



## TÍTULO

**ASSESSING THE LEVEL OF AWARENESS OF RELEVANT CITES  
STAKEHOLDERS IN GHANA**

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**“ASSESSING THE LEVEL OF AWARENESS OF RELEVANT CITES  
STAKEHOLDERS IN GHANA.”**

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## **DEDICATION**

I dedicate this thesis to God Almighty for seeing me through this Masters Degree Course, my biological parents, Mr. Moses Oduro and Mrs. Cecilia Oduro and my husband Mr. Bismack Koomson and most especially my little daughter Jhnelle Nana Ama Nhyira Koomson.

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## ABSTRACT

The research was carried out within CITES operational areas in Ghana with the view to investigating the level of awareness of all relevant stakeholders of CITES in Ghana for any existing knowledge gap to be addressed in order to engender an effective awareness creation system to facilitate CITES implementation in Ghana. Specifically, the four-fold objectives were intended to assess the knowledge base and level of awareness of relevant stakeholders on CITES, broaden the stakeholder base and their roles in CITES implementation, examine existing mechanisms for awareness creation on CITES and identify challenges associated with awareness creation among relevant CITES stakeholders in Ghana and finally, solicit relevant stakeholders' inputs on how to address identifiable challenges associated with awareness creation for CITES implementation in Ghana. The methodology used for data collection included an initial review of existing literature on CITES, the use of purposive sampling method to identify the relevant stakeholders, the use of questionnaires and interview guides to solicit identifiable stakeholders' views on various agencies that could potentially qualify as stakeholders on CITES to contribute towards effective awareness creation, existing awareness creation mechanisms and challenges associated with them and how to address these challenges to improve upon awareness creation for effective CITES implementation in Ghana.. Finally, the CITES Trade database was analyzed to know the effect of awareness creation on wildlife trade in Ghana. Results of the study revealed among other things that, most of the relevant stakeholders interviewed had inadequate knowledge on CITES and that the number of years spent on their jobs as stakeholders did not necessarily reflect on their knowledge levels. The results further revealed that additional potential CITES stakeholders are available to be deployed from existing state regulatory institutions to help improve on CITES awareness creation in Ghana. Similarly, respondents were unanimous on the need for the number of scientific authorities to be increased to facilitate research to promote CITES information for dissemination to stakeholders. In its generality, there was a consensus on the urgent need for a comprehensive awareness creation strategy be developed and enforced to help improve on the level of awareness of stakeholders on CITES issues in Ghana

## LIST OF ACRONYMS

CEPS - Customs Exercise and Preventive Service  
CITES - Convention on International Trade in Endangered Species of Wild Fauna and Flora  
CSIR - Council for Scientific and Industrial Research  
ECOWAS – Economic Community of West African States  
EU – European Union  
FAO – Food and Agriculture Organization  
FC - Forestry Commission  
FSD – Forest Services Division  
GWS - Ghana Wildlife Society  
ISPMs - International Standards for Phytosanitary Measures  
IUCN - International Union for the Conservation of Nature  
KNUST - Kwame Nkrumah University of Science and Technology.  
MA - Management Authority  
MOFA - Ministry of Food and Agriculture  
MOU- Memorandum of Understanding  
NACOB - Narcotics Control Board  
NBSAP - National Biodiversity Strategies Action Plan  
OAS - Organization of American States  
PPRSD - Plant Protection and Regulatory Services Division  
SA -Scientific Authority  
SPS - Sanitary and Phytosanitary  
TIDD - Timber Industry Development Division  
U.N. - United Nations  
UNEP-WCMC - United Nations Environment Programme-World Conservation Monitoring Centre  
USA - United States of America  
USAID - United States Agency for International Development  
VSD - Veterinary Services Directorate  
WA BiCC - West Africa Biodiversity and Climate Change  
WD - Wildlife Division

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## CHAPTER ONE

### 1.0 INTRODUCTION

The US Fish and Wildlife Affairs (2012) defines Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), as an international treaty conceptualized and designed to prevent wild species of plants and animals from becoming endangered or extinct due to international trade and hence regulates international trade in over 35,000 wild species of plants and animals. It is further explained to have been formulated in the 1960's at a meeting of the International Union for the Conservation of Nature (IUCN) in Kenya and that the text of the treaty was approved by 80 countries in 1973 and the treaty formally entered into force in 1975. Currently, CITES is made up of 183 Parties including Ghana which signed and ratified the treaty in 1976 (CITES, 2016).

Ghana's efforts to ensure compliance with CITES and implement better controls relating to international trade in fauna and flora since it became a party to the treaty has not been without problems and these problems need to be addressed to ensure more effective controls, legally robust, as well as sustainable and traceable international trade (Oppong, 2017). Currently, there is no specific legislation for the implementation of CITES in Ghana, aside the use of the text of the convention (CITES, 2019). According to Oppong (2017), old legislations that were enacted for management and regulation of wildlife resources in Ghana are those used for the implementation and enforcement of CITES in the country.

Agyare (2017) in a personal communication indicated that, absence of specific legislation for CITES in Ghana undermines the potential role of stakeholders in CITES implementation. This gives a cause for one to believe that there is low level of awareness on the legal implications of CITES. There is therefore an urgent need for a high level of awareness creation among stakeholders of CITES in Ghana. To be able to achieve the needed high level of awareness among stakeholders in CITES-Ghana, the nation will need to devise strategies to improve the prevailing situation.

According to Jacobson (2015), effective conservation education and outreach is one critical way to promote conservation policy implementation by CITES stakeholders because such an innovation will ultimately change people's behavior towards unsustainable use and trade in wildlife, thereby facilitating the adherence to CITES regulations and its implementation. It was

further explained that, conservation education and outreach programs can help to solve conservation challenges, including protecting rare species, cleaning up a silted river or sustainably managing a forest through local community participation and provision of alternative sources of livelihood argued that the fate of ecosystems, and the people that depend on these ecosystem lies with our ability to educate the public, both children (particularly in schools) and adults in their communities.

A nation's landscape and ecosystems are continually being threatened by urbanization, deforestation and habitat fragmentation. The magnitude of the threat posed by disturbances to our ecosystem and landscape has never received equal measure of attention that it deserves. The value of understanding conservation, retention of natural resources and obligation to regard the natural world is as pressing as ever. By observing the current state of events in terms of environmental disturbances, it implies that we are behind schedule in trying to bring ample solutions and strategies that can help secure our environment for the future (Anon, 2010).

An intriguing possibility is therefore that provision of information, beyond sheer exposure to biodiversity, could help increase people's awareness about biodiversity and reconnect them to nature (Schwartz *et al.*, 2013). For an effective implementation of CITES and prevention of wildlife crime, there is a need for regular awareness creation at national and local levels and to foster partnership or collaboration among relevant CITES stakeholders.

## **1.1 PROBLEM STATEMENT**

Awareness creation on CITES in Ghana over the years has been focused on management, conservation and protection of wildlife locally. However, awareness creation on CITES implementation and Wildlife trafficking in general has been very low. (Agyare, 2018)

The author's field of CITES implementation especially at the Kotoka International Airport indicates inadequacies in the level of awareness of stakeholders involved in CITES. The inadequate level of awareness of these stakeholders and the related deficiencies in the roles they play constitutes a major factor that militates against CITES compliance in Ghana. This observation is directly linked to the findings made by (Oppong,2017), who identified low level public awareness, inadequate knowledge by relevant stakeholders, knowledge gap on CITES on the part of Regulatory and Enforcement Agencies among others as factors that contribute to CITES violations and ultimately affect the effective implementation of CITES adversely in Ghana.

In addition, results of a field assessment conducted in Ghana by Born Free, U.S.A on behalf of the USAID-WA BiCC Program, in 2016 corroborated the previous observation made by Oppong (2017) that inadequate awareness or knowledge negatively impacted on the capacity of customs officers, police and other officials to function effectively as frontline officers in CITES.

It is therefore important to formally assess the level of awareness of stakeholders on CITES and examine existing mechanisms for awareness creation on CITES implementation in Ghana with the view of identifying any inherent weaknesses for the necessary remediation so as to help improve on the level of awareness for CITES implementation in Ghana.

## **1.2 RESEARCH QUESTIONS**

This study is expected to answer the following questions:

1. What is the knowledge base and level of awareness on CITES among relevant Stakeholders?
2. What are the existing mechanisms for awareness creation among relevant stakeholders on CITES in Ghana?
3. What are the challenges affecting CITES awareness creation in Ghana?
4. How can identifiable challenges be addressed to promote a participatory implementation of CITES in Ghana?

## **1.3 GENERAL OBJECTIVE**

The study intends to critically investigate the status of awareness among relevant shareholders for CITES implementation in Ghana with the view to generating relevant inputs for developing awareness creation guidelines for improving CITES implementation in Ghana.

## **1.4 SPECIFIC OBJECTIVES**

The specific objectives of the study are to achieve the following:

1. Assess the knowledge base and level of awareness of relevant stakeholders on CITES
2. Broaden the stakeholder base and their roles in CITES implementation.
3. Examine existing mechanisms for awareness creation on CITES and identify challenges associated with awareness creation among relevant CITES stakeholders in Ghana.
4. Solicit relevant stakeholders' inputs on how to address identifiable challenges in awareness creation for CITES implementation in Ghana.



## CHAPTER TWO

### 2.0 LITERATURE REVIEW

#### 2.1. International relevance of CITES.

CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. The effort to regulate it requires international cooperation to safeguard certain species from over-exploitation because the trade in wild animals and plants crosses borders between countries. The CITES convention was drafted due to a resolution adopted in 1963 at a meeting of members of the International Union for Conservation of Nature (IUCN). The convention was opened for signature in 1973 and CITES entered into force on 1 July 1975. (CITES, 1973)

Wildlife species in trade are not necessarily endangered, but the existence of an agreement to ensure the sustainability of the trade is important to safeguard these resources for the future. (CITES 2018). CITES is also one of the best tools for fighting the transnational illegal wildlife trade that threatens many of the world's most endangered species. (Leigh, 2016).

CITES is one of the largest and oldest conservation and sustainable agreements in existence. Participation is voluntary, and countries that have agreed to be bound by the Convention are known as Parties. Although CITES is legally binding on the Parties, it does not take the place of national laws. Rather it provides a framework respected by each Party, which must adopt their own domestic legislation to implement CITES at the national level. (Zimmerman, 2003).

According to Ryan, (2018), the Convention on International Trade of Endangered Species of Wild Fauna and Flora is important because it is the only treaty that regulates international trade in wildlife. It is intended to address deficiencies in International Wildlife Trade.

A research conducted by an associate in Zoology and Entomology at the University of the Free State in South Africa, notes that illegal wildlife trade deprives nations of their biodiversity, income opportunities and natural heritage and capital. (Nowak, 2016)

In a presentation made by Scanlon (2015), Secretary-General at CITES Secretariat he stated that, a number of CITES listed species are of high-value items and are targeted by organized crime groups, and this makes the officers responsible for regulating trade in these specimens vulnerable to attempts made to corrupt them. He said that illegal trade in wildlife could often be



associated with a combination of other well-established general crimes such as fraud, use of dangerous weapons, bribery, money-laundering and other forms of corruption.

The link between corruption, organised crime and wildlife trafficking is important in terms of legislation as it is “crucial to ensure that combating corruption as it affects trade in wildlife and CITES implementation is built into other relevant conventions, national laws, institutions and programmes” (CITES, 2015)

A 2015 paper in an Oxford journal states: ‘Most *mammalian megafauna face dramatic range contractions and population declines... 60% of the world’s largest herbivores are classified as threatened with extinction on the International Union for the Conservation of Nature (IUCN) Red List.* (Anon, 2016)

In addition to poaching and trafficking, habitat contraction and fragmentation threaten species survival. Fragmentation also threatens large migratory species, as smaller pockets of protected areas often cannot support sustainable populations of large herbivores and carnivores.

Livestock encroachment into wildlife habitats, land-use change, and armed conflict combine to account for contraction. (Anon, 2016)

CITES can therefore only deal with one dimension of a much broader problem. However the more effective it becomes at dealing with trafficking; the more traction is likely to be gained in tackling the others. (Anon, 2016).

As a means of showcasing the important role of local communities in sustainable management of CITES – listed species, a new handbook on CITES and livelihoods was launched by the Secretariat of the Convention and the General Secretariat of the Organization of American States (OAS) to support the effective implementation of the Convention by enabling countries to assess the impacts of the CITES listings on the livelihoods of poor rural communities that live alongside wild plants and animals.(CITES, 2016).

## **2.2. Challenges confronting awareness creation on CITES from the global perspective and related causes.**

Despite the important work being done to implement the Convention on International Trade in Endangered Species (CITES) globally, the wildlife in many parts of Africa is being devastated through illegal international animal and plant trade. This issue may be particularly be more destructive in Asia because China, with its increasing wealth, has become a dominant market for this illegal trade. (Mcneely *et al*, 2009)

This unfortunate situation may be attributed to the shortage of appropriately skilled staff at various ports and exit and entry points who can control the illegal movements across borders, states, and countries. Training of airport and port staff, drawing on the expertise of local wildlife authorities, is an immediate priority to ameliorate the situation. (Mcneely *et al*, 2009)

McOmber (2002) also revealed that there are fewer than 100 wildlife inspectors spread among the designated ports around the world. Clearly, it is not possible for this limited number of inspectors to check every shipment. Furthermore, the general practice is to inspect only those containers that are designated as wildlife, but, as the majority of the trade in wildlife is illegal, this does little in the way of discovering it.

The situation in Ghana is not very different from what has been reported from elsewhere. There are several Protected area systems of conservation of CITES and other species but their benefits are hardly noticed due to insufficient public knowledge, lack of alternative livelihood support for nearby communities, and the fact that there is almost zero interaction between a majority of the people and these reserves.(Hackman, 2014)

There are several factors causing CITES awareness to be pinned down in Ghana. The lack of effective collaboration among stakeholders is another major factor. All stakeholders of CITES have separate but important functions. Lack of targeted, long-term and systemic awareness-raising including campaigns and strategies, especially for children at the earliest possible age is one factor that militates against increased awareness. In addition, there is a failure to make use of innovative technologies and approaches in awareness-raising campaigns and in disseminating good practices. (Dekoninck, 2017)

Other challenges affecting CITES awareness creation that have potential to undermine national implementation of CITES have been identified as lack of or insufficient national legislation, particularly regarding penalties; issuance of irregular documents; lack of or insufficient border control; fraud; lack of or insufficient coordination and communication between the Management Authority, Scientific Authority and enforcement agencies; insufficient communication with the Secretariat; and lack of or insufficient control of domestic trade (since domestic trade has implications for international trade). (Reeve, 2003)

Again, (Oppong, 2016), identified the knowledge gap in CITES on the part of state regulatory institutions as part of factors that cause the Convention not to be nationally recognized in the country.

### **2.3. The status of CITES implementation in Ghana and its related Legislative constraints.**

Ghana forms part of the 183 Parties of CITES in the world. The country became a signatory to CITES in 1976 and since then, it has not been without challenges. Its Management Authority is the Wildlife Division of the Forestry Commission. Aside this, other Management Authority competent to grant permits and certificates is the Timber Industry Development Division of the Forestry Commission. The Scientific Authority is the Faculty of Renewable Natural Resources of the Kwame Nkrumah University of Science and Technology. (CITES, 2016) There are other relevant Institutions that play a vital role in the effective implementation of CITES in the country and major examples of these are the Customs and the Veterinary Service of Ghana.

According to the Text of the Convention, the Management Authority has two basic roles: granting permits and certificates under the terms of the Convention and communicating with the CITES Secretariat and other Parties. There are many other tasks imposed by the text of the Convention, included in Resolutions and Decisions and other that would be seen as logics for a Management Authority. (CITES, 1973)

The Scientific Authority provides advice to the Management Authority on issuing permits for the export and import, of a CITES-listed species. The Management Authority first consults with the Scientific Authority prior to issuing CITES export permits. Essentially the Scientific Authority's key role is to ensure that the trade of a CITES-listed species will not be detrimental to the survival of the species in the wild. (Pires, 2007)

Ghana is currently faced with a major challenge for its National Legislation to be effectively enforced and implemented. It is currently in Category 3: this means that the legislation is believed generally not to meet the requirements for the implementation of CITES but has a comprehensive draft and revised draft legislation prepared. However, there has been a delay in submission for enactment due to personnel changes. Currently, there is a revised forest and wildlife policy, which is a sure headway for the legislation to be reviewed to reflect on the relevant provisions in the policy to help make it enforceable. (CITES -NLP, 2017).

Part of the challenges facing the country for implementing CITES is that, as a result of being in the Category 3 of CITES, it has been sanctioned to suspend trade in three species: *Pandinus imperator*, *Chamaeleo gracilis* and *Chamaeleo senegalensis*. CITES uses trade measures by way of temporary suspension to serve as incentives for its implementation, for improving the effectiveness of the Convention. A recommendation to suspend trade provides a period during which the relevant country can move from non-compliance to compliance. However,

recommendations to suspend trade are withdrawn immediately upon a country's return to compliance. (CITES, 2019)

#### **2.4. The motivation for awareness creation on CITES in Ghana.**

According to Du *et al* (2018), due to low environmental awareness, people often show little enthusiasm for environmental participation. This observation can be likened to Ghana with reference to awareness on the part of the majority of the populace on CITES.

Cheung, (1995) observed that, a change in the traditional beliefs and cultural practices of consumers is crucial to curbing demand in the long term. This can be accomplished through culturally sensitive public awareness and educational campaigns. Achieving this in the short term is virtually impossible as such beliefs and practices are so entrenched in ancient medicinal customs. Nevertheless, raising the awareness and obtaining the cooperation of the Oriental medicine community about the plight of wildlife and the need for better conservation are relevant approaches to be taken now to reduce demand in the long term.

The success or failure of this approach will however depend on the extent of the formal education of the populace. This is because, it has been observed by authors that, provision of education, awareness, and outreach programs to local communities neighboring protected areas are responsible in some cases for successful conservation of biodiversity. For example, a study from the Masoala National Park in Madagascar found that 93% of residents living near the park were aware of the existence of the park and expressed positive opinions about the park, attributing this to the education and awareness programs that the park administration had provided. Again, the success of Sustainable Forest Management and Conservation Projects in Botswana, Malawi, Mozambique, and Namibia was due to the provision of awareness programs. They attributed the reduction in deforestation from 1.6% in 1997 to about 1.4% in 2004 to provision of environmental education. Provision of awareness programs was linked to sensitization of the community on the need for conservation. A study in Bwindi Impenetrable National Park in Uganda also confirmed that environmental education enhanced management effectiveness in the parks. Education and awareness activities play a vital role in building support for protected areas in general and for management actions. Sensitization is highly significant in terms of future interventions. (Muhumuza *et al*, 2013).

The outcome of research conducted by the Ghana Wildlife Society (GWS) has shown that the basic conservation rule is that *“if people are not made to understand the reason why they should conserve, they may not see the need to do so”*. Although some people damage wildlife out of

greed and are fully aware of the consequences, others do so from ignorance and/or are compelled by social and economic inequities and the need to meet their basic needs.

Agyare (2018) in a personal communication also stated that over the years, awareness creation on CITES issues in Ghana has not really been on the high side. It has basically been centered on conservation issues. Moreover, there has not been any formal guidelines of creating awareness on CITES. Existing mechanisms have been occasional workshops and conferences. However, awareness creation can be improved through media participation, formal education and participation in conferences and workshop.

The African scenario depicted is like that of USA where an analysis of the Global Warming Citizen Survey showed that the higher a respondent's education level, the greater his/her activism in terms of policy support, environmental political participation and environment-friendly behavior (Anon, 2015)

Consequently, as part of measures to update the Current Status of National Biodiversity Strategies and Action Plan (NBSAP) in Ghana, it is a considered a high priority activity to strengthen education and awareness creation at all levels of society especially among those whose livelihoods depend on the forests. (Anon, 2016) This brings to light that there is an urgent need to raise awareness on CITES issues to help regulate trade effectively in Ghana. International wildlife trade can represent a major threat to biodiversity conservation. Annually, billions of plants, animals and their products are traded across international borders, with legal trade alone estimated to be worth over 320 billion USD per annum. All 183 CITES signatory countries, must provide annual reports detailing their international trade in CITES-listed species, culminating in more than 18 million trade records. This wealth of data, reported from 1975 to-date, is maintained in a central, freely accessible database, the 'CITES Trade Database' ([trade.cites.org](http://trade.cites.org)), managed by the UN Environment World Conservation Monitoring Centre (UNEP-WCMC) on behalf of the CITES Secretariat. Incorrect interpretation can lead to erroneous conclusions. In addition, errors in interpretation of the Data Base leads to incorrect capturing of information on both importer and exporter figures. Countries provide data for both their imports and exports, resulting in two data sources. That is, data reported by importing countries, and data reported by exporting countries. For several reasons, these do not always match. As the quantities traded may be lower than those permitted. This can result in lower importer-reported trade levels. Again, under-reporting of imports can lead to substantially higher trade levels reported by exporters than by importers. In addition, inconsistencies in import and export figures may include different use of trade 'terms' such as 'source', 'purpose', 'unit' etc., whereby different Parties apply the 'terms'

differently. Furthermore, the trade for ‘personal’ purposes is often used for non-commercial movement of pets but this excludes large numbers traded for the pet trade, which are traded as ‘commercial’. (Robinson *et al*, 2018).

