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Thesis for the Degree of Master of International and Areas Studies

**THE SUSTAINABLE FISHERIES PARTNERSHIP
AGREEMENTS BETWEEN THE EUROPEAN UNION
AND WEST AFRICAN COUNTRIES: SOCIAL,
ECONOMIC AND ECOLOGICAL IMPACTS
IN MAURITANIA**

By

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February 2018

The Sustainable Fisheries Partnership Agreements between the European Union and West African countries: Social, Economic and Ecological Impacts in Mauritania

(유럽 연합과 모리타니아의 지속 가능한 어업

협정: 모리타니아에 끼치는 사회적, 경제적

그리고 생태학적 영향)

Advisor: Prof. Sang Wuk AHN

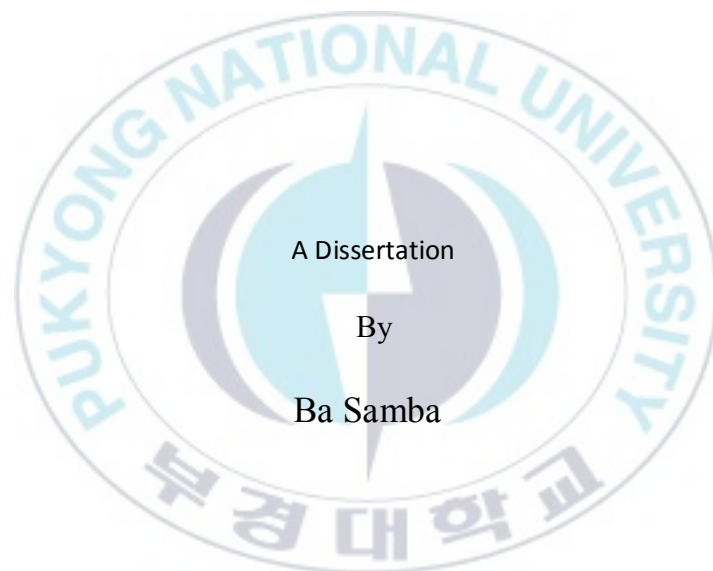
By

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The Sustainable Fisheries Partnership
Agreements between the European Union and
West African countries: Social, Economic and
Ecological Impacts in Mauritania



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<List of acronyms>

ACP: African, Caribbean and Pacific

BLN: billion

CIA: Central Intelligence Agency (USA government)

CFP: Common Fishery Policy

CPR: Common Pool Resource

EC: European Commission

ECA: European Court for Auditory

EDF: European Development Fund

EDP: European Development Policy

EEC: European Economic Community

EEZ: Exclusive Economic Zone

EU: European Union

FAO: Food and Agriculture Organization

FPA: Fisheries Partnership Agreement

FPC: Fisheries Policy Commission

GDP: Gross Domestic Product

GTZ: Deutsche Gesellschaft für Technische Zusammenarbeit GmbH (German: German Agency for Technical Cooperation)

IDB: Integrated Development Plan

IFA: Inshore Fishing Area

IFREMER: French Research Institute for Exploitation of the Sea

IMROP: the Mauritanian Institute of Oceanographic Research and Fisheries

(Institut Mauritanien de recherches Océanographiques et des Pêches)

IMF: International Monetary Fund

IR: International Relations

IUU: Illegal, Unreported and Unregulated fishing

JSC: Joint Scientific Committee

KFW: Kreditanstalt Fur Wirtschaft (Loan for Industry)

MNC: Multinational Cooperation

MSY: Maximum Sustainable Yield

NEPAD: New Partnership for Africa Development

NGO: Non-Governmental Organization

OPEC: Ocean Processes and European Climate

PNBA: Parc National du Banc d'Arguin

PCD: Policy Coherence for Development

RIM: Republic Islamic of Mauritania

SAU: the Sea Around Us project

SDG: Sustainable Development Goal

SFPA: Sustainable Fisheries Partnership Agreement

SRFC: Sub-Regional Fisheries Commission

UN: United Nations

UNCLOS: United Nations Convention on the Law of the Sea

UNDP: United Nations Development Program

UNHDI: United Nations Human Development Index

USAID: United States Agency for International Development

USD: United States Dollar (\$)

WCED: World Commission on Environment and Development

WWF: World Wide Fund for nature

ZEEM: Zone Economique Exclusive de Mauritanie

**The Sustainable Fisheries Partnership Agreements between the European Union and
West African countries: Socioeconomic and Ecological
Impacts in Mauritania**

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Abstract

The current world population is expected to reach around 9.6 billion humans by 2050 and recent publications of the FAO (2002) indicated that more than 800 million of the world population is suffering from chronic malnourishment and hunger. Furthermore, the half of this population is living on the African continent and 239 million of these people lives in African Sub-Sahara. Referring to this phenomenon, FAO's studies showed that to feed the World population, states have to focus on fisheries. These alarming discoveries came at a period where many States were almost depleted from their fisheries ground and trying to satisfy their fish consumption in others Nations' waters. That is the situation in the majority of the European Union member states which lost the capacity to satisfy their domestic fish consumption from adjacent fishing ground. In order to fill this gap, Europeans expanded their distant water fleets to others sea resources in the world such as the situation in West Africa. This region constitutes a particular area for the European fishing industry. In 1982, the United Nation Convention on the Law of the Sea (UNCLOS) provided to States the possibility to get agreement allowing to fish in others Nations' Exclusive Economic Zones (EEZs). Ever since, the EU has obtained the right to negotiate agreements permitting its members States to capture fish in West Africa. But recent environmental studies point out the alarming situation of overfishing is causing the EU in West African water. Therefore, the EU tried to improve the nature of the Fishery Partnership Agreement (FPA) clauses into the Sustainable Fisheries Partnership Agreement (SFPA). This research seeks to find out the impact of the EU's SFPA on Mauritanian social, economic and environmental. In order to analyze the assembled data obtained from literature research, statistical databases provided and expert consultation, the method of triangulation is used for a comprehensive overview of this phenomenon. The principal International Relations theories that have been used to analyze this case are: Emmanuel Wallerstein's theory of the World system, the approach of P. Baran on dependency, a theory of power by Hans J. Morgenthau for the explanation of the international partnership EU- Mauritania, the common theory according the approach of Garrett Hardin and Elinor Ostrom and the sustainable development theory of the economist Rene Passet. The application of these different approaches makes the understanding of this case on its multiple facets more clear and easy to apprehend. First, it was proved that the rich Mauritanian fisheries ground is more exploited for the benefit of foreigners such as the EU, Russia, Japan, China, Senegal and others. It was demonstrated that

the actual SFPAs between the EU and Mauritania started by a non-political cooperation (just as a fisheries capture deal), but due to many factors this cooperation has evolved and led into a more complex partnership between the two entities. Through the application of the common theory approach, the EU's intention to increase its Power by following an imperialist and the Mauritanian's to maintain the status-quo helped to understand the inconstancy of this partnership. The actual partnership has expanded to sustainability and to eradicate the IUU. The study concludes with some preliminary recommendations that could help to improve this partnership by making it win-win cooperation in a more sustainable way.

Keywords: Fishery agreement, EU, Mauritania, sustainability



초록

세계 인구가 2050년까지 약 96억명에 달할 것으로 예상되며 FAO (2002)의 최근 간행물은 세계 인구의 8억명 이상이 만성 영양실조와 굶주림으로 고통 받고 있다고 밝혔다. 더 나아가, 이 인구의 절반은 아프리카 대륙에 살고 있으며 이 사람들 중 2억 3천 9백만명이 아프리카 사하라 이남 지역에 살고 있다. 이러한 현상을 참조하여, 일부 FAO의 연구는 세계 인구에 식량을 공급하기 위해서 국가들은 어업에 초점을 맞추어야 한다는 것을 보여 주었다. 많은 국가들의 어장이 대폭 감소되었고, 여러 타국의 어장에서 자국의 어류 소비량을 만족시키려고 하는 시기에 이러한 걱정스러운 문제점을 발견하게 되었다. 대부분의 유럽 연합(EU) 회원국의 인근 어장에서 자국 어류 소비량을 만족 시킬 능력을 상실하면서 일어난 상황이 한 예이다. 이 격차를 메우기 위해, 유럽 연합(EU) 회원국은 자국의 어획 수역을 서 아프리카와 같은 다른 나라 지역으로 확장했다. 이 지역은 유럽 연합(EU) 회원국의 수산업 특정 구역을 구성하고 있다. 1982년, 유엔해양법협약(UNCLOS)은 각 나라에 어획 동의를 받고 타국의 배타적 경제 수역(EEZs)에서 어업을 진행할 수 있는 협약을 맺었다. 그 이후, EU는 서 아프리카 부근에서 유럽 연합(EU) 회원국이 어획할 수 있도록 허용하는 협정을 협상할 권리를 얻었다. 하지만 최근 환경 연구가 지적인 바에 따르면 서 아프리카 수역에서 유럽 연합(EU) 회원국들의 어류 포획이 수산 자원 남획으로 연결되고 있다. 따라서 유럽 연합(EU)은 어업 협정(FPA) 조항을 지속 가능한 어업 협정(SEPA)으로 개선하고자 했다.

본 연구는 유럽 연합(EU)의 지속 가능한 어업 협정(SEPA)이 모리타니아의 사회적, 경제적, 그리고 환경적으로 끼치는 영향을 발견하고자 한다. 문학적 연구, 제공된 통계적 데이터베이스 사용 및 전문가 협의를 통해 조합된 자료를 분석하기 위해, 삼각 망/삼각 측량법 등의 연구 자료를 사용해 포괄적인 개요를 제공한다. 사례 분석 예시로 사용된 주 국제 관계 이론은 다음과 같다:

임마누엘 월러스타인의 세계체제론(Emmanuel Wallerstein's theory of the World system), 폴 A. 바란의 종속이론 접근법(an approach of Paul A. Baran on dependency), 유럽 연합(EU)과 모리타니아의 국제 협력 관계 설명을 위한 한스 J. 모겐소의 권력 이론(a theory of power by Hans J. Morgenthau for the explanation of

the international partnership EU- Mauritania), 가렛 하딘과 엘리너 오스트롬의 공유지 이론 접근법(a common theory according the approach of Garrett Hardin and Elinor Ostrom), 그리고 경제학자 르네 파세의 지속 가능 발전(SD) 이론 (a sustainable development theory of the economist Rene Passet).

다양한 접근법을 적용하여 예시로 든 사례를 이해하기 쉽고 명확히 파악할 수 있다. 첫번째, 모리타니아의 어장은 자국보다는 유럽 연합(EU), 러시아, 일본, 중국, 세네갈 등 타 국가의 이익을 위해 더 이용당하고 있다. 유럽 연합(EU)과 모리타니아 간의 실질적인 SEPA 가 비-정치 협력(어류 포획 협약)으로 시작되었으나, 많은 요인들로 인해 이 비-정치 협력은 두 기관 사이의 복잡한 협력관계로 발전 되었다. 일반적인 이론 접근법 적용을 통해, 유럽 연합(EU)의 제국주의를 적용하여 모리타니아를 향한 힘을 증대시키려는 의도와 현재 상황을 유지하려는 의도를 통해 모순적인 협력 관계를 이해하는데 도움이 되도록 했다. 실질적 협력 관계는 지속 가능하도록 확대되고 불법조업(IUU)을 근절하도록 되어있다. 본 연구는 모순적인 협력 관계를 더 지속적인 상생협력으로 향상을 도울 수 있는 예비적 권고로 마무리된다.

