



Challenges faced in combating Illegal Unreported and Unregulated (IUU) fishing activities in Sierra Leone Waters

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Abstract

Sierra Leone, a coastal state that has been naturally blessed with fisheries resources is thus vulnerable to Illegal, Unreported and Unregulated (IUU) fishing activity. IUU is also a serious global problem affecting livelihoods, food security and the marine environment. This study aims to identify key challenges faced in trying to combat IUU fishing activities in S/L waters. The research was conducted in Sierra Leone. Primary data was sourced from 65 respondents who answered thorough questionnaires which were then corroborated with key informant interviews.

Respondents with vast knowledge of the issues of IUU fishing activity were selected from all major fisheries institutions of Sierra Leone. Results were analyzed using Excel and Scientific Package for Social Scientists. The findings from the analysis reveal that the prevalence of IUU fishing in Sierra Leone could be attributed to various different factors including lack of funding to facilitate Monitoring Control and Surveillance (MCS) and Vessel Monitoring Systems (VMS) programs. Conclusively the research reveals that Sierra Leone is losing a lot of revenue to IUU fishing activity, thereby combatting factors responsible for increasing IUU fishing activity would improve Sierra Leone's fisheries management and achieve sustainable fisheries. This research would hence serve as a tool for the different fisheries stakeholders in understanding the factors responsible for the occurrence of the increasing IUU fishing activity. This research, therefore, recommends stakeholder collaboration in order to incorporate implementations of enhanced MCS and the adoption of stronger measures to limit the increasing IUU fishing activity.

Keywords: Fishing, Illegal Unreported and Unregulated, Sierra Leone.

Introduction

Illegal, unreported and unregulated (IUU) fishing is a broad term that captures a wide variety of fishing activities that breaks national and international fisheries laws and regulations. IUU fishing is a universal problem that poses threats to ocean ecosystems, food security, economic security and more so to sustainable fisheries. These threats however are significantly predominant in West African countries like Sierra Leone which happens to be one of the most affected countries with considerable loss of revenue by Illegal Unreported and Unregulated fishing activities (Doubouya et al, 2017).

The territorial waters of Sierra Leone which have been plagued with Illegal, unreported, and unregulated IUU fishing activities have a direct impact on the protein intake of its citizens as fish is the most important animal-source food with growing demand in the diets of Sierra Leoneans. About 80% of Sierra Leoneans depend on fish for their cheapest and desired animal source of protein intake (WorldFish, 2017). IUU also affects the livelihoods of law-abiding fishermen, seafood producers and the fishing industries that adhere to the rules and regulations regarding the fish species left for them to legally harvest and make a living on (FAO, 2010).

Although IUU fishing activity is not the only contributor to the depletion and extinction of fisheries resources, it does play a significant role in undermining marine habitat. The IUU fishing vessels target high-value species using destructive fishing methods whilst generating a huge amount of unwanted by-catch which is then tossed back into the oceans. The use of prohibited gear by illegal fishing vessels has significantly contributed to the problem of by-catch, which is the unintended capture of non-target species (Petrossian, 2015). The issue of by-catch also contributes to the harvest rate far outstripping that of replenishment (FAO, 2001).

IUU fishing is easy and highly lucrative due to lack of monitoring and enforcement especially in West Africa (FAO, 2010). It is unfortunate that illegal fishing activities, particularly those committed by foreign private fishing vessels, continue to be unabated and unchallenged despite the fact that important parties, governmental and non-governmental organizations, have produced many laws and voluntary fishing legal instruments due to the lack of adequate -monitoring, control and surveillance structure with regard to both equipment and management systems in the developing West African sub-region (FAO, 2010).

This paper sheds some light on understanding the challenges faced in enforcing the rules and regulations in combatting Illegal Unreported and Unregulated fishing in Sierra Leone. This research is an important step as it also seeks to bring to the attention of all relevant stakeholders in the fisheries sector, the pressing need to coordinate efforts and better management measures in order to find ways to minimize IUU fishing activity in Sierra Leone.