## **2.5 Addressing challenges on awareness creation on CITES implementation in Ghana.**

The identifiable challenges confronting awareness creation and CITES implementation in Ghana can be addressed in several ways for instance, a stronger funding base for CITES has the potential to trigger many more initiatives to strengthen the overall regime. This in the end will help improve awareness. In the past, there had been a tendency to spend a disproportionate amount of funds on scientifically or trade driven species-specific projects, monitoring populations and management, to the detriment of crosscutting projects to enhance implementation and enforcement. The imbalance needs to be redressed to influence decision-making and funding priorities. (Reeve, 2003)

Communication, education and awareness programs are all too often an afterthought in conservation planning. Yet nearly all conservation efforts are embedded in a social, cultural, political and economic context – making community engagement a key factor for success. The tools used to communicate, and the investment made in shifting human behavior and social norms at the community level, must be given the same level of consideration currently reserved for science and management programs. Despite growing evidence that communication has a strong impact on conservation success and sustainability, many protected area agencies lack the resources or capacity to implement effective outreach. In creating change at the community level, it requires figuring out what moves people on an emotional and practical level and then designing communication systems that speak to these needs. Communication, education and public awareness programs have been characterized in many ways by many different organizations. (Ervin, 2010) Capacity building programs are also of great relevance in awareness raising of CITES. They have been described as programs that: attract and mobilize positive action for biodiversity; provide ways of managing multi-stakeholder dialogue; enable protected area managers to focus more on conservation and less on threat reduction efforts; help gain the cooperation of different groups; and provide the tools to develop community capacity to support conservation within protected areas. However, the essence of these programs is the simple act of people exchanging information on biodiversity, and on the consequences of human behavior on biodiversity. (Ervin, 2010)

Just like in Mongolia, mass media education is of much relevance in public awareness. Modern Mass Media such as (newspapers, magazines, radio, television, and film) provide one of the most

effective, ready-made means of reaching a wide target audience. Potential activities include organization of workshops, field visits and sensitization courses for print and broadcast journalists, with the aim of developing an adequate knowledge base for conveying reliable information to the public. Outstanding journalists could also be provided additional sensitization. Development of a syndicated feature and photo service on conservation for newspapers and magazines could also be used. Publication of messages and slogans as paid advertisements in newspapers and magazines is also another way. Development of radio discussions, and radio spots conveying specific conservation messages, for broadcast at local level. Production of television spots, dramas and other programming, with content aimed at an appropriate audience and production of special documentary films for screening on television, in schools, community centers, rural areas and other public gatherings centered on CITES issues. (Solongo, 2012). These strategies are of great relevance in Ghana as well to help enhance awareness of the Stakeholders of CITES.

## **2.6 Mechanisms for Broadening the stakeholder base and their roles in CITES implementation.**

Stakeholders are the relevant bodies that can play a crucial role in implementing the provisions of the convention, either directly through their own activities and research, or indirectly by helping to build capacity within governments and other institutions to better meet their commitments. Relevant organizations and stakeholders can also help shape processes and policies by contributing information and expertise to meetings. (Anon, 2018)

In Ghana relevant and existing known stakeholders of CITES are the Forestry Commission, Veterinary Services Directorate, Kwame Nkrumah University of Science and Technology, Police, Customs Exercise and Preventive Service and the Ghana Wildlife Exporters Association. Aside these, there are other Relevant Bodies that work in and around the borders, seaports and airports who help in regulating and enforcing policies as well as implementing them. The possibility of increasing the number of relevant stakeholders depends on the already known stakeholders to identify potential ones. This is further explained in the research to broaden the stakeholder base for the benefits entailed.

### **2.6.1 Potential Collaborating Institutions for CITES Implementation in Ghana**

In the professional opinion of the author, and from experience gathered from the field of work, several state regulatory institutions are most likely to be able to lend a hand to the Wildlife Division of the Forestry Commission in creating awareness on CITES. This is by nature of their

mandated roles, which bears a reasonable semblance to the role of the Wildlife Division. Some of these institutions and their corresponding roles are explained below:

Plant Protection and Regulatory Services Division of the Ministry of Food and Agriculture (MOFA), Freight Forwarders and The Narcotics Control Board (NACOB) that may be explained separately as follows:

#### ***2.6.1.1 Plant Protection and Regulatory Services Division of the Ministry Of Food and Agriculture (MOFA):***

The Division works closely with the customs authorities Customs Exercise and Preventive Service (CEPS) at all the official entry points. It supervises and trains Phytosanitary Inspectors, develops and publishes information material, keeps records of plant imports and exports, the importers and exporters, as well as the pests and diseases of quarantine importance. It issues Phytosanitary Certificates and Import permits. It also operates the Sanitary and Phytosanitary (SPS) Enquiry Point. The Division also carries out inspection on marketing quality standards on fresh fruits and vegetables for export. Implementation of relevant International Standards for Phytosanitary Measures (ISPMs) are implemented by the Division.

The Division also does inspection, certification (Phytosanitary and marketing quality compliance), treatment (confiscation and destruction), and information on export requirements and training on export requirements. It deals with importers of agricultural produce: Inspection, certification (import permits), release, (confiscation and destruction, return to country of origin), information on import requirements, post-entry quarantine, training on import requirements. (Anon, 2018) This and other agency duties performed by this division is in one way or the other directly related to CITES therefore involving them as stakeholders in CITES will help improve on CITES awareness in Ghana in the long way.

#### ***2.6.1.2 Freight Forwarders***

A freight forwarder is an agent who acts on behalf of importers, exporters or other companies to organise the safe, efficient and cost-effective transportation of goods.

Companies vary in size and type, from those operating on a national and international basis to smaller, more specialised firms, which deal with types of goods or operate within particular geographical areas. Investigating and planning the most appropriate route for a shipment, considering the perishable or hazardous nature of goods, cost, transit time and security

Dealing with special arrangements for transporting delicate cargoes, such as livestock, food and medical supplies. They also maintain communication and control through all phases of the



journey, including the production of management reports and statistical and unit cost analysis. Again, they maintain current knowledge of relevant legislation, political situations and other factors that could affect the movement of freight (AGCA, 2018). Their work is of great value at all ports and has a tremendous potential for tracking CITES species being transported illegally because of the various roles they play in trade.

### **2.6.1.3 The Narcotics Control Board (NACOB)**

This is an agency under the Ministry of Interior mainly concerned with the formulation and enforcement of narcotics laws in the country. The boards' work is aimed at preventing the use, import, and export of narcotics.

National Coordination Mechanism Besides the international cooperation, Narcotics Control Board also has local collaboration with other stakeholders through Inter Agency Committees to facilitate exchange of information and statistics, and to assist intelligence gathering among various agencies in the country. Currently, there are two of such committees, one for Enforcement and Control and the other for Demand Reduction. ("Ministry of Interior, Republic of Ghana", 2018)

The board regularly has inspectorates at various entry points of the country, particularly airports and seaports. Regular sweeps are done on marine vessels and on passengers at airports as security checks. During these inspections, if any suspected narcotic product(s) is found, the board confiscates them and runs tests to ascertain the kind of substance it is. The culprits are then arraigned before law courts for their cases to be tried. The narcotic product confiscated is then burned to prevent redistribution of the product. (Anon, 2011) The presence of these and other agencies can play a vital role in CITES since there is a high possibility that these plant and narcotic regulators might in their line of duty encounter wild fauna and flora in their day to day duties and checks. There is therefore an urgent need to introduce these and other stakeholders located at the borders, airport and seaports to come on board as stakeholders to help combat illegal wildlife trafficking. Broadening the stakeholders involved in CITES will also help to improve on the awareness of the convention nationally.

# CHAPTER THREE

## 3.0 RESEARCH METHODOLOGY

### 3.1 Description of study Area:

The study was conducted in CITES operational areas across Ghana and therefore the sites were purposively selected in that regard as depicted on the map of Ghana below.



**Figure nº 1: Map of Ghana indicating the Ports, Borders and checkpoints where the study was conducted.**

Source: <https://www.ezilon.com/maps/africa/ghana-road-maps.html> (Accessed 20 Nov, 2018)

The study was specifically conducted in Ghana with the main focus of assessing the level of awareness of CITES stakeholders in the country. Ten(10) main locations that is two(2) ports and eight(8) borders were visited. These are Tema, Accra, Aflao, Kumasi, Elubo, Takoradi, Paga, Mole National Park, Kakum National Park and Tumu.

The Republic of Ghana is a country located along the Gulf of Guinea and Atlantic Ocean, in the sub region of West Africa. Spanning a land mass of 238,535 km<sup>2</sup> (92,099 sq mi). Its diverse geography and ecology ranges from coastal savannahs to tropical rain forests. (Jackson, 2001)

The country has a north-south extent of about 670 km and a maximum east-west extent of about 560 km. It shares borders with Côte d'Ivoire to the west, Burkina Faso to the north, and Togo to the east. To the south are the Gulf of Guinea and the Atlantic Ocean. The country is divided into 10 administrative regions. (Jackson, 2001) According to the World Bank, (2018) Ghana's population is about 29.6 million. With this vast population and land coverage according to the U.N. FAO, 21.7% or about 4,940,000 ha is forested. Of this 8.0% (395,000 ha) is classified as primary forest, the most biodiverse and carbon-dense form of forest. Ghana had 260,000 ha of planted forest. Change in Forest Cover: Between 1990 and 2010, Ghana lost an average of 125,400 ha or 1.68% per year. In total, between 1990 and 2010, Ghana lost 33.7% of its forest cover of around 2,508,000ha.

Ghana's forests contain 381 million metric tons of carbon in living forest biomass. Biodiversity and Protected Areas: Ghana has some 1185 known species of amphibians, birds, mammals and reptiles according to figures from the World Conservation Monitoring Centre. Of these, 0.8% are endemic, meaning they exist in no other country, and 3.0% are threatened. Ghana is home to at least 3725 species of vascular plants, of which 1.2% are endemic. 4.6% of Ghana is protected under IUCN categories I-V. (Tufour, 2012) The study however, was conducted in these areas mapped because they are the main ports and boarders that the country has and are obviously the main routes used chiefly by exporters and importers for trade and other CITES regulated activities. The selection of respondents from these locations were purposely done.

### **3.2. Literature Review**

There was an intensive desktop study of existing literature, publications and journals. Literature relating to CITES in Ghana was explored using databases such as Google Scholar as well as other search engines. The desktop study also known as the secondary data were practically obtained from both published and unpublished documents and other literatures that were relevant to the objectives of the study. In addition, information was gathered from other assessments

conducted in collaboration with the Forestry Commission and other relevant bodies working on CITES issues in Ghana.

### **3.3. Analysis of CITES trade database**

Ghana's CITES trade data was analyzed to know the effect of awareness on the wildlife trade and on its effective implementation. The CITES Trade Database provides a powerful tool for understanding the wildlife trade for listed species, and hence it was carefully analyzed. As such the research focused on the analyzing the Trade Database to know the inconsistencies that come with it which may obviously be due to inadequate awareness by the relevant stakeholders. Ghana's Trade data from the CITES Trade Database between 2010-2017 was analyzed to further verify on its effectiveness in relation to CITES awareness. It is however important to note that for the exporter figure for 2016, data was taken from the Wildlife Division of the Forestry Commission in Ghana as it was not available on the CITES trade data base.

### **3.4 Sampling Size**

In Ghana, very few frontline officers are estimated to be working directly on CITES issues (Perscom, 2018). In view of this, eighty (80) respondents were selected from eight (8) relevant stakeholder institutions in CITES. Out of this selection, seventy-three (73) representing 91% the respondents were either able to complete the questionnaires or could be interviewed of this total sample size.

### **3.5 Distribution of questionnaires**

Questionnaires (Appendix I) were administered to relevant stakeholders such as Customs Divisions, Exporters and Importers (wildlife traders), Regulatory Authorities, that is: Forestry Services Division (FSD), Wildlife Division (WD), TIDD (Forestry Commission), Scientific Authority (SA), Veterinary Services Directorate and the Police. Both open ended and closed ended questionnaires were used as one of the main sources of data collection. They were administered to the different CITES focal persons as well as other government officials. Selection of respondents were based on both Purposive Sampling and Snow Ball Method. The Purposive probability sampling technique helped in selecting respondents. The respondents were selected based on those who work directly on CITES related issues other than random selection of respondents. With the Snowball Sampling Method, the first focal person selected helped by providing information to help in recruiting other multiple referrals. Each new referral was then issued a questionnaire for primary data to be gathered and this continued until enough samples are collected. The questionnaires were self-administered, and hand delivered to the respondents

to complete the questionnaires personally. However, 91% of the questionnaires were retrieved successfully from respondents.

### **3.6. Stakeholders Interviews**

A sample of relevant Stakeholders that work directly on CITES related issues were interviewed one on one for relevant data to be gathered. In all, five (5) relevant Stakeholders were interviewed individually. Among those interviewed, two of them were past officers who worked directly on CITES issues at the management authority. That is the former International Conventions Manager and one other retired officer who was an Operations Director of the Forestry Commission specifically in charge of carrying out CITES duties. In addition, one officer of the Veterinary Services Directorate at the Kotoka International Airport was also interviewed. At the Airport, the Veterinary Officers are solely responsible for the cross examination of all fauna that enters and exits the airport. In performance of their duties, it is obvious that they encounter CITES specimens in their line of duty. The two other officers interviewed were the current head of intelligence and Investigations Department of the Customs Division whose specialty is in the field of intelligence gathering and investigation of all revenue related crimes which are likely to include CITES related issues nationally and the current Operations Director of the Wildlife Division. These stakeholders were all interviewed to solicit their views directly on awareness issues of CITES and the challenges that are associated with awareness issues as well as what can be done to improve on CITES awareness issues in Ghana. The five (5) officers who were interviewed were part of the 73 respondents and for that matter 91% of respondents from whom data was obtained.

These face-to-face interviews also helped to obtain in-depth information that could not have been obtained with the distribution of questionnaires. Respondents of the interviews are also known to have a lot of experience both in and out of the field on CITES issues and this proves that the information gathered was very relevant and authentic.

### **3.7. Field observations**

Field observations were carried out concurrently in all ten (10) locations visited for the data collection. Study of the field dynamics was carried out in respect of their routine functions, how and where inspections are carried out as well as their various departments. The observation also aided in finding out from the officers their strengths, weakness, opportunities and threats.

### **3.8. Analysis of data**

Data obtained were both quantitative as well as qualitative. Simple descriptive statistical tools like the Excel spreadsheet were used to analyze the results of the data acquired on the field as

well as visits to the stakeholders of CITES. The raw data that was collected from the field was strategically entered in an Excel Spread Sheet, coded and analyzed. Results of the data was also represented using Charts like the Pie Chat, Bar Graphs. Tables as well as graphs were provided for a much clearer and elaborate understanding of the study.

## CHAPTER FOUR

### 4.0 RESULTS

The results of the research are presented based on research questions, questionnaires and interview guides that were derived from the objectives of the study, the authors' field observations and the views of various respondents expressed about questions posed generally by the study conducted. In order to ensure a logical flow of thought, the outline of presentation of the results begins with a profile of the respondents. The main results/ findings are then arranged in a chronological order consistent with that of the objectives of the study, which are indicated as the main thematic areas under which the corresponding results/findings are explained. The categories of respondents include Private Sector, Regulatory Authorities, Management Authority as well as Scientific Authority. Questionnaires were given out as well as interviews granted for respondents. In all 73 of them were retrieved representing, 91% retrieval.

#### 4.1 Challenges faced in data collection

Collection of data at the various locations for the study was confronted with certain challenges some of which are outlined to include the following:

- Initial unwillingness by various officers to complete it due to insufficient knowledge and fear of possible embarrassment on CITES issues.
- Time constraints for filling the questionnaires.
- Lack of understanding to complete the questionnaires.
- Inability to retrieve all the questionnaires administered to all the officers.
- Long distance in travelling to get access to the stakeholders.

#### 4.2. Profile of respondents

**Table n<sup>o</sup> 1: Category of respondents, number of institutions, number of respondents, percentage of total respondents, name of Institutions and remarks.**

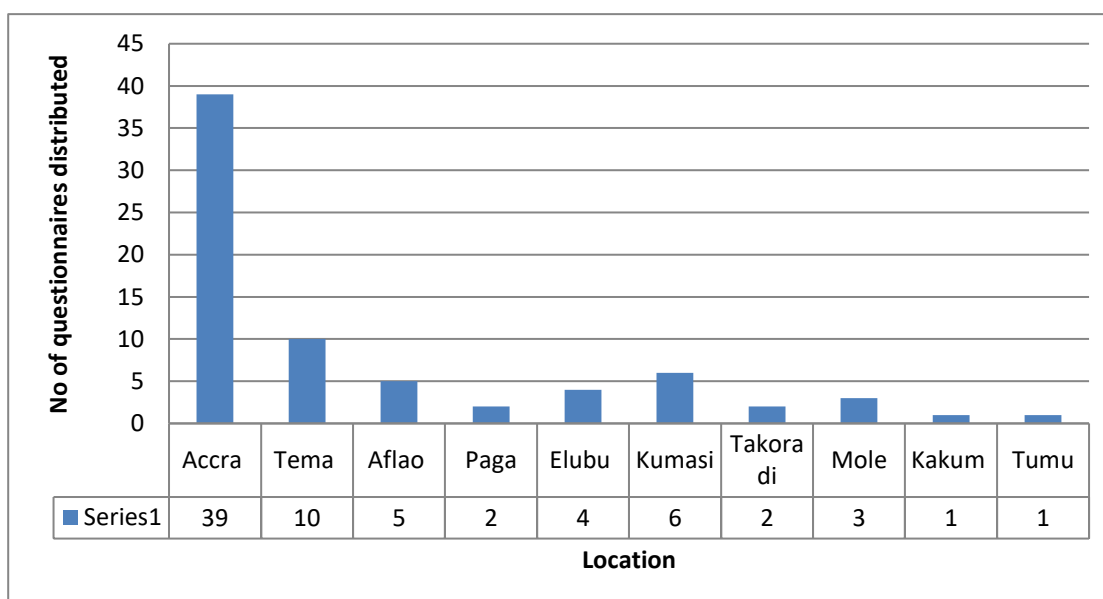
Category of Respondents	No of institutions	No of respondents	% of total respondents	Name of Institutions	Remarks
1.Private Sector	1	5	7%	Traders	Represents the least patronage
2.Regulatory Authorities	3	39	53%	Police, Customs, Veterinary Services	Represents the largest patronage
3.Management Authority	3	23	32%	Wildlife Division (WD), Timber Industry Development Division (TIDD), Forestry Services Division(FSD)	Indicative of a moderate patronage
4. Scientific Authority	1	6	8%	Kwame Nkrumah University of Science and Technology.(KNUST)	Indicative of a low patronage
<b>Total</b>	<b>8</b>	<b>73</b>	<b>100%</b>		

It is inferred from the table that four categories of respondents were captured from eight different key stakeholder institutions. The least represented of such institutions is the private sector made up of one (1) institution with five (5) respondents. The second largest key stakeholder institution was the management authority with three (3) categories of respondents and twenty-three (23) respondents to the questionnaire. Three (3) key stakeholder regulatory institutions attracted the highest number of thirty-nine (39) respondents. The main Scientific Authority also had six (6) respondents. The number of questionnaires distributed were solely dependent on the staff strength of stakeholders available at the different locations that the study was conducted.



**Table nº 2: Distribution of questionnaires to respondents at different locations.**

Location Number	Location	No of questionnaires distributed	No of questionnaires retrieved	% Retrieved
1	Accra	40	39	98%
2	Tema	10	10	100%
3	Aflao	5	5	100%
4	Paga	4	2	50%
5	Elubu	4	4	100%
6	Kumasi	6	6	100%
7	Takoradi	3	2	67%
8	Mole	3	3	100%
9	Kakum	3	1	33%
10	Tumu	2	1	50%
<b>Total</b>		<b>80</b>	<b>73</b>	<b>91%</b>



**Figure nº 2: Distribution of questionnaires to respondents at different locations.**

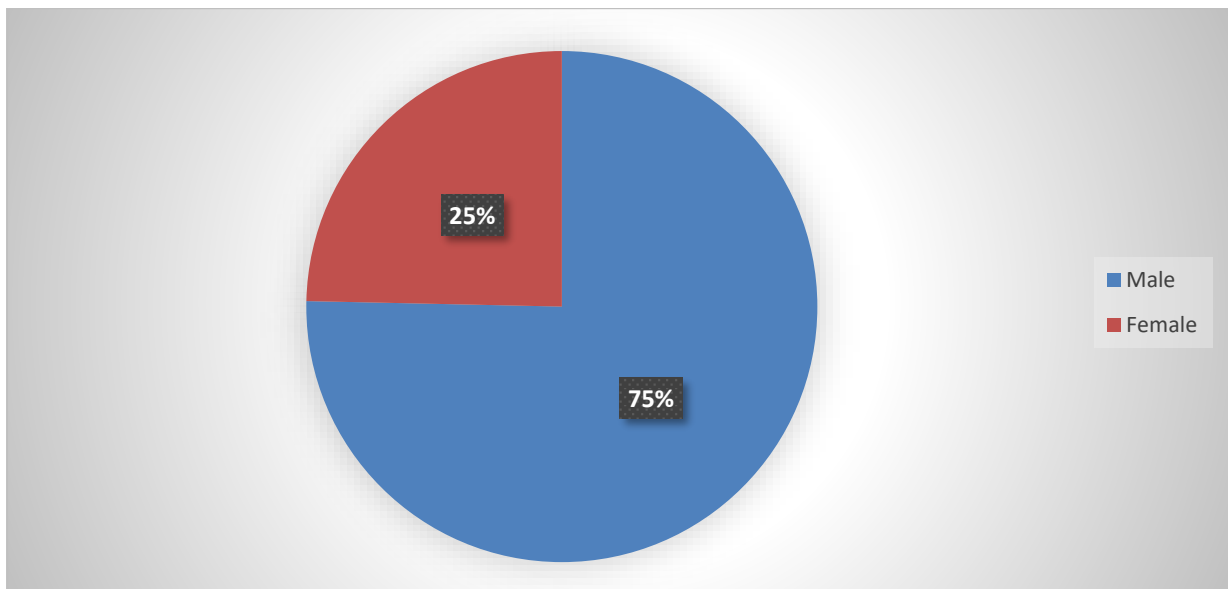
Source: Authors' Own Elaboration

The figure above (Fig. nº 2) shows that the highest number of respondents that is 39 of them were from the main capital city of Ghana. The graphical representation above also represents the 10 locations that the study took place. Even though results of the research show that most of the

respondents were from all the ports and borders of Ghana, the highest number came from the cities, that is Accra, Tema and Kumasi as well as Aflao. Suggesting that there is much room for improvement in passing down CITES awareness information to the stakeholders living beyond the cities.