핵심 용어: 어업 협정, 유럽 연합(EU), 지속가능성

I. Introduction

The West African coast from Mauritania to Equatorial Guinea has a good ecosystem such coral reefs, mangrove, wetland, and dunes. Those considerable advantages provide a good protection to the coast against severe weather, the sea rise level and the regulation of the water quality and quantity. It makes this area more favorable to many aquatic species lives possible. This part is one of the richest fishing grounds in the world because of the presence of many fish flourishing conditions. Moreover, the most important source of protein in West Africa is sea-food, and it accounts for around 40% of the total protein consumption. The fisheries sectors are an important source of income and general opportunities for employment in countries such as Senegal, Mauritania, and Morocco. In Mauritania, the fish capture is estimated at 378 339 tonnes per year out of a potential total of 1.8 million tones and the small-scale fisheries represent 10% of fish production according to the FAO(fisheries and Aquaculture, 2016). The fishery industry employs directly and indirectly almost 55.000 Mauritians including 80% in the artisanal fisheries sector. Also, the sea-food exportation represents around 32.7 %(molluscs 15%, non-fillet frozen fish 14% and non-fillet fresh 3.7%) of the total exports according to the International Trade Statistics Yearbook (2016), half from small-scale fisheries and fisheries sector contributes 6% of the Gross Domestic Product (GDP) and 22% of the primary sector.

Despite its rich resource grounds, Mauritania is suffering from malnourishment and is one of the poorest country in the world with a per capita GDP averaging USD 1,300, ranking 156th among the 188 countries in 2014 on the United Nations Human Development Index (UNHDI, 2015). Mauritania and Guinea fisheries sector should normally contribute more to the economy

of these countries argued World Bank (2015). In these countries, fishery sector is an important contributor to food security, nutrition and providing jobs. According to Colin Bruce (World Bank, 2014), improving fisheries governance and resource governance could generate more than USD 2 billion per year in sustainable benefit. Moreover, fish and fish products could be estimated to 17.9% of animal protein. The main cause of food insecurity in West Africa is the overexploitation and the Illegal, Unreported and Unregulated (IUU) fishing in West African marine coast by developed countries such as EU, Japan, China and others. According to the Frontiers in Marine, West Africa is losing around USD 2.3 billion annually from IUU fishing practices (March 07, 2017). According to Fair Politics, the main reason of this present situation is the incoherence between EU's Fisheries Policy and Its Development policy. The partnership agreement between West Africa countries and European countries in the field of fishery is not recent, the first Fishery agreement concluded between European Economic Community (EEC) and Senegal was in 1979. After that agreement, the EEC concluded many fisheries agreement in this part of West Africa (Mauritania, Cape Verde, The Gambia, Guinea, Guinea-Bissau, Sierra Leon), but the EU agreements fisheries with developing countries was early criticized by many environmental organizations and scholar papers, with the main reason mentioned is that EU's fisheries agreements were more financial than sustainable. Therefore, EC tried to improve the partnership aims and name to Sustainable Fisheries Partnership Agreement (SFPA) but the problem of IUU in the Sub-Regional Fisheries Commission member states Exclusive Economic Zone (EEZ) stills an actual subject. In 2013, the EU legal and reported catch was estimated to be 295.700 tonnes per annum while the Illegal Unregulated and Unreported was around 115.700 tons per annum in Mauritania.

The sustainable fishery theory is now considered as the most important alternative to profit from natural resources without compromising future generations' needs according to the definition of the Brundtland Commission (1987). In order to apply this theory, three domains should be considered such as proposed the economist Passet Rene (1979): "economic, social and environmental".

The objective of this present work is to find out the keys solution to promote sustainable fisheries in terms of recommendations and suggestions. Through the case of the sustainable fisheries agreement between EU and Mauritania, the question of corruption and good policy will be put into a test. The study will show how the Mauritanian society is suffering from this partnership even if the government seems enjoying its partnership. Furthermore, to show also the role could play good policy in the establishment of the sustainable fisheries in West Africa.

This thesis will try to answer to the following question:

1. What are the impacts of the Sustainable Fisheries Partnership Agreement between EU and Mauritania on economy, ecology and social life of Mauritanian?

As it was mentioned earlier, the sustainability is based on three major points such as economic, social and ecology or environmental according to the three pillars. Therefore, trying to know the impacts of the fishing agreement on these points will probably give a better understanding and lead to solution in this issue. Moreover, a solution to the case of EU-Mauritania may be applicable to other cases such as EU-Senegal or EU-Morocco. However, to get better understanding and a better diagnostic of this problem, it is important to answer the flowing questions also.

2. Why some NGOs think that there are incoherencies or contradictions between EU's Fisheries Partnership Agreement and its Development Policies?

The partnership between EU and Mauritania started just as a deal of buy, fish and go but after several critics EU decided to reform this deal to a long term of partnership. Despite the reform in 2002 of the CFP to SFPA, many NGOs continue to argue that's just a reform vocabulary for a better exploiting and EU tried to give answer to these critics. Therefore, it makes sense to analyze this point and try to give some recommendations about the management of the fisheries sector in Mauritania.

3. How sustainable and flourishing fisheries can be promoted in Mauritania?

In order to seek a successful answer to these questions; there are several variables which can play a major role as driving forces behind this research question of overfishing or overexploitation of the marine water's resources. It is believed that in case such as the sustainability fisheries partnership agreement these factors may help to understand and explain the overfishing phenomenon; the illegal, unreported and unregulated (IUU), bycatch and discards, the fisheries management policy, and the law of regulations ; the theory of corruption against sustainability. In order to give a response to these questions, it is highly recommended to focus on the social, ecological and economical points. It is not the first research paper in this field of fishery, but it is the first in Mauritanian fisheries sustainability and the present research can bring some new answers or solutions about the question of fisheries sustainability. Therefore, the goal of this master research is to bring over new approach and find out how to mitigate or if possible eliminate the problem of overfishing.

1. Theory

a. Dependency theory

The most of international politics theories explain in term of coercion one state or society by another. That's mean one nation or society can increases its prosperity by exploiting the resources of another nation or society. There is several theories using this approach but the two flows are more helpful in this case:

- 1) The dependency theory of Baran;
- 2) And Wallerstein's World system.

During the imperialism period, European countries colonized many countries in Africa, and according to Paul Baran the way took by European countries to dominate underdeveloped countries had destroyed the social formations and distorted their cycle of development, lead deep stage of dependency. Therefore, developing countries were systematically subordinated to the developed countries in the international system.

This theory seems analyzing the dependency of developing countries as the result of the imperialism only, but the example of Asian countries show as that even if the imperialism consequences were deeply felt that does not condemn developing countries to stay eternally on the stage of dependency. According to the work of scholars like Rostow (1959), the current stage of dependency is considered as an obligatory stage where have passed the today developed countries, and it is not an exception for African countries.

However, it is know that the economic exchange between developing countries and developed countries is considered as take place on an unequal term. The developing countries provide or

sell their products to their developed partners at a low price and import from these same developed countries manufactured goods. Therefore, the peripheries states are maintained in the same position and do not have considerable advantages to develop. According to Wallerstein, the most uncomfortable position is occupied by the semi-periphery countries whereby they are under pressing from the developed countries at the same time they are putting pressure on the developing countries. Wallerstein (2004), in contrast to free market thinkers argued that developing countries should improve their connection with the world market. That approaches of dependency lead us to the theory of power.

b. Theory of power

The approach of the founder of the realist theory, Hans J. Morgenthau can be use in this research for the explanation of the international partnership between Mauritania and EU. The keys concepts of H.J. Morgenthau that will interest this thesis are “Power”, “status quo”, “imperialism” and “prestige”. The concept of power refers to “man’s control over the mind and action of other men”. According to him, the power can be defined as a “mutual relations of control among the holders of public authority and between the latter and the people at large” (p.30). In international politics, Power is the aim of every nation. Therefore, if the ultimate aim of one nation is not seeking for power, this nation is not confirming within the realm of international relation. The same author argued that in order to achieve its will of objectives, the legitimate power is more desirable than illegitimate power for nations.

The concept of status-quo, imperialism and prestige are the ineluctable result of the concept of power. In the situation of power there are three alternative:

- 1- If a nation is seeking to maintain its power, this nation is following a status quo policy.

- 2- When a nation's aim is to increase its power, this nation is in the logic of imperialism,
- 3- And then the third one is the policy of prestige, In this case the nation will try to demonstrate its power.

Furthermore, he explains more comprehensively that these both mentioned positions can be wrapped up into the balance of power concept. Although, the theory observes divers variations of this system, it is essential to restrict the evocated theory due to the particularity of the relation between EU and Mauritania for the presented case here. This present work is focus on fisheries relationship between an organization of states and one country.

Nevertheless, the theory appears helpful for analyzing this present case when considering his flowing opinions. Morgenthau detected various actions that occur on a non political situation where nations do not need the imperialist way or to use power. In this case nations might negotiate their exchange of goods or treaties agreements. That approach allows distinguishing the political interaction of power (result of policy status quo, imperialism or prestige) to a non-political interaction. The first fit with the political option of the fisheries agreement leading to the status quo or increase power of the EU or Mauritania and the second lead to a willing partnership between the EU and Mauritania. The most advantageous might be chosen to facilitate their partnership for the fish stocks exploitation. Westerns states negotiate with African countries in order to get a right for exploiting desired resources according to the perception of Southall & Melber (2009).

Africa, in former times is considered as a land where western can employ its hegemony to influence into decisions, but now it is a new field of challenge for developed or emerging

countries such as China, Japan, India and Brazil. This situation gives West African countries the opportunity to choose the most value offer.

c. Theory of Common

The concept of theory of commons is an economic theory of a situation within a shared resources system, where human profit independently to satisfy their own self-interest. In this context commons means any shared or unregulated resource such as forest, ocean, fish stocks or even an office refrigerator. The concept became widely know due to an article written by the ecologist Garrett Hardin (1969) and Elinor Ostrom (1999). In his article "*the tragedy of common*", Garrett Hardin argued that the non-owner or the users of collectively owned resource consequences are the destruction these resources. This concept was deeply more developed by Ostrom *et al.* (1999) in his article titled "*revisiting the commons: Local lessons, Global Challenges*". He separated explicitly the resources system concept to those related to the property rights. The resources systems despite of the question of which property right, the annotation of CPR can be use. The tragedy of the common is frequently cited in connection with the sustainable development, where governments exploit the natural resources continuously without putting more efforts in the domains of social and environmental such as the case in Mauritania. The republic of Mauritania is a rich country in term of natural resources (fish, gold, iron, copper, and oil gas), however these economic resources are not reflected in the population economic live (42% of residents live below the poverty line). The government reveled in 2016, that everyday 75000 barrels of oil are extracted, 30.000 tonnes of mineral and 900.000 tonnes per year with a population estimate to 3.9 million. Probably this theory of commons can help to explain the situation of Mauritians.