Materials and methods

Description of the Study Area

Sierra Leone is a West African country located on the southwest coast. It is bordered by the North Atlantic Ocean and by neighbouring countries Liberia and Guinea. Sierra Leone has a tropical climate characterized by the alternation of rainy (May-December) and dry (April-November) seasons. It has different habitats ranging from savannah to rainforests, with a total area of 71,740 sq km. Sierra Leone has nine major rivers and a series of minor coastal creeks and tidal streams. From north to south, the principal rivers are the [Great Scarcies](#), Little Scarcies, [Rokel](#), Gbangbaia, Jong, [Sewa](#), Waanje, Moa, and [Mano](#). Sierra Leone's many waterways are home to many varieties of fish, such as bonga (a type of shad), butterfish, snapper, and sole. The coastal waters contain such shellfish as shrimp, lobster, and oysters. The two major religions practiced in Sierra Leone are Islam and Christianity. Sierra Leone's current population is 8,605,718 according to the world bank data. The country is organized into five administrative regions, each of which is further divided into sub-regions. Freetown, the nation's capital which is located in the western region is home to one of the world's largest natural harbours.



Sources of Data

The majority of the information used in this study was gathered from primary and secondary sources. Primary sources were obtained from the targeted respondents. The secondary sources include reports on monitoring and surveillance activities carried out by the MFMR and the Navy, articles, journals by numerous expert publications and unpublished reports.

Data Collection Procedure

Data was collected by using well-structured questionnaires to collect primary data from distinct organizations, including the Sierra Leone MFMR, the Sierra Leone Navy, the Marine Police, stakeholders from the artisanal fishermen union, and also stakeholders from the Industrial fishing industries. Various stakeholders in the Sierra Leone fishing industry including the Joint Maritime Committee (JMC) and Sierra Leone Maritime Administration (SLMA) gave face-to-face interviews while others were interviewed through mobile phone.

Sample Size and Selection of Respondents

Respondents were selected from all major fisheries institutions of Sierra Leone. These include staff from the Sierra Leone Ministry of Fisheries and Marine Resources (MFMR), the Sierra Leone Navy, stakeholders from the artisanal sector and the Industrial fishing industries and the Marine Police. During the research study, 65 questionnaires were distributed to different calibres of staff with vast knowledge and understanding of the review of management and policy framework to combat illegal, unreported, and unregulated fishing in Sierra Leone waters.

Data Analysis

Statistical methodologies were used in order to analyse the data gathered from the questionnaires. The data was then reviewed using Statistical Package for Social Scientists and Excel giving results in the form of tables, pie charts and bar charts.

Results

Respondents General Characteristics

Gender of Respondents

A total of 65 respondents participated in the research study. Table 1 clearly shows male participants made up (80%) and female participants made up (20%) of the total respondents respectively.

Gender of Respondents				
Gender		Frequency	Percent	Cumulative Percent
	MALE	52	80.0%	80.0
	FEMALE	13	20.0%	100.0
	Total	65	100.0%	

Table 1: Respondent's Gender Representative Body of Respondents

According to the results from the survey in figure 2, about 24.62% of respondents work for the Ministry of Fisheries and Marine Resources (MFMR); 18.46% for the Sierra Leone Navy; 18.46% for the Fishing Industry; 23.08% for the Artisanal Fishermen Association; and 15.38% for the Marine Police.

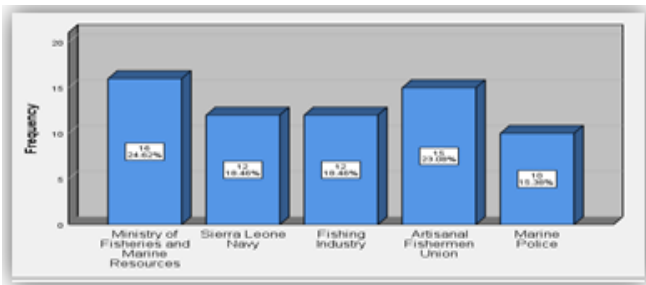


Figure 2: A representative body of respondents

Age Range of Respondents

According to research results in figure 3, 23.08% of respondents are between the ages of 25 and 35, 40.00% are between the ages of 36 and 46, 16.92% are between the ages of 47 and 57, and 20% are between the ages of 58 and 68.

