addressing threats to the priority CITES listed species is due in part to budgetary constraints for park administration to carry out its function accordingly.

## CHAPTER SIX: CONCLUSION AND RECOMMENDATION

SNP is considered the largest protected area in Liberia with the second-largest area of primary tropical rainforest in West Africa, after the Taï National Park in Côte d'Ivoire. The Park is located in the southeastern part of Liberia and comprises many unique and rare species including the Forest elephants (*Loxodonta cyclotis*), Pygmy hippopotamus (*Choeropsis liberiensis* or *Hexaprotodon liberiensis*) amongst others as well as birds. In July 2013, a MP was designed and drafted to be used as a manual by FDA and its staff at SNP to guide the management activities of the Park.

With the results and discussion provided in the previous chapters, this thesis concludes that:

1. With the current gaps in FDA's capacity, it is impossible for the rangers to actually manage and control illegal entry at SNP; and by this, illegal activities will continue to take place in the Park;
2. The seventy-five (75) affected communities around the Park have limited knowledge on conservation education. In addition, this research has established that the communities within the borders of SNP do not clearly understand the importance of the Park's SNP MP;
3. Inadequate alternative livelihood activities around the SNP is leading to several illegal activities;
4. SNP lacks logistical and infrastructural development. The Park headquarters is not up to standard and there are no standardized ranger post in the three (3) Zones thus making the Park's borders vulnerable to increase illegal entry. Rangers are not comfortable staying at their outpost due to lack of basic facilities. In addition, there is a lack of communication equipment for park staff to promptly channel information on illegal activities to central management;
5. The MP of the SNP is still in draft and not yet validated. Not many rangers are knowledgeable about the SNP MP. Although, the draft MP is pending validation, the protection of the nation's wildlife and the prevention of illegal trade in wildlife species remains a huge challenge for the GoL;
6. SNP landscape has continued to experience hunting, poaching/ trade/ trafficking of wildlife species, illegal artisanal mining and shifting cultivation by illegal occupants.

These illegal activities within the SNP suggest that the Park's management regimes have over the years experienced some level of challenges in the governance and effective implementation of the MP;

7. A major challenges faced by SNP administrator is the weak judicial system of the Country. When poachers are arrested by the park rangers and taken to court, the court doesn't prosecute them. In fact, when wildlife cases are taken to court, FDA Legal Division doesn't follow up on them;
8. It has been established that the Park faces budgetary constraints to carry out its functions accordingly; and
9. Bad road networks in some zones of the Park especially during the rainy season make those areas inaccessible to Park rangers.

In view of the points concluded with above, the followings are recommendations for implementation in the short, medium and long term to enhance the effective governance and management of the SNP:

1. The FDA must increase the staff capacity at SNP as the number of rangers assigned there is insufficient. This needs to be implemented in a short term to minimize the illegal activities currently ongoing within the Park;
2. The FDA in collaboration with partners should sustained the awareness creation at SNP. Communities should continually be reminded about the importance of managing the Park and conserving its rich biodiversity. When finalized, the SNP MP should be simplified and dramatized to SNP communities;
3. The FDA and partners should provide alternative livelihood programs to communities around the Park. Such program should include but not limited to conservation/sustainable agriculture through lowland farming, fishery, animal husbandry, sustainable cash crop planting etc. This should be implemented in the short term;
4. The Park headquarters should be modernized and equipped while the ranger outposts should be built and same done. These places must be made comfortable to encourage rangers to stay on duty. These rangers also need comfort and busy services like any

mankind. Considering that infrastructural development is cost intensive, this can be done in the medium and long term;

5. The draft SNP MP should be completed, validated and implemented to the fullest. No proper Park management can go on in the absence of such plan which guides the day-to-day management of the Park. This is achievable in the short term;
6. The Park management should exert all efforts amidst these many challenges to minimize illegal activities. Relationship and confidence with the communities should be fostered to improve Park management;
7. The FDA needs to work very closely with the judicial system in Liberia to ensure prosecution of illegal occupants and destroyers of biodiversity. If done, it will serve as a deterrent for would-be violators and send a strong signal to all. This can be done in the long term as the judicial system needs strengthening in Liberia;
8. The GoL needs to support FDA considering that the entity is a revenue generating entity and has mandate to protect the forest of Liberia for current and future generations. Aside from GoL support, the FDA must learn to secure funding from outside (Green Climate Fund, Global Environment Facility etc.) to conserve its biodiversity;
9. The Park rangers should be equipped to carry out minor civil works around the SNP. They could do minor repair of broken or fragile bridges, do minor maintenance of roads etc.;
10. In the same way, capacity building of FDA staff/ rangers should be prioritized. This will help to control illegal entry into SNP and thus limit the poaching of wildlife by aliens and surrounding communities;
11. FDA should collaborate with some of its partners to provide the needed communication equipment and office materials to SNP for effective communication;
12. Hunters should be trained professionally on how to hunt and when to hunt;

13. Research needs to be done on various species population and habitat especially at SNP;
14. SNP management team should carry out joint patrol along with adjoining communities into the Park to curtail illegal activities and show them the level of destruction being carried on in the area; and
15. Mobilize and organize communities empowerment programs through a transparent and participatory development planning process, clear development plans and community development committees that are accountable in working with SNP management for the protection of the park.