**Table n<sup>o</sup> 3: Gender perspective of respondents.**

Respondents	Number
Male	55
Female	18



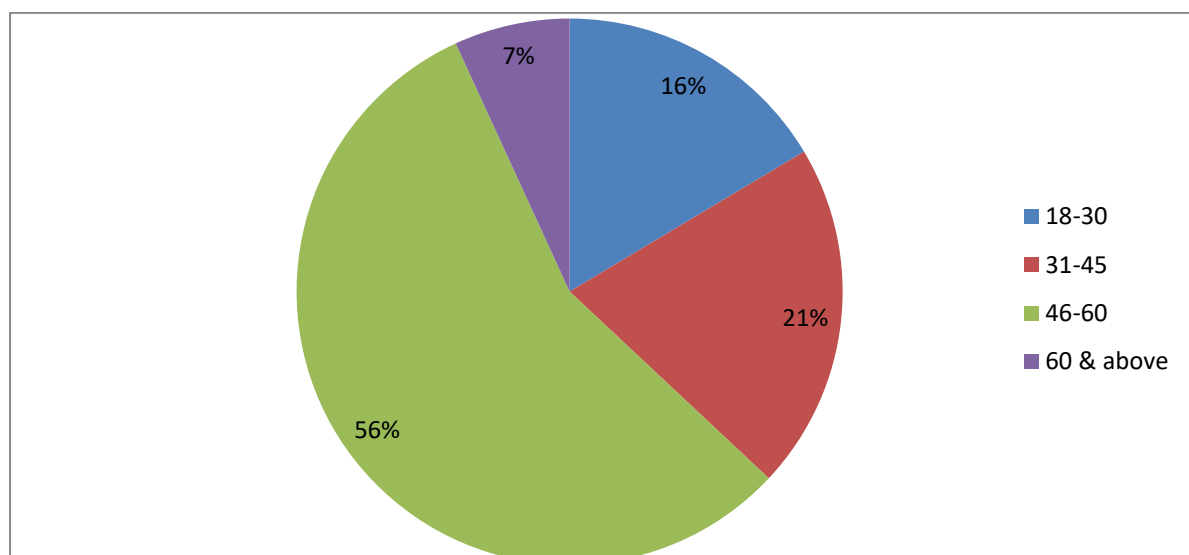
**Figure n<sup>o</sup> 3: Gender perspective of respondents.**

Source: Authors' Own Elaboration

Table and Figure n<sup>o</sup> 3 above depicting the gender perspectives of the social survey indicates that 74% of the respondents were males and 26% females suggesting that CITES and its related issues in Ghana as far as the study concerned is a male dominated field.

**Table nº 4: Age ranges of respondents.**

Age ranges	Number of respondents	Remarks
18-30	12	Vibrant
31-45	15	Middle aged
46-60	41	Dominant age group
60 & above	5	Retired from active service



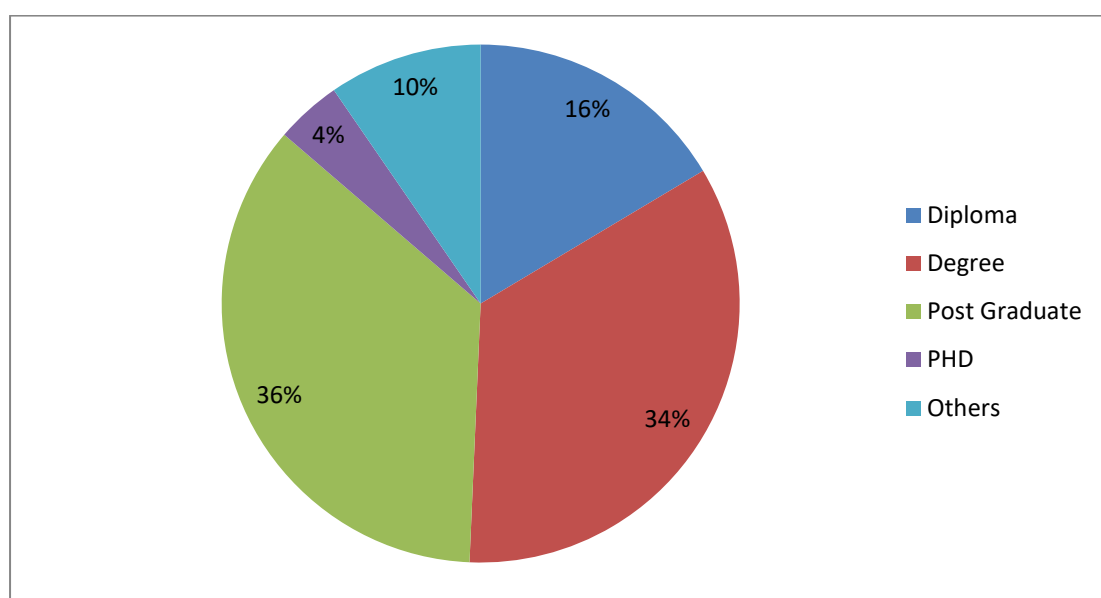
**Figure nº 4: Age range of respondents.**

Source: Authors' Own Elaboration

Table and Figure nº 4 above indicate that most responsible respondents (56%) are within the dominant age bracket between 46-60 which has implications for the sustainability of interest and commitment as far as CITES implementation in general is concerned.

**Table nº 5: Education levels of the respondents interviewed.**

Education Level	Number of respondents
Diploma	12
Degree	25
Post Graduate	26
PHD	3
Others(non-tertiary level)	7



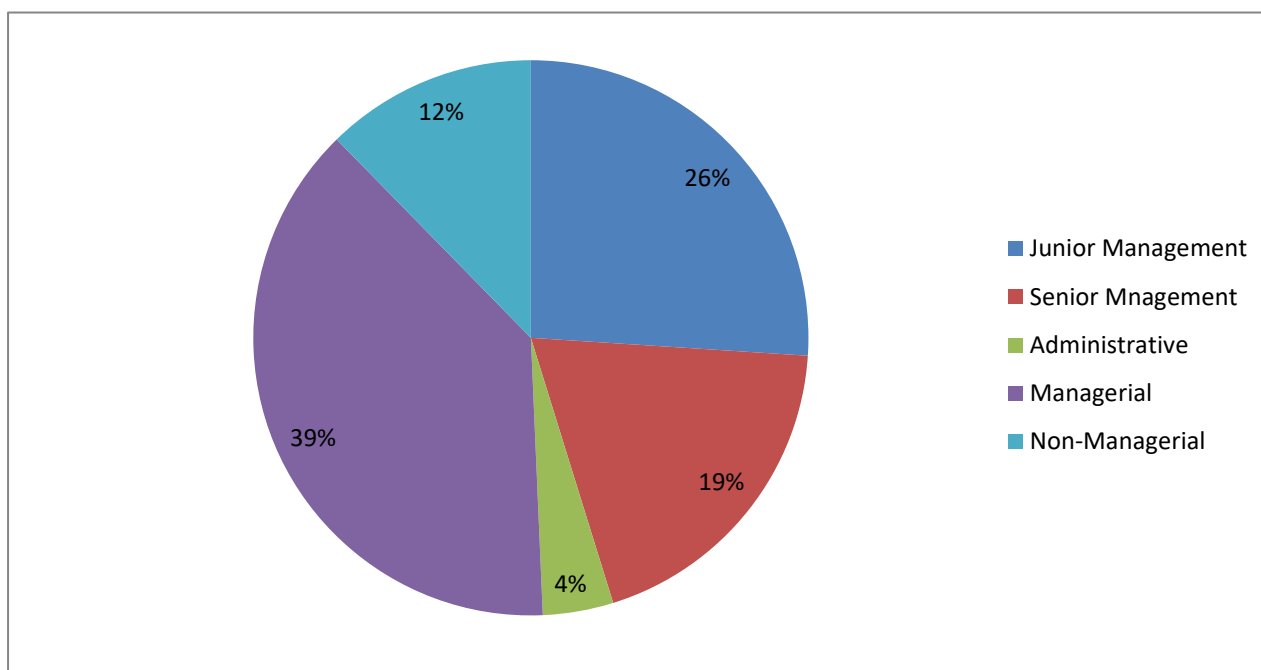
**Figure nº 5: Education levels of the respondents interviewed and frequency.**

Source: Authors' Own Elaboration

Both Table and Fig nº 5 give an impression of a positive correlation between tertiary qualification and level of awareness on CITES. It is evident that all those who have acquired tertiary level of education are knowledgeable to some extent about CITES.

**Table nº 6: Levels of the categories of staff interviewed.**

Category of staff	Number of respondents
Junior Management	19
Senior Management	14
Administrative	3
Managerial	28
Non-Managerial	9



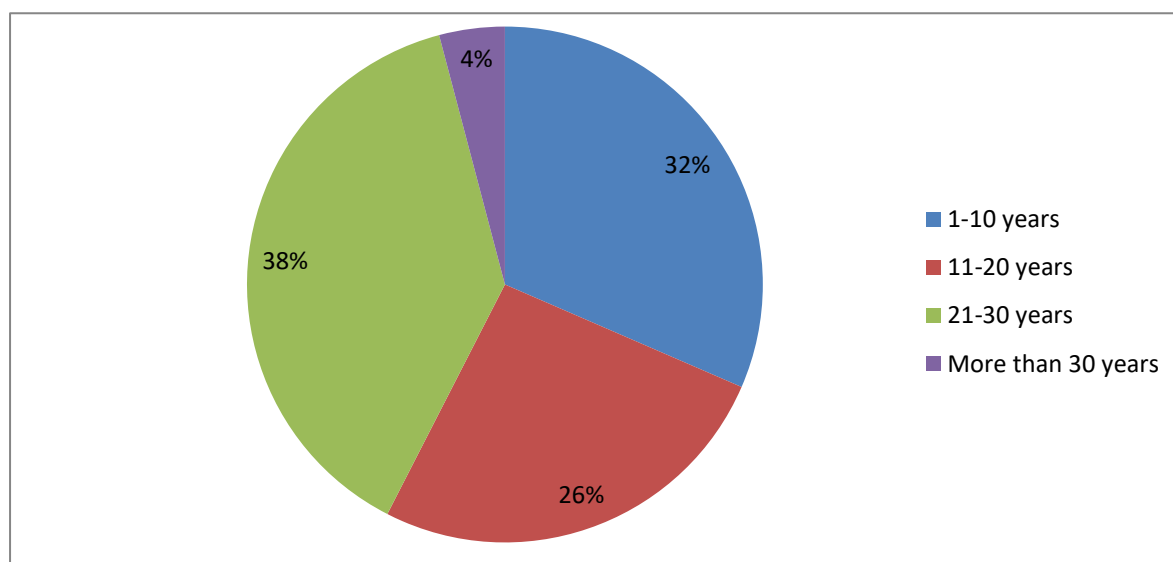
**Figure nº 6: Levels of the categories of staff interviewed.**

Source: Authors' Own Elaboration

The table and chart above indicate that staff at the managerial level that is 39% are very knowledgeable on CITES followed by the Junior management that forms 26% of the respondents.

**Table nº 7: General work experience of stakeholders.**

Period	No of respondents
1-10 years	23
11-20 years	19
21-30 years	28
More than 30 years	3



**Figure nº 7: General work experience of stakeholders.**

Source: Authors' Own Elaboration

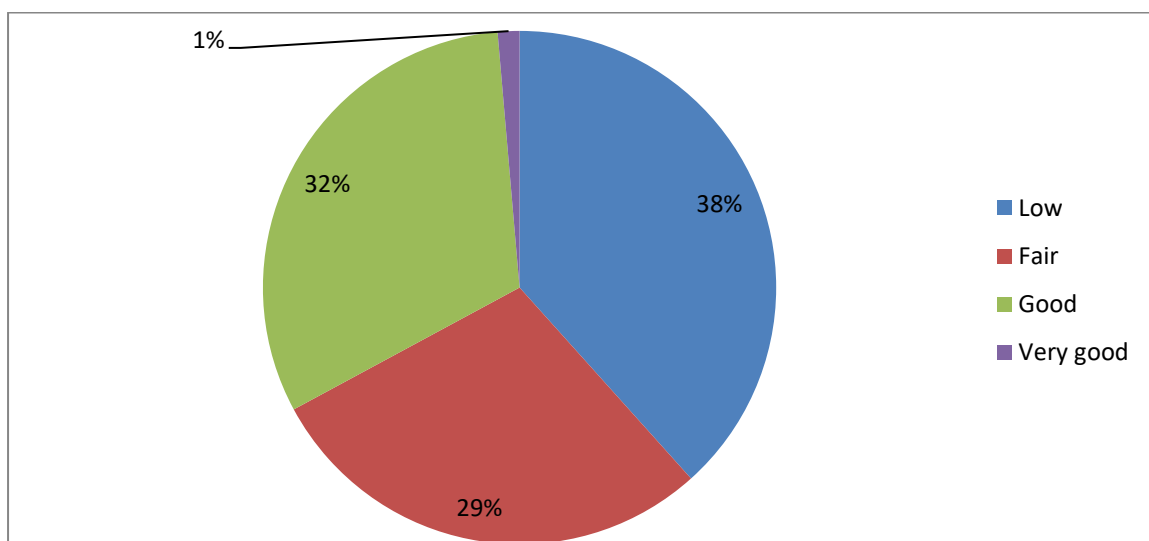
Both Table and Figure nº 7 indicate that a good majority of respondents have acquired considerable experience in the field of CITES and this has the tendency of reflecting in their level of knowledge on CITES all things being equal. A majority of them 38% worked between 21-30 years. This was followed by 32% who worked between 1-10 years and 26% of the respondents who have also worked between 11-20 years. The least number of respondents (4%) have worked for more than 30 years

**4.4 Knowledge and levels of awareness on convention on international trade in endangered species (CITES).**

These results/findings compiled for this section were based on the knowledge base and levels of awareness of respondents on CITES.

***Table nº 8: Respondents personal views on their knowledge in CITES.***

Response	Number
Low	28
Fair	21
Good	23
Very good	1



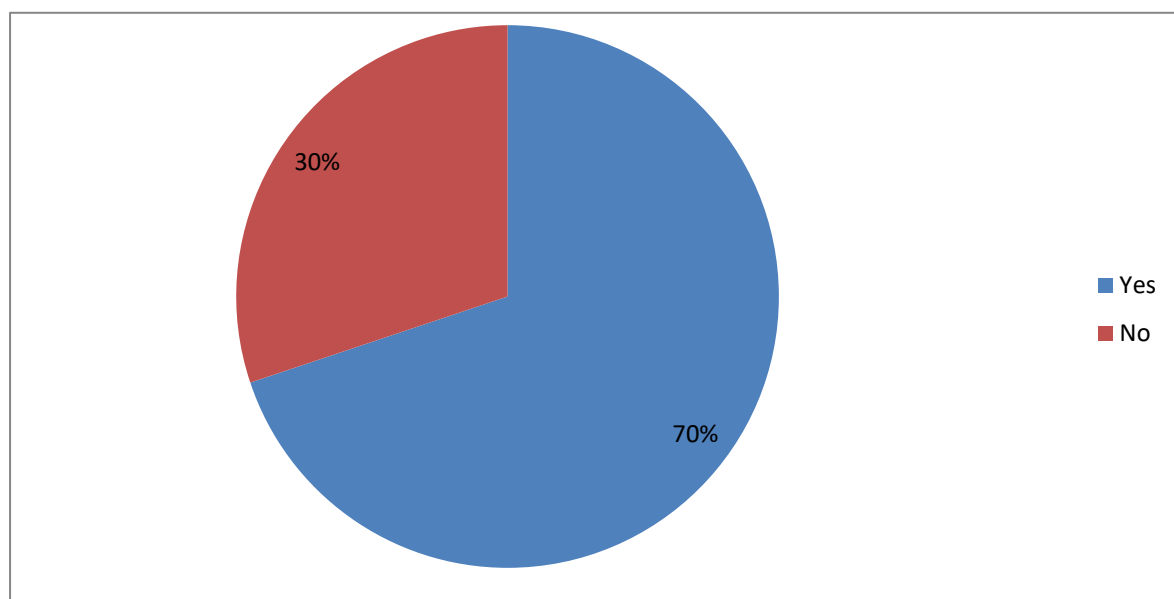
***Figure nº 8: Respondents personal views on their knowledge in CITES.***

Source: Authors' Own Elaboration

Both the table above and the pie chart display that a greater number of the stakeholders that is 38% admitted they had low knowledge about CITES issues, 32% also indicated they had fair knowledge whiles 29% said their knowledge base was good. Furthermore 1% said they were very good in CITES

**Table nº 9: Verification of respondent's general knowledge in CITES.**

Response	No of respondents
Yes	51
No	22



**Figure nº 9: Verification of respondent's general knowledge in CITES.**

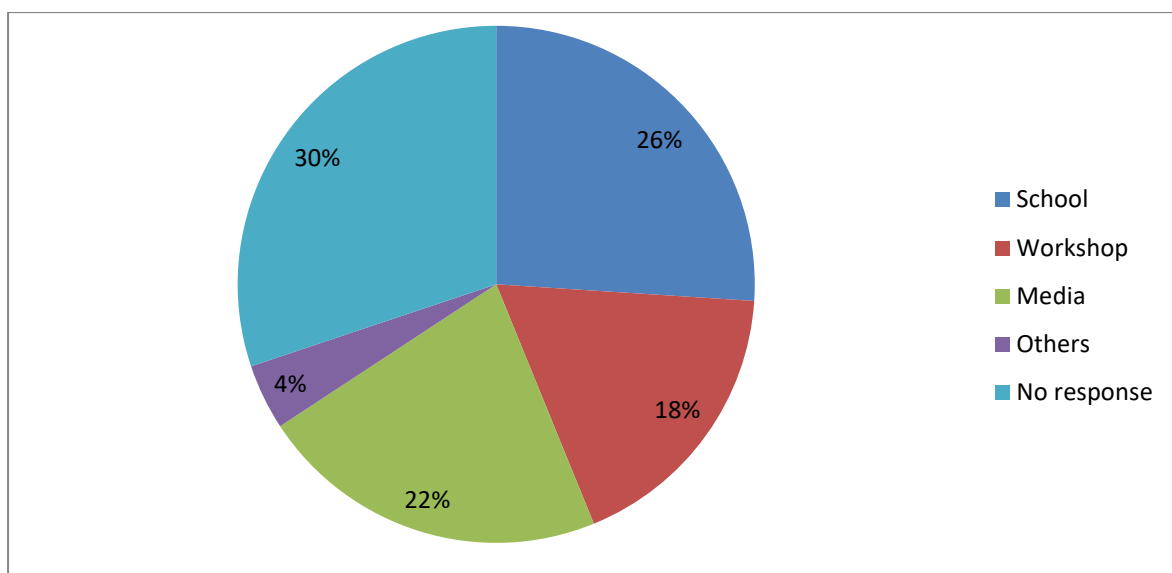
Source: Authors' Own Elaboration

The table and chart nº 9 indicate that 70% of respondents saying they are knowledgeable in CITES as against 30% who are ignorant about it



**Table nº 10: Respondents sources of Knowledge about CITES and how they learned about CITES.**

Learn about CITES	No of respondents
School	19
Workshop	13
Media	16
Others	3
No response	22



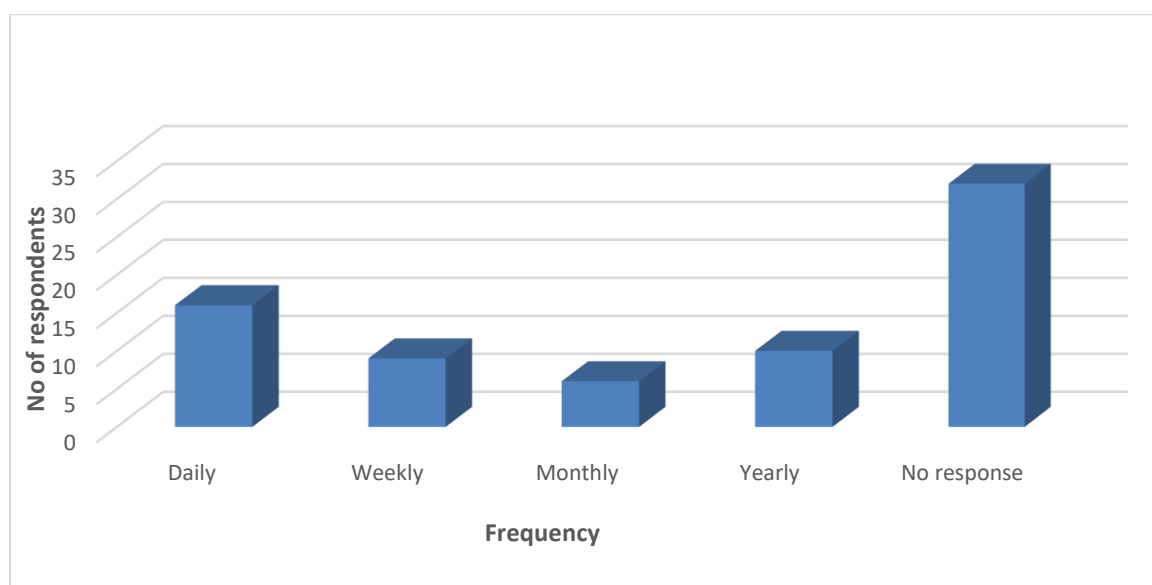
**Figure nº 10: Respondents sources of Knowledge about CITES and how they learned about CITES.**

Source: Authors' Own Elaboration

Many respondents (30%) could not say how they learn about CITES. However the most common source of information about CITES was school (26%) and media (22%).