There are two characteristics of the common tragedy that the CPRs entail:

- 1) The extreme value of the beneficiaries exclusion
- 2) The access to the resources is permitted only to a restraint small group and it reduces the resources availability for the majority (sub-tractability).

Generally, users are interested to their own profits (short-term interests) and produce the outcomes that are in no one's long term-benefices which can result to the resources overexploitation; that are the real dilemmas of the CPR. About this subject, Ostrom et al. (1999) distinguished four groups of user of CPRs:

- 1) Free-riders
- 2) Cooperators
- 3) Initiators
- 4) And genuine altruists

Free-riders are self interested and act without considering the others or the negatives consequences of the environment or resources. Therefore free-riders are not contributing to the sustainability neither to economic profit of the society. Cooperators depend on free-riders, they are willing to help if they are not manipulated by free-riders and most of time they protect. Initiators are those who initiated or started a project and want others to adhered or participate to the project. And those who are working for the profit of a group of human are considered as the genuine altruists.

Schlager & Ostrom (1999) characterized different kind of rights that could be granted to one user as flows:

- 1) Access

- 2) Withdrawal
- 3) Management
- 4) Exclusion
- 5) And alienation

When a government is facing to CPR dilemmas, Ostrom suggested two important ways to solve the issue: the restriction of the access and the creation incentives.

d. Theory of Sustainability

The economist, Rene Passet (1979) argued that for more utility and in long-term of exploitation human needs to consider at least three domains in the sustainable development or sustainability: the “economic, social and environmental”. These three domains are called the “three Pillars” of the sustainable development. According to the “Nested” or “Living system Model” a good economy or a sustainable economy depends upon a healthy society, and both in turn are dependent upon the natural environment. Therefore, the theory of sustainability could fit with this study case.

The partnership between EU and Mauritania is one of the most important agreements for EU in the field of fisheries in West Africa. On their last agreement on 16th of November 2015, the total contribution from the EU’s budget per year for Mauritania was estimated to be around 59,125,000 euro and the earmarked for sustainable fisheries policy was 4,125,000 euro. In order to prevent the overfishing phenomenon in Mauritania and to give an answer to several critics for their promotion of unfair trade, dramatically the environment and overexploiting foreigners fish resources. In 2002 the CFP as well as the fisheries agreement was reformed to Sustainable Fisheries Partnership Agreement (SFPA). The CFP or the traditional fisheries

agreement based on pay, fish and go was changed to a more comprehensive and cooperative approach. And the Fisheries Partnership Agreement (FPA) was added but the issues still unchanged. Therefore, it makes sense to wonder if this reform was not just a words game (from CFP to SFPA).

And then, the second point is the main problem of Mauritania's fisheries sector is that the fisheries management is not developed and it is confronted to corruption and bad policy.

2. Methodology

This study will be focus more on the case of Mauritania Fisheries partnership agreement with EU. However, it will take consideration to other similar cases such as the fisheries partnership between EU-Morocco and EU-Senegal. The main aim is to analyze, interpret and criticize fisheries agreements the SFPA. According to Bailey (1994), the case study can describe, interpret, and critic for solving administrative problems. Therefore, the study will be based on the qualitative methodology. In political research it is easy to be objective, because it is not objective science argued to Denscombe (2002, 18).

The research uses primary data obtain from past studies papers, formal documents, archives, and case studies. Secondary data are constituted by official documents and reports published by organizations such as Sea Around us, Green Peace, World Bank, FAO, NEPAD, EU, SRFC, and relevant scientific researches publications. A single case study seems the most appropriate with this case in order to explain, interpret and criticize positions.

The analyze case is the fishery partnership relation between EU and Mauritania. This case study has been chosen due to the fact that Mauritania is the most important partner of EU in

fisheries. The study will follow the methods proposed by Yin (2003) and Mayring (2007). The case will try to focus on these following points:

- 1) The positives and negatives points of the SFPA for Mauritania.
- 2) The principal causes of these underline consequences.
- 3) Are the theories of power, commons, dependency and sustainability applicable to the EU-Mauritania's SFPA?

The study will analyze:

- 1) The latest official agreements and protocols of this partnership,
- 2) Statements of the European commission,
- 3) Scientific articles,
- 4) Reports and other gray literature documents,
- 5) Websites,
- 6) Official statistics,

a. Case Study

For Yin a case study is an empirical and can be define by:

- 1) An investigation of a “contemporary phenomenon within its real-life context, especially when”
- 2) There are not clear boundaries between the phenomenon and the context,
- 3) There are several variables of interest more than data points,
- 4) Based on many “sources of evidence, with data needing to converge in a triangulation fashion and as another result”,

- 5) And “benefits from prior development of theoretical positions to guide data collection and analyses” Yin (2003).

According to several critics, the case studies cannot be generalized because of relatively low number of case and it is unselected with sampling methods. However, it is impossible for some variable to apply general statistics because of the requirement of a considerable amount of resources (Yin, 2003). That will be very difficult to use statistics with some theories such as the theory of Morgenthau and theory of common; however they are a necessity for analytical research (in international politics, in social and in sustainable fisheries agreement). This research tends more to describe and to explain. The explanatory is distinct from the descriptive perspective. The first one means that the research will try to analyze and explain the different structures.

b. Quality Critics

Following Yin (2003) and Mayring (2007), in order to increase the quality of the explanatory result the following four validities of criteria have been used:

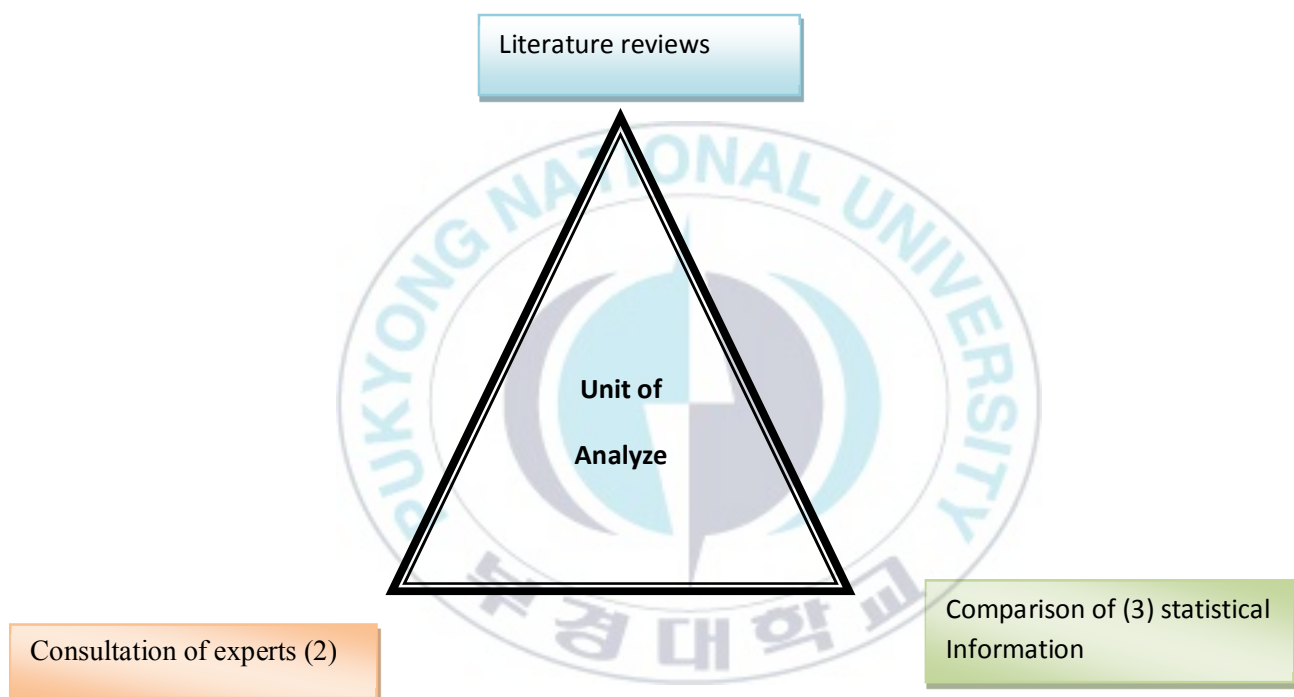
- 1) Construction
- 2) Internal
- 3) External
- 4) Reliability

c. Triangulation Method

Data are collected from different sources and by using three different methods (documents and literature review, statistical information comparison and experts interviews). Due to the lack

of information the real procedure of triangulation method was not possible to achieve (the consultation of expert was not possible).

<figure1>: Triangulation figure



Source: Yin(2003)

<Table 1> of triangulation

Unit of analysis	Literature	Statistics
RIM Fisheries sector	X	X
UNICLOS	X	
Fisheries Agreements and Protocols	X	
Fisheries Categories	X	X
IUU	X	X
Subsidies	X	X
Recommendations	X	

Source: by the Author



II. Basic facts about Mauritania

1. Geography

The Republic Islamic of Mauritania is situated in North West of Africa between the 15th and 21st parallel and the country is limited in the south by the Republic of Senegal, in the south east by the Republic of Mali, bordered by Algeria and the Western Sahara in the North and North east and opens to the Atlantic Ocean in the West more than 700 km. The country covers 1,030,700 Km² of area, making it two times bigger than Spain, but three quarters of this country is desert or semi-desert and cause of severe drought (in 1970). Mauritania is considered as the cultural and geographical bridge between the North African Maghreb (Morocco, Tunisia, and Algeria) and the West African sub-Sahara. The terrain is characterized mostly by flat plains of the Sahara and some central hills. There are four ecological zones:

- 1) The Sahel zone, which is located in the southern region with one rainy season (from June to October); characterizes by savanna grassland and steppes.
- 2) The two-thirds of the country are occupied by the Sahara zone, which is composed by huge empty stretches of dunes alternating with granite outcroppings, little vegetation, and some mountainous areas.
- 3) The third zone is located in the Senegal River valley known as the Chemama (from N'Diogo to Seylibaby); where most of the active population is engaged in agriculture and local fishing. This part of the country is participating actively the local agriculture production.
- 4) And the coastal area; know as Sub-canaries zone (from Nouadhibou to the mouth of the Senegal River), where the climate owes its humidity from the oceanic trade winds blowing from Canary's Island permanently. The fishing sector is most active here; due

to a concentration of the population this area and this Atlantic zone extends the length of 700 km approximately.

< Figure 2>: Physical Map of Mauritania



Source: Ezilon (n.d.)