## REFERENCES

- Geography Map of Liberia (2017). World atlas, Retrieved March 03, 2017. Available at <https://www.climatestotravel.com/climate/liberia>*
- FAO, (2017). Collaborative Partnership on Sustainable Wildlife Management supports global efforts against wildlife crime. Retrieved January-13-2017. Available at: [www.fao.org/forestry/wildlife-partnership/en](http://www.fao.org/forestry/wildlife-partnership/en)
- Marshall, B., Cardon, P., Poddar, A. & Fontenot, R. (2013). Does Sample Size Matter in Qualitative research? A review of Qualitative Interviews in a Research. *Journal of Computer Information Systems*:
- Bayol, N. and J. Chevalier (2004). *Current State of the Forest Cover in Liberia: Forest Information Critical to Decision Making*. Biodiversity and Ecosystem Functioning: Current Knowledge and Future Challenge.
- Call to Action (2002). *Enhancing Compliance and Strengthening Enforcement of Multilateral Environmental Agreements (MEAs), Backgrounder on the Johannesburg Summit*. Accessed 12/16/2018 at: [http://www.ciel.org /Tae/Johannesburg Call Back2.html](http://www.ciel.org/Tae/Johannesburg_Call_Back2.html)
- CITES (2016). Activity Report of the CITES Secretariat 2008-2009. Collaborative Partnership on Sustainable Wildlife Management supports global efforts against wildlife crime. Retrieved January-13-2017. Available at: [www.fao.org/forestry/wildlifepartnership/en](http://www.fao.org/forestry/wildlifepartnership/en)
- Climates to Travel (2019). Available at <https://www.climatestotravel.com/climate/liberia>. Accessed 03/11/19
- Coyne I.T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling: merging or clear boundaries? *Journal of Advanced Nursing* 26, 623–630
- Doe, J. W. (2004). *The Forest Revenue System and Government Expenditure on Forestry in Liberia*. Monrovia, Liberia

- FDA (September 7, 2018). *FDA Clears Sapo National Park of poachers, Illegal Occupants - sends seven persons to court for prosecution*. Accessed 09/7/2018at: <http://www.fda.gov.lr/fda-clears-sapo-national-park-of-poachers-illegal-occupants-sends-seven-persons-to-court-for-prosecution/>
- FDA. (2002). *National Forest Policy and Implementation Strategy*. Forestry Development Authority, Government of Liberia
- FDA. (2006). *The National Forestry Reform Law (NFRL) of 2006*. Forestry Development Authority, Government of Liberia.
- FDA. (2017). *CITES threat assessment mission report*. FDA, Monrovia, Liberia
- FDA. (2017a).Forestry Development Authority. Accessed 12/13/2018 at: [www.fda.gov.lr/wp-content/uploads/2017/01/REO1-for-BB\\_SES](http://www.fda.gov.lr/wp-content/uploads/2017/01/REO1-for-BB_SES)
- FFI(2015)<http://www.liberianfaunaflora.org/proposed-protected-areas>. Accessed 12/10/2018
- FFI(2018)<http://www.liberianfaunaflora.org/protected-areas> Accessed 12/10/2018
- FFI. (2015). Liberian Fauna and Flora. Accessed 12/13/2018 at: <http://www.liberianfaunaflora.org/proposed-protected-areas>
- FFI. (2018). Liberian Fauna and Flora. Accessed 12/13/2018at <http://www.liberianfaunaflora.org/protected-areas>
- Fiadjoe, Y. (2004). Cities in Africa: An Examination of Domestic Implementation and Compliance. *Sustainable Development Law & Policy Volume 4 Article 8*.
- Gbeaduh, J. and Cassell, C. (2015). *Pygmy Hippo in the Sapo National Park*. Accessed 12/18/2018 at: [liberianfaunaflora.org/Liberian-fauna9076pygmy-hippopotamus-2015-snp](http://liberianfaunaflora.org/Liberian-fauna9076pygmy-hippopotamus-2015-snp)
- Geography map of Liberia. World atlas.Retrieved March 03, 2018 at <https://www.climatestotravel.com/climate/liberia>



- GoL. (1953). *An Act for conservation of the Forests of the Republic of Liberia*. National Legislation Bureau of Forest and Wildlife Conservation. Government of Liberia.
- GoL. (1976). *Act creating the Forestry Development Authority*. Government of Liberia. Monrovia, Liberia.
- GoL. (2000): *The New National Forestry Law*. Forestry Development Authority, Government of Liberia
- Grimes, T. (2017). *Raising Awareness on the Importance of CITES to Relevant Stakeholders and the Public in Liberia*. Master's degree thesis, Universidad Internacional de Andulucia: Spain.
- I. Etikan, S. A. Musa, R. S. Alkassim (2016). Comparison of Convenience Sampling and Purposive Sampling. *American Journal of Theoretical and Applied Statistics*. Vol. 5, No. 1, pp. 1-4. doi: 10.11648/j.ajtas.20160501.11
- Ishak & Bakar (2014). Developing Sampling Frame for Case Study: Challenges and Conditions. *World Journal of Education Vol. 4, No. 3*.
- Kothari, C. R. (2004). *Research Methodology: Methods and Techniques – Second Revised Edition*. New Age International (P) Ltd.
- Lawson & Vines. (2014) *Global Impacts of the Illegal Wildlife Trade: The Costs of Crime, Insecurity and Institutional Erosion*. Chatham House, London
- Marshall, MN. (1996). *Sampling for qualitative research*. Family Practice. 13: 522-525
- Nations Encyclopedia (2018). Accessed 12/14/2018 at <https://www.nationsencyclopedia.com/Africa/Liberia-CLIMATE.html>.
- NBSAP (2004). *Liberia's National Biodiversity Strategy & Action Plan*. Monrovia Liberia. Accessed 12/10/2018 at: <http://www.cbd.int/doc/world/lr/lr-nbsap-01-p1-en.pdf>
- Norris, K., Assase, A., Collen, B., Gockowksi, J., Mason, J., Phalan, B., Wade, A. (2010) Biodiversity in a forest-agriculture mosaic – The changing face of West African rainforests. *Biological Conservation*, 143:2341-2350.
- Nworgu, B.G. (2015). *Educational Research: Basic Issues and Methodology*. Nsukka: University Trust Pub.