**Table nº 11: Verification for frequency of engagement in CITES schedules/duties.**

Frequency	No of respondents	% response
Daily	16	22%
Weekly	9	12%
Monthly	6	8%
Yearly	10	14%
No response	32	44%



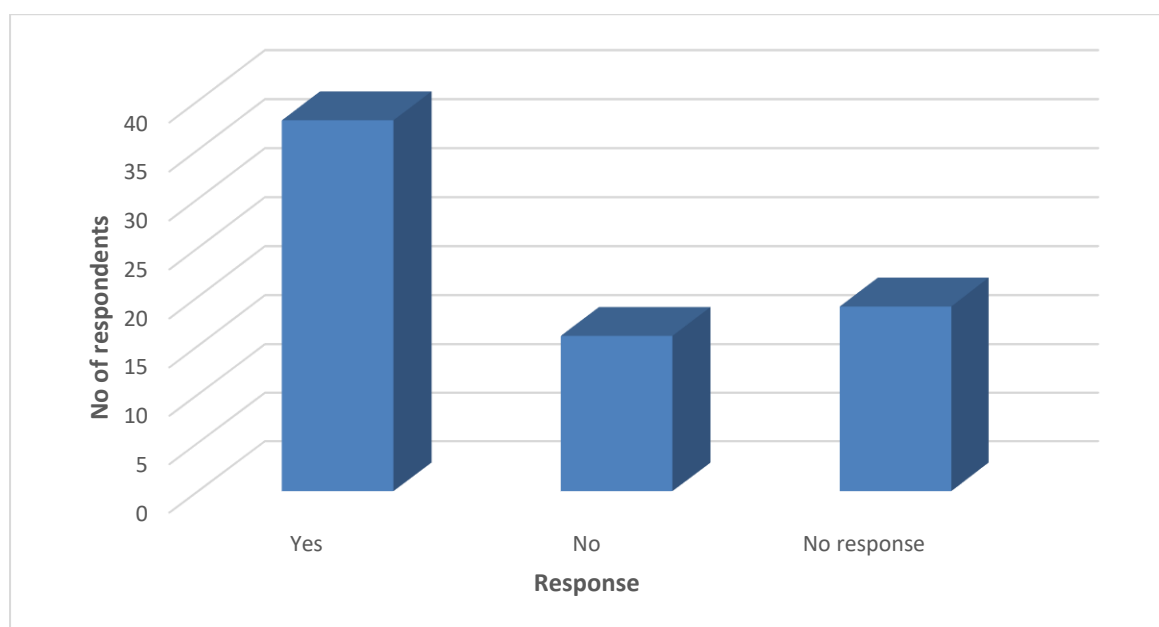
**Figure nº 11: Verification for frequency of engagement in CITES schedules/duties.**

Source: Authors' Own Elaboration

Results on both the table and the chart reveal that even though respondents do work on CITES their frequency of engagement on CITES was not very often as majority (44%) did not respond to the question. Also 22% responded to work on CITES daily and 14% yearly whereas 12% weekly and finally 8% monthly.

**Table nº 12: Respondents knowledge about Ghana’s membership on CITES.**

Response	No of respondents	% Response
Yes	38	52%
No	16	22%
No response	19	26%



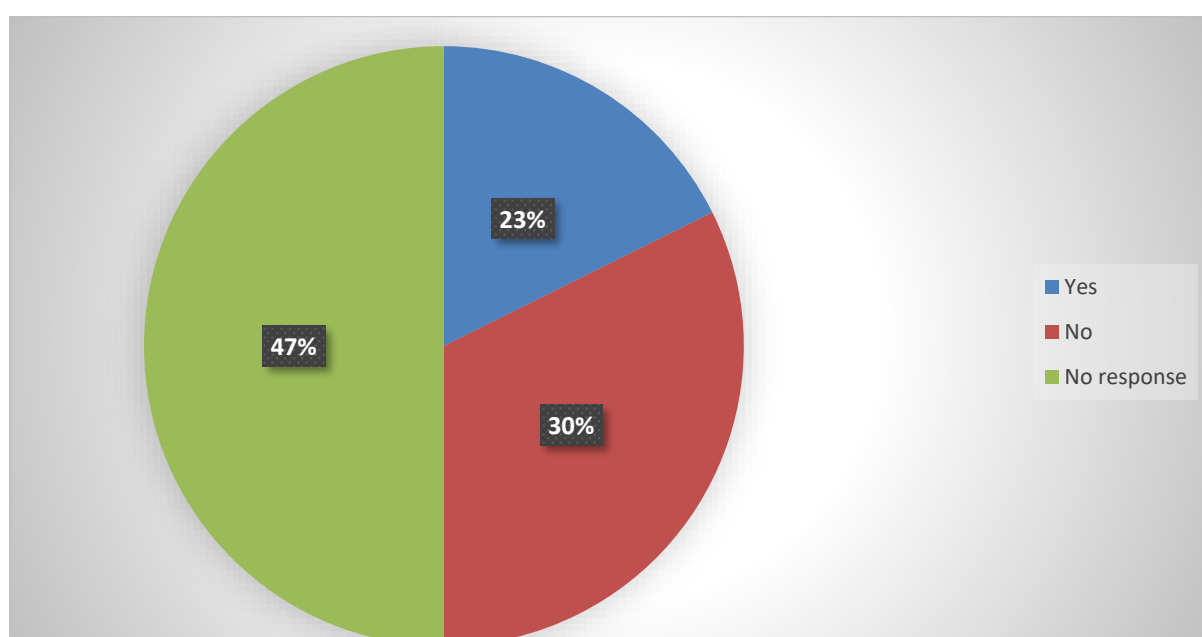
**Figure nº 12: Respondents knowledge about Ghana’s membership on CITES.**

Source: Authors’ Own Elaboration

From the table and the graph nº 12, 52% of the respondents indicated that Ghana is a member of CITES where as 22% also indicated that they did not know if Ghana was a member or not. However, 26% did not respond to the question

**Table nº 13: Verification for respondents about their knowledge on CITES Appendices.**

Response	No of respondents
Yes	17
No	22
No response	34



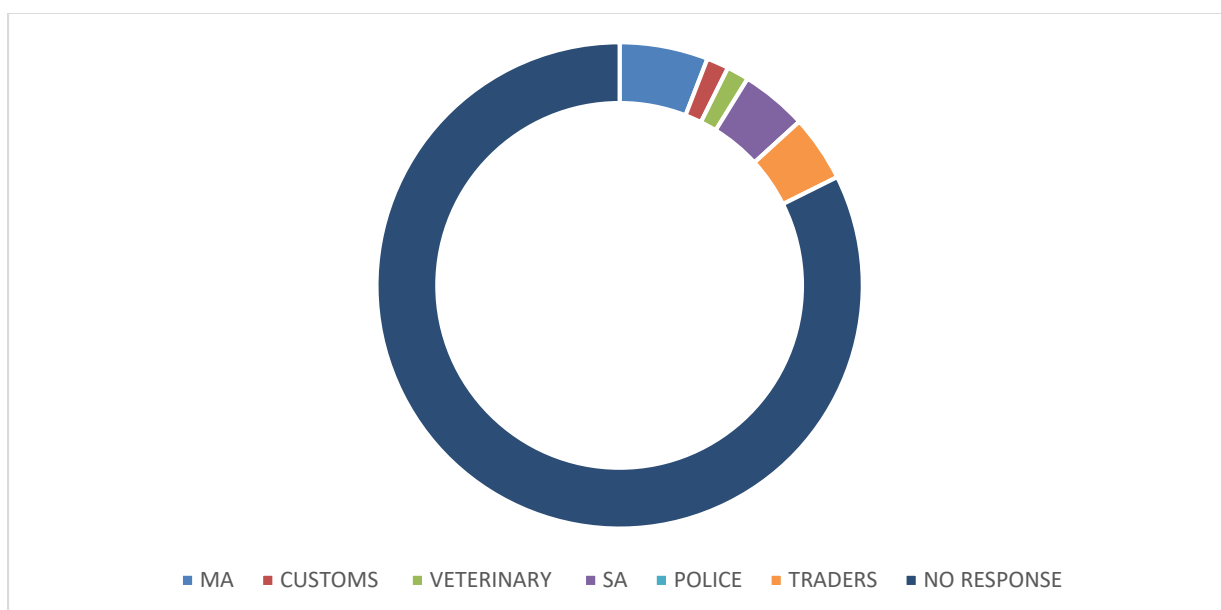
**Figure nº 13: Verification for respondents about their knowledge on CITES Appendices.**

Source: Authors' Own Elaboration

The table and the pie chart nº 13 display 23% of the respondent admitting that they are knowledgeable in the CITES species, where as 30% answered 'No' to the question. However, majority of them 47% indicated their lack of knowledge by not responding to the question.

**Table nº 14: Verification on the number of institutional respondents that listed species on appendices correctly.**

Institutions	No of respondents	% Frequency of respondents
MA	4	6%
CUSTOMS	1	1%
VETERINARY	1	1%
SA	3	4%
POLICE	0	0%
TRADERS	4	6%
NO RESPONSE	60	82%



**Figure nº 14: Verification on the number of institutional respondents that listed species on appendices correctly.**

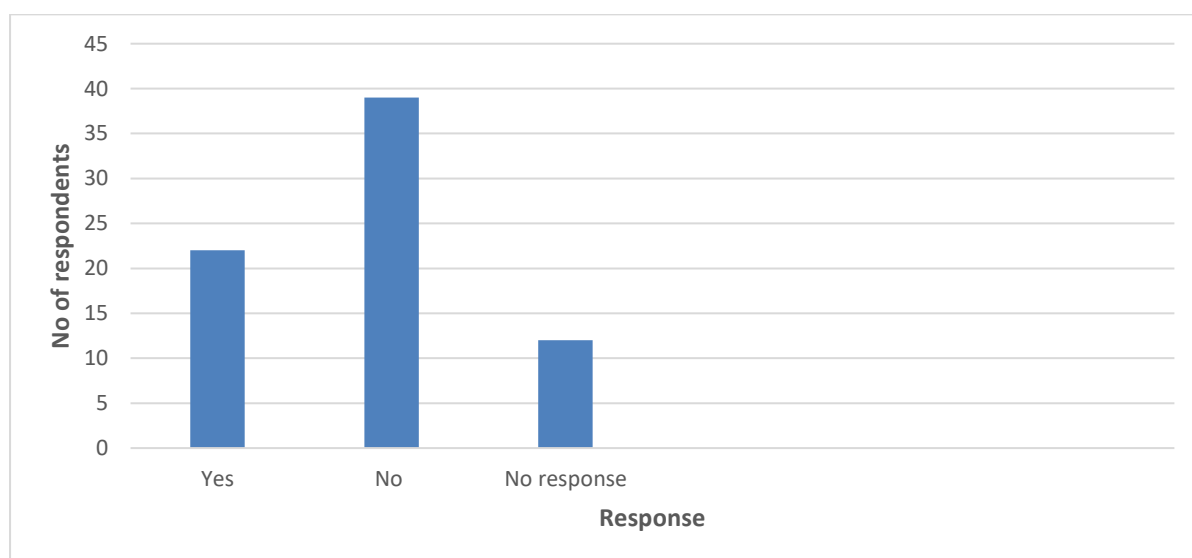
Source: Authors' Own Elaboration

From the Table and Fig. nº 14 it is inferred that 6% of the respondents from the M.A listed the species for the appendices on the CITES correctly, whereas 4% also from the S.A were also

accurate on the species as well as 4% from the traders. However, the Customs, Veterinary and the Police had only 1%, 1% and 0% respectively. Majority of the respondents did not respond.

**Table nº 15: Capacity building of respondents on CITES.**

Response	Number of respondents	%Frequency of respondents
Yes	22	30%
No	39	53%
No response	12	17%



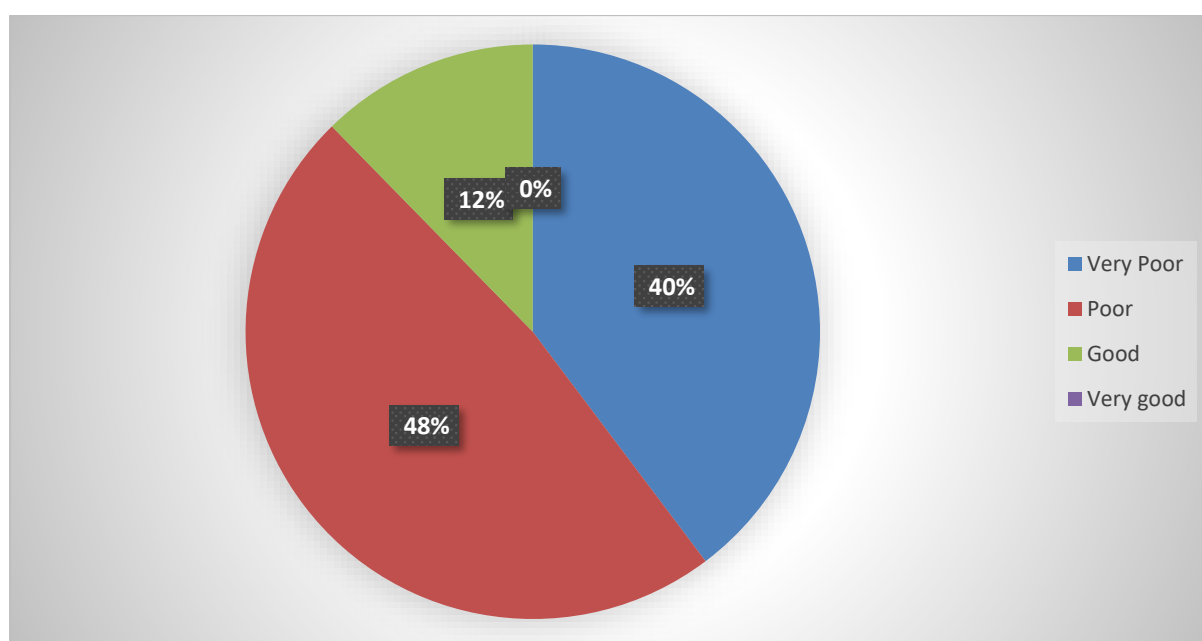
**Figure nº 15: Capacity building of respondents on CITES.**

Source: Authors' Own Elaboration

The table and graphical nº 15 representation show that 30% of the stakeholders admitted that they had been trained on CITES, while 53% also said they had not received training on CITES. Again, 17% ignored the question.

**Table nº 16: Respondents' impressions about general rating on CITES awareness creation in Ghana.**

Respondents' impression	Number of respondents
Very Poor	29
Poor	35
Good	9
Very good	0



**Figure nº 16: Respondents' impressions about general rating on CITES awareness creation in Ghana.**

Source: Authors' Own Elaboration

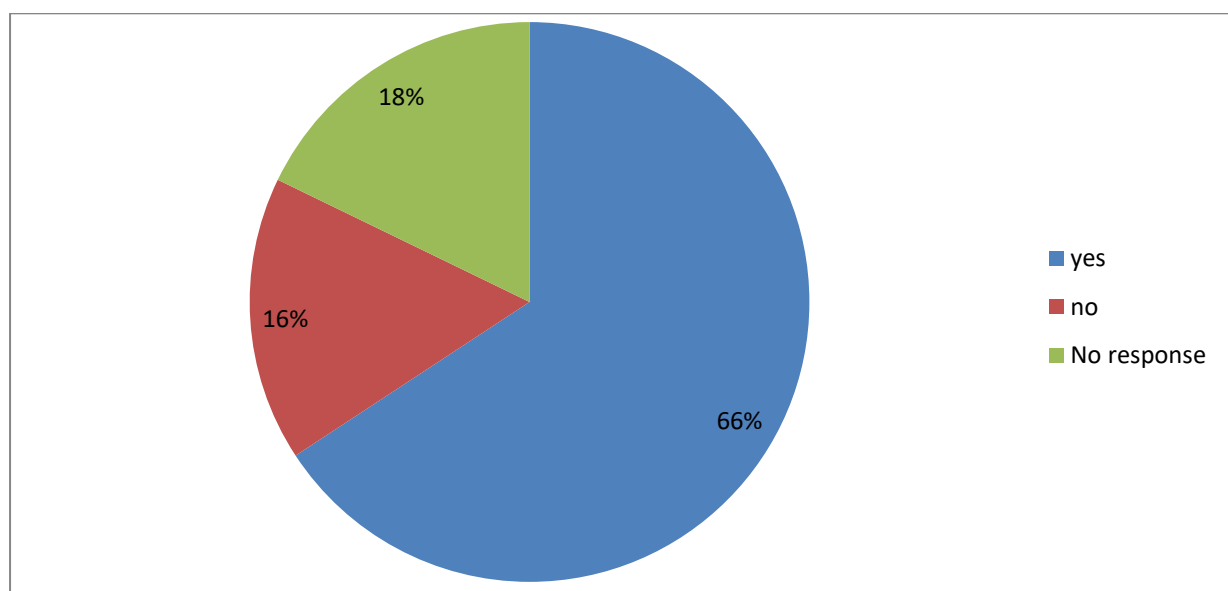
From the Table and chart above it is evident that 48% of the stakeholders selected rate CITES awareness creation in Ghana as poor, 40% also rate awareness of CITES in Ghana as very poor while the remaining 12% rate awareness in Ghana as good.

#### 4.5 Broadening stakeholder base and their role in CITES implementation

This section of the results/findings are a reflection on the respondent's views on the potential collaborating institutions for CITES implementation and their possible roles in that regard.

**Table nº 17: Respondents knowledge base about existing potential stakeholders on CITES in Ghana.**

Knowledge about potentially relevant stakeholders on CITES	Number	% Frequency
Yes	48	66%
No	12	16%
No Response	13	18%



**Figure nº 17: Respondents knowledge base about existing potential stakeholders on CITES in Ghana.**

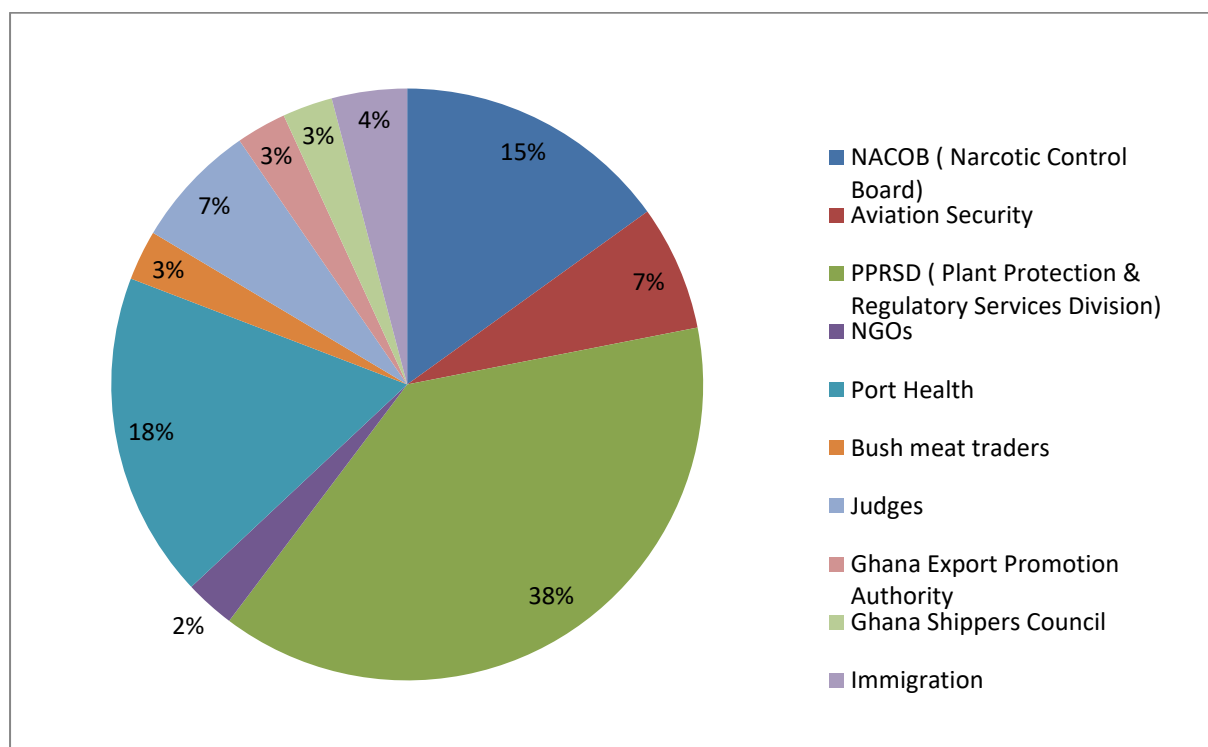
Source: Authors' Own Elaboration

Both the table and graph nº 17 display that most of the respondents are aware of other existing potential stakeholders whose activities relate to CITES as focus. Majority of them about (66%) were aware that these institutions existed.