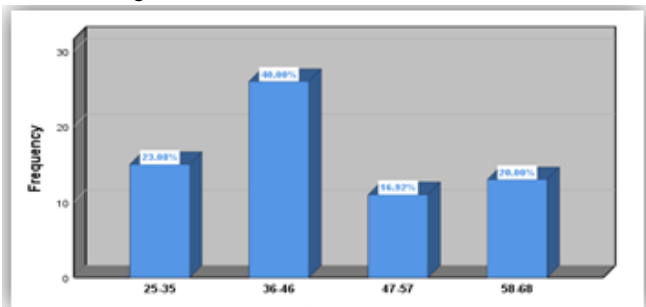


Figure 3: Age Range of respondents

Responders' Level of Education

According to the results in figure 4, around 60.00% of respondents have a university or college degree, 12.31% have a high school diploma, 13.85% have a primary education, and 13.85% does not have any formal education.

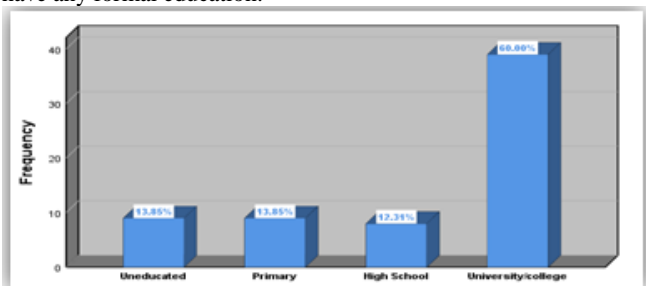


Figure 4: Educational level of respondents

Key challenges faced in trying to deter IUU fishing activities in S/L waters

The primary impediment to enforcing IUU policies is the lack of funding or the availability of funding, which is represented by 32.31% of the 21 respondents in figure 5 below. This is followed by 27.69%, which is a representation of 18 respondents who acknowledge that political interference and meddling in the prosecution or enforcement stage by political authorities is a barrier, 15 respondents who demonstrate 23.08% attesting to the fact that defaulters' prosecution is frequently compromised, and 11 respondents who clearly state that bribery and corruption are usually done by MCS officers representing a total of 16.92%.

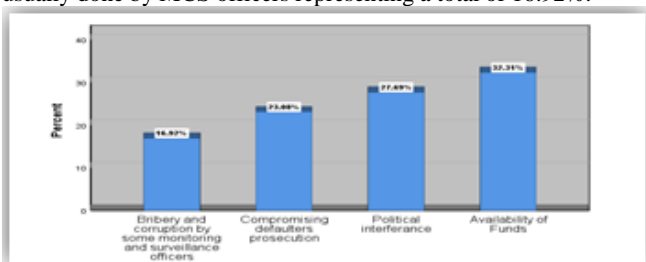


Figure 5: Key Challenges in Enforcing IUU Policies in Sierra Leone

Discussion

Gender results of respondents that participated in the research study in table 1 showed that majority were male respondents simply due to the fact that the targeted institutions are dominated by male workers. The research shows in figure 2, that stakeholders from various fishing intuitions were targeted with a good number of representations to get a holistic view. The highest number of respondents was from the Ministry of Fisheries and Marine Resources (MFMR) since they tend to be the parent body of all the collective fisheries in the country. According to the research results in figure 3 the age range of the respondents varies with the highest number of respondents being within the age bracket of (36-46) years. The results in figure 4 also showed that the majority of the respondents had a college or university level of education.