Reeve, R. (2004). The CITES treaty and compliance: progress or jeopardy? Sustainable Development Programme Bp 04/01.:

Ramsey and P. Robinson (2015). *A History of Conservation in Liberia*. Monrovia, Liberia.

Akella, S. and Allan, C. (2012). *Dismantling Wildlife Crime: Executive Summary, International consulting expert specialized in improving enforcement effectiveness in the realms of wildlife conservation and trade*. TRAFFIC North America, WWF, Washington DC.:

USAID. (2008). *Liberia Environmental Threats and Opportunities Assessment (Final Report)*. Liberia: United States Agency for International Development.

Verschuren, J. (1983). *Conservation Tropical Rain Forest in Liberia: Recommendation for Wildlife Conservation and National Park in Liberia*.

WABiCC (2018). Accessed 12/10/2018 at: <https://www.wabicc.org/sub-national-launch-of-the-grebo-krahn-national-park/>

WABiCC. (2018). West Africa Biodiversity and Climate Change. Accessed 12/10/2018: <https://www.wabicc.org/sub-national-launch-of-the-grebo-krahn-national-park/>. Accessed 12/14/2018

WPAML. (2017). *Wildlife and Protected Areas Management Law of Liberia*. FDA, Liberia.

## Appendices

### *Appendix 1: Questionnaire – Institutional*



Sede Antonio Machado, Baeza (Jaén) – Spain

**Thesis Topic: ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA.**

**Important information:** This research is in partial fulfillment for the award of Master of Science Degree (CONSERVATION AND MANAGEMENT OF SPECIES IN TRADE) from the university above. Your responses herein will be treated with confidentiality and used solely for academic purpose.

**Questionnaire for SNP staff + Partners (working/have worked in SNP and those who had never worked in SNP but know something about SNP)** Implementing Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) in Liberia.

### **Section 1: GENERAL INFORMATION**

Name of Institution/Agency/organization						
Area of Assignment						
Instruction: <b>Kindly Check (√) the option that best applies to you</b>						
Gender	Male [ <input type="checkbox"/> ]		Female [ <input type="checkbox"/> ]			
Age Range	Below 18 ( <input type="checkbox"/> )	18-30 ( <input type="checkbox"/> )	31-45 ( <input type="checkbox"/> )	45-60 ( <input type="checkbox"/> )	Above 60 ( <input type="checkbox"/> )	
Level of education	Doctorate ( <input type="checkbox"/> );    Master's degree ( <input type="checkbox"/> );    Bachelor degree ( <input type="checkbox"/> )    Professional Qualification ( <input type="checkbox"/> ); others pls specify					

**Session  
2:  
Knowle**

**dge about the administrative or management challenges of the Sapo National Park (SNP) relative to wildlife conservation and CITES**

	Are you currently working or have worked in SNP?	Yes ( ) No ( )
Assessing	If No, do you know something about SNP?	Yes ( ) No ( )
Q1	Do you know about CITES?	Yes ( ) No ( )
Q1a	If you answered 'yes' to Q1, what is your understanding (briefly)	
Q2	How long have you been assigned/worked to SNP?	a. Less than a year ( ); b. For about 1-2 years ( ); c. For about 3-5 years ( ); d. For about 6-8 years ( ); e. For about 9-10 years ( ); f. more than 10 year ( )
Q3	What are the administrative or management challenges that SNP faces in terms of general conservation of wildlife species or habitat? <b>(briefly discuss)</b>	
Q3a	How these challenges impact wildlife conservation? <b>Reference each of the challenges above mentioned in</b>	

	<b>Q3</b>	
Q4	What have you done or doing to help address these challenges?	
Q5	Have you ever created awareness on wildlife conservation to the communities?	Yes ( )      No ( )
Q5a	If you answered 'yes' to Q5, how have communities responded? ( <b>explain briefly</b> )	

**Section 3: Information on CITES Priorities listed species**

**found around SNP (Emphasis on 3 species as per this research objective)**

From your experience, kindly provide information on the main threats and drivers threatening the species below:

<b>Q6</b>	<b>Species English Name (Local name)</b>	<b>Current Threat and driver</b>	<b>Recommendation to address threats</b>
Q6a	Pigmy Hippopotamus (nigben)		

**Section 4: Management Plan SNP and Effectiveness of Implementation**

Q7	Do you know whether SNP has a Management plan?	Yes [ ]	No [ ]
Q7a	If you answered 'yes' to Q7, what is your level of understanding of the SNP MP?	Adequate [ ]	Moderate [ ] Inadequate [ ]
Q7b	Have you ever been trained on the SNP Management plan?	Yes [ ]	No [ ]
Q7c	In your view, how effective is the design and implementation of the MP in addressing threats to the priority CITES listed species?	Very effective [ ]	Partly effective [ ] Ineffective [ ] Very ineffective [ ]
Q8	In your opinion, how can the Management Plan be improved in addressing threats to the priority CITES listed species? <b>briefly explain</b>		
Q9	What are some strategies that you think can be put in place to improve CITES implementation at SNP?		