**Table nº 18: List of potential relevant CITES Stakeholders.**

Name of potential stakeholder	Number
NACOB (Narcotic Control Board)	11
Aviation Security	5
PPRSD (Plant Protection & Regulatory Services Division)	28
NGOs	2
Port Health	13
Bush meat traders	2
Judges	5
Ghana Export Promotion Authority	2
Ghana Shippers Council	2
Immigration	3



**Figure nº 18: List of Potential Relevant CITES Stakeholders.**

Source: Authors' Own Elaboration

The Table nº 18 represents the additional potential stakeholders that respondents suggested should be added to help broaden CITES awareness campaign in Ghana. The Fig. nº 18 goes on to display that 38% of the respondents mentioned PPRSD from MOFA ,24%-Port Health and

15%-NACOB as the main stakeholder institutions needed to help improve CITES awareness campaign, in the country because of the role these institutions play at the various ports and borders.

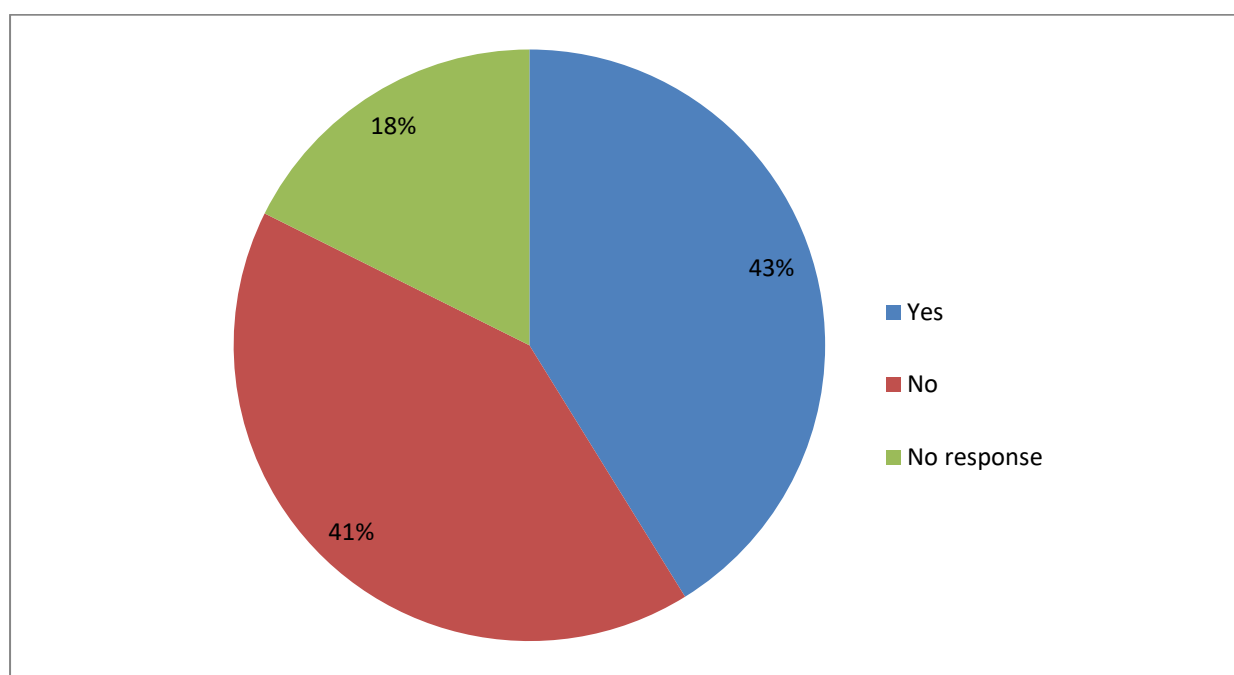
Respondents were asked about the various roles for suggesting the above stakeholders and they responded with views on the individual roles and responsibility of the potential stakeholders the results are indicated in the Table n° 19.

**Table n° 19: Respondent reason for suggesting the above potential stakeholders.**

<b>Potential Institution</b>	<b>Response on their reason for the selection</b>
<b>NACOB (Narcotic Control Board)</b>	They are responsible for narcotic issues, which may be linked to all other criminal issues at the ports.
<b>Judges</b>	Prosecute CITES offenders
<b>Airport Security</b>	They are responsible for safety at the airport.
<b>Aviation Security</b>	They are responsible for intelligence gathering at ports
<b>Plant Protection and Regulatory Services Division of the Ministry of Food and Agriculture (PPRSD)</b>	Regulate plant trade and are staffed at all entry and exit points
<b>Non-Governmental Organization (NGOs)</b>	They play a vital role in conservation and help research on status of species that are endangered and vulnerable.
<b>Port Health</b>	Control Health and safety at all ports of entry and exit.
<b>Bush meat Traders</b>	Responsible for wildlife trade activities
<b>Ghana Exports Promotion Authority (GEPA)</b>	They are responsible for developing and promotion of Ghanaian exports.
<b>Ghana Shippers Authority (GSA)</b>	Responsible for all trade and shipments in the country

**Table nº 20: Assessment of the level of awareness of respondents on the role of Scientific Authority in CITES implementation.**

Response	No of respondents
Yes	31
No	30
No response	12



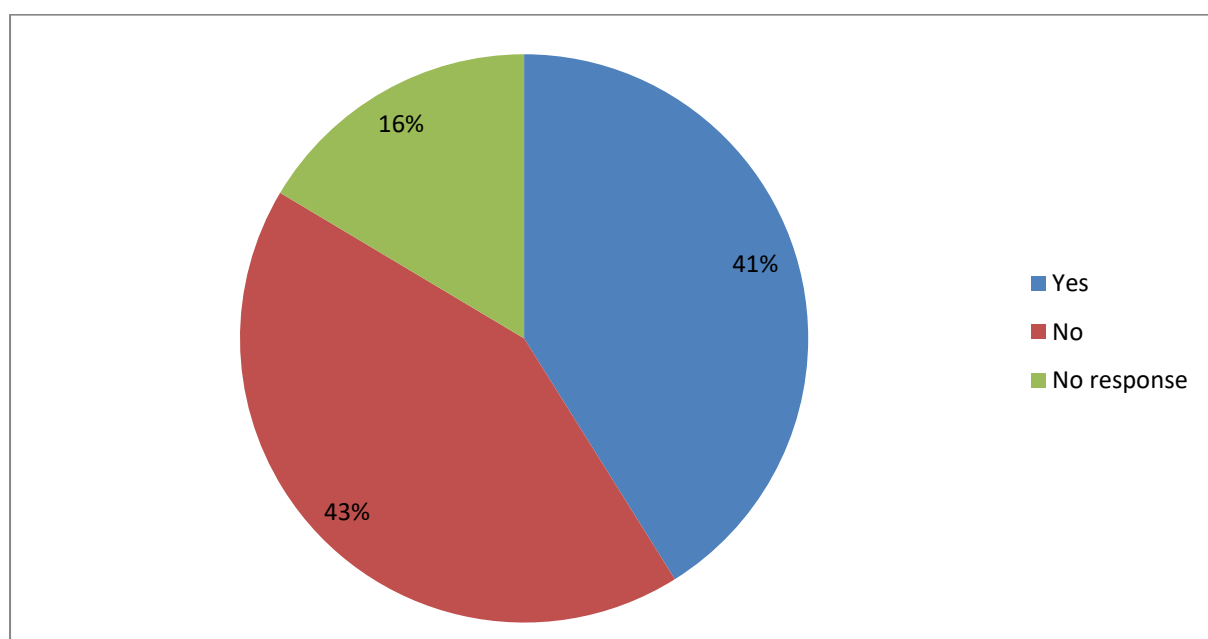
**Figure nº 19: Assessment of the level of awareness of respondents on the role of Scientific Authority (S.A) in CITES implementation.**

Source: Authors' Own Elaboration

The Table nº 20 and the Fig. nº 19 display 43% of the respondents are aware of the role of the S.A and 41% are not aware of S.A's role. That is 41% respectively. However, 18% ignored the question meaning they did not want to show their ignorance in knowledge as stakeholders.

**Table nº 21: Verification about the adequacy of one institution as SA.**

Response	No of Response
Yes	30
No	31
No response	12



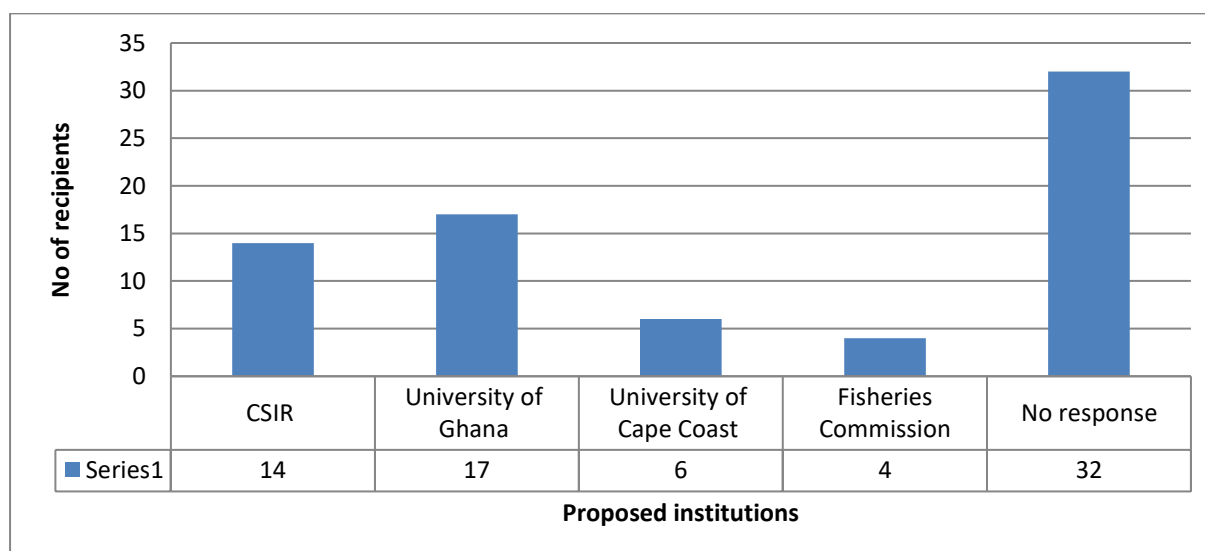
**Figure nº 20: Verification about the adequacy of one institution as SA.**

Source: Authors' Own Elaboration

Both Table nº 21 and Fig. nº 20 show that majority of the stakeholders that is 41% believe that the S.A should be broadened to more research institutions to enable them carry out their functions effectively while 43% did not think it should be broadened. The 12 respondents who declined to respond represented 16% of the total number of respondents.

**Table nº 22: Proposed list of Scientific Authorities.**

Proposed Institution	No of recipients	% Response
Council for Scientific and Industrial Research (CSIR)	14	18%
University of Ghana	17	22%
University of Cape Coast	6	9%
Fisheries Commission	4	4%
No response	32	47%



**Figure nº 21: Proposed list of Scientific Authorities.**

Source: Authors' Own Elaboration

Results from the Table nº 22 and the Fig. nº 21 show the list of institutions proposed by the respondents to be added as Scientific Authority (S.A) by the respondents. This suggests that the whiles a number of respondents were in favor of University of Ghana, CSIR, University of Cape coast and Fisheries Commission, as proposed institutions for S.A, majority of stakeholders (47%) did not respond to the question.

**Table nº 23: Verification of role of stakeholders in CITES implementation.**

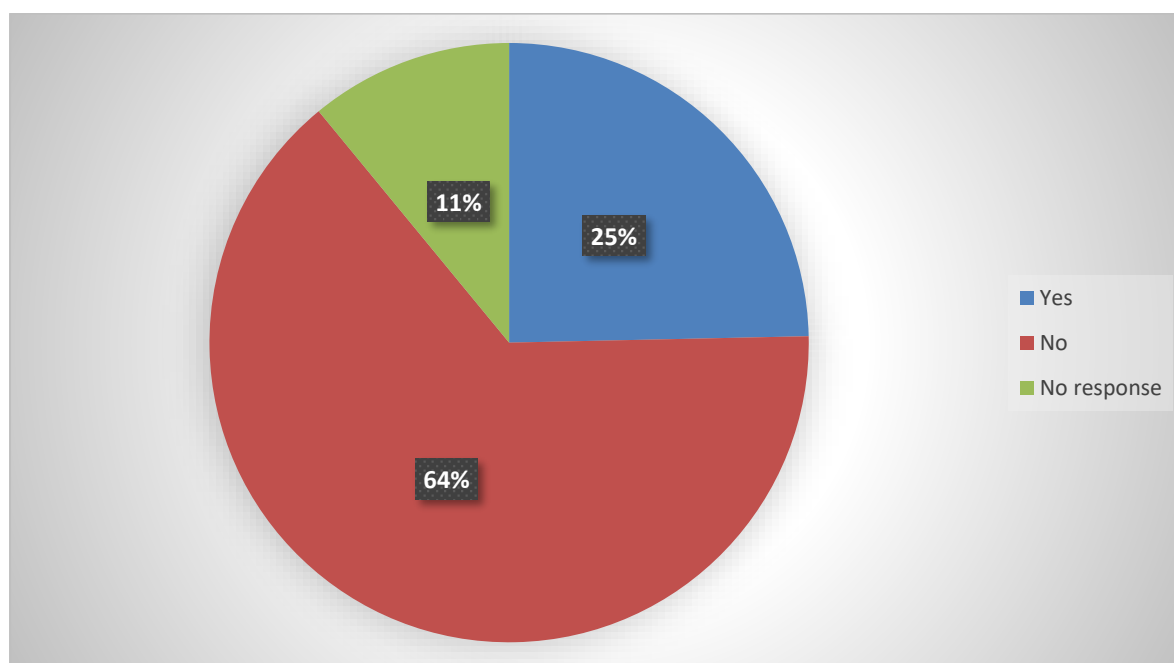
<b>Institution</b>	<b>Role in CITES implementation</b>
<b>WD/FSD/TIDD</b>	<ul style="list-style-type: none"> <li>• Create awareness and educate on CITES issues.</li> <li>• Monitor and enforce CITES.</li> <li>• Certify CITES species.</li> <li>• Arrest CITES offenders.</li> <li>• Part of the Management Authority (MA) of CITES.</li> </ul>
<b>Customs</b>	<ul style="list-style-type: none"> <li>• Regulation of wildlife trade.</li> <li>• Enforce CITES laws.</li> <li>• Examination, seizure and investigation of consignment for export.</li> <li>• Compliance of CITES restriction and prohibition.</li> <li>• Regulation of Wildlife trade.</li> </ul>
<b>Traders</b>	<ul style="list-style-type: none"> <li>• Responsible for all trade in CITES listed species.</li> </ul>
<b>Scientific authority</b>	<ul style="list-style-type: none"> <li>• Responsible for conducting research on species to know their quota for trade.</li> </ul>
<b>Police</b>	<ul style="list-style-type: none"> <li>• Enforce CITES laws.</li> <li>• Arrest all CITES offenders.</li> </ul>
<b>Veterinary</b>	<ul style="list-style-type: none"> <li>• Monitoring of health of animals in trade.</li> <li>• Regulate activities at borders and ports.</li> </ul>

#### **4.6. Mechanisms for awareness creation on CITES**

This aspect of the results findings presents what respondents know about existing mechanisms for awareness creation on CITES as well as its effectiveness or otherwise.

**Table nº 24: Respondents knowledge about existing mechanisms for awareness creation on CITES in Ghana.**

Response	Number
Yes	18
No	47
No response	8



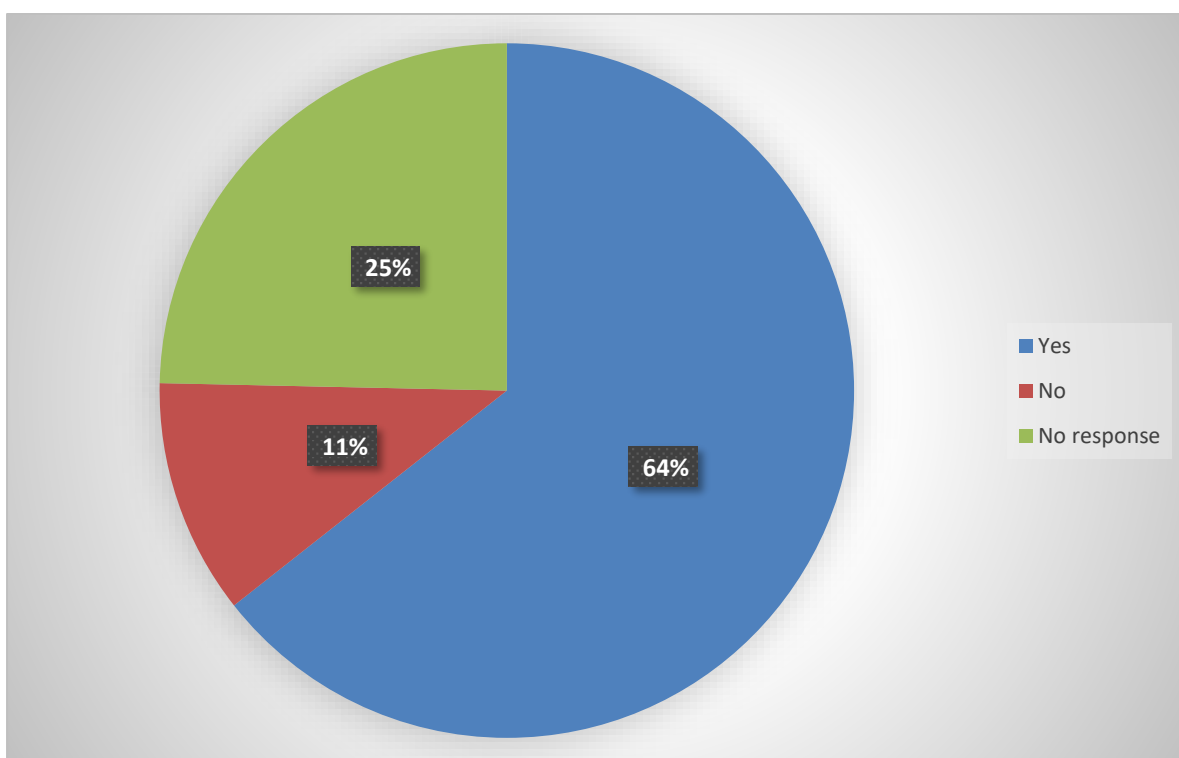
**Figure nº 22: Respondents knowledge about existing mechanisms for awareness creation on CITES in Ghana.**

Source: Authors' Own Elaboration

The above representation shows that 64% of the stakeholders said there are no mechanisms for awareness creation while 25% insisted that there are mechanisms. However, 11% gave a no response to that question.

**Table nº 25: Respondents views about the inadequacies in the procedures for CITES awareness creation.**

Response	Number of respondents
Yes	47
No	8
No response	18



**Figure nº 23: Respondents views about the inadequacies in the procedures for CITES awareness creation**

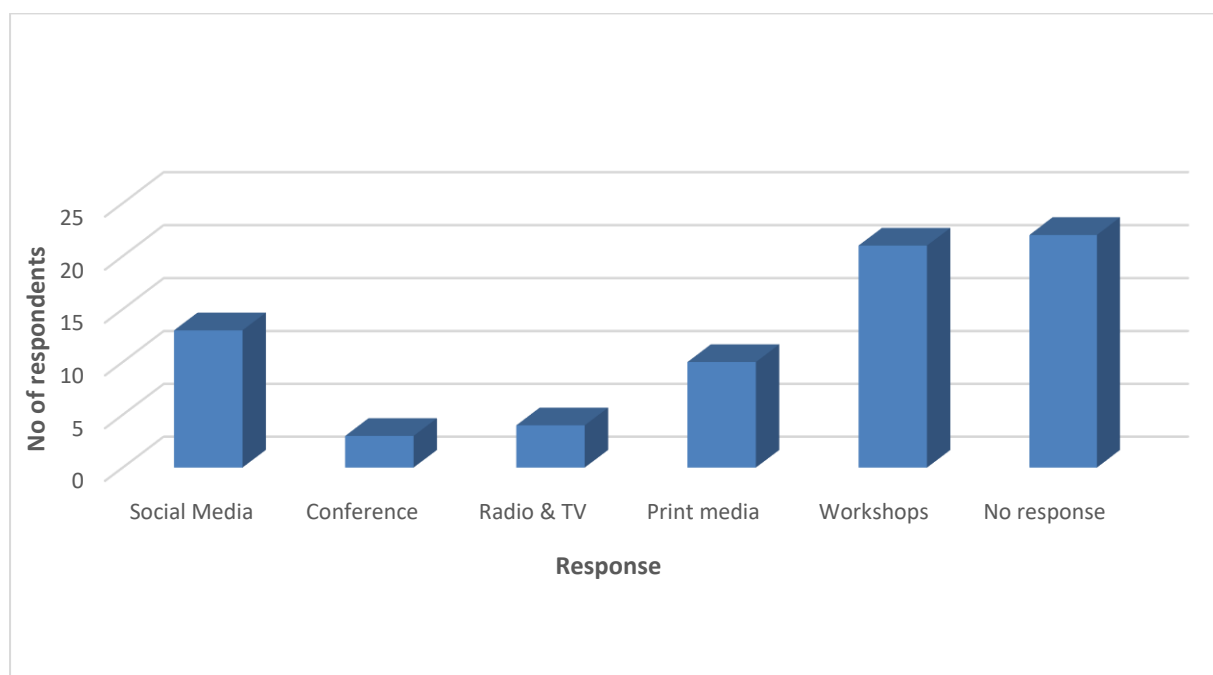
Source: Authors' Own Elaboration

The Table nº 25 and the Fig. nº 23 representation illustrate that 64% of respondents observed that there are a lot of inadequacies in the procedures for CITES awareness creation while 25% did not indicate any response. The remaining 11% responded with a “no”.



