Recruitment and Training of Marine Fishermen to Address Dwindling Of Personnel and Prevention of Foreign Neighbors from Flooding Into Nigeria Labor Market

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Abstract

Nigeria is surrounded by extensive marine fisheries resources capable of improving fish output, but, is unable of satisfying the fish needs of its inhabitants, given the poor productivity recorded in this sector. An estimated 26 million people, including fishermen, retailers of fish gear equipment, and those engaged in the processing, distribution, and marketing of fish, are employed in artisanal fisheries, making it a major contributor to the economy in regions with large bodies of water and associated water resources. Despite the advantages and potentials associated with the fisheries sector, the business nonetheless experiences negative repercussions such as illicit fishing, climate change, and insufficient governance. This paper investigates the measures of stopping foreign neighbors from stomping into the Nigerianlabor market by recruiting and training marine fishermen to address the slumping workforce. The questionnaire was adopted for data collection which was distributed randomly to fishermen around Epe and Badagry. 120 of the distributed questionnaires were retrieved and thus analyze. This paper identified the challenges faced in the management of the fishing sector including overfishing, damage to the ocean floor, and inadequate resources for monitoring and surveillance. It also determined the training needs of marine fishermen to include understanding of regulatory and safety requirements, quality control and management, weather navigation and communication, Fish marketing within quality control standards, and safety measures and equipment.The result thus recommends the government work in hand with the body in charge of regulating this sector to create a training program that will be of benefit to this sector.

Keywords: Recruiting and training, Marine fishermen, dwindling of personnel, prevention of foreign neighbors.

I.   Introduction

Goal 14 of the United Nations Sustainable Development Goals focuses on the protection and wise use of the ocean and its resources (Okafor-Yarwood, 2020). This purpose appears to have failed due to unsustainable behaviors, such as illicit and uncontrolled fishing carried out in the marine environment, which consistently threatens the continuing survival of its resources (Chikelu, 2021). Increasing the country's Gross Domestic Product (GDP) via fisheries output is said to be crucial to Nigeria's social and economic development (Olaoye&Ojebiyi, 2018). Nigeria is surrounded by extensive marine fisheries resources capable of improving fish output, but, is unable of satisfying the fish needs of its inhabitants, given the poor productivity recorded in this sector. An estimated 26 million people, including fishermen, retailers of fish gear equipment, and those engaged in the processing, distribution, and marketing of fish, are employed in artisanal fisheries, making it a major contributor to the economy in regions with large bodies of water and associated water resources. Despite the advantages and potentials associated with the fisheries sector, the business nonetheless experiences negative repercussions such as illicit fishing, climate change and insufficient governance (Olorunyomi, 2021).

Tragic mismanagement is a major problem in the fishing industry, which is already struggling with dwindling supplies. Other major problems include overfishing, population expansion, illegal fishing, deterioration of aquatic habitats, and rising fish demand. This significantly impacts the lives of millions of people relying on the fisheries industry for food and as the source of income, therefore increasing poverty, insecurity, and hunger. When faced with difficulties in this industry, Nigeria has turned to fish imports, resulting in a loss of income

for the government. It's clear that investing in the sector's future and giving fishermenthe training they need is crucial for the industry to be managed and grow effectively (Ajani & Osho, 2019).

The seasonal migration of commercial fish species is a major factor in the nomadic lifestyle of artisan fishermen. Some migrants have found a permanent home in fishing towns because of this. They are able to make good use of their expertise because of the effective fishing inputs necessary to collect the vast fisheries resources found in Nigerian maritime waters. Hence, the choice of fishermen from nearby countries to relocate to Nigeria depends on their cost-benefit assessment to which they anticipate favorable net returns in monetary terms (Fregene, 2010).

Given the widespread lack of familiarity with Nigeria's fishing regulations, it is unsurprising that information about them is poorly disseminated. It is the perspective of Abolanle (2021) that certain measures need to be put in place to successfully promote and grow the economy via fishing; to which end there needs to be the provision of functional infrastructures to help efficiency in fishing. The maritime ecosystem is laced with illegalities due to a lack of understanding and the application of regulations, necessitating the introduction of legislation to defend against man-made stresses like unlawful fishing.

Statement of the research problem

There has been ineffective management of the marine environment by the Nigerian government probably due to lack of funds and poor maintenance culture at both Federal and State Levels. Over the years, the exploitation of the ecosystem has caused a decrease in the fishing yield, while the inability to monitor fish stocks and understand the changes in the ecosystem has further contributed to the inefficiency of fisheries management policy. This would imply that the government has over estimated its ability to manage these fishery resources.