**Section 5: Potential Problems Affecting CITES Implementation at SNP**

Q10	Potential Problems Affecting CITES Implementation at SNP	Select (√) as many as may be applied	Recommendations (if available )
Q10a	Lack of institutional capacity (ex. no equipment, logistics to work with)		
Q10b	Limited human capacity (ex. Low manpower, limited number of trained rangers, ranger assigned at Sapo not many)		
Q10c	Weak Enforcement and monitoring (ex. limited patrol in the different zones)		
Q10d	Inadequate budget support to the park (ex. The park doesn't have standalone operational budget)		
Q10e	High population around the park (many communities around the park)		
Q10f	Poverty (ex. limited livelihood options/alternatives, employment)		
Q10 g	Limited understanding/ knowledge about CITES		

**Thanks for your time...**



*Appendix 2: Questionnaire \_FGDs*



Sede Antonio Machado, Baeza (Jaén) – Spain

**Thesis Topic: ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA.**

**Important information:** This research is in partial fulfillment for the award of Master of Science Degree (CONSERVATION AND MANAGEMENT OF SPECIES IN TRADE) from the university above. Your responses herein will be treated with confidentiality and used solely for academic purpose

**Focus Group Discussion (FGD) for communities around the SNP**

**Section 1: GENERAL INFORMATION**

Community/Town Name		Population	
District			
County			

Instruction: Kindly count the number of persons attending the FGD.						
Note: Ensure that at least 5 each of youth, women, elders and community leaders attend the FGD.						
Participants	Total #	# of Male		# of Female		
Participant grouping	# of Youth	# of women	# of Elders		# of Community leaders	
Age Range						
Level of education	Doctorate	Master's degree	Bachelor degree	High school graduate	Professional Qualification	Never Been to School

Session  
2:  
Communities'  
Knowledge about  
CITES  
and SNP

Question #	Question	Options/Responses	
Q1.	<b>Formal:</b> Do you know about CITES? <b>Informal:</b> Anybody here na hear about something we called CITES?	# of person saying 'YES'	# of person saying 'No'
Q1a	<b>Formal :</b> If they answered 'yes' to Q1, what is your understanding (briefly) <b>Informal:</b> say the thing you know about CITES na...anything you know just say it	<b>Take Notes:</b>	
Q2	<b>Formal:</b> Have you (community member) ever created awareness on wildlife conservation to the communities? <b>Informal:</b> anybody here na tell people here about the good things about the animals here?	# of person saying 'YES'	# of person saying 'No'
Q2a	<b>Formal:</b> If you answered 'yes' to Q2, how have communities responded? ( <b>explain briefly</b> )  <b>Informal:</b> All the people that say yes, watin the community people say about the animal thing you tell them na?	<b>Take notes:</b>	

**Section 3: Community knowledge on SNP**

Q3	<b>Formal:</b> Do you know about SNP? <b>Informal:</b> Anybody here know or na hear about SNP?	# of person saying 'YES'	# of person saying 'YES'
Q3a	<b>Formal:</b> Please tell me what you know about SNP? <b>Informal:</b> your tell me the thing your know about SNP na	<b>Take notes (Summary):</b>	
Q3b	<b>Formal:</b> The researcher should rate their understanding base on how they respond to Q3a.	Adequate [ ]	Moderate [ ] Inadequate [ ]
Q4	<b>Formal:</b> Have you ever been trained/ awareness created by staff from SNP on managing the park? <b>Informal:</b> The FDA people from SNP na ever tell your about taking care of our animals in SNP?	# of person saying 'YES'	# of person saying 'YES'
Q4a	<b>Formal:</b> How often have they created awareness? <b>Informal:</b> How many times the FDA people from SNP na ever tell your about taking care of our animals?	Very Often (very plenty time)	Often (plenty time) Not often (one or two time)
Q5	<b>Formal:</b> Which animal is mostly threaten in this area? <b>Informal:</b> Which animal people can really kill in this area?		
Q6	<b>Formal:</b> What are some strategies that you think can be put in place to improve CITES implementation at SNP?	<b>Take notes:</b>	

<p><b>Informal:</b> What way your can help the FDA people to take care of SNP? Watin your want do to help? What the FDA people mor do for your to help?</p>	
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**Thanks for your time...**

*Appendix 3: Protocol and guidelines to conduct FGDs*



Sede Antonio Machado, Baeza (Jaén) – Spain

Thesis Topic: **ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA.**

**Protocol/Guidelines for the conduct of Focus Group Discussions (FGDs) in the Communities**

**Objective/s:**

- **To ensure that the FGDs are held in an orderly and scientific manner void of bias and manipulation;**
- **To ensure the accurate data and information are gathered in a timely manner during the FGDs.**

Before and or during the FGDs, the researcher and team should ensure that the following are done before or on the day of the FGDs:

**BEFORE FGDs**

- ✓ Inspect and test all equipment to ensure they're in good working condition. For those using batteries, ensure you have spare batteries. It's advisable to purchase these items in bulk as they made not be found in rural areas;
- ✓ The researcher and team should ensure that the communities are informed ahead of time and consent to meeting with them at least 1 day before the meeting. In achieving this, the team should have a schedule of the communities to be visited and send message ahead;
- ✓ The team should arrive in the community/town at least the evening before the meeting date and sleep. This will avoid community members waiting for the team which could be caused by unknown circumstances; and

- ✓ Once in the town, the team should firstly meet with the town chief and brief him/her on their mission. The team must clearly state their purpose and the 'kind of' participants to attend the FGD the following day.

### **DURING FGDs**

- ✓ The research team should attend the meeting on time and avoid the community member waiting for their arrival in the hall. It is advisable that the meeting start at 9:00 am so as to allow the community members to leave soon for their farm or livelihood activities;
- ✓ Attendance sheet should be given for participants to write his/her name. For those that cannot write, a volunteer should write their name but use the ink pad to have them to sign. Note, don't forget to collect the attendance sheet afterwards;
- ✓ Pictures should be taken for the participants and research team at different interval. It will be good to take a group picture right outside the meeting hall;
- ✓ The FGDs should be in simple English and if possible translated by a volunteer into local language/vernacular;
- ✓ A member of the research team should do video recording for the documentary; and
- ✓ At the end of the FGDs, the research should thank the people for the time and information provided.