2. Population

The country is composed by Arabic (30%), “Negro-African” (70%). In this last group, there are two categories, the first part of “negro-Africans” speaking (Fulani, Wolof, Soninke, and

Bambana), and the second part is composed by those who speak Arabic language known by Haratines.

In July 2016, the population of the Republic Islamic of Mauritania is estimated around 4.301.018 with a relative population growth rate of 2.2% per annum and a density of four people per square kilometer (4per/km²). However, 2/3 of the country is occupied by the Sahara desert especially in the central, northern and eastern stay uninhabited. Therefore, mostly the coastal and the valley of Senegal River are where most the population is concentrated. This country has a young population and 60% is under 25 years old according to World Bank report (2017) and the life expectancy is 63 years. Almost 70% of government is Arab.

3. Economic and social situation in Mauritania

The country economy revenues are based on agriculture and exportation of mineral iron, gold, copper, oil, and fish. Exploration is ongoing for new resources such as uranium, and natural gas. The mining resource contributed around 22% to the GDP, while the fisheries sector accounts for about 7% of the total revenue in 2016 according to World Bank (April 19, 2017). According to the International Monetary Fund (IMF- World Economic Outlook Database, 2016), the Mauritanian GDP was estimated to USD 4.715 billion in 2016, with 4.42% of growth rate per year from 2012 to 2016 and the GDP per capita to be USD 4,225.76. However, the population living below to poverty line is estimated to 37% in this country

Mauritanian export value is estimate about \$1.6 billion in 2016, while the import is \$2.2 billion and the merchandise balance deficit reached \$551.1 million.

<Table 2> Export Commodities from 2014 to 2016

Commodities	Value (mln US\$)		Unit Value (thsd \$/kg)	
	2014	2016	2014	2016
1-Iron ores and concentrates, including roasted iron pyrites...	854.2	487.7	0.1	0.0
2-Gold (including gold plated with platinum)	322.2	227.2	37.3	35.9
3-Fish, frozen, excluding fish fillets and other fish meat	288.3	206.9	0.5	0.5
4-Molluscs, whether in shell or not	227.1	246.0	7.0	7.0
6-Copper ores and concentrates	216.5	198.7	1.4	1.0
7-Flours, meals and pellets, of meat or meat offal	76.1	91.6	1.1	1.2
8-Commodities not specified according to kind	.....	75.5	.....	.....
9-Petroleum oils, other than crude	59.3	.....	0.3	.....
10-Fish, fresh or chilled, excluding fish fillets	25.9	32.3	1.4	.....
11-Fats and oils and their fractions, of fish or marine mammals	17.9	24.9	0.9	1.2

All Commodities.....	2139.8	1622.8
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Source: International Trade Statistics Yearbook (2016).Vol. I

Before 2014, the commodities exportations of Mauritania were remarkably dominated by iron ores and concentrates, including roasted iron pyrites... estimated to \$ 854.2 million in 2014 and followed by gold and copper. After that period these commodities still leading the list of exportation but decreasing considerably from 2014 to 2016 according to International Trade estimations. While the fish exportation, is increasing considerably as shown the estimations. In the primary sector, the fish exploitation contributed considerably to the Mauritanian Gross Domestic Product and its evolution from 2012 to 2016 shown its importance in the future of Mauritanian economic such as it is shown on the table and figure of the African economic outlook (2017).Moreover, according to the investigation of FAO (2016) the fish exportations started from 1980 since it is increasing considerably.

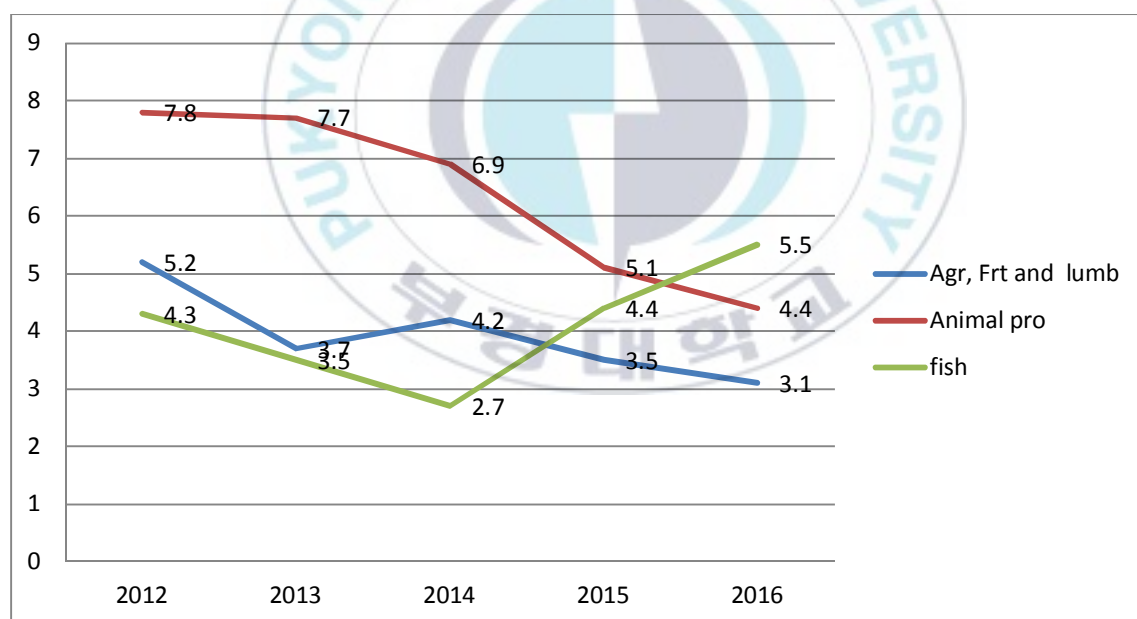
<Table 3> Mauritania's Gross Domestic Product (GDP) in the primary sector

Year	2012	2013	2014	2015	2016
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Agriculture, Forestry and lumbering	5.2%	3.7%	4.2%	3.5%	3.1%
Animal production	7.8%	7.7%	6.9%	5.1%	3.3%
Fish	4.3%	3.5%	2.7%	4.4%	5.5%

Source: Selma, C.M.(2017)

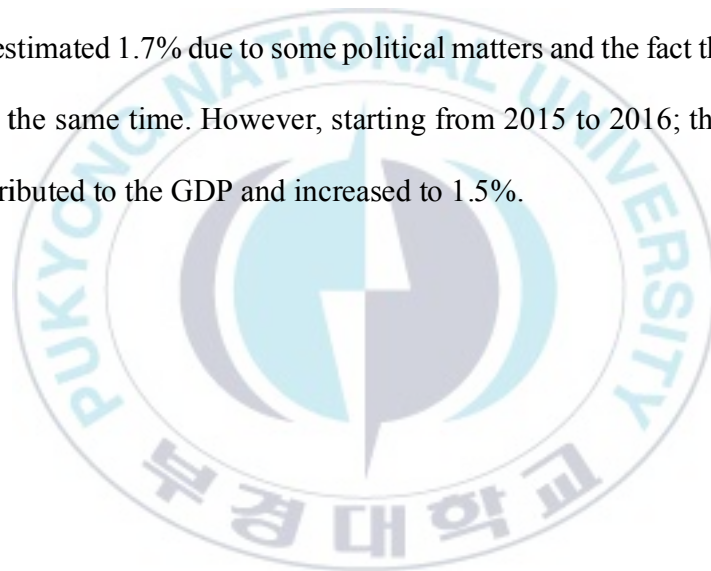
<Figure 3> Fish evolution compare to other resources in the primary sector



Source: draw by the author

The primary sector has an important contribution to GDP of this country and mostly the fisheries sector. This table indicates that in primary sector only fishing is improving year after its contribution but the animal production, agriculture, forestry, and lumbering are not stable and

decreasing more than increasing cause of their dependence on the abundance of rain. As mentioned early the country is dominated by desert and it is not a rainy region. Moreover, the Mauritanian policy against the progress of the desert is not improving at all. That is the major factor explaining the decreasing of agriculture, forestry and lumbering productions yearly. From 2012 to 2016, the production of agriculture, forest and lumbering lost 2.1%. Moreover, the animal production lost at the same time around 4.5% of its production due to the same mentioned reason. Only the fisheries sector is improving, even if its evolution is not constantly increasing. From 2012 to 2013, as shown on the table, the fish capture contribution had a considerable decrease estimated 1.7% due to some political matters and the fact that the agreement with EU expired at the same time. However, starting from 2015 to 2016; the fisheries sector had massively contributed to the GDP and increased to 1.5%.



III. The fisheries sector in the Republic Islamic of Mauritania

The Mauritanian fisheries sector can be divided into three principal sectors; the artisanal sector, the industrial sector, and the inland sector. In this country, the aquaculture fishing activities are quasi-nonexistent compare to others West African fishing countries and the local fishing is divided into artisanal and inland fisheries. The inland fisheries sector can be localized around the Senegal River and some part of the country. The inland fisheries sector has low revenue cause of the low rainfall in this area and the rare existence of plains water estimated to be around 25 in total. Therefore, the artisanal fishing activities are concentrated on three major poles localized along the coastal: the capital economy (Nouadhibou), the capital city (Nouakchott) and N'Diogo.

While the industrial fishing sector plays a major role both for the revues of the government and in the socio-economic life of the population. However, this one is more dominated by foreigner's exploitation and it is localized in the Mauritanian E.E.Z and the most important fisheries partnerships are Japan (21%), China (14%) and EU (37% in 2013 to 24% in 2015). Earlier of 2016, the country becomes the major fisheries partnership of the E.U and some NGOs such as Greenpeace and Mauritaniens local fishermen accused the E.U to be only responsible for overfishing in this country. The fishery sector provides jobs directly or indirectly to 55.000 people, representing around 4% of the labor force in Mauritania in 2014. Compare to 2011, the fishery sector increased considerably to 30% in 3 years only according to the Sub-Regional Fisheries Commission (SRFC) studies in 2015.

<Table 4> capture production by Inland and Marine waters for the Islamic Republic of Mauritania

Year	Marine capture	Inland capture
------	----------------	----------------

	Qt (t)	Qt (t)
1980-1985	296.620	-
1986-1990	354.677	-
1991-1996	327.360	16.000
1997-2002	627.426	60.000
2003-2008	1.277.107	82.000
2009-2015	2.367.806	105.000

Source: FAO Fishsat (2016)

The Mauritians are not culturally fishers, therefore their interests in fisheries appears recently around 1993 with the influence of immigrants from others countries such as Senegal's fishermen, who came fish and sell it in the Mauritanian market. Therefore, the local fishing sector is not developed as the Senegal's or Moroccan's.