The fishing industry is also challenged by the lack of trained manpower especially in regards to fish production, resource development and environmental management, which would have enhanced the potential to boost fish production processes in Nigeria (Abolanle, 2021). Fish resources are vulnerable to environmental issues such as over-fishing, resulting in the rapid deterioration of the river thus limiting production and eventual collapse of fisheries over time.

The state of insecurity in the marine environment is one that calls for the attention given the rise in the invasion of foreigners and their vessels into Nigerian waters with the sole purpose of fishing illegally, and repackaging them for sale to Nigerians. This occurs due to the inability to enforce laws resulting in such level of behavior from foreigners who indirectly have taken over the Nigerian labour market. It is in view of the foregoing that this study seeks to the importance of recruiting and training of Marine fishermen to address the dwindling of personnel and prevention of foreign neighbors from flooding into Nigeria Labor market

Research objective
The study generally examines the importance of recruiting and training Marine fishermen to address the dwindling of personnel and the prevention of foreign neighbors from flooding into Nigeria's Labor market. Specifically, it seeks to;
1.   Identify the challenges faced in the management of the fishing sector.
2.   Identify the training needs of marine fishermen.
3.   Determine the impact of recruiting and training of marine fishermen on dwindling personnel in the Nigeria Fishing industry.
4.   Examine the extent to which recruitment and training of Marine fishermen prevent the migration of foreigners into the Nigerian fishing industry.

Research questions
1.   What are the challenges faced in the management of the fishing sector?
2.   What are the training needs of marine fishermen?
3.   What is the impact of Recruitment and Training of Marine fishermen on dwindling personnel in the Nigeria Fishing industry?
4.   To what extent will Recruitment and Training of Marine fishermen prevent the migration of foreigners into the Nigerian fishing industry?

II.   Literature review
Overview of fisheries

Fisheries is described to be a major source of protein as well as contributory to the economies of most countries (Aldred, 2021). In addition to be consumed by millions globally, it further serves as a source of livelihood in developing, lowincome and food deficient countries (FAO, 2021). For so many years, the fisheries sector has been over exploited by humans causing destruction to the marine and the ecosystem in general. The end result is the depletion of fish stocks and growing food insecurity (Fillie, 2019).

The supply of fish in Nigeria is majorly sourced through any of the following means; importation, aquaculture, artisanal fisheries, and industrial trawlers (Grema, 2020). In africa, Nigeria is reportedly the largest fish consumer with the annual consumption of about 3.2 million metric tons of fish (Adelesi, 2019). The demand and supply of fish in Nigeria is largely unbalanced; as fish demand annually is pegged at approximately 2.66 million tonnes and production at approximately 780, 000 tonnes; an indication of a huge supply gap of 1.8 million tonnes (Adelesi, 2019). The fishery resources of Nigeria are primarily made up of a dwindling marine and an ever developing aquaculture industry (Olaoye, et al., 2016). According to FAO (2017), the consistent investment in this sector has resulted in Nigeria being referred to as the largest aquaculture producer in Sub-Saharan Africa.

Training

Training is significant to the performance of humans and entails the acquisition of skillsto improve productivity (Olorunfemi, et al., 2017). Trainingof fishermen is a necessity in view of the challenges often encountered in the course of fishing. The problems encountered by fishermen can be grouped into human and natural threats. The human factor encompasses Overfishing, environmental activities, inadequate resources for monitoring and surveillance, ghost fishing, bycatch, use of destructive fishing gears, bottom trawling, dynamite fishing and cyanide fishing, and inaccurate data.The natural threats to fisheries resources includes unavailability of nutrients, consumption of smaller fishes by the larger predator fish, seabirds and mammals, ocean current, salinity, concentration of carbon-dioxide, and wind speed and direction.