**Table nº 26: Respondents views on medium used for awareness creation on CITES.**

Response	No of respondents	% Frequency of respondents
Social Media	13	18%
Conference	3	4%
Radio & TV	4	5%
Print media	10	14%
Workshops	21	29%
No response	22	30%



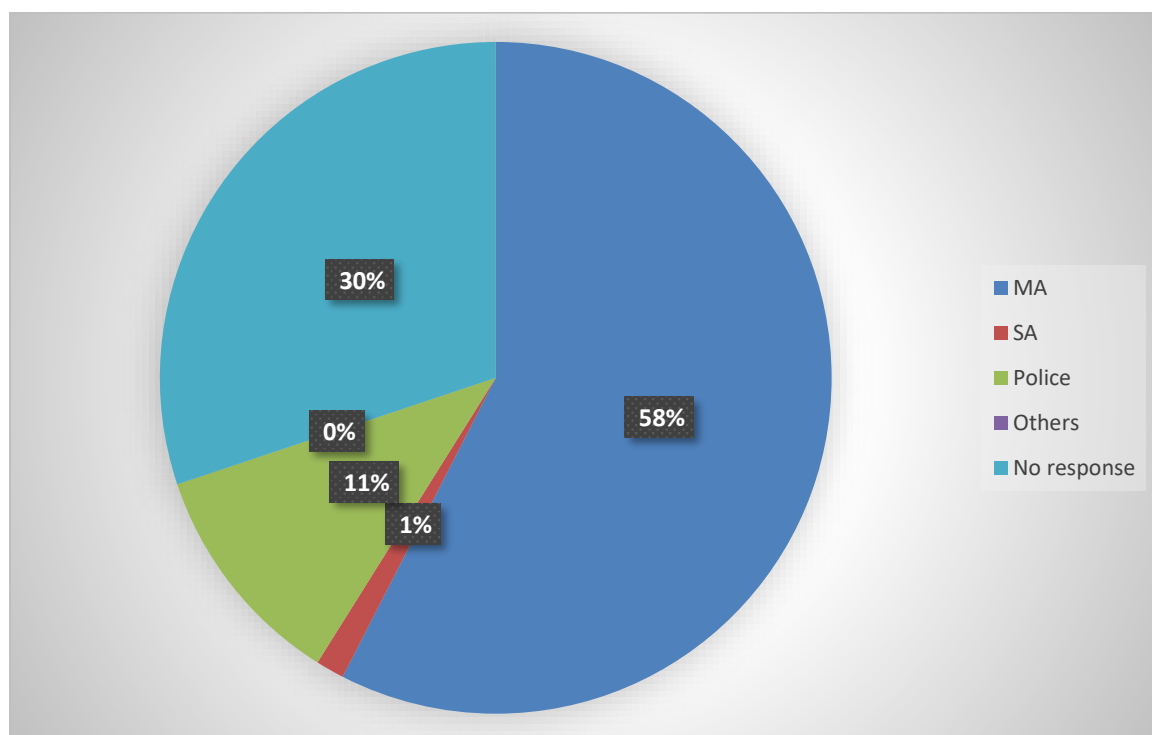
**Figure nº 24: Respondents views on medium used for awareness creation on CITES.**

Source: Authors' Own Elaboration

The Table nº 26 and Fig. nº 24 above show that majority of the respondents that is 30% did not respond to the question. However, 29% said the known medium used for awareness creation on CITES is through workshops, 14% through print media, 18% through social media, 5% - Radio and TV and 4% through conferences.

**Table nº 27: Respondents views on reporting of CITES related crimes.**

Authorities	No of respondents
MA	42
SA	1
Police	8
Others	0
No response	22



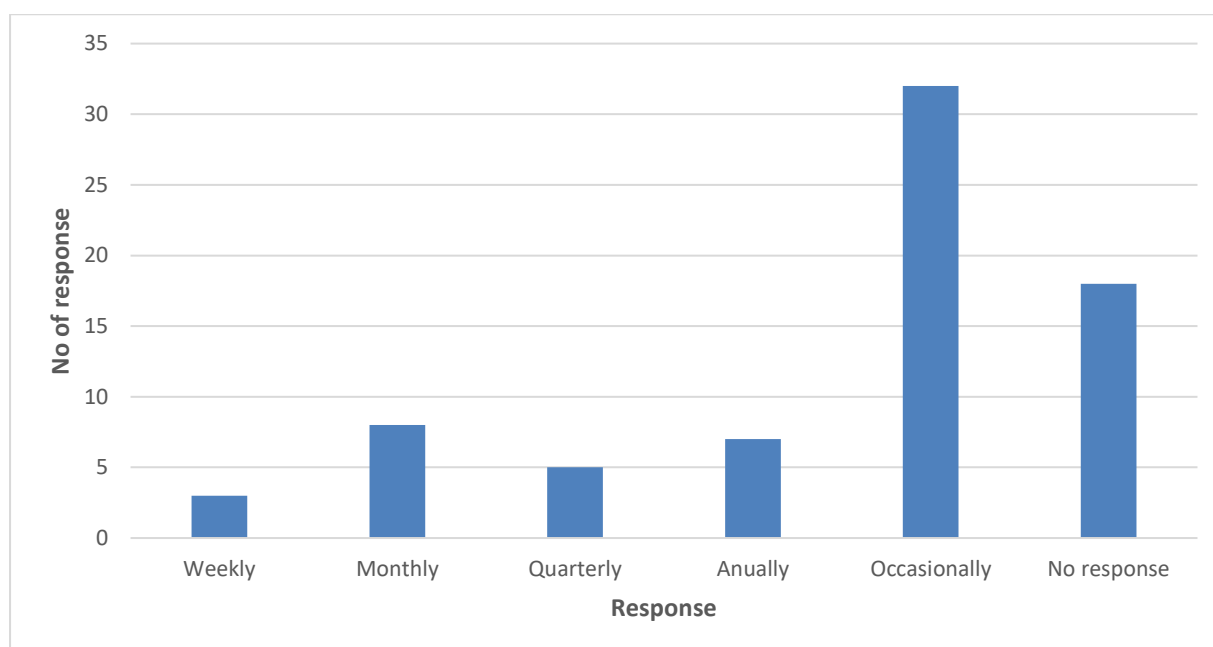
**Figure nº 25: Respondents views on reporting of CITES related crimes.**

Source: Authors' Own Elaboration

The Table nº 27 and Fig. nº 25 depicts that most of the respondents report CITES related cases straight to the M.A when encountered, representing about 58%. The rest of 30% however did not respond to the question and 11% indicated they report to the police.

**Table nº 28: Assessment of frequency of CITES related crimes encountered by respondents**

Response	No of response	% Frequency of Response
Weekly	0	0%
Monthly	10	14%
Quarterly	5	7%
Annually	7	10%
Occasionally	31	42%
No response	20	27%



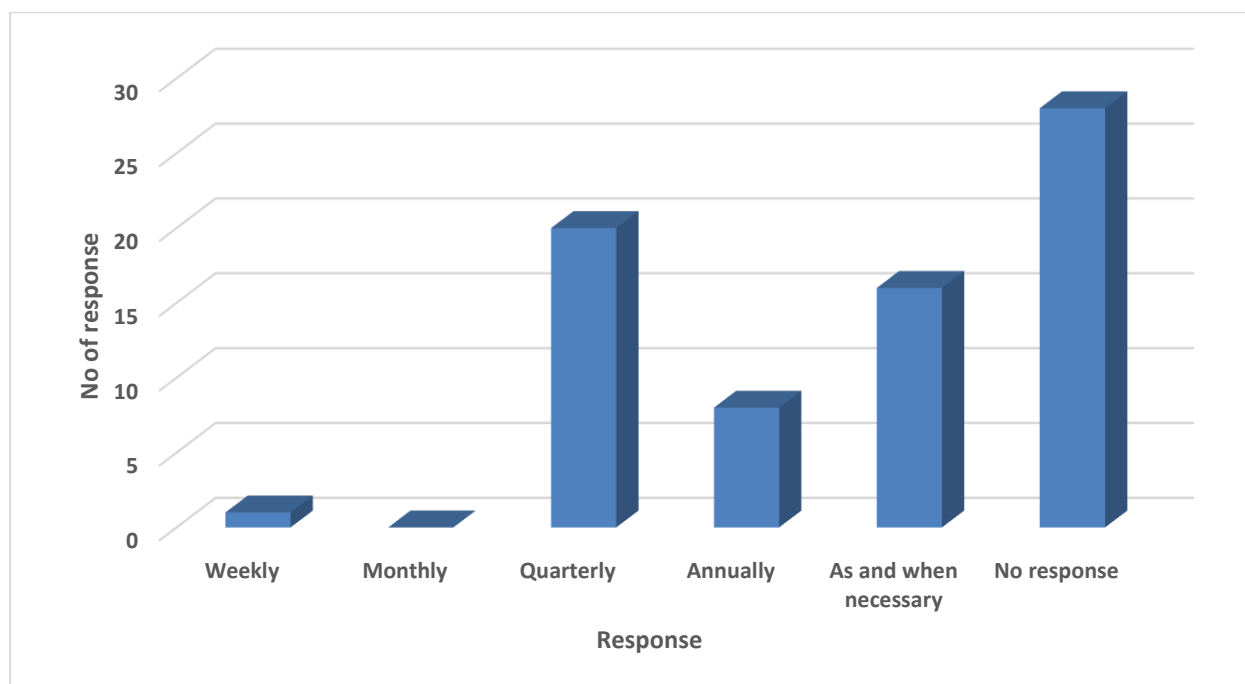
**Figure nº 26: Assessment of frequency of CITES related crimes encountered by respondents**

Source: Authors' Own Elaboration

The Table nº 28 and fig. nº 26 indicate that most of the respondents encountered CITES crimes occasionally while in their line of duty and not that often. This represents majority of stakeholders of them that is 42%. Again, 27% respondents did not respond to the question but 14% reported CITES related crimes monthly and the remaining 10% said to report annually with 7% reporting quarterly.

**Table nº 29: Frequency of CITES report writing by respondents.**

Response	Number of response	% Frequency of respondents
Weekly	1	1%
Monthly	0	0%
Quarterly	5	7%
Annually	8	11%
As and when necessary	31	43%
No response	28	38%



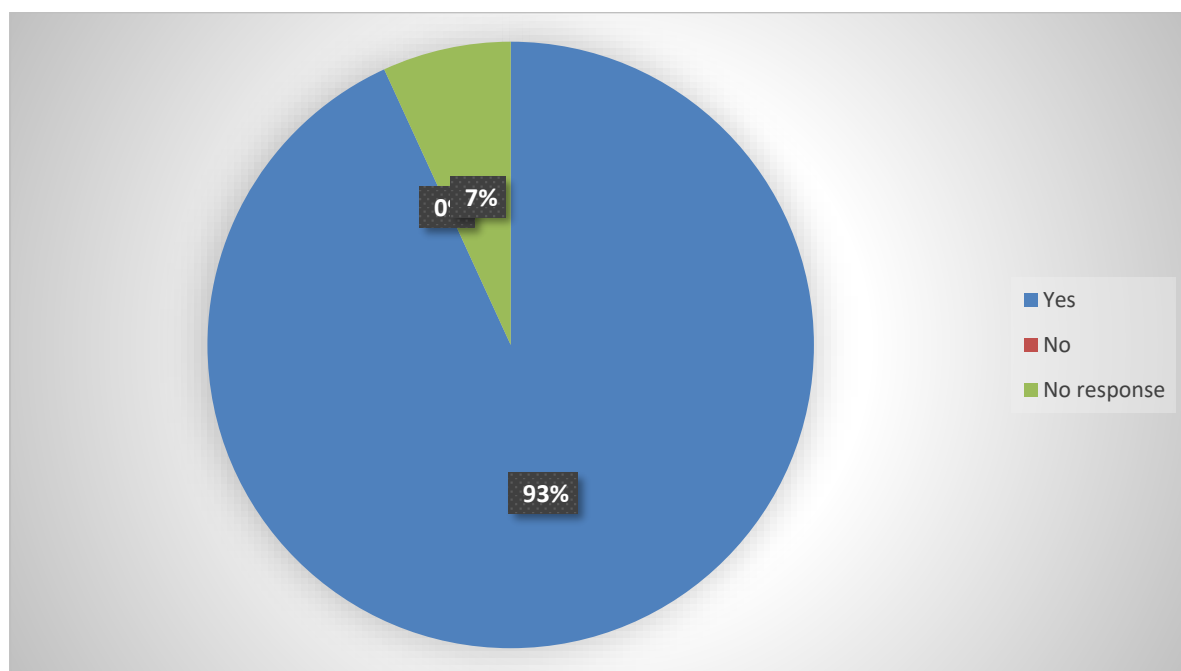
**Figure nº 27: Frequency of CITES report writing by respondent**

Source: Authors' Own Elaboration

From the above Table nº 29 and Fig. nº 27 majority of respondents that is 38% reveals that they did not write reports by responding “no answer” and 43% of them said that they write it as and when necessary and 11% admitted that they wrote it annually. Again 7% said they write quarterly reports annually.

**Table nº 30: Respondents preference for CITES listed species as a CITES awareness information package.**

Response	Number of respondents
Yes	68
No	0
No response	5



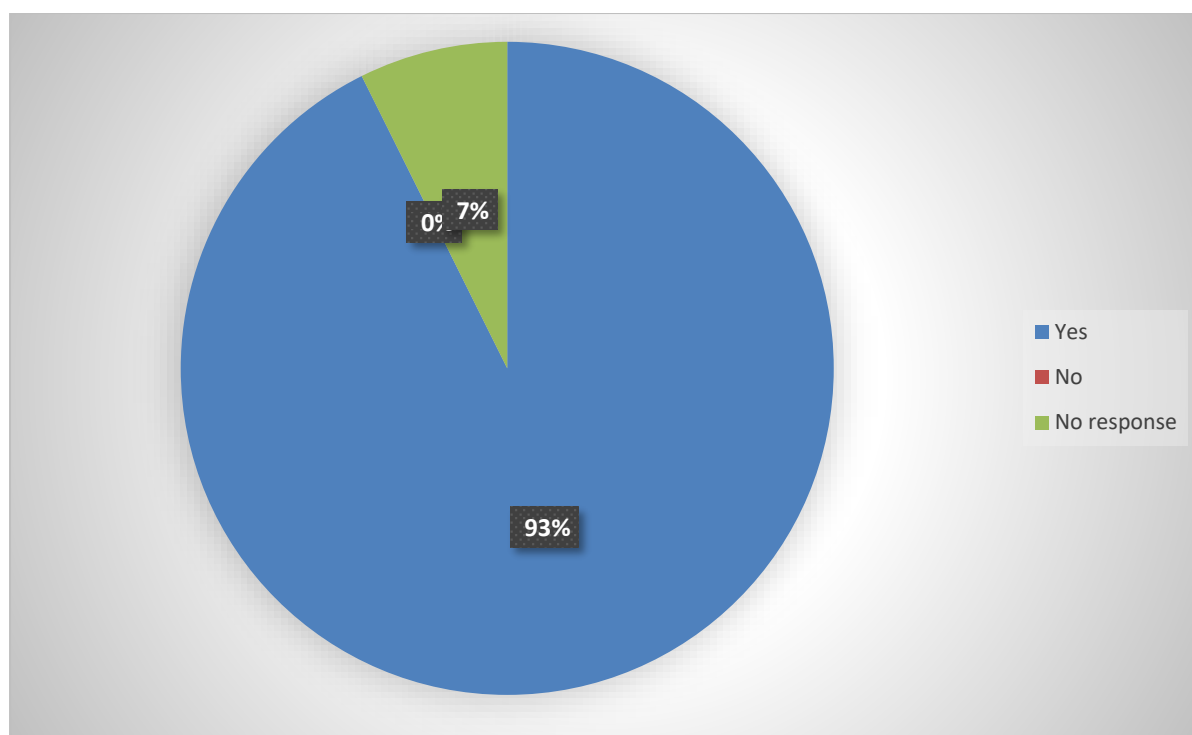
**Figure nº 28: Respondents preference for CITES listed species as a CITES awareness information package.**

Source: Authors' Own Elaboration

Results on the Table nº 30 and Fig. nº 28 reveal that 93% of the stakeholders indicated their preference for awareness creation materials that contain information on CITES listed species. Only 7% did not respond to the question.

**Table nº 31 : Respondents views on their preference for periodic dissemination of CITES information.**

Response	Frequency of respondents
Yes	62
No	0
No response	6



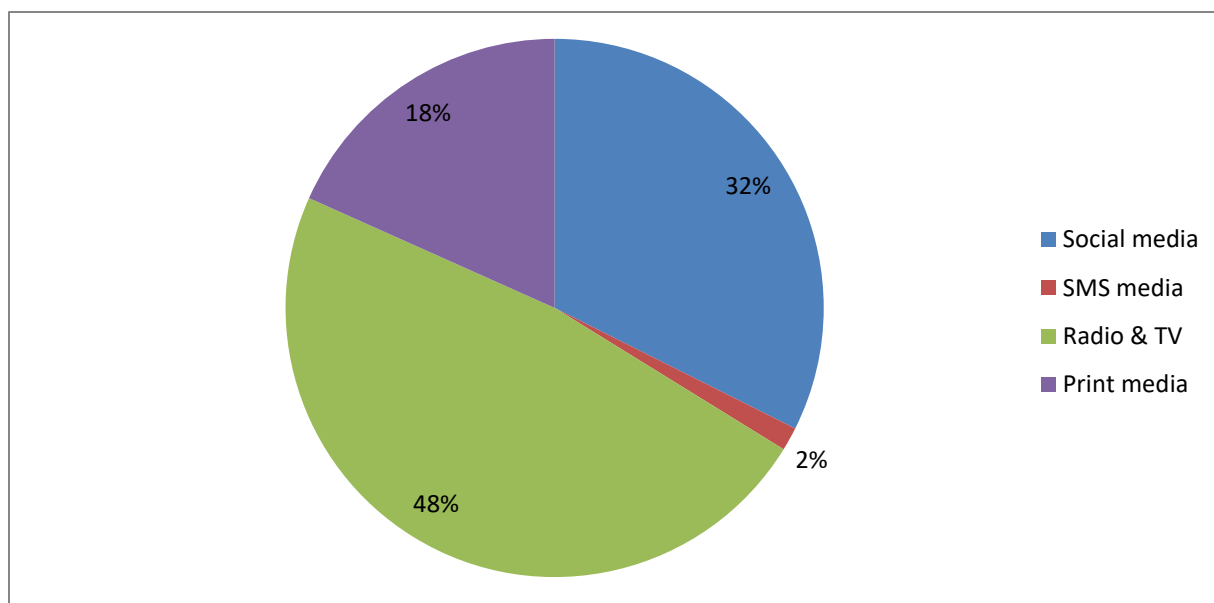
**Figure nº 29: Respondents views on their preference for periodic dissemination of CITES information.**

Source: Authors' Own Elaboration

The Table nº 31 and Fig. nº 29 indicate that, 93% of respondents would like periodic dissemination of information on CITES issues and remaining 7% did not respond to the question.

**Table nº 32: Respondents views on alternatives for modernizing information sharing on CITES issues.**

Response	Number of respondents
Social media	25
SMS alert	1
Radio & TV	34
Print media	13



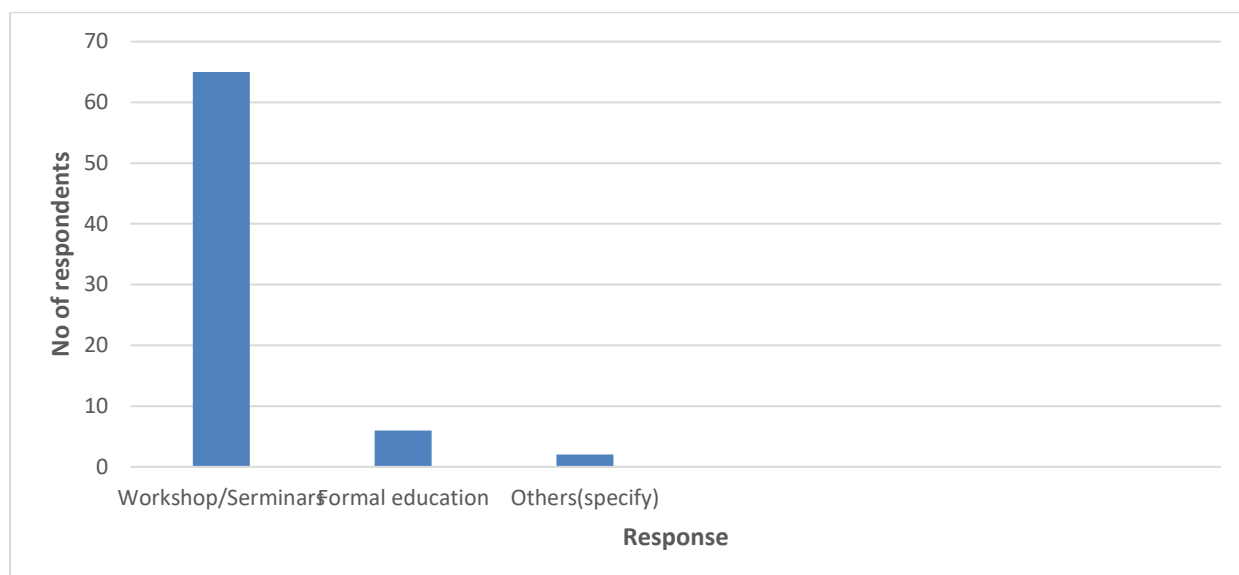
**Figure nº 30: Respondents views on alternatives for modernizing information sharing on CITES issues.**

Source: Authors' Own Elaboration

The Table nº 32 above and the Fig. nº 30 depict the means in which respondents would like to modernize sharing of knowledge on CITES. The chart shows that 48% said that they would want to modernize through radio and television. Whiles 32% through social media, 18% through print media such as newspaper and magazines with the remaining 2% registering their preference for SMS alert.