<Figure 4> capture production by Inland and Marine waters for the Islamic Republic of Mauritania

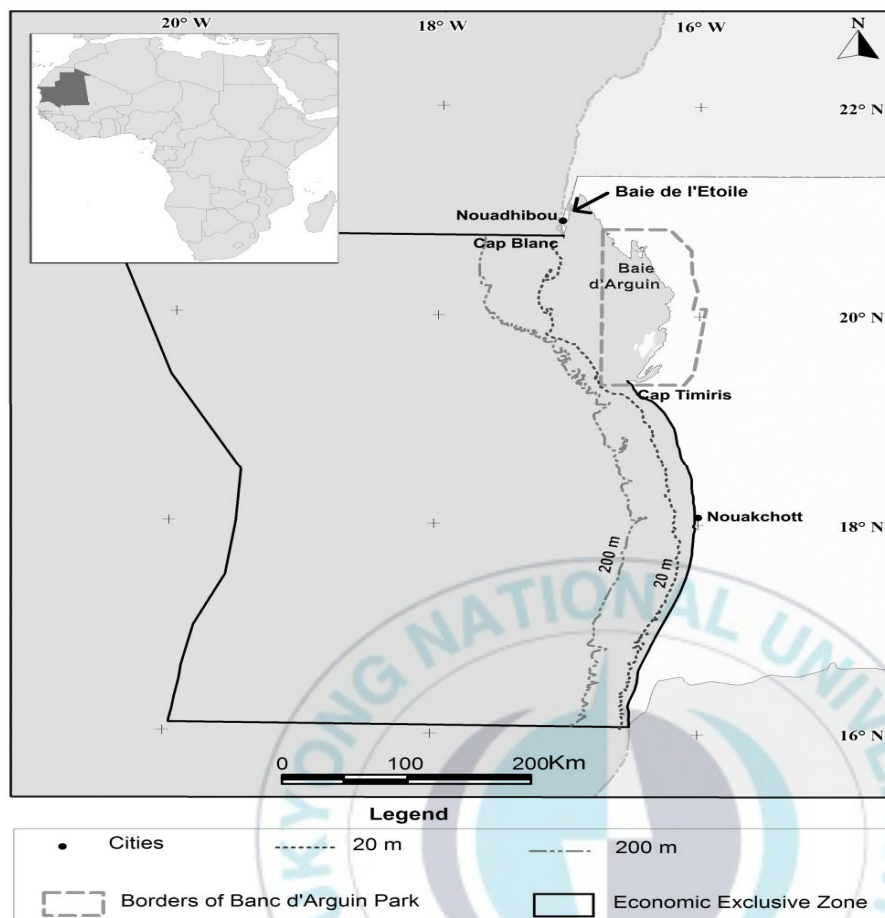


Source: FAO Fishstat (2016).

a. The Mauritanian Exclusive Economic Zones (E.E.Z)

Declared in 1978, the Exclusive Economic Zone of the Islamic Republic of Mauritania is estimated to be 200 miles and covering a surface area of 234,000 km² with 39,000 km of continental shelf renowned for its large and diversity of fisheries resources. The coastline has a length of 720 km and nearly around 600 fish species was identified among which 200 can be commercialized according to FAO Fishstat's studies done in 2016. Due to the highly favorable hydro-climatic conditions and to quantity and quality of nutrients carried by the Canary current, the EEZ permits flourishing lives and reproduction to many aquatic species. Moreover, From Nouadhibou to N'Diogo, the Islamic Republic of Mauritania coastal has a good ecosystem such as coral reefs, mangrove, wetland, and dunes. Those considerable advantages provide a good protection to the coast against severe weather, the sea rise level and the regulation of the water quality and quantity. This part is one of the richest fishing grounds in the world because of the presence of many fish flourishing conditions.

<Figure 5>The Mauritanian fisheries areas



Source: Ould Talebould Sidi MM, Diop MS (2003)

b. Artisanal fishing

The artisanal fishing concern particularly the small-scale and fixed gears, this type of catch provides fish for national consumption. It targets small pelagic species, demersal, fish, cephalopod, crustaceans etc. The artisanal fishing is divided into two categories according to the geographic area:

- 1) The continental and coastal fishing mostly is found along the Senegal River and in 25 plains of water in the south and South-east of the country. The most popular among these 25 plains of water is the lake of Forum leGleita and in the region of Nouadhibou. According

to the IMROP (2015), an average of 750 boats is operated in the artisanal fishing continental and the traditional fisheries sector is provided more than 90 tonnes in 2014.

- 2) And the artisanal fishing coastal (sea), this one is practiced only in the domestic water (in the country E.E.Z). Within the Exclusive Economic Zone, the artisanal fishermen are allowed only to fish 50km from the coast or with a depth of 200m. This area is commonly named the Inshore Fishing Area (IFA). This fishing capture is practiced in its EEZ, which extends on a maritime front of 720 km long, with 200 nautical miles and an area of 234 000 km². This part of the Atlantic Ocean is recognized as one of the richest zones on fish resources and has an important commercial impact in the economy of that regional.

This second artisanal fishing is estimated to employ in 2015 an average of 6507 canoes according to the IMPRO investigation in 2016. From 2009 to 2015, the presence of pirogues increase at 49% and more than the half are motorized. In the year of 2016, the evaluations of the Mauritanian National Statistic office shows that more than 55.000 jobs directly or indirectly are provided by fisheries industry and 80% is from the artisanal sector. The marine fishery is considered as the principal source of the national food Security. However, nowadays, the workers in this field are confronted with a rude competition with EU fishers. Therefore, the production is decreasing and many are trying to find others jobs. The consequences of this competition have considerable impacts on the social and economic life of Mauritaniens. Moreover, the country suffers from an important lack of infrastructures of landing, processing, and Mauritanian fishermen do not have much experience in fish conservation and marketing which causes considerable losses and waste of resources at the post-harvest level. According to the FAO Code of Conduct for Responsible Fisheries in order to increase the availability of fish for the

consumption, it's important to minimize the post-harvest losses (FAO, 2016). Some environmentalist recommends the creation of protected areas in order to renew the resources and help their blossoming. Base on that idea, the Mauritanian government made some efforts by creating some kind of protected spaces in the fisheries such as:

- a. The National Park of Banc d'Arguin with 6450 km² of a surface, which occupies around 30% of the coastline and 20 m of profundity. The place provides flourishing conditions for fish's reproduction and brings a good protection to birds.
- b. And the Diawling National park located in Senegal River with 500 km² of area. In this park the fish capture is seasonal and only those who obtain a fishing license from the Mauritanian government are allowed to fish based on targeted species. Mauritanian the aquaculture and recreation fisheries areas are mostly Diawling National Park and the National Park of Banc d'Arguin (the most important in the field of the fishery).

3) Aquaculture and recreation

The Aquaculture and the recreation are mostly practiced in the 'Baie de l'étoile' located in Nouadhibou, the Banc d'Arguin Park, and Diawli. The Banc d'Arguin was created to protect the habitat for migratory birds in 1976, but have been broadened to contribute the sustainable development of resources exploitation and economic development. It is the largest marine protected area (6.450 km²) in Africa. In this park only residents are allowed to fish with small sailboats, the capture of fish is estimated to 5, 000t per annum and it represents around 5% of the artisanal fishery in the year of 2014. Many species are identified in Banc d'Arguin Park such as mullets, costal selacians (e.g. *Rhinobatus rhinobatos*, *Mustellus Metellus*), meager (*Argyrosomus regius*), octopus (*Octopus vulgaris*), catfish (*Arius heudelotii*) and various other

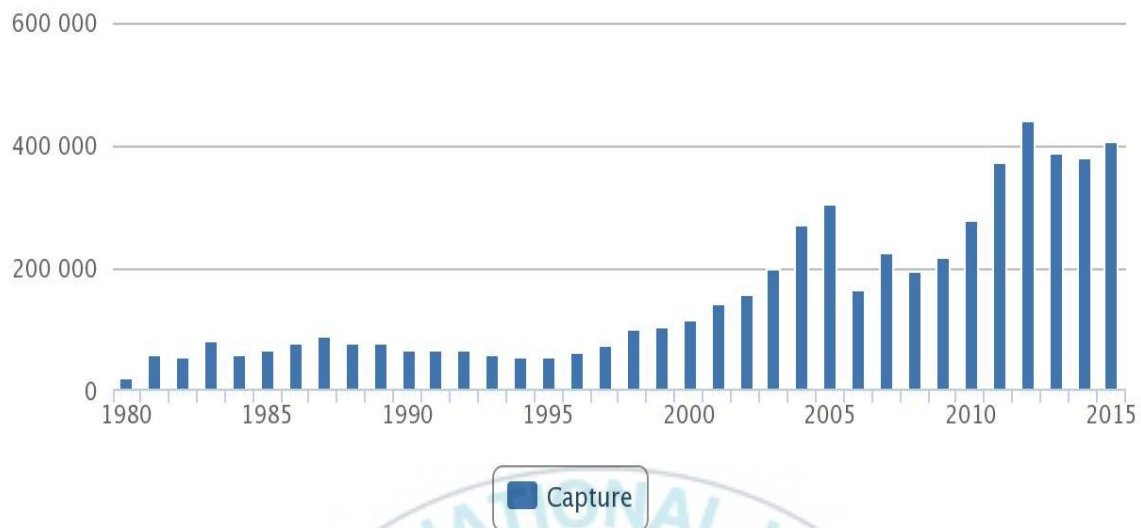
demersal (e.g. Sparidae, Serranidae, Pomadasydae, Pleuronectiformes) and pelagic fish. This area is reserved totally to traditional fisheries and the capture is seasonal. The ‘Baie de l’etoile’ can be considered as the most important recreational fishing facility in the country. The total catch in recreation is estimated to be 9 tons/year from 2010 to 2015 according to the IMPRO (2016) estimations.

<Table 5 > Capture and aquaculture production for Mauritania (tonnes)

Year	Dataset	Quantity(t)
2010-2015	Capture	2.255.906
2004-2009	Capture	1.376.357
1998-2003	Capture	812.949
1992-1997	Capture	372.850
1986-1991	Capture	452.314
1980-1985	Capture	342.218

Source: FAO Fishstat (2016)

<Figure 6> Total capture and aquaculture production for the Islamic Republic of Mauritania (tonnes)



Source: FAO Fishstat (2016)

4) The Industrial sector

The exploitation of the Mauritanian Industrial fishery sector dates to the beginning of 1982. It corresponds to the adoption of the United Nations' Convention on the Law of the Sea (UNCLOS). UNCLOS defined the EEZ such as a coastal surface over which one state has the right to exploit and protect its Exclusive Economic Zone (Art.56-58). From the coast to a distance of 200 miles (370 km) far in the ocean, the concerned state has its right to allow which species or resources to exploit in its EEZ (Art.61). However, the state has the duty to protect all the resources from overexploitation. The first fishing agreement of Mauritania was concluded in 1987 with EU in context of the Common Fisheries Policy (CFP), which will be replaced by the Fisheries Partnership Agreement (FPA). The FPA changed the attitude of the EU-Mauritania simple fisheries deal to an agreement which encouraging the sustainable fisheries. The

industrial fishing capture is dominated by the EU's vessel; however, there is an important presence of Chinese and Japan's vessel. From 2000 to 2013, the weight of the EU's demersal fleet was estimated to fluctuate between 24% and 38% of the foreigner's total vessel presence. In 2002, 223 foreigner's fleets were authorized to fish in the Mauritanian EEZ and half these are under the FPA (EU's countries member's ships). The Mauritanian EEZ is fully serving the foreigners vessels such as the European Union (France, Spain, Greece, Italy, and Netherland etc), Japan, Russia, China, and others. The foreign fish capture concerns mainly demersal and pelagic species as indicated the investigation of IMPRO (Institut Mauritanien de Recherches Oceano-graphiques et des Peches) in 2013. In 2016, FAO's investigations reevaluated Mauritanian fish to 200species. The same studies showed that in the industrial fish capture there are many species that Mauritanian can commercialize. As the following figure has shown, the variety of fish species is a very good opportunity for Mauritania and its different partners in fisheries cooperation. The following figure show only species that were frequently captured but not all the species.