Appendix 4: Field Schedule for the conduct of FGDs in SNP



Sede Antonio Machado, Baeza (Jaén) – Spain

Thesis Topic: **ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA**

**Tentative Field Schedule for Data collection in SNP**

<b>Date</b>	<b>Description</b>	<b>Activities</b>	<b>Location</b>	<b>County/</b>	<b>Zone</b>	<b>Remark</b>
Friday, Jan. 03-0-19	Departure	Travel from Monrovia	Zwedru City	Gd. Gedeh	-----	Spend one(1) night in Zwedru City
Sunday, Jan 05-06-19	Departure	Travel from Zwedru City	To SNP headquarter	Sinoe	-----	Spend two(2) days at the park headquarter
Monday, Jan, 07-19	SNP/headquarter	Presentation of letter to Chief Park warden at the headquarter and briefing	SNP/headquarter	Sinoe	-----	Meeting/Briefing and introduction of data collector team from Monrovia and recruitment of Rangers for data collection
Tuesday, Jan, 08-19	SNP/Community meeting and	Administering Questionnaires and	Jalay Community	Sinoe	01	Meeting with jalay town community, doing video recording with Camera and taking photo, using drone to capture geographical features of SNP

		having focus group discussion with youths elders, women and men on CITES				
Wednesday, Jan,10-19	SNP/Community meeting	Administering Questionnaires and having focus group discussion with youths elders, women and men on CITES	Chebioh Community	Sinoe	01	Meeting with Chebioh community, during doing video recording with Camera and taking photo, using drone to capture geographical features of SNP
Thursday, Jan,12-19	SNP/Community meeting	Administering Questionnaires and having focus group discussion with youths elders, women and men on CITES	Putu Jarwodee Community	Gd.Gedeh	02	Meeting with Putu Jarwodee community, doing video recording with Camera and taking photo, using drone to capture geographical features of SNP



Friday, Jan, 14-19	SNP/Community meeting	Administering Questionnaires and have focus group discussion with youths elders, women and men on CITES	Geeblo Community	Gd. Gedeh	02	Meeting with Geeblo community, doing video recording with Camera and taking photo, using drone to capture geographical features of SNP
Saturday, Jan. 16-19	SNP/Community meeting	Administering Questionnaires and having focus group discussion with youths elders, women and men on CITES	Doodwicken Community	River Gee	03	Meeting with Doodwicken community, doing video recording with Camera and taking photo, using drone to capture geographical features of SNP
Sunday, Jan. 18-19	SNP/Community meeting	Administering Questionnaires and having focus group discussion with youths elders,	Blewriah Community	Sinoe	03	Meeting with Blewriah community, doing video recording with Camera and taking photo, using drone to capture geographical features of SNP

		women and men on CITES				
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Appendix 5: Attendance in Chebioh Town

**UN**  
Universidad  
Internacional  
de Andalucía

Topic: **ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA.**

Community/Town: Chebioh Town County: Sinoe  
 Date: Jan 6, 2019 District: WACARRA  
Clan Karwien Zone - 4

**ATTENDANCE LISTING FOR CITES SNP STAKEHOLDERS WORKSHOP**

No.	Name	Position	Signature
1.			
2.	Joseph Taike		
3.	Dantes Torbor	Youth leader	PJ
4.	Johnson Jah	Town Chief	
5.	Harris Idesiah	Chief elder	
6.	John Taike		
7.	Bessy playe	chairlady	
8.	Esther Taryee		
9.	Emmanuel pter	city mayor	
10.	Narrison Jah		
11.	Oretha Taryee		
12.	Emmanuel Nyanble	clan chief	
13.	Madden Biea		
14.	Lawrence Kular		
15.	Arine Gbeen		
16.	Oretha Blayee		
17.	Mercy Darius		
18.	Emmanuel Taike		
19.	Emmanuel Alah		
20.	Abel pajeh		
21.	Cecelia Torwaa		
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Appendix 6: Attendance in Geeblo Town



Topic: ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA.

Community/Town: Geeblo Town County: Grand Gedeh  
 Date: 07/01/19 Districts: Pete Clan: Blowiah

**ATTENDANCE LISTING FOR CITES SNP STAKEHOLDERS WORKSHOP**

No	Name	Position	Signature
1.	Wrotto Pardeq	Chief Elder	
2.	Thomas Zinnah	Elder	
3.	Paul K Seyon	"	
4.	Samuel Seyon	"	
5.	Arthur Seyon	"	
6.	Williams Geeblo	Citizen	
7.	Kinnah Tobeh	"	
8.	Alber Blayee	"	
9.	Charles n. Wabblo	"	
10.	Thomas Dorbor	"	
11.	Mark T. Wilson	youth chairman	
12.	Augustine Carr	Youth	
13.	Prince Kerabel	"	
14.	Gini Zinnah	youth	
15.	Evelyn Dorbor	"	
16.	Elizabeth Zinnah	chairlady	
17.	Mary Wah	Town chief	
18.	Ruth Dorbor	G-Town chief	
19.	Edith Zinnah	Citizen	
20.	Maye Blayee	"	
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Appendix 7: Attendance in Blewriah, SNP

**UN**  
Universidad Internacional de Andalucía

Topic: **ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT INSAPO NATIONAL PARK IN LIBERIA.**