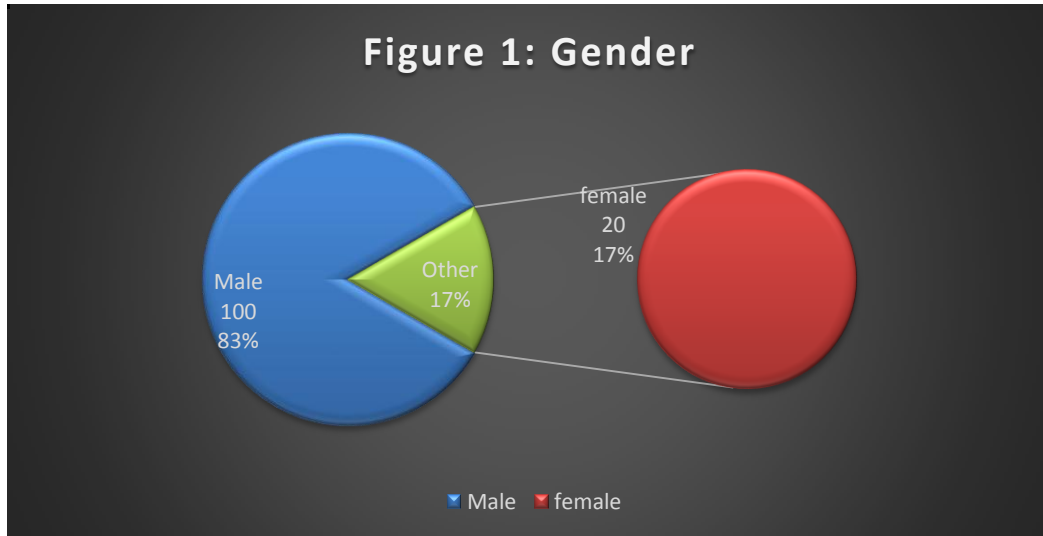**Theoretical: Neoclassical Economics: Macro Theory**

According to the neoclassical economics theory, international migration occurs as a result of geographic differences in the supply of and demand for labour. The movement of capital encompasses human capital, with highly skilled workers migrating from moving from capital-rich to capital-poor countries so as to enable them benefit from the high returns derived from the use of their skills in a human capitalscarce environment. In the fisheries sector, the migration of fishermen is caused by the differences in the supply and demand of economic fish species. A fisherman who possesses great skills as well as have an updated knowledge on modern fishing technology, is more likely to migrate from one location to another.

III.   Methodology

Descriptive research survey was employed in examining the impact of recruitment and training of Marine fishermen to address dwindling of personnel and prevention of foreign neighbors flooding into Nigeria Labor market. The study population comprised of fishers in artisanal communities in Epeand Ikorodu local government areas of Lagos state. From these local government areas, three fishing communities were randomly selected, making six fishing communities in total. From each of these communities, twenty fishermen were randomly selected as respondents for the study bringing it to a total of 120 respondents. The instrument used for data collection was the questionnaire which was structured based on the research objectives formulated for the purpose of the study. The four point likert scale of Strongly Disagree (SD=1), Disagree (D=2), Agree (A=3), Strongly Agree (SA=4) was adopted in the construction of the questionnaire. The assistance of research assistants were solicited in distributing the questionnaires, as majority of the respondents were illiterates and required assistance in understanding and filling the questionnaire. The data collected was descriptively analyzed using mean and percentages.
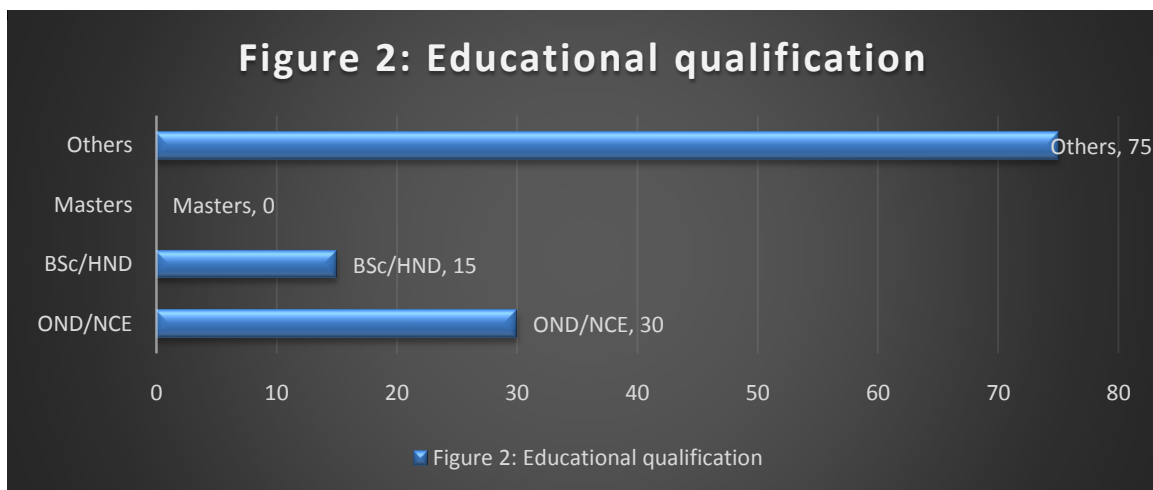
Data presentation, and analysis
Gender

The chart indicates that the majority of the fishermen are male with only a few female participants. This area is therefore not balanced because both genders are needed to create a balance in every business endeavor.