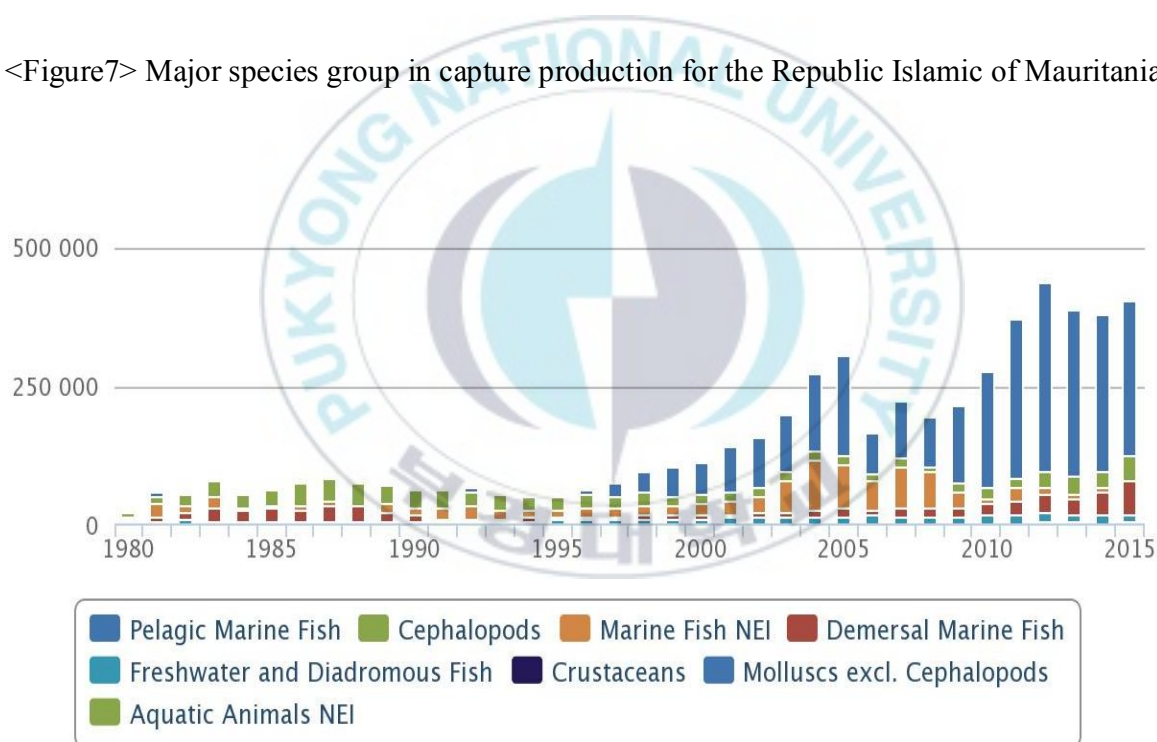
<Table 6> Major species groups in capture production for the Islamic republic of Mauritania

Species	2010/qt(t)	2011/Qt(t)	2012/qt(t)	2013/Qt(t)	2014/Qt(t)	2015/qt(t)
Pelagic marine fish	210.278	286.781	342.440	300.072	284.157	280.337
Demersal Marine fish	23.565	24.098	33.644	2.692	41.354	59.774
Marine fish NEI	7.045	23.865	10.492	9.484	9.437	994
Crustaceans	962	1.260	4.742	2.781	1063	2.889
Mollusks excl. Cephalopods	1007	1.321	1.769	1.958	2.597	1.514

Aquatic Ani- mal	14	90	4	0	0	0
Cephalopods	18.367	19.596	29.618	31.609	24.731	43.268
Fresh water and Diadro- mous fish	15000	15.000	15.000	15.000	15.000	15.000

Source: FAO Fishstat (2016)

<Figure7> Major species group in capture production for the Republic Islamic of Mauritania.



Source: FAO Fishstat (2016)

Under the FPA EU-Mauritania protocol signed on 16 of November 2015, EU's fleets are allowed to fish in the Mauritanian EEZ for shrimp, demersal fish, Tuna and small pelagic up to 281 500 Tonnes per annum. In exchange the EU will pay a financial contribution of € 59.125

million per year and a supplementary of € 4.125 million will serve for the local fishing communities support. It is a multi-species agreement for a period of four (4) years renewable (from 16.11.2015 to 16.11.2019). The fisheries protocol is negotiated per category as shown in the flowing examples and in the table:

- 1) *The category 1- targets especially crustaceans other than spiny lobster and crab for a fee of 400 €/t (an annual advance of 1000€/vessel was deducted from the total fee due).*
- 2) *The category 2- for the fee of 90€/t, with an annual advance fee of 1000€ per vessel, deducted from the total fee due.*
- 3) *Category 3- fee of 105€/t, with an annual advance of 1000€/vessel deducted from the total fee due.*
- 4) *Category 4- concerns tuna seiners, that is the highest capture rate of 88% per annum*
- 5) *Category 5- Pole and line tuna vessels and surface long-liners (annual licenses) following the transfer, on 23 February 2013, 3 fishing opportunities in the category 6-5. The opportunities increased from 22 to 25 per capture. The utilization rate become considerable (88%).*
- 6) *Category 6-Line tuna vessels and surface longliners (annual licenses). The opportunities rate is averaged to 58% (6000 tonnes to 10000 tonnes volume of capture).*
- 7) *Category 7Freezer trawlers fishing for pelagic species. These opportunities are only used by the Netherlands, Poland, Lithuania and Latvia. The volume capture is estimated to 93315 tonnes yearly.*
- 8) *Category 8- The Pelagic opportunities fish catches the Portugal uses more that category for an annual catch of 15000 tonnes.*
- 9) *Category 9- this category concerns the Cephalopod. Following to the Joint Scientific Committee, octopus cephalopod is in an over-status therefore no fishing opportunities were allocated for this category under the protocol.*

<Table 7> the Maximum number of vessel permit to fish under EU-Mauritania SFPA

Vessel category (According to protocol)	Maximum No. of vessels permitted to fish in any one year	No. of active vessels	% time spent in the Mauritanian EEZ
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Category 1 – fishing vessels specializing in crustaceans (other than spiny lobster and crab)	23	0	0
Category 2 - Black hake (non-freezer) trawlers and bottom long liners	6	2	100
Category 3 -Vessels fishing for demersal species other than black hake with gear other than trawls	6	5	85
Category 4 -Tuna Seiners	25	6	75
Category 5 - Pole and line tuna vessels and surface long-liners	15	10	55
Category 6 -Pelagic freezer trawlers	19	11	62
Category 7 -Non freezer pelagic vessels	2	2	7

Source: cofrepeche et al (2014b)

This table shows that the European Union is more interested in two categories the number 4 tuna seiners and the categories were crustaceans. But the most important analyze indicated that Mauritanian fishery is catching Europeans attention because the fisheries ground provides the possibility of capture up to 200 species of fish and then local fishermen are out of the fishing competition due to their weak means. Some species are easier to catch than others that can explain the difference of the time spent in the EEZ.

The protocols between the EU and Mauritania concerned mainly different species of fish, among these there are demersal, cephalopod, shrimp, hake, small pelagic and Tuna. The Industrial fishery industry has a considerable contribution to the GDP of the country economy, even its negative impact on the environment was decried by local's fishermen association and many environmental organizations such as Sea Around Us (SAU). As it is underlined up to this paper, the majority of the local fishermen are from the community of black African, which is not represented by few personalities in the government compared to the Biden's. Therefore some clauses of the agreement are sometimes neglected by the represents of the government and that fact sometimes results to a discomfort of the artisanal fisheries industry. The local fishermen are confronted generally to a rude competition with foreigners fleets, which are more armed and catch more fish than artisanal fishermen equipped only by small motorize pirogues. The industrial sector is not an exclusive profit of the EU and Mauritanian government; there are some social benefits such as in the employment.

a. Impact of the Industrial sector on Employment

A considerable number of European trawlers are operating the Mauritanian EEZ under the FPA protocol and it has provided major consequences in the social-economic live of both side. In the EU's countries, the FPA has created new jobs, while in Mauritania many fishermen declared the reduction of their advantages of capturing fish. The president of Mauritanian Fisheries Federation, Si'd Ahmed Ould Abeid declared the agreement between the EU and Mauritania has been "a catastrophe for fishermen whose catches are decreasing day after day and for the future of our water... the fish are just taken from our water, our fishermen are losing their lives and we are gaining nothing". But for Joe Borg, an EU fisheries commissioner the new Fisheries Partnership Agreement would benefit both parties in terms of providing news

“jobs, strengthened monitoring and control, conservation of resources in compliance with scientific assessment and environmental protection” (July 24, 2006). In 2016 a study on “The impact of fisheries Partnership Agreement in the EU and third world countries” sustained estimation 10, 568 of jobs are provided under the FPA, these estimates included EU’s vessels fishing. The evaluation of the EU-Mauritania FPA conducted by Cofrepeche (2014b) shown that out of the Tuna advantages during the period 2013-2014, the protocol was used by thirteen crustacean vessels for 16.7 % of each year. Moreover, two black hake vessels and five other demersal were used for 100% and 85% of their fully fishing time respectively. Furthermore, the fisheries protocol under the FPA totaled about 47,500 jobs in the European Union countries with 6,197 in Italy, Portugal 6,823, France 16,184, and Spain 18,332 (STECF 2015). In the other hand, the protocol provided employment for citizens of the fished countries such as the case in Mauritania. Some studies of the European Commission based only on the Tuna capture provided an estimation about 230 of Mauritanian were employed under the FPA Tuna capture by European’s trawlers in 2015(cofrepeche, 2016b). The same source estimated the Tuna annual to 16,898 tonnes, that means a proportion of 16% of the EU’s fleet captures under the FPAs in 2015. The high exploitation of this resource is the main explanation of that situation. However, the others catch exclude Tuna provide also a significant result as indicates the following table.