**Table nº 33: Respondents views on knowledge improvement for effective CITES information sharing.**

Response	Number of respondents	% of Frequency of respondents
Workshop/Seminars	65	89%
Formal education	6	8%
Others (specify)	2	3%



**Figure nº 31: Respondents views on knowledge improvement for effective CITES information sharing.**

Source: Authors' Own Elaboration

Results on both Table nº 33 and Fig. nº 31 show that majority of stakeholders representing 89% would prefer improving their knowledge through workshops/seminars as well as 8% through formal training and 2% through others sources.



Results on training needs assessment for various categories of respondents are presented below in the order in which the investigation was conducted as follows (Table nº 34)

**Table nº 34: Assessment of training needs in the implementation of CITES.**

<b>Institution</b>	<b>Response</b>
<b>(MA)FSD/TIDD/WD</b>	<ul style="list-style-type: none"> <li>• Training in handling and identification</li> <li>• Training on their role as a stakeholders for implementation</li> <li>• Training on detailed concept on understanding CITES and how to collaborate with other signatories.</li> <li>• Training on report writing</li> </ul>
<b>Customs</b>	<ul style="list-style-type: none"> <li>• Training on identification</li> <li>• Training on investigation on seizures</li> <li>• Training on report writing</li> <li>• Training on CITES legislation</li> </ul>
<b>Veterinary</b>	<ul style="list-style-type: none"> <li>• Training on identification of species</li> <li>• Training on handling of traded species</li> </ul>
<b>Police</b>	<ul style="list-style-type: none"> <li>• Training on general knowledge on CITES</li> </ul>
<b>S.A (Scientific Authority)</b>	<ul style="list-style-type: none"> <li>• Training on general Identification of species and CITES activities</li> </ul>
<b>Traders</b>	<ul style="list-style-type: none"> <li>• Training on general knowledge on CITES</li> </ul>

In respondent's quest for best mechanisms for awareness creation, the under listed views were expressed in Table nº 35.

**Table nº 35: Assessment of mechanisms for awareness creation.**

Institutions	Response
(MA)FSD/TIDD/WD, Customs, Veterinary, Police, (S.A) Scientific Authority, Traders.	<ul style="list-style-type: none"> <li>• Electronic media</li> <li>• Community outreach programs</li> <li>• Education centers on CITES by the MA</li> <li>• Formal Training</li> <li>• Radio and TV adverts</li> </ul>

#### **4.7 Challenges associated with awareness creation and suggested mitigating actions**

This section of the results hinges on respondents views on associated challenges and how the identifiable challenges can be mitigated.

##### **4.7.1 Challenges with awareness creation.**

Almost all the respondents indicated the challenges of awareness creation as follows.

- Financial Challenge
- Inadequate laws/policies
- Inadequate collaboration among stakeholders
- Ineffective communication among stakeholders
- Inadequate public education

##### **4.7.2 Addressing challenges with awareness creation**

Respondents suggested the following on how to address awareness creation challenges

- Expediting action on CITES legislation in the Parliament
- Introduction of Public education on CITES by the Management Authority
- The Management Authority should organize training/workshop for CITES stakeholders

##### **4.7.3 Improving awareness creation on CITES in Ghana.**

The Management Authority should make a conscious effort to improve awareness creation on CITES by introducing the under listed interventions:

- Frequent training of stakeholders

- By organizing seminars
- Through media publication/advertisement
- Incorporating in curriculum at schools
- Improving Publicity on CITES issues
- Regulating agency participation

#### **4.8 - Analysis of Ghana's Export Trade Data (2010-2017) on CITES Species**

An analysis of Ghana's export trade data for the period 2010-2017 was carried out to examine the effect of awareness on wildlife trade in Ghana and the related results portrayed the following;

**Table nº 36: Ghana's Export Data on Live Animals (2010-2017)**

YEAR	QUANTITY	
	IMPORTED	EXPORTED
2010	141,048	203,106
2011	150,668	204,157
2012	118,288	160,436
2013	78,510	106,364
2014	38,462	57,695
2015	39,950	51,333
2016	28,067	108,556
2017	24,999	12,550



**Figure n° 32: Ghana's Export Data on Live Animals (2010-2017)**

Data Source :( UNEP-WCMC, 2019)

The Table n° 36 and Fig. n° 32 above shows in most cases the disparities in the export figures recorded by either the exporter or the importer. For live animals, the difference between the importer and exporter figures was -284,205. It is however important to note that for the exporter figure for 2016, data was taken from the Wildlife Division of the Forestry Commission in Ghana as it was not available on the CITES trade data base.

**Table n° 37: Ghana's export data on raw corals (2010-2017)**

YEAR	QUANTITY (KG)	
	IMPORTED	EXPORTED
2010	638	0
2011	0	0
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016	0	0
2017	0	0



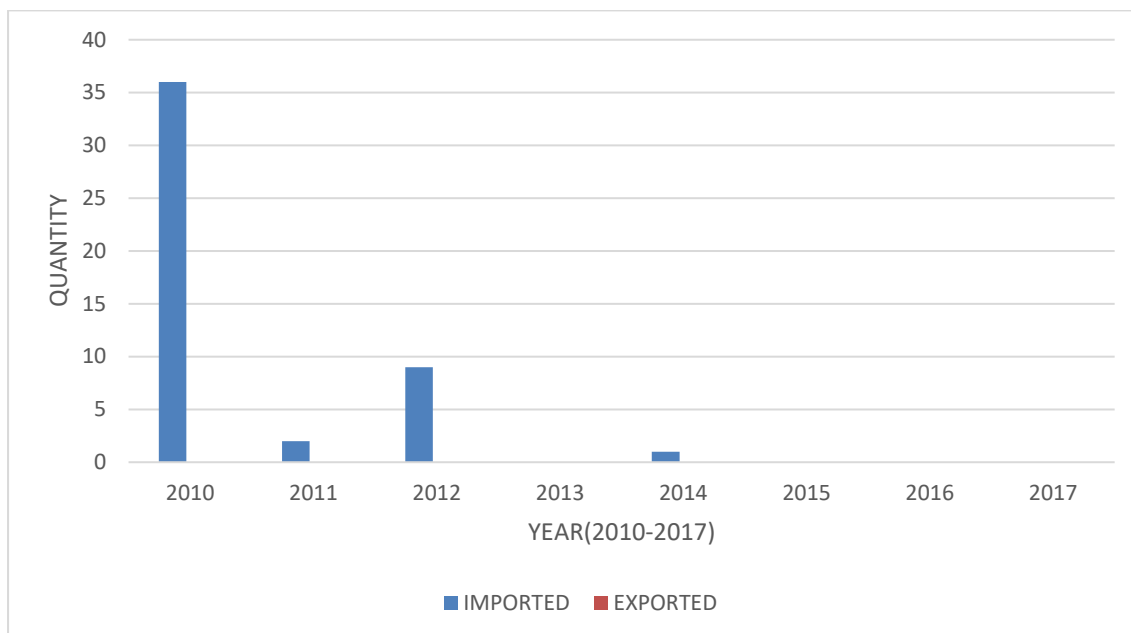
**Figure nº 33: Ghana's export data on raw corals (2010-2017)**

Data Source :( UNEP-WCMC, 2019)

The Table nº 37 and Fig. nº 33 above portrays rather just one disparity recorded in the year 2010. The difference in the importer figure recorded as against the exporter figure for Raw Corals was 638kg.

**Table nº 38: Ghana's export data on other products: bone pieces, bones, ivory carving, shells, skeleton, skull, tail, teeth, trophies, tusks (2010-2017)**

YEAR	QUANTITY	
	IMPORTED	EXPORTED
2010	36	0
2011	2	0
2012	9	0
2013	0	2
2014	1	0
2015	0	0
2016	0	0
2017	0	0



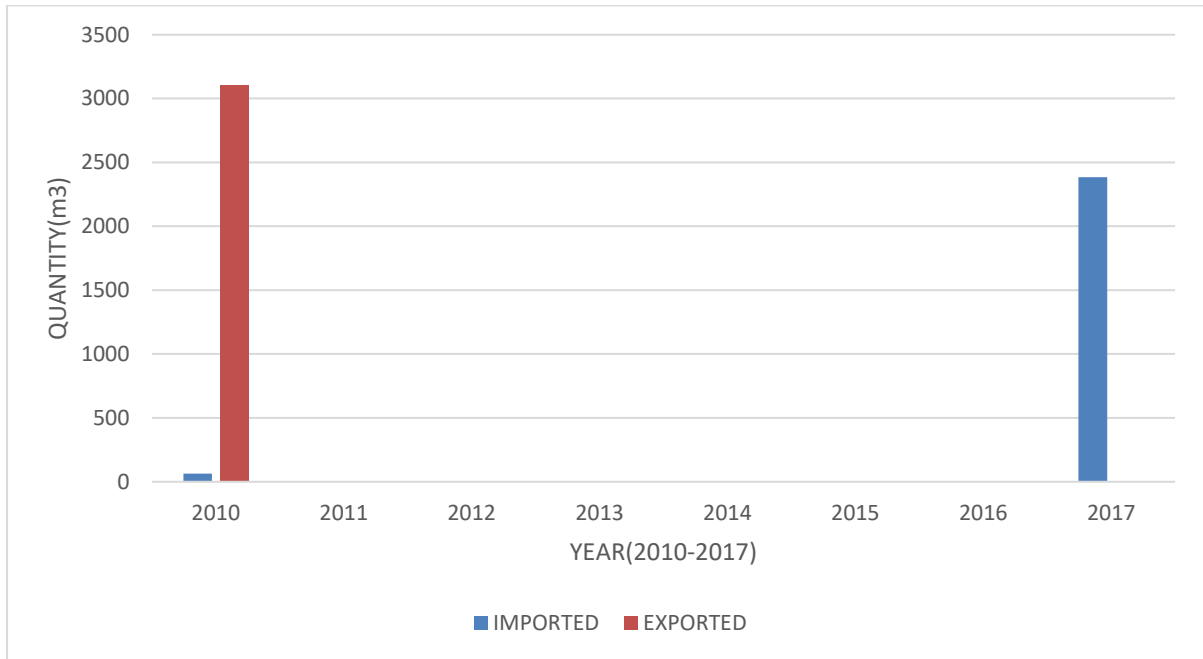
**Figure n° 34: Ghana's export data on other products: bone pieces, bones, ivory carving, shells, skeleton,skull,tail,teeth,trophies,tusks (2010-2017)**

Data Source :( UNEP-WCMC, 2019)

The Table n° 38 and Fig. n° 34 above shows the disparities recorded on other products by both the importing and exporting countries and the difference was recorded as 46 as against the exporter.

**Table n° 39: Ghana's export on sawn timber (2010-2017)**

YEAR	QUANTITY(m3)	
	IMPORTED	EXPORTED
2010	64.653	3100.664
2011	0	0
2012	0	0
2013	0	0
2014	0	0
2015	0	0
2016	0	0
2017	2384.139	0



**Figure nº 35: Ghana's export data on sawn timber (2010-2017)**

Data Source :( UNEP-WCMC, 2019)

The Table nº 39 and Fig. nº 35 above indicates the difference in recorded exporter and importer figures as -651.872m3 as against the exporter for trade on sawn timber.

## CHAPTER FIVE

### 5.0 DISCUSSION

Discussion of the results/findings is being carried out to reflect on the underlisted salient and relevant thematic areas of the research.

- 5.1. - Demographic characteristics of respondents
- 5.2. - Respondents' knowledge base and level of awareness on CITES
- 5.3. - Potential CITES stakeholders and their corresponding roles in CITES implementation
- 5.4. - Existing mechanisms for awareness creation on CITES in Ghana
- 5.5. - Challenges confronting awareness creation on CITES in Ghana.
- 5.6. - Suggestions for mitigating the challenges of CITES awareness creation in Ghana.
- 5.7. - Relevance of awareness creation strategy for promoting awareness of CITES in Ghana.

#### **5.1-Demographic characteristics of relevant CITES stakeholders and their implications for CITES awareness creation in Ghana.**

The study investigated the location, gender, age, levels of education, categories of respondents and work experience. It was found out in the study that the location of the respondents exerted considerable influence on their involvement in CITES implementation in Ghana. Many of the respondents are stationed in the urban areas and this was an indication of the fact that not much had been done in educating other potential stakeholders in the rural areas of the country. The obvious concentration in the cities creates an imbalance between these cities and other locations and borders where CITES duties are performed. This obviously attests to the fact that, individuals are constantly shaped by the environment and the variables from which they surround themselves. (VanderStel, 2014). The findings on gender inconsistencies are at variance with an observation made by Espinosa, 2010 to the effect that females play important roles in local livelihoods and have acquired knowledge on and are involved in decisions related to wildlife use. This is because results of the study indicated that 25% of the respondents were females, which is a relatively small number. It is therefore the opinion of the author that, that CITES and its related issues in Ghana is gender biased and in favor of males than females. Involvement of more females to join the CITES stakeholders cannot be under estimated because of the great influence women have in passing on knowledge to their next generation. In terms of age, majority of the respondents, 56% had their age range between 46-60 which suggests that majority of stakeholders who work directly on CITES are quite close to retirement implying that a committed effort must be made in passing on enough CITES knowledge and skills to these other stakeholders within the relatively younger age bracket.



According to Allen, (2007) higher education, theoretically, will enable individuals to expand their knowledge and skills, express their thoughts clearly in speech and in writing, grasp abstract concepts and theories, and increase their understanding of the world and their community. This statement justifies the result obtained on respondents level of education which revealed that majority of respondents had acquired tertiary level of education creating the impression that theoretically their knowledge on awareness level of CITES in Ghana is necessarily consistent with their relatively higher levels of education as stakeholders. This was however not the case. Similarly, it had been the author's opinion that long term work experience as stakeholders of CITES is supposed to provide many advantages in terms of increased awareness levels, giving stakeholders more skills and experience that enable them to stand out in terms of their work. The results from the study did not directly correlates with this assertion in respect of respondents work experience. Although majority of them had long work experience on the job, the expected advantages did not necessarily reflect on their awareness level in CITES. This provides a basis for the author to suggest the need for a conscious and deliberate effort to build the capacity of stakeholders who are permanently assigned to CITES duties.

## **5.2-Respondents knowledge base and level of awareness on CITES**

The pursuit of knowledge has allowed our society to advance in incredible ways. The greatest inventions of all times have been based on securing, embracing and applying knowledge. One major benefit of knowledge is that once you learn something, it cannot be taken away and can be imparted to generations to come. (Ruiz, 2016)

Against the background the foregoing assertion, the study tried to find out from respondents the extent of their knowledge base and levels of awareness on CITES. The result disclosed that, even though all stakeholders were working on or had worked on CITES before, their response to most of the questions proved that most of them were either deficient in their knowledge of CITES or did not indicate any responses.

For this observation to have been made about workers permanently assigned to CITES schedules, it may be speculated that their refusal to respond could be due to their ignorance. This could be attributed to the fact that, stakeholders who were supposed to be involved directly in CITES issues had poor knowledge on the various appendices in CITES. Their knowledge in CITES traded species needs to be improved to help reduce the illegalities in trade. It could also be inferred from the results that stakeholders had inadequate training and capacity building and it is therefore one of their topmost needs for CITES implementation. Majority of the respondents, mostly from the Management Authority admitted that they knew and had heard about CITES. These were mostly existing stakeholders from the Management Authority.

The most surprising revelation was that even though most of them (70%) claimed they knew about CITES about 23% unfortunately did not know if Ghana was a member of the Convention. Individual stakeholders who responded to the questionnaires also rated their levels of awareness on CITES frankly as inadequate. This obviously brought to light that the level of awareness was generally inadequate for all categories of stakeholders.

Exactly half of the respondents rated awareness of CITES in Ghana as very poor, hence underscoring the urgent need for awareness creation to be intensified to help strengthen stakeholders general knowledge on CITES. If the knowledge gap on the part of the respondents was so yawning, then there is an obvious justification for the author to advocate a very robust and dedicated mechanism for addressing the gap before there can be any breakthrough in the awareness creation efforts.

Ideally, in the analysis of CITES trade data for CITES member countries, the same figures must be recorded by both the importing and exporting countries. On the other hand, when this was carried out by the author to assess the level of awareness on CITES in Ghana, the results depicted a different scenario. A comparative study of the figures recorded revealed some disparities and this could be mainly attributed to inadequate knowledge on CITES in Ghana and for that matter a reliable reporting system. The variation may also be due to possible connivance between the traders and the CITES officials in smuggling. The situation therefore underscores the urgent need for the necessary sensitization on CITES as well as orientation on the standardized reporting regime and professional ethics on CITES to help address the deficiency.

### **5.3.-Potential CITES stakeholders and their corresponding roles in CITES implementation**

According to Conley *et al* (2003), collaborative efforts can also be referred to as partnerships. Within the context of the research, this explanation will apply to how such a partnership can positively influence CITES awareness creation in Ghana. Civil society organizations see their impact increase through collaboration with other sectors. According to Marchetti (2017), if the concept of partnership will succeed, there is an urgent need to learn faster together, collaborate more efficiently, and enhance collective action for more sustainable human behavior on an everyday basis at the local, national, and global level.

As far as results of the study were concerned, respondents made it clear that they were aware of other equally potential CITES stakeholders. This provides an opportunity as well as the urgent need to explore the possibility for effective networking even among the existing stakeholders to achieve the purpose of knowing each other as stakeholders in order to link up to these institutions who play vital roles in CITES.

The list of stakeholders and their potential roles disclosed by respondents are explained to include the NACOB (Narcotic Control Board) and this is aimed at reducing narcotic drugs in the society, by arresting and prosecuting cultivators, traffickers, peddlers and users and thus control the supply of narcotic drugs to the minimum at various ports and borders of Ghana. Their knowledge in tracking offenders, arresting and seizure of items will be useful in law enforcement in wildlife trafficking.

The other organization is Aviation Security, which involves a combination of human and material resources to safeguard civil aviation against unlawful interference and once they are sensitized and given the necessary orientation on CITES, they can help in tracking CITES related offences.

The next to relate to is the Airport Security, who have techniques and methods used in an attempt to protect passengers, staff, aircraft, and airport property from accidental/malicious harm, crime, and other threats. With these techniques and methods used in their line of work they can aid in combating crimes such as wildlife trafficking and other CITES related issues.

Another of such potential stakeholder institution identified by respondents was PPRSD (Plant Protection and Regulatory Services Division) under the Ministry of Food and Agriculture. This institution has the mandate and capacity to organize, regulate, implement and coordinate the plant protection services needed for the country in support of sustainable growth and development of Agriculture in Ghana. Their coordination in protecting plants in the country relates them directly to CITES regulation and hence when made stakeholder of CITES will play a vital role in the convention.

NGO'S (Non-Governmental Organizations) are also organizations that primarily deal with the conservation of various ecosystems. They are also known to play a vital role in advocacy on government policies and stakeholder sensitization and as such, their role as CITES stakeholders will be of great significance, as this would help speed us interventions to help implement laws governing CITES that are still currently pending in parliament.

Port health staff were also identified among the potential stakeholder institutions. They are mainly at the ports and borders to ensure that only products that are safe to eat enter the food chain, and also safeguard animal and public health and check compliance with European Union (EU) rules and international trading standards. Their roles will also be of relatively great value in CITES awareness creation in Ghana.

Bush meat exporters were also identified as potential collaborators for CITES awareness creation in Ghana. Their knowledge can be used in ensuring that trade in all bush meat that might be transported for either imports or exports are regulated with CITES documents before trade.

Staff of Ghana Exporters Promotion Authority (GEPA) were also identified as potential stakeholders since they act as coordinating pivot for the various public sector and non-governmental bodies involved in trade facilitation. They also train exporters and personnel of export facilitating institutions to upgrade their skills in export marketing. Their duties are interrelated with CITES in Ghana and hence their role as potential stakeholders will be of great relevance.

Judges and prosecutors were also identified as potential CITES stakeholders as they are responsibly noted for prosecuting all CITES offenders. By virtue of their roles as judges, if they are given the needed sensitization on CITES, they are most likely to develop a greater appreciation for its significance and hence prescribe more punitive sanctions against culprits of CITES related crimes that are taken for granted.

The role-played by the Scientific Authority and Management Authorities in CITES awareness cannot be underestimated. The Management Authority is responsible for granting permits and certificates under the terms of the Convention, consult the Scientific Authority before issuing an export permit for specimens of species in Appendices I & II), make sure that it keeps the Scientific Authority informed about all relevant CITES issues as well as communicating with the CITES Secretariat and other Parties.

The Scientific Authority plays an important role by providing credible research based on information on species to help provide quotas for export and hence promoting the effectiveness of CITES and contributing to how it can be extended. They also advise the Management Authority on whether or not export of specimens would be detrimental to the survival of the species in the wild and also advises the Management Authority on other scientific matters (CITES,2016) It was therefore unfortunate that the study revealed the ignorance of the stakeholders in the role of the S.A in CITES. Not with standing this, some of the stakeholders who were aware of their importance suggested that, more institutions should be added to the Authority to improve on its functions in order to prevent common delays in the release of relevant research findings and finally quality of the Non-Detrimental Findings (NDF's).