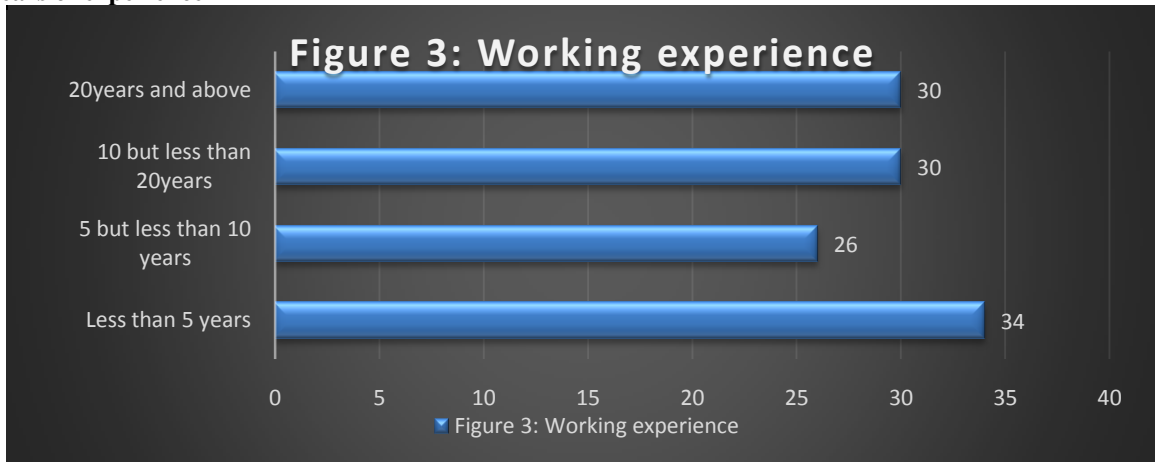**Education qualification**

The result presented in the table above indicates that none of the participants had a master's degree. 30 had OND/NCE; 15 had BSc/HND. The greater majority selected others who are suspected to be lower than OND. This goes a long way to say that the fishing sector in Nigeria is left with low academic qualifications. This may be one of the factors impeding growth in the sector.
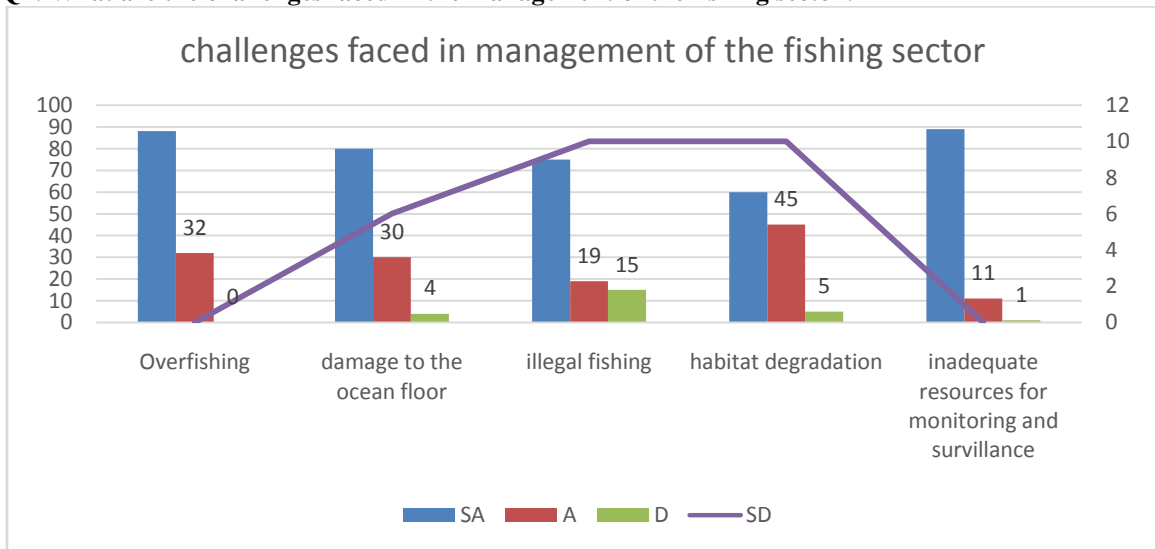
Years of experience