<Table 8> Employment directly related to the EU fleet activities (excluding tuna) in the Mauritania FPA

FLEET SEGMENT	AUTHORISA- TIONS (No.)	CREW-COMPOSITION PER VESSEL (No.)	DIRECT EMPLOYMENT ON BOARD (No.)
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	AVAIL- ABLE	UTILISED	EU	RIM	ACP	TOTAL	EU	RIM	ACP	TOTAL
Hake trawl	6	2	4	5	3	12	8	10	6	24
Other demersal	6	5	3	3	1	7	15	15	5	35
Small pelagic frozen	19	11	14	15	12	41	154	165	132	451
Small pelagic fresh	2	2	8	1	2	11	16	2	4	22
TOTAL	58	20	...	....	...	....	193	192	147	532

Source: cofrepeche (2016b)

Furthermore, the Mauritania fish after post capture is routed to other region compare to the local fish capture which is treated in the local market and provide indirect possibilities of benefits. The circuit is described in these terms: from fishermen to the sellers for a local consumption. Therefore, many analysts said the EU-Mauritania caused a considerable loss of jobs. And Mauritanian fishermen do not have much experience on fish conservation and marketing which causes considerable losses and waste of resources at the post harvest level. According the FAO Code of Conduct for Responsible Fisheries in order to increasing the availability of fish for the consumption, it's important to minimize the post-harvest losses (FAO, 2016). Moreover, it is not the only problem is facing the Mauritanian fisheries industry; inter alia there is a corrupt policy, overfishing, and environmental issues.

IV. The Problems of the Fisheries sectors in Mauritania

The country depends heavily on fish for food security and has an important contribution to the GDP. Moreover, the fishery industry provides jobs directly or indirectly over 55.000 Mauritians including 80% in the artisanal fisheries sector indicated the FAO's yearbook (2016). In 2016, an organization protecting environment called Green Peace, estimated that more than 75% of all fish stocks are almost fully exploited, overexploited or depleted in their article entitled "How Africa is feeding Europe"(March 2015). In the same way, the Mauritanian fisheries industry is facing to a several obstacles such as the Illegal, Unreported and Unregulated fishing leading to environmental Issues in the country EEZ.

1. The Illegal, Unreported and Unregulated (IUU)

The Food and Agriculture Organization's (FAO) proposed to describe the Illegal, Unreported and Unregulated into three general activities:

"Illegal fishing refers to activities: 1. Conducted by national or foreign vessels in waters under the jurisdiction of a State, without the permission of that State, or in contravention of its laws and regulations; 2. Conducted by vessels flying the flag of States that are parties to a relevant regional fisheries management organization but operate in contravention of the conservation and management measures adopted by that organization and by which the States are bound, or relevant provisions of the applicable international law; or 3. In violation of national laws or international obligations, including those undertaken by cooperating States to a relevant regional fisheries management organization. Unreported fishing refers to fishing activities: 1. Which have not been reported, or have been misreported, to the relevant national authority, in contravention of national laws and regulations; or 2. Undertaken in the area of competence of a relevant regional fisheries management organization which have not been reported or have

been misreported, in contravention of the reporting procedures of that organization. Unregulated fishing refers to fishing activities: 1. In the area of application of a relevant regional fisheries management organization that are conducted by vessels without nationality, or by those flying the flag of a State not party to that organization, or by a fishing entity, in a manner that is not consistent with or contravenes the conservation and management measures of that organization; or 2. In areas or for fish stocks in relation to which there are no applicable conservation or management measures and where such fishing activities are conducted in a manner inconsistent with State responsibilities for the conservation of living marine resources under international law.”

The official data supplied from public databases of organizations such as the FAO (FAO Fishsat), the EU (Eurostat) and The SAU (SAU database) about the Illegal, Unreported and Unregulated fishing landings are different and the perceptions of the of the alarming situation in West Africa are not in the same level of analyze. IUU’s data is not easy to find, therefore some reports minimize their results or omit some variables of data because of political purpose. According to recent studies (Belhabib et al., 2012), the fish catch in Mauritania past from 20.000t/year to 440.000t/year in a period of 10 years and these statistics tripled the data provided by the FAO on behalf of Mauritania. The same studies found that the half of western European catch’s are not unreported to the Mauritanian authorities or unregulated. Referring to identical situations, (Gascuel et al., 2007) said that Dutch vessels have to provide more exact captures to their government than Mauritanian government. According an investigating on the fisheries relationship between the EU and Mauritania (Nagel et al., 2012), the government cannot secure its EEZ and the EU’s trawlers are taking advantages on this situation. Furthermore, the EU is not the only one who is taking profit on this weakness of the Mauritanian

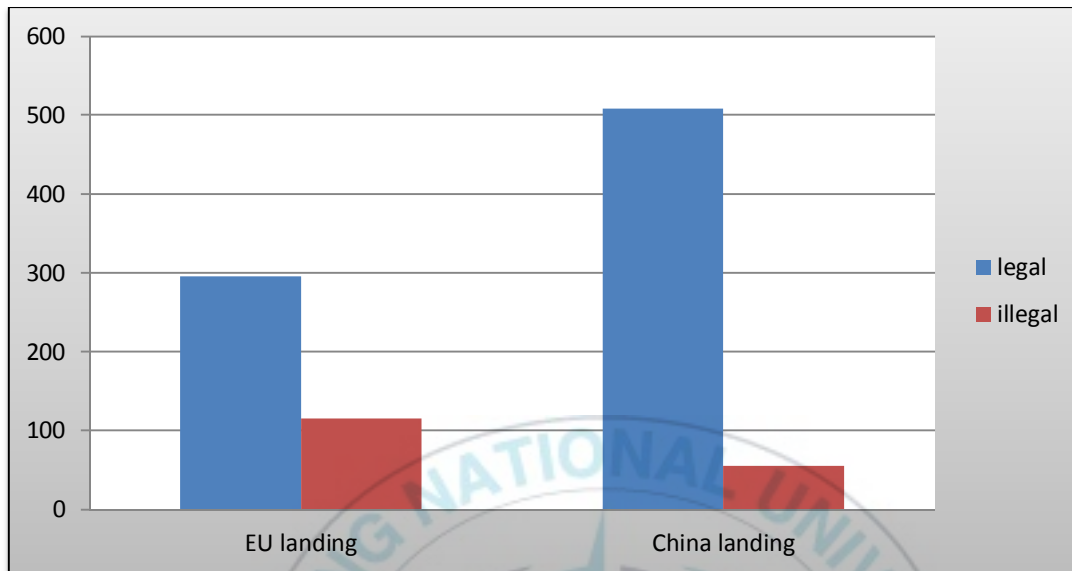
government, several others organization and foreigners countries too such as China, Japan and a few number of African fishermen(Senegal, Mali, the Gambia...). The IUU is decreasing since 2002 because of the fast increasing number of controller and surveillance personnel and the some environmental protection organizations (Greenpeace, Sea Around Us, Sub-Regional Fisheries Commission etc).Overall the under-reported capture has estimation of € 12 million between 2013 and 2015 (IMROP, 2016). Based the publication on the definition of the FAO about IUU, three categories can be identify in the country: illegal and unlicensed Senegalese's fishermen, illegal fish capture in protected areas with illegal artisanal gear (in PNBA), and the illegal industrial capture is operating out of the EEZ (in the exclusive zone reserves to artisanal capture) or without license.

<Table 9>Estimated average landed value, access value, official and actual compensation by Europe and China from West African countries for the period between 2000 and 2013 USD x 10⁶. The case of Mauritania

EU landed Value (USD ₂₀₁₃ x 10 ⁶)		China landed Value (USD ₂₀₁₃ x 10 ⁶)		Total Value (USD ₂₀₁₃ x 10 ⁶)		Access Value (USD ₂₀₁₃ x 10 ⁶)		Value of Reported landing (USD ₂₀₁₃ x 10 ⁶)	
Legal	Illegal	Legal	Illegal	EU	China	EU	China	EU	China
295.7	115.7	508.2	54.7	411.4	562.9	95.2	102.0	95.3	122.1

Source: Plos(2015)

<Figure 9> legal and illegal landing value (USD₂₀₁₃ x 10⁶) comparison between the EU and China in Mauritania



Source: PLoS (2015)

Referring to these reports, the data shown that the Illegal, Unreported and Unregulated landing catch of EU's is the double of the Chinese IUU in Mauritania. Therefore, many organizations accused EU to overfishing in West Africa. The Illegal, Unreported and Unregulated land catch is not the only issue, the bycatch and discards also constitute a considerable phenomenon which is facing fisheries sector in Mauritania.

2. Bycatch and Discards

Bycatch and discards may have a multitude of definition different from one area to another (Clucas, 1997). The most common definition of the term “discarded catch” or in short “discards”, means in the context of fisheries is the undesired fish that is released or thrown to the water or the coast after capture (Alverson, et al., 1994; Clucas, 1997). The reasons for why

discarded happen are different, it could be sometimes due to the lack value of the product in the market or because of the regulation in a given state's EEZ.

The term bycatch is more difficult to define and caused many contradictions between managers and scientists, due to the complexity of the characteristics of the context even in the fisheries fields. Alverson et al. (1994) suggested dividing the definition of the concept into three different concepts. Firstly, the term “bycatch” or “by-product” is used to separate capture of target species from non target species which are retained and sold (Alverson et al., 1994). Secondly, the term could be used to refer to species, sizes or sexes of fish that are released or thrown for personal consideration or legal reasons (Alverson et al., 1994). Finally, the term described all non targeted species are retained and sold in addition to the thrown captured species or discarded (Alverson et al., 1994). The standard international definition given by FAO (2010c, p. 12) is as follows; every “catch that a fisher did not intend to catch, did want to catch, did not choose to use, or which should not be caught for whatever reason” can be considered as bycatch. However, every bycatch may not be considered as unsustainable fisheries act. The act that is considered as unsustainable from bycatch is when the captured species are retained and sold, while the discarded back to the sea. Most of the time bycatch and discarded practices cause waste due to its nature of dumping undesired species into the sea. Thus, in such a way does not help for the blossoming of species and cause generally damages. The issues related to discards are multiples:

- 1) The moral problem of responsible stewardship of marine resources;
- 2) designing a management regime that limits or prevents discarding while meeting multiple social, economic and biological objectives;

- 3) The practical problem of enforcing regulation designed to prevent or minimize discards, particularly as discards occur at sea where enforcements is most difficult;
- 4) The technical problems of gear selectivity and utilization of species with a low market demand through transformation or adding value; and
- 5) The economic problems posed by efforts to reduce bycatch, increase landing of bycatch or increase utilization of bycatch.

Source: Kelleher, K. (2005),

According to Kelleher (2005), four relatives issues can be identify in discard case:

- a. Policy and ethical issues;
- b. Fisheries management issues;
- c. Ecological Issues; and
- d. Technical and economic Issues.