Community/Town: Blewriah County \_\_\_\_\_

Date: Sarwelle District \_\_\_\_\_ Class: 8

**ATTENDANCE LISTING FOR CITES SNP STAKEHOLDERS WORKSHOP**

No.	Name	Position	Signature
1. ✓	J. Dweh Saytako	City Mayor	
2. ✓	T. Sarwennie Sneh	Farmer	
3. ✓	J. Perry Dweh	Farmer	J. Perry Dweh
4. ✓	Nathaniel Komteb	CC	
5. ✓	Daniel Kayee	Teacher	
6. ✓	Brown Komteb	Farmer	
7. ✓	Prince Dweh	youth Leader	
8. ✓	Thompson Saytako	Farmer	
9. ✓	Joetta Potepa	"	J K P
10. ✓	Doris Jah	"	
11. ✓	Theresa Jah	"	
12. ✓	Augusta Jah	Teacher	
13. ✓	Mai Komteb	Farmer	

Page 1 of 3

14. ✓	Esther Sneh	Farmer	
15. ✓	Blayee Kessah		
16. ✓	Partica Toe		P. T
17. ✓	Rose Sarwennie		
18. ✓	Neriu Toe		
19. ✓	Evelyn Wassah		
20. ✓	Beatrice Kamree		
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Appendix 8: Attendance in Putu Jarwodee, SNP



Topic: ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT INSAPO NATIONAL PARK IN LIBERIA.

Community/Town: Putu Jarwodee County Grand Gedeh  
 Date: Jan. 27, 2019 / District: Putu Administrative  
 District / Clan: Putu Administrative <sup>Sub-Clan</sup> Zone-2

**ATTENDANCE LISTING FOR CITES SNP STAKEHOLDERS WORKSHOP**

No	Name	Position	Signature
1. ✓	Prince W. Jarwahl	youth Leader	P.J
2. ✓	Korlue Sargbah	Gen. Secretary	Bang
3. ✓	Junior Theo		[Signature]
4. ✓	Junior Jarwahl		[Signature]
5. ✓	John Farley		[Signature]
6. ✓	Edward Jarwahl		[Signature]
7. ✓	Edward pyne		[Signature]
8. ✓	Hellena Sargbah		[Signature]
9. ✓	felecial manieah		[Signature]
10. ✓	Tinna Kuloe		Replaced.
11. ✓	Joseph pyne	Chief Elder	[Signature]
12. ✓	Mose Niles		[Signature]
13. ✓	Alphonso Wrotto	T/C LAMMISSIONA	[Signature]
14. ✓	William Kuloe		W.Kuloe
15. ✓	Annis Kuloe		AK
16. ✓	Esther Gbowel	Chair Lady	[Signature]
17. ✓	Thomas Sneh		Replaced.
18. ✓	Amose Farley		[Signature]
19. ✓	Betty Kuloe		[Signature]
20. ✓	France Jarwahl		[Signature]
21. ✓	Eric Fai		[Signature]
22. ✓	Henry Mallo		[Signature]
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Appendix 9: Attendance List from Jalay's Town



Topic: ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA.

Community/Town: Jalay Town City County Sinoe  
 Date: Jan 06, 2019 District Warbarkani  
Iuimbo Zone 1

**ATTENDANCE LISTING FOR CITES SNP STAKEHOLDERS WORKSHOP**

No	Name	Position	Signature
1.	Chris & Karmoh	youth chairman	
2.	James Tariue	SCML/SSG	
3.	Garothy Gboyee		
4.	Ellis Karmoh	SCML/SSG	
5.	Amose Syeh	Town Chairman	
6.	Sunday Nimesy		
7.	Comfort Swen		
8.	Jacob Sunday		
9.	EVERY Solo		
10.	patiencee Tannah	city major	
11.	Frances Togbah	Chiefdom chair-lady	
12.	mamie Nimesy		
13.	Norah Togbah	Acting chair-lady	
14.	Etta Togbah		
15.	Thomas Dogbah	Bio-monitoring	
16.	David Tariue	FDA Ranger	
17.	Nacy Gayee	Tradition Sinking	
18.	Junior Karmoh		
19.	ma menja		
20.	mamie Tangbeh	chair-lady	
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Appendix 10: Doodwicken Attendance List



Topic: ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA

Community/Town: Doodwicken County Sinoe  
 Date: Jan 10, 2019 District: Torbo Clam Jarbo

**ATTENDANCE LISTING FOR CITES SNP STAKEHOLDERS WORKSHOP**

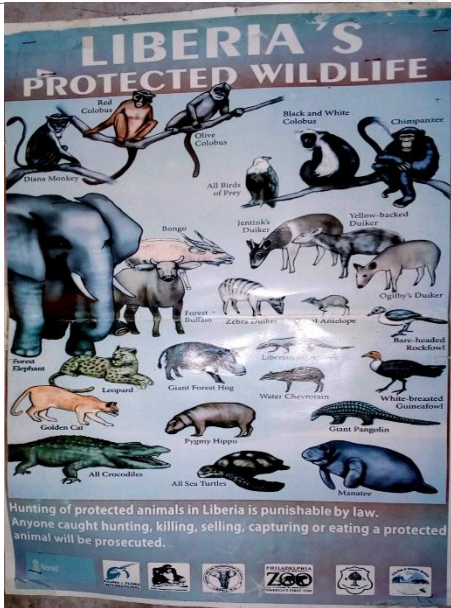
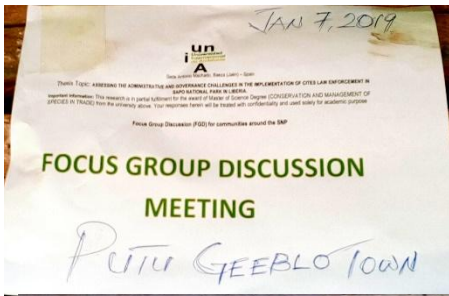
No	Name	Position	Signature
1.	✓ Annie Carter	Chairlady	
2.	✓ Rose Soka		
3.	✓ Oretta potera	Women member	
4.	✓ Isaac Togo		ISAAC TOGO
5.	✓ Dorris Kollie		DORRIS
6.	✓ Tuse Jah		
7.	✓ Emmanuel Nyemah	Town Chief	Emmanuel Nyemah
8.	✓ Perry Jarboe		Perry Jarboe
9.	✓ Otis M. Kiah	chairman	
10.	✓ Anthony Kiah		
11.	✓ Evans Teah		
12.	✓ Tudor Santee	Youth Leader	Tudor Santee
13.	✓ J. ponneh sokan		J. P. Soka