The marine fishermen had diverse years of working experience. As indicated in the table, 30 had been into fishing for 10 years through 20 years and above. 26 has been into fishing for between 5 but less than 10 years; whereas 34 respondents had been fishing for less than 5 years. This result is an indication that there are a number of individuals who have been into fishing for many years but still operating as subsistent farmers. There is therefore the need for advanced training for marine fishermen who will take fish farming to another level commercially and not just contented with catching enough for their family alone.

RQ1: What are the challenges faced in the management of the fishing sector?

As indicated in Table 1 above, the fishing sector is plagued by the following challenges in management: overfishing, damage to the ocean floor, illegal fishing habitat degradation, and inadequate resources for monitoring and surveillance.

RQ2: What are the training needs of marine fishermen?

Table 2: the training needs of marine fishermen

Items	SA/A	D/SD	total% in agreement
Understanding of regulatory and safety requirements	113	7	94.2
Quality control and management	118	2	98.3
Weather navigation and communication	120	0	100

Fish marketing within quality control standards	120	0	100
Safety measures and equipment	105	15	87.5

Field survey (2022)

Table 2 above presents the need for training marine fishermen. According to the data gathered, the training needs of marine fishermen. 94.2% of the respondents agreed that understanding regulatory and safety requirements is an essential aspect of training. Others include quality control and management, weather navigation, and communication, Fish marketing within quality control standards, and Safety measures and equipment, with more than 88% agreement on each case.

RQ3: What is the impact of Recruitment and Training of Marine fishermen on dwindling personnel in the Nigeria Fishing industry?

Table 3: the impact of Recruitment and Training of Marine fishermen on dwindling personnel in the Nigeria Fishing industry

Items	SA/A	D/SD	total% in agreement
Recruitment and Training of Marine fishermen create employment opportunities for the fishermen	119	1	99.2
Recruitment and Training of Marine fishermen increases the manpower needed to prevent overfishing and help overfished stocks rebound	120	0	100
Recruitment and Training of Marine fishermen enables the maintenance of stock at all times above 50% of its mean unexploited level	112	8	93.3
Recruitment and Training of Marine fishermen improve their general knowledge of marine management making them more effective	106	14	88.3

Field Survey (2022)

Table 3 above presents the respondent's opinions on the impact of the Recruitment and Training of Marine fishermen on dwindling personnel in the Nigeria Fishing industry. As indicated in the table, 99.2% of the respondents support that the recruitment and Training of Marine fishermen create employment opportunities for the fishermen. 100% supported that the Recruitment and Training of Marine fishermen increases the manpower needed to prevent overfishing and help overfished stocks rebound; 93.3% are of the view that the Recruitment and Training of Marine fishermen enables the maintenance of stock at all times above 50% of its mean unexploited level, and 88.3% supports that recruitment and Training of Marine fishermen improve their general knowledge of marine management making them more effective.

RQ4: To what extent will the Recruitment and Training of Marine fishermen prevent the migration of foreigners into the Nigerian fishing industry?

Table 4: the extent to which Recruitment and Training of Marine fishermen will prevent the migration of foreigners into the Nigerian fishing industry

Items	SA/A	D/SD	total% in agreement
Recruitment and Training of Marine fishermen will aid the centralization of information on activities and monitoring of the sector	109	11	90.8
Recruitment and Training of Marine fishermen will increase theircommitment to detecting illegal fishing activities and prosecuting offenders	118	2	98.3
Recruitment and Training of Marine fishermen will promote community awareness of the need to observe fisheries management	117	3	97.5

laws			
Recruitment and Training of Marine fishermen will enable them to detect the illegal operations of foreigners at sea	108	12	90.0

Field survey (2022)

Table 4 presents data on the respondents' opinion on the extent to which Recruitment and Training of Marine fishermen will prevent the migration of foreigners into the Nigerian fishing industry. As indicated in the table, 90.8% of the respondents agree with the statement that the Recruitment and Training of Marine fishermen will aid the centralization of information on activities and monitoring of the sector; 98.3% agreed that Recruitment and Training of Marine fishermen will increase their commitment to detecting illegal fishing activities and prosecuting offenders. 97.5% agreed that Recruitment and Training of Marine fishermen will promote community awareness of the need to observe fisheries management laws. Finally, 90.0% of the respondents support that the Recruitment and Training of Marine fishermen will enable them to detect the illegal operations of foreigners at sea.