Even though most of them were not well informed about the roles of the SA, a greater percentage of them 43 % subscribed to the need for the Scientific Authority to be expanded to other Universities and Research Institutions for NDFs to be carried out with relative ease in terms of timeliness and scientific accuracy of their inputs. These research Institutions may include the Center for Scientific and Industrial Research (CSIR), the Marine and Zoology Department University of Ghana (Legon), Faculty of Environment and Natural Resources of the University of Cape Coast and Fisheries Commission. These are academic and research institutions, which help

to tackle scientific research on various CITES species and for effective results SA's will require to adopt a multi- disciplinary approach to their research adventures.

#### **5.4.-Existing mechanisms for awareness creation on CITES in Ghana**

Awareness mechanisms are very important because they provide a noticeable improvement to group work productivity. (Gallego *et al*, 2011). Results of the study was contrary to this observation. This was because, the respondents were not aware of any existing mechanisms for awareness creation on CITES in Ghana. Most of the respondents who were interviewed for the study, emphasized that very little had been done on the creation of awareness on CITES issues in Ghana. The number of respondents who said there were mechanisms in place for awareness creation were mainly from the Management Authority making it evident that they naturally had to defend their technical roles as MA to cover up their inadequacies. It is therefore not a surprise that generally, people are not aware of what biodiversity is and its importance to humans and as such, local people practically feel that regulation on biodiversity will be an impediment to their livelihood. It was revealed that previously, as part of raising awareness, a Wildlife officer was posted to the Kotoka International Airport to inspect goods destined for export and import in collaboration with Customs officers. It was learnt that, this went on for a while, but was later withdrawn due to some challenges that were encountered.

According to the respondents, the mechanisms that were in place were all conservation inclined generally but not specifically on CITES. Exactly half of the respondents rated awareness of CITES in Ghana as very poor with only (6%) rating awareness in Ghana as good, revealing the urgent need for awareness creation to help improve stakeholders general knowledge on CITES. Respondents also disclosed that there were no mechanisms for promoting an appreciable understanding for what CITES stands for except for few stakeholder meetings that are held occasionally. The results of the study also indicated that the main means for information dissemination on CITES issues is through workshops, which is not well institutionalized. This revelation lent credence to the fact that not much had been done in Ghana to help improve on CITES awareness in the country. It implies that a lot has to be done aside workshop training to strengthen CITES awareness through other media like social and print media. Per the results of the study, report writing was also found to be a great challenge to stakeholders. Most of them 43% conceded that they compiled reports on an adhoc basis. There is therefore the need for intensive education and training on all aspects pertaining to CITES for these respondents, in other to strengthen the procedure for raising more awareness on the Convention in Ghana. Respondents indicated that generally, there were many inadequacies in the procedures for CITES awareness

creation hence providing their justification for a comprehensive awareness creation strategy to be put in place by the Management Authority to help improve on CITES awareness in Ghana.

On training needs assessment of respondents, there was a consensus on the under listed modules which included, identification of specimen, proper handling of specimen and its related products, various roles as stakeholders for CITES implementation, detailed concept on the understanding of CITES and how to collaborate with other signatories, report writing, investigations on seizures and training on detailed legislation and laws governing CITES.

Results of the research indicated that a greater number of respondents (93%) would like to disseminate information on CITES issues which is obviously one reliable way of improving on CITES awareness in Ghana. Respondents were also of the view that modernizing knowledge sharing on CITES through Radio and Television and other forms of media in general would be an effective approach to consider on the way forward for enhancing awareness creation on the Convention. The research results indicated that majority of the stakeholders (89%) opted for seminars and workshops as preferred means for improving knowledge for effective CITES information sharing in the country. It was the opinion of some respondents that the mechanism for creating awareness can be improved not only through training and workshops but also by electronic media and creating education centers for specialization of CITES by the MA.

It is the view of the author that, if the various options are professionally interrogated in terms of their cost implications, effectiveness and applicability, the MA can eventually decide on which of them can be adopted to address the challenges at stake.

### **5.5.-Challenges confronting awareness creation on CITES in Ghana.**

CITES is not a self-executing treaty and therefore relies on the domestic enforcement measures undertaken by its member Parties. CITES contains different permit requirements for each of the three appendices. These permit requirements are intended to allow monitoring of trade in CITES species in order to aid domestic enforcement. (McOmbler, 2002). From the results of the research conducted, the respondents indicated that financial inadequacy is one main key challenge that prevents the forest and wildlife policies from being implemented effectively of which awareness creation on CITES and legislation is of no exception.

Ineffective communication and collaboration among stakeholders was identified as a challenge in the study. Education on the Convention itself is of great significance at the level of regulatory institutions to help achieve the aim of improving awareness on CITES in Ghana. However, results of the study revealed the challenge of inadequate commitment on the part of the management and scientific authorities to carry out this institutional education, which was attributed to inadequate funding.

It was also noted from the study that, a lot of ignorance at the level of the policy makers is a major challenge and that little regard is given to wildlife at the policy level especially concerning funding. There are bureaucratic bottlenecks that inhibit the channeling of money to help in raising awareness on CITES issues. Money would rather be channeled to the mainstream activities than in CITES awareness creation. The prevailing situation agrees with the notion that, educating people is a long-term project because it takes time for its impact to be measured. The results to be achieved in education, takes a lot of time and as such a lot of emphasis is not placed on it. (Perscom, 2018).

Results of the study also disclosed that, public education on CITES awareness is also very low to the extent that a lot of respondents even though are working directly on CITES, are not adequately equipped in terms of knowledge on the Convention.

National laws for implementing CITES are critical to ensure that trade in protected species is legal, sustainable and traceable. Legislation empowers government officials to act, regulates human behaviour and articulates policy in relation to conservation and trade in wildlife. Although CITES is legally binding on States it is generally not self-executing. This means that it cannot be fully implemented until specific domestic measures have been adopted for that purpose. It is therefore essential that CITES Parties have legislation in place especially in Ghana to allow for the implementation and enforcement of all aspects of the Convention. It is through adequate legislation which is permanently up to date and efficiently enforced, both at the borders and within countries, can CITES really work. Adequate national legislation is key to

effective wildlife trade controls by the State agencies charged with implementing and enforcing the Convention. It is also a vital prerequisite for ensuring that a State Party complies with the provisions of the Convention. (CITES, 2018) In the Ghanaian situation, there is not yet any specific legislation to cater for awareness creation among other equally important factors affecting effective CITES implementation. The desire for adequate improvement in awareness creation is therefore most likely to remain a mere mirage until the challenge is addressed.

#### **5.6.-Suggestions for mitigating the challenges of CITES awareness creation in Ghana.**

Addressing the challenges of awareness creation in Ghana demands a deliberate and conscious effort by all stakeholders involved in CITES awareness creation to introduce various innovations that have the potential to drive the much needed reforms or changes. According to Bonkougou, (2018) these innovations include: incentives, policy reform, and the marginalized in the society, resource mobilization and relationship with other international Conventions. All of these will require a concerted effort at capacity building at all levels. There is also, awareness and exchanges between regions, as well as research and training, sharing of information, technical and scientific co-operation.

It was suggested by respondents that, to improve on awareness creation on CITES, there should be consistent workshops and conferences involving both Policy makers and all Parties on ground floor directly or indirectly involved in CITES issues. Legislations should first be improved so that all offenders can be dealt with drastically. In addressing these challenges associated with CITES awareness creation, funds channeled for other projects would also have to be invested in awareness creation to help in strengthening the collaboration among the institutions involved in CITES. In reaching out to awareness on CITES issues, the respondents suggestion proved that, training was one key factor as well as media publications which is one quick way to help improve on the awareness rate in Ghana.

Respondents suggested regular training for all stakeholders especially on identification of CITES and non-CITES specimens as well. There was a general concern for CITES to be made more public and not just to the stakeholders to help improve on awareness. Especially during the celebration of special days set aside for Conservation, it should be used to educate people about the Convention. Furthermore, it was suggested that, Community Resource Management Area (CREMA) concept, an institutional innovation developed by the Wildlife Division of the Forestry Commission of Ghana and which dates back to the 2000 should be adopted for CITES awareness creation. If its implementation is carried out within the framework of the Collaborative Resource Management Policy with, the seriousness it deserves it is most likely to yield positive results. This is because it is geared towards creating the opportunity for sustainable management



of natural resources in off reserve areas, particularly paying attention to communities that are located along the fringes of protected areas, national parks and forest reserves. The Community Resource Management Concept has the potential to provide opportunities for communities to participate in the management of resources within their respective areas. The capacity building component for the establishment of these communities offers an opportunity for creating awareness on CITES in Ghana as well.

It was also suggested that trained CITES officers be given a slot during customs training and police to help in training on CITES and how it works either at officer or recruit level. This will enable them to know who exactly to call on in case they come across CITES issues in their line of work.

In the opinion of the author, the various mitigation actions suggested by respondents hold a lot of promise for addressing the challenges confronting awareness creation in Ghana, provided their implementation will be accorded the top-most priority attention it deserves.

### **5.7.-Relevance of awareness creation strategy for promoting awareness of CITES in Ghana.**

Awareness creation strategies are important because even though their results are realized in a long term, they are best means of communicating all relevant issues. The notion has been confirmed by Solongo (2012) that a wide variety of methods and techniques are available in Kenya for developing communication and public awareness, which are used in promoting conservation. It is therefore not out of place for the respondents in the study who have inadequate awareness to advocate for a comprehensive awareness creation strategy to be developed (emphasizing on importance of awareness) for effective awareness creation in the country.

Similarly, an awareness creation strategy will be of great importance in the improvement of CITES awareness in Ghana. This will provide an opportunity for communication and public awareness activities to be implemented in both short and long terms and to help improve on conservation awareness. In the Ghanaian situation where the knowledge of respondents on CITES is generally inadequate, there is an urgent call to implement this to improve CITES awareness in Ghana. An awareness creation strategy could be in many forms such as modern mass media, use of popular personalities and organizing awareness programs for schools. Various authors have explained this as follows:

Modern mass media such as newspapers, magazines, radio, television and film provide one of the most effective, ready-made means of reaching a wide target audience. Potential activities would include, the Publication of messages and slogans as paid advertisements in newspapers

and magazines. These will be most effective if accompanied by attractive or dramatic photographs or other illustrations. Again, special and investigative reporting on CITES issues could be published in collaboration with other radio discussions, and radio spots conveying specific CITES information for broadcast at local level. Television spots on special documentary films for screening on television, in schools, community centers, rural areas and other public gatherings must also not be left out since they are forms of modern mass media that could be used to improve on the awareness level of stakeholders on CITES. Aside this, billboards are also modern means of promoting awareness on CITES that are easy and cost-effective. This medium also attracts the attention of a broad cross-section of people. Specific messages on CITES could be conveyed using slogans and attractive pictures. In Mongolia, boundary walls are widely used for displaying commercial advertising, and this technique could be used for disseminating information on CITES in Ghana. (Solongo, 2012)

On other occasions, popular personalities from TV, music, film, traditional forms of entertainment and sports can be effective spokespersons and advocates as they have massive public appeal. Inviting such personalities to become involved in communication and public awareness campaigns on CITES could be an effective means of promoting awareness effectively on CITES in Ghana. (Solongo, 2012)

Organizing programs for schools is equally relevant in promoting awareness on environmental issues. Advantages are a large and receptive target audience, and an established structure (the school system) that facilitates dissemination and presentation of materials. Potential techniques can include incorporation of conservation-related materials in textbooks and curricula, presentation of audio-visual materials, drawing and writing contests, and field trips. Children will also take the message home to their families and provide another means of disseminating messages to adults with limited access to communications media. Outdoor education programs can be included in an awareness creation strategy to create awareness on CITES issues. Although this technique is likely to be limited to a relatively small target audience, effectiveness at promoting a conservation message and having a long-term influence on attitudes is likely to be very high. All of these are relevant strategies that could be included in a comprehensive document prepared by the MA to help improve on the awareness on CITES in Ghana for its effective implementation. (Solongo, 2012)

Wildlife practitioners are professionals in their own field of expertise and not necessarily public relations practitioners. It therefore follows logically that the advocacy for a comprehensive awareness creation strategy by respondents is laudable and worth considering. The corporate affairs and media relations department of the Ghana Forestry Commission may therefore have

to take up the task of developing a comprehensive strategic document. The situation therefore calls for a committed capacity building for the staff of the department to enable them to provide the kind of strategic document on CITES awareness. It is the author's opinion that this can only be achieved under the technical guidance of the CITES staff of the MA.

## CHAPTER SIX

### 6.0 CONCLUSIONS AND RECOMMENDATIONS

#### 6.1.-CONCLUSIONS

The conclusions of the research highlight on the salient aspects of the findings, which are consistent with the responses to the research questions derived from the objectives of the study, and include the following:

- CITES issues in Ghana were found to be dominated by males.
- Even though, majority of respondents had acquired tertiary levels of education, their knowledge on awareness level of CITES in Ghana was not necessarily consistent with their relatively higher levels of education as CITES stakeholders. Hence, it can be postulated that higher academic education does not necessarily guarantee higher knowledge levels in CITES.
- Most of the respondents who had spent several years working on CITES were deficient in knowledge about CITES. It can therefore be argued reasonably that there is no positive correlation between long work experience and adequacy of knowledge in respondents' field of work.
- Public education on CITES awareness is also very low due to deficiency in knowledge on the part of CITES workers themselves who are supposed to disseminate the CITES knowledge to the public.
- Workers permanently assigned to CITES schedules, had inadequate training and capacity building and this contributed partially to their low level of knowledge about CITES.
- Most of the respondents were almost near retirement age, meaning that the few of them with knowledge on CITES would soon leave their positions vacant for other officers who are more deficient in CITES knowledge to take over.

- Respondents were knowledgeable about equally potential CITES stakeholders and therefore identified some of the relevant state regulatory institutions which could be enlisted among existing MA.
- Inadequate legislation of CITES and its implementation is a major contributory factor for low level of awareness.
- Financial inadequacy is one of the main key challenges that confronts effective implementation of the forest and wildlife policies of which awareness creation on CITES is of no exception as well as collaboration between the Management Authority and Scientific Authority to carry out institutional education in CITES.
- All respondents advocated for an improvement in knowledge sharing on CITES by adopting modern methods to help improve on CITES knowledge dissemination in general.
- Respondents expressed the urgent need for a comprehensive strategic awareness creation document to be developed and approved to be used by the MA to help improve on awareness on CITES country wide.

It is anticipated that when all the identifiable challenges are addressed with the required seriousness, it will go a long way to facilitate the awareness creation on CITES in Ghana

## 6.2.-RECOMMENDATIONS

Against the background of the afore-mentioned conclusions, the following recommendations respondents suggested most of which as mitigating factors for the various challenges are provided as follows:

- Action on the CITES- related bill pending in parliament should be expedited to give a specific legal backing to all CITES related activities in Ghana.
- The Management Authority should explore the possibility of recruiting additional women to help address the gender inequality in the awareness creation on CITES.
- Younger people should be employed on CITES to address the current generational gap that has the potential to adversely affect awareness creation on CITES in the much foreseeable future.
- All potential and existing CITES officers should be given the needed training on CITES to help them understand better what CITES stands for.
- The Management Authority should explore the possibility of entering into an Memorandum of Understanding (M.O.U) with the potential stakeholders to help bring them on board as CITES stakeholders.
- Policy makers should be educated and given adequate wildlife training to address their ignorance on CITES and help them to appreciate its benefits not just to the country but globally.
- Conservation education should be intensified and be dedicated to address the knowledge gap on CITES through the organization of regular training by the MA for all stakeholders especially on identification of CITES and non-CITES specimens, which respondents identified as an important training need.
- Financial challenges confronting CITES awareness creation should be addressed by the CITES Management Authority and policy makers by investing more money in CITES issues emphasizing its benefits in terms of reduction in Wildlife Trafficking globally and also to help address and improve on knowledge in CITES.

- Community Resource Management Area (CREMA) concept, which is an initiative by the Wildlife Division should be properly enforced and incorporated into CITES education. This implementation will help raise awareness on CITES among communities.
- Knowledge sharing on CITES should be modernized through Radio and Television and other forms of media in general. This would be an effective approach to consider on the way forward for enhancing awareness creation on the Convention.
- The Cooperate affairs and media relations unit of the Forestry Commission should collaborate with the operations departments of the Technical Divisions of the TIDD, FSD and WD to develop a strategic document for awareness creation to serve as a national blue-print and for that matter reference source for awareness creation in Ghana.

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## LIST OF PLATES

### Plate 1



Interview with the current Director of Veterinary Services Directorate of Ghana

Source: Authors' Own Elaboration

### Plate 2



Interview with a past Director of International Conventions, Wildlife Division (MA)

Source: Authors' Own Elaboration

**Plate 3**



Interview with a former Director of Operations Wildlife Division of the FC (MA)

Source: Authors' Own Elaboration

**Plate 4**



Interview with Head of Investigations of Customs in Ghana at his Accra office.

Source: Authors' Own Elaboration

Plate 5



Discussion with two custom officers (Respondents) prior to interview at Aflao Border

Source: Authors' Own Elaboration

## LIST OF APPENDICES

### APPENDIX I

#### QUESTIONNAIRE

INTERNATIONAL UNIVERSITY OF ANDALUCIA-SPAIN

MASTERS DEGREE THESIS ON “ASSESSING THE LEVEL OF AWARENESS OF RELEVANT CITES STAKEHOLDERS IN GHANA.”

STUDENT’S RESEARCH QUESTIONNAIRES/ INTERVIEW GUIDE FOR RELEVANT INSTITUTIONAL STAKE HOLDERS (REGULATORY BODIES, ENFORCEMENT AGENCIES AND TRADERS)

#### **Personal Information**

1. Name of Institution/Agency

.....

2. Location/ Station

.....

3. Gender [ ] Male [ ] Female

4. Age Range a. 18-30 b. 31-45 c. 46-60 d.60 and above

5. Level of Education a. Diploma b. Degree c. Post Graduate d. PhD e. Others (Specify)

.....

6. Indicate which of the under listed category staff you belong to.

a.Junior Management b.Senior Management c. Administrative d.Managerial e.Non Managerial

7. What is the extent of your work experience?

a. 1-10 years b. 11-20 years c. 21-30 years d. More than 30 years

#### **Section 1 KNOWLEDGE AND LEVELS OF AWARENESS ON CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES (CITES)**

8. How would you assess yourself in terms of your general knowledge base about CITES issues?

a. Low b. Fair c. Good d. Very good

9. Do you know about CITES? a. Yes b. No

10. If yes, where? a. School b. Workshop c. Media d. Others (Specify).....



11. How often do you work on CITES? a. Daily b. Weekly c. Monthly d. Yearly
12. Do you know if Ghana is a member of CITES? a. Yes b. No
13. Do you have knowledge in trade of any species listed under CITES appendices? a. Yes b. No
14. If yes, list at least two species for each appendix
- .....
- .....
- .....
15. Have you had any training or ever been taught on CITES? a. Yes b. No
16. How would you generally rate CITES awareness creation in Ghana?
- a. Very Poor b. Poor c. Good d. Very good

**Section 2 BROADEN THE STAKEHOLDER BASE AND THEIR ROLE IN CITES IMPLEMENTATION**

17. Do you know any potential stakeholders relevant for implementation of CITES in Ghana?
- a. Yes b. No
18. If Yes, mention any potential CITES stakeholder in Ghana
- .....
- .....
- .....
19. Is there any reason for your answer in the above question on additional stakeholders?
- .....
- .....
- .....
20. Do you know the role of CITES Management and Scientific authority. a Yes b No
21. Do you think having one institution as Scientific Authority (S.A) of CITES is enough?
- a. Yes b.No
22. If No, which other institutions do you think should be part of the S.A

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.....  
23. What is the role of your organization in the implementation of CITES

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.....  
.....

**Section 3 MECHANISMS FOR AWARENESS CREATION ON CITES**

24. In your view, are there existing mechanisms for awareness creation on CITES in Ghana?

a. Yes b. No

25. In your opinion, have you observed any inadequacies in the procedures for CITES awareness creation? a. Yes b. No

26. Through what medium do you hear about CITES?

a. Social media b. Conference c. Radio and Television d. Print media e. Workshops

27. Where do you report CITES cases when encountered?

a. Management Authority b. Scientific Authority c. Police d. Others  
(Specify).....

28. How frequent are your cases? a. Weekly b. Monthly c. Quarterly d. Annually e. Occasionally

29. At what frequency do you write or compile reports on CITES?

a. Weekly b. Monthly c. Quarterly d. Annually e. As and when necessary

30. Would you like to have information on all the species listed on CITES that are traded?

a. Yes b. No

31. Would you like to disseminate periodic knowledge on CITES issues? a. Yes b. No

32. If yes, how would you want to modernize sharing knowledge on CITES?

a. Social media b. SMS alert c. Radio and Television d. Print media

33. How do you think your knowledge on CITES can be improved for effective CITES information sharing? a. Workshops/ Seminar b. Formal education c. Others (specify).....

34. What are your training needs in the implementation of CITES?

.....  
.....  
.....

35. What do you think are the best mechanisms for creating awareness on CITES?

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**Section 4 CHALLENGES ASSOCIATED WITH AWARENESS CREATION**

**Brief answers required**

36. What do you think are the challenges associated with awareness creation?

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37. What do you think can be done to address these challenges?

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38. How do you think awareness on CITES can be improved?

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.....