In figure 5 the results showed that one of the main factors that are responsible for the increase in IUU fishing activities in Sierra Leone is the availability of funds to facilitate MCS and VMS programs to enforce fisheries guidelines. It is no secret that running an MCS and VMS program is expensive but with the help from the world bank there was transparency and increasing surveillance activities, these programs were active up to the point where they had to leave prompting to low or virtually no effective monitoring after 2014 (Doubouya et al, 2017). This sector is now suffering from relatively weak Monitoring Control and Surveillance (MCS) systems due to untimely funds from the government or from partial donor partners. In the absence of a greatly strengthened regional capacity for monitoring, whatever rules are put in place, are likely to prove of limited effectiveness (Daniels et al, 2016). The fact that the country does not have effective Monitoring Control and Surveillance measures, makes the condition favourable for such IUU activity. One main way that a sovereign nation can effectively protect its fish resources in its territorial waters is through MCS activities (Conteh, 2021). According to the research done by Fillie in 2019, the Navy plans 50 patrols per month which are conducted by its five Forward Operational Bases (FOBs) namely; FOB Bailor, FOB Tombo, FOB Gbangbatok, FOB Bonthe, and FOB Sulima which are all located along the coast to strengthen the enforcement of IUU guidelines. It is however important to note that conducting all these high monitoring costs lots of money to the government without international funding and most of the expenditures from the Sierra Leone Government on MCS operations go into fuel costs (Fellie, 2019).

The research further reveals that Political influence or interference is a major factor weakening the tight implementation of IUU management rules. Most of the arrests being made had an authority figure who would call for their release before being prosecuted, thereby paralyzing the economic growth of the sector and preventing the government from achieving its fisheries goals. This shows the lack of political will from government officials. The enforcement of rules without political support is one of the main obstacles in limiting IUU fishing activity. As sad as it is to say, political interference plays a major role in the fisheries sector and this in turn leads to compromising defaulters' prosecution. Fisheries officials are vulnerable to bribery and corruption compelling them to compromise defaulter's prosecution on IUU infringements. This is normally done through various methods including the misplacement of evidence and falsification of

documents hence, a study conducted by Doumbouya et al in 2017, reveals that the number of arrests does not imply the total number of illegal fishing Vessels. This act indirectly tolerates the prevalence of IUU leading to an unnoticeable increase in IUU violations since offenders already know that once caught, they can just bribe their way out of the legal consequences. Another challenge reveals from the research study is the bribery and corruption by some monitoring, control and surveillance officers. In Sierra Leone, it is required to have an observer on board all industrial fishing vessels cause failure to do so is a crime. But in most cases, the monitoring, control and surveillance officers would be compensated by the foreign ship owners to look the other way in a sense to ignore the crimes being committed on the high seas which looks to contradict their function. This was also picked up in the report done by Daniels et al in 2016 for the Overseas Development Institute on Western Africa's Missing Fish: The impact of illegal, unreported and unregulated fishing and under-reporting catches by foreign fleets, which also clearly states that corruption is another barrier to effective action.

Conclusion

Sierra Leone has a 200-nautical mile EEZ, but the IPCs (inshore patrol crafts) do not patrol beyond 25 nautical miles from shore. This also contributes to the incredible loss of fisheries resources. This research paper has shown that low monitoring, control and surveillance due to the cost involved, lesser prosecution rates and high corruption show serious concern about the vulnerability of Sierra Leone to IUU fishing. The Ministry of Fisheries and Marine Resources has been doing all it can to combat IUU fishing but the sad reality is they lack the financial backing to implement strong monitoring, control and surveillance programs hence lacking independence. The Ministry also suffers from human resource capacity and technical support in order to implement its own fisheries management system to combat Illegal Unregulated and Unreported fishing activity for its marine resource sustainability.

Recommendations

In an effort to address IUU fishing practices, this research study recommends the following:

1. A joint approach from the national and international fisheries bodies in strengthening of the Monitoring Control and Surveillance (MCS) of Sierra Leone waters for obtaining the full potential of our fisheries.
2. Government should ensure timely funding to the Ministry for further strengthening of observer programs.
3. Political support should be given to the Ministry of Fisheries and Marine Resources in implementing IUU fishing policies.
4. Conduct capacity-building programs on responsible fishing to raise awareness of fisheries observers, inspectors, and other fisheries officers on best fishing management practices.
5. The creation of an updated database that would record names of all IUU fishing vesicles, and the total number of catch by illegal fishing vessels as this would make it easier for vessels to be blacklisted and also give an insight as to how much the country is losing to IUU fishing activity.
6. Percentage of the amount fined by any IUU fishing vesicles captured should be given to the monitoring,

control and surveillance officers as this would lead to taking fewer bribes and the maintenance of their integrity.

7. Steep fines worth more than the IUU catch backed up by strong Government actions.

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