IV.   Discussion, Conclusion, and recommendation

Fisheries contribute significantly to food security and the Nigerian economy at large; making it valuable to rural development due to its provision of quality protein and a source of income to rural and artisanal fishers.This study has identified the challenges faced in the management of the fishing sector including overfishing, damage to the ocean floor, and inadequate resources for monitoring and surveillance. It also determined the training needs of marine fishermen to include understanding of regulatory and safety requirements, quality control and management, weather navigation and communication, Fish marketing within quality control standards, and safety measures and equipment.This corresponded with the list of training programs proposed byRaunek (2020); Hristova(2019), and Shangchun (2000). As found by the study, the recruitment and training of marine fishermen impact the dwindling personnel through the creation of employment opportunities, increasing the manpower needed to prevent overfishing andmaintain stock at all times.Recruitment and Training of Marine fishermen can prevent the migration of foreigners through the centralization of information on activities and monitoring of the sector, detecting illegal fishing activities and prosecuting offenders,

promoting community awareness of the need to observe fisheries management laws as well as enabling detection of illegal operations of foreigners at sea. This finding is consistent with Amir et al., (2020) whose study indicated that training improves the knowledge, attitude, and behavior of fishers, enabling them to always be alert in emergency situations and how to handle them effectively. This study concludes that there is a training need for marine fishermen and thus recommends the government make available resources that will enable the respective body to ensure that they provide mandatory training to people or workers in this sector.

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REQUEST FOR INFORMATION

Dear Respondent,

I am carrying out a study on "Recruitment and Training of Marine fishermen to address dwindling of personnel and prevention of foreign neighbors flooding into Nigeria Labor market", and you have been chosen to be part of the study. This questionnaire is only for academic purposes. Kindly select the response which applies to you and all information will be kept confidential

SECTION A
Gender: Male ( ) Female ( )
Education qualification
a)   OND/NCE
                    ( )
b)   B.Sc./ HND
                    ( )
c)   M. Sc./MBA
                    ( )
d)   Others
         ( ) Specify…………………
Years of experience
a)   Less than 5 years
                    ( )
b)   5 but less than 10 years
                    ( )
c)   10 but less than 20 years
                    ( )
d)   20 years and above
                    ( )

SECTION B:
Instructions: Please tick **(√)** as appropriate where
SA   = Strongly Agree (SA), A   = Agree, D = Disagree (D), SD = Strongly Disagree (SD)
Key: Strongly agree (5), Agree (3), Disagree (2), and strongly disagree (1).

S/N	ITEMS	SA	A	D	SD
RQ1	**What are the challenges faced in the management of the fishing sector?**				
1	Overfishing				
2	Damage to the ocean floor				
3	Illegal fishing				
4	Habitat degradation				
5	Inadequate resources for monitoring and surveillance				
RQ2	**What are the training needs of marine fishermen?**				
6	Understanding of regulatory and safety requirements				
7	Quality control and management				
8	Weather navigation and communication				
9	Fish marketing within quality control standards				
10	Safety measures and equipments				
RQ3	**What is the impact of Recruitment and Training of Marine fishermen on dwindling personnel in the Nigeria Fishing industry?**				
11	Recruitment and Training of Marine fishermen creates employment opportunities for the fishermen				
12	Recruitment and Training of Marine fishermen increases the manpower needed to prevent overfishing and help overfished stocks rebound				
13	Recruitment and Training of Marine fishermen enables the maintenance of				

	stock at all times above 50% of its mean unexploited level				
14	Recruitment and Training of Marine fishermen improves their general knowledge of marine management making them more effective				
RQ4	**To what extent will Recruitment and Training of Marine fishermen prevent the migration of foreigners into the Nigerian fishing industry?**				
15	Recruitment and Training of Marine fishermen will aid the centralization of information on activities and monitoring of the sector				
16	Recruitment and Training of Marine fishermen will increase their commitment to detecting illegal fishing activities and prosecuting offenders				
17	Recruitment and Training of Marine fishermen will promote community awareness of the need to observe fisheries management laws				
18	Recruitment and Training of Marine fishermen will enable them detect the illegal operations of foreigners at sea				