14.	✓ Peter Kulleh	elder	
15.	✓ John B. Kulleh	Township	J. B. Kulleh
16.	✓ Emmanuel Kulleh	Youth member	
17.	✓ Morris Kaung	Commissioner	M. Kaung
18.	✓ Sarah Nyemah	Women member	
19.	✓ Beatrix Nalaba	( )	
20.	✓ Gibson T. Carter	Youth member	G. T. Carter
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Appendix 11: Photolog: FGDs, Travels, and Awareness etc.

FDG



*Appendix 12: Agenda for the Stakeholder Workshop*



Sede Antonio Machado, Baeza (Jaén) – Spain

**Thesis Topic: ASSESSING THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA**

One-day Stakeholders Workshop on the Assessment of the Administrative and Governance Challenges in the implementation and enforcement of CITES Law in SNP.

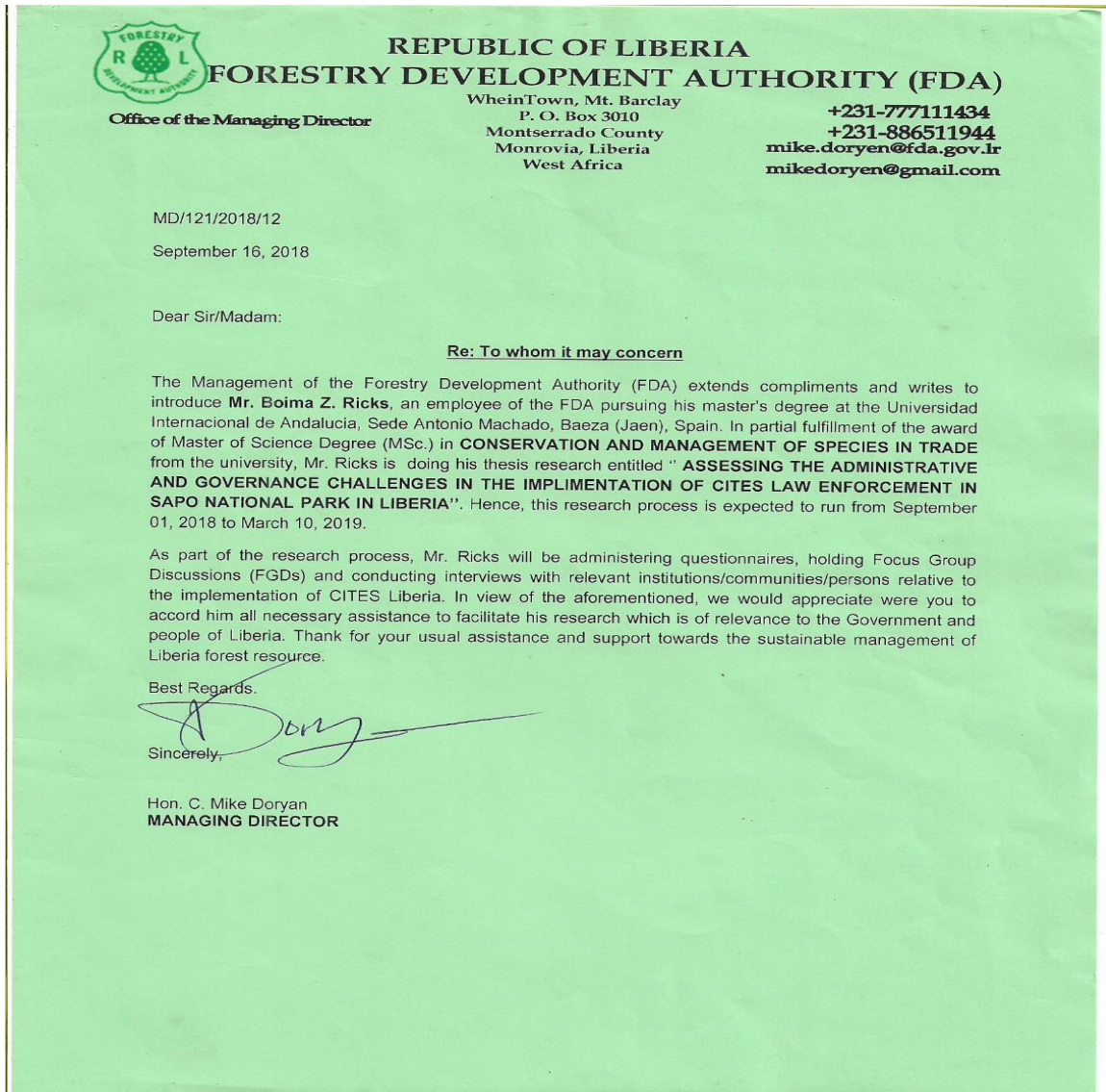
Tuesday, February 26, 2019 @ 9: 45 Am in the Board Room of the Forestry Development Authority, Whein Town, Paynesville - Liberia

**AGENDA**


Item	Description of Activity	All participants	Time	Expected Outcome
1.0	Registration and Breakfast	All participants	09:00-10:00	
	Welcome remarks	Hon. C. Mike Doryan Managing Director/ FDA	10:00-10:05	Welcome participants to the workshop
	Elaboration of the workshop objectives	Boima Z. Ricks CITES Student	10:05-10:15	Workshop objectives, methodology and Expected Outcome elaborated.
1.2	Presentation on CITES	Mr. Blama S. Goll Technical Manager for Conservation Department and CITES Management Authority for Liberia		Global Overview of CITES activities presented by the Management Authority
2.0	Presentation – the Administrative & Governance Challenges in implementing & Enforcing CITES Law in Sapó National Park	Mr. Theo Freeman Consultant/ Liberia National Resource Management & Environmental Consultant Firm	10:15-10:45	A summary of the key findings on CITES activities presented by the Consultant
2.1	Plenary Session – questions, Answers, and Interactions on the presentation	Responses from Participants, Facilitated by the MC.	10:45-11:00	Discussion on the findings presented by the consultant
3.0	Group Photo & BREAK	All participants	11:00–11:10	
4.1	Plenary Session – Questions, Answers, and Interactions on the	Responses from Participants, Facilitated by the MC	11:50-12:00	Concrete recommendations from participants for

	presentation			improving CITES Law implementation and enforcement in SNP
5.0	LUNCH BREAK	All participants	12:00-01:00	
6.0	Technical Working Group Session – Break -up of Participants into two Groups	Group 1- Identify strategies that can be used to overcome the administrative and governance challenges at SNP  Group 2- Provide concrete recommendations on how CITES Law should be implemented and enforced at SNP	01:00-01:45	Each group will discuss as per the topic assigned
6.1	Plenary Session – group presentation	Group Head	01:45-2:15	Present working group reports to plenary; Q & A; clarifications made
	Closing Remarks			

Appendix 13: Letter of Introduction from the FDA Management to stakeholders



Appendix 14: Stakeholders Workshop in Monrovia, Attendance List

  
**Topic: Assessing THE ADMINISTRATIVE AND GOVERNANCE CHALLENGES IN THE IMPLEMENTATION OF CITES LAW ENFORCEMENT IN SAPO NATIONAL PARK IN LIBERIA.**  
**Attendance listing for CITES Monrovia Stakeholders Workshop**  
**DATE: 02/26/2013**

No.	Name	Position	Institution/Organization	Contact Number	Gender	Email Address
1.	Thomas J. Grandor	Head/Inventor	LVP	0886008550	Female	grandor.thomas@gmail.com
2.	Mathewo G. K. W. K. W.	Wildlife Manager	FDA	0850820808	M	mathewo@fda.gov.lb
3.	Philip S. Wehaye	sr. Planner	FDA	0880779872	M	philipwehaye@yahoo.com
4.	Beo V. Freeman	Consultant	L/MRF	08865176	M	thebeofreeman@yahoo.com
5.	Steve H. Davis	L.E. Advisor	F.D.A	0855475248	M	stevedavis@fda.gov.lb
6.	Edward S. Oshimor	Consultant	S.D.I	0777822751	M	edwardosimor@gmail.com

7.	Blamah S. Goll	Technical Manager	FDA	0886581371	Male	blamah@yahoo.com
8.	Wendee H. Gray	MCA	FDA/conserv	0777203057	Female	wendeegray@yahoo.com
9.	Andrew S. Ginkpan	MCA	S.A.S	0776657380	Male	andrews@ahg.gov.lb
10.	Edmanweji L. L. L.	Asst. Manager	FDA	085650820	Male	edmanweji@yahoo.com
11.	Forkpnyea W. Gbeles	Coordinator	ATML	0777827308	M	Forkpnyea-Gbeles@atml.gov.lb
12.	Conrict T. Sakui	MED. Manager	FDA	0886563941	F	ctsakui@fda.gov.lb
13.	Banda Massagui	CHIEF PP	TCU	0777011228	M	bandamassagui1968@gmail.com
14.	Parker K. Jimmy	Officer	FDA	0777410715	M	Parker.kjimmy@gmail.com
15.	Eddie G. Payne	Trainer	SAP/Comm	088036238	M	paynedie73@gmail.com
16.	B. Birra Z. Kicks	BZO	FDA/Student	0777728877	M	birra@fda.gov.lb
17.	Michael C. Umuwa	IT/Inventor	UL	077595822	M	m.umuwa@ul.gov.lb
18.	Edward Akpetin	Team Chief	SNP/Comm	0886517176	M	edwardakpetin@yahoo.com
19.	Timon S. Grimes	Biologist	FDA	0886517176	F	grimes.timon@gmail.com
20.	Nick B. Goll, Jr.	Enforcement Supervisor	Riv/EPA	0775171719	M	nickgoll1980@yahoo.com
21.	Stephen L. Hold-Wilson	Project Manager	MCA	0886517176	M	hold@ecowildlife.org
22.	Bobbiene K. K. K.	Charity	SAP/Comm	0886517176	F	bobbiene@yahoo.com

23.	Ezekiel B Zogan	SNP/comm	Chief	0776131569	m	
24.	Peter L. Messervey	PROGRAM	FACE	0886 339886	m	john.messervey@yichen.com
25.	Peter Wieh		SNP/comm		m	
26.	Gina Zannah		SNP/comm		F	
27.	Peter Wieh		SNP/comm		m	
28.	Bawton Kawa	CPW	SNP/PARK	0988678233	m	bahtonkawa10@gmail.com
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Appendix 15: Partial view of stakeholders at the Workshop