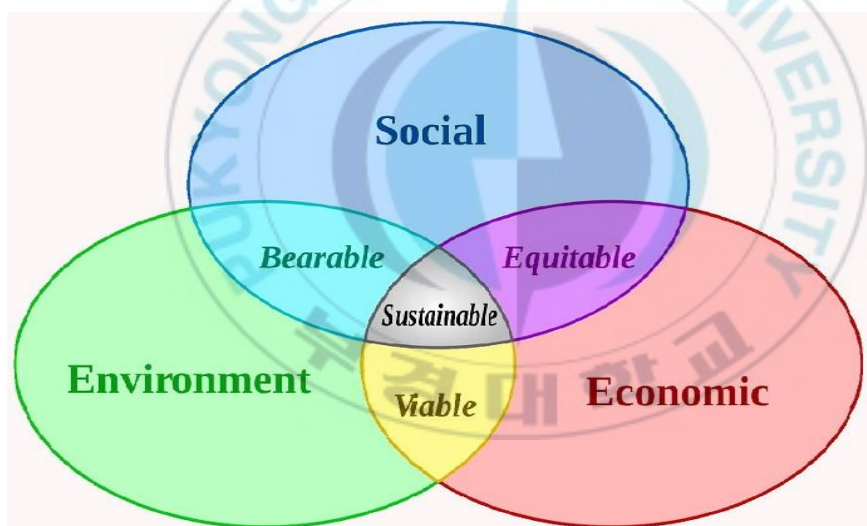
Mauritania has a reputation to be a very corrupt country and that sounds unwieldy to eradicate this phenomenon because the authorities those who are supposed to fight against it are those who the most of time involved in that practice. On February 3rd 2016, the Mauritanian government launched the new Fisheries Transparency Initiative. However the country doesn't have many experiences concerning the fisheries management and how to deal with some ecological issues. Therefore, the sustainability in field of fisheries is not an easy object to treat and the comprehension of this policy is complex to apprehend for both sides (the EU and the Mauritanian government).

V. Sustainable Fishing

1. Definition of sustainable fishing and Maximum Sustainable Yield(MSY)

The concept of sustainability is large in terms of definition and not easy to understand because of the diversity of the points of views between specialists. The economist, Rene Passet (1979) argued that for more utility and in long-term of exploitation human needs to consider at least three domains in the sustainable development or sustainability: the “economic, social and environmental”.

<Figure 9> three pillars of the sustainable development



Source: Green fish blue fish, (2012).

These three domains are called the “three Pillars” of the sustainable development. According to the “Nested” or “Living system Model” a good economy or a sustainable economy depends upon a healthy society, and both in turn are dependent upon the natural environment. Since the 1980s, the term has been used in many fields such as in the environmental, economic,

sociologic and generally refers to the exploitation of the environment resources without compromising the futures generations needs. However, the most important step done in the concept of sustainability was in 1980s with the work of the World Commission on Environment and Development(WCED) that gave birth of the Brundtland commission on March 20, 1987(WCED, 1987).The universal and standard definition of the concept sustainability that has been given by FAO is “the management and conservation of the natural resource base, and the orientation of technological and institutional in such a manner as to ensure the attainment and continued satisfaction of human needs for present and future generations...(FAO council, 1989).

According to the European Commission (2011a), the West African fisheries sectors are suffering from a lack of sustainability due to divers overfishing practices such as discards, inadequate scientific management and micromanagement. Recently on their last agreement done on 16th of November 2015, the EU rejoined West African countries in the fight against the IUU and for Mauritania its contribution on sustainable fisheries policy was 4,125,000 euro out of the 59,125,000 euro for the getting access to the EEZ. That significant act is the result of many critics of NGOs about their behavior in the third countries waters. In order to prevent the overfishing phenomenon in Mauritania and to provide an answer to several critics for their promotion of unfair trade, dramatically the environment and overexploiting foreigners fish resources. In 2002 the CFP as well as the fisheries agreement was reformed to Sustainable Fisheries Partnership Agreement (SFPA). The CFP or the traditional fisheries agreement based on pay, fish and go was changed to a more comprehensive and cooperative approach and the Fisheries Partnership Agreement (FPA) was added but the issues still unchanged. Therefore, it makes sense to wonder if this reform was not just a game of words (from CFP to SFPA). Trying to

answer to some critics the European Commission argued that the main problem of Mauritania's fisheries sector is that the fisheries management is not developed and it is confronted to corruption and bad policy.

According to the WWF, the Maximum Sustainable Yield might be defined as flowing; "The Maximum Sustainable Yield (MSY) for a given fish stock means the highest possible annual catch that can be sustained over time, by keeping the stocks at the level producing maximum growth. The MSY refers to a hypothetical equilibrium state between the exploited population and the fishing activity" (WWF, 2011).

- a. Lack of sustainability in the economic
- b. Lack of sustainability in the environment
- c. Lack of sustainability in the social

2. Human right approach of the sustainable development

Many socialists, economists and environmentalists in their recommendations suggested the adoption of human right the sustainability development processes. According to Dr. Edward H. Allison there is a need to adopt "a human rights approach to sustainable development of small scale fisheries" (FAO, 2009b, p. 15). The principal aim of the human right approach in the sustainability is to set up cross-sectoral partnership that could guide the development policy in developing countries. The exploitation of resource agreement needs to involve non-governmental organizations, international organizations, most of the government department and bilateral agencies (FAO, 2009b). In this terms FAO(2010a) stimulated that "the human rights approach stresses the importance of removing obstacles, such as illiteracy, ill health, lack of

access to resources, and lack of civil and political freedoms, that prevent people from doing legitimate activities that they want to do” (p. 72). Therefore, unless the issues such as “rights to food, justice representation, health, decent work and dignified lives” are resolved there may be a potential lack to establish a complete sustainability in the field of fisheries (FAO, 2009b). There is a strong belief that by establishing a cross-sectorial partnership the well-being in the social and the environmental will be improved (FAO, 2009b). This may lead to the eradication of poverty and guarantee food security.

Mauritania did not attain yet this step of progressing and it constitutes a potential lack to the sustainability for this West African country. However, the country is considered in the region (West Africa) as the richest in the terms of natural resources. The country is the third producer of iron in the world with 12 million tons per annum, around 75,000 barrels of oil are extracted per day, the world's fifth biggest gold producer (Kingross Gold, 2016), and one of the richest fisheries ground in the world and many others natural resources and is going for Uranium. In the year 2016, Mauritania exported \$1.62Billion making it the 93rd largest exporter in the world (World Bank, 2016). But as it is indicated earlier 60% of the Mauritanian citizens live below the poverty line. Critics pointed the frequent corruption as the main obstacle; often licenses and permits in the fisheries sectors are obtained through bribery and other corruption methods (World Bank and IFC, 2016). Moreover human rights are not respected in the country, for example Mauritania is one of the rare countries in the world where slavery continues to be actual subject.

VI. The Sustainable Fisheries partnership agreements between EU and Mauritania

1. History and the stage of the bilateral partnership

Mauritania obtained its independence in 1960 from France. its first fisheries agreement was with the Soviet Union (1974), Since then several agreements was conclude with others countries such as Japan, China, Spain and Portugal(6 January, 1984)

In 1987, first fisheries agreement with European Union

The first agreement, which allowed the EU's access to Mauritanian waters, was closed in October 1987 by the European Commission and Mauritanian's authorities. This agreement was a continuation of the protocol between Mauritania and Portugal finished up on 6 January 1984, which rooted before Portugal being accepted as member to the European Community (1986) and which is connected to Spanish fleets for all time enrolled in Canary Island ports. The first aim of the agreement was just to give a support to fishermen from Canary Islands that had lost opportunities to fish in Morocco and Western Sahara (occupied at that period by Morocco). When Spain joined the E.C, the country wanted to get access to northern European fishing waters but the northern countries had shown their disaccord to compete with Spain in their waters. Therefore, the E.U for the resolution of this issue or to give compensation to Spain tried to get fishing opportunities for the Spanish fleet in Mauritania. The agreement was initially connected to a three year time-frame from the 1st August to 31 of July, and can be reha-

bilitated unless ended. The agreement was characterized at normal intervals through convention and the Islamic Republic of Mauritania provided fishing access as a byproduct of a financial guarantee. Toward the end of the 1993-1996 amounts, an extension was approved to continue the partnership. Fishing areas with section and habitat conditions approved work sizes and appropriate by-get levels were got wind of. Additionally, the proportion for Mauritania cluster and condition for the seizure and delay of the banner vessels of the geographical area condition of the cluster were established. According to the investigation of the IFREMER (1999 within the 1993-1997), the fisheries concurrence with Mauritania described thirteen (13%) of the financial support distributed by the EC to fisheries understandings. The wage from the understanding described five day of the country national disbursement plan. The study concluded that European Union investment can be evaluated of €42.76 million per annum plus another €89.58 million of backhanded enclosed esteem was being created within the part States. Moreover, the investigations revealed that the partnership provided 1969 job directly and 478 aberrant occupations. 114 vessels were estimated operating the Mauritanian water in 1993, and become 156 three years later (1996). Around 80% were Spanish boats.

From 1996 to 2006, Cooperation Agreement

The first protocol was interest only on sardine and demersal fish until 1993, when the protocol included the octopus species and this new one became rapidly the major target species of the EC in terms of money. In 1996, the protocol added the Dutch pelagic trawlers for *Sardinella* capture. The 20 June 1996, the European Community and the Mauritanian government signed a new agreement for five years and decided to more collaborate in the exploitation of fish, to motivate the processing and advertising the fishery products. The difference to the previous protocol within so it made share over the Euro-Mediterranean project, hold into thought the

spirit on assistance resulting beside the Lome Convention. Unlike the 1987 fisheries protocol, the emphasis used to be placed regarding cooperation as was to be embodied in:

1. Protecting the fishery stock from overexploitation and IUU practices within accordance to the relevant provisions of the UNCLOS;
2. Scientific and technical cooperation among institutions specialized in fisheries field;
3. Exchange and dissemination over records about fish capture methods and gear, on the conservation and manufactured technology concerning the fishery products, also about strategies for protecting the fishery ground;
4. Every vessel provision should respect the agreement protocol and the Mauritanian law of sea;
5. In order to prevent the illegal fishing, the two partners should exchange theirs information on fisheries capture through a strong administration cooperation;

The main target of this agreement was to improve the sustainable fisheries development in Mauritania By:

1. Modernizing the inshore fishing fleet and all sector related to industry fishery;
2. Developing infrastructures of the port and small scales fishing
3. Venture of aquaculture plans
4. Safety in the marine environment
5. Commissioning specific studies and developing new researches in order to discover new methods of fishing in concordance with sustainable fishery;
6. Improving administrative cooperation for the management of the FPA;
7. Encouraging associations to investiture in the protection of marine species;

8. Improving and developing the distribution networks for fisheries products and stepping up surveillance at sea etc.

This was supposed to expire in 2001, but its validity was extended for five years more (2016). With this extension, in terms of finance Mauritania became the most important partner of EU (from €86 million per annum before the extension of the Agreement expired in 2001 to €430 million within the extension of the agreement until 31 July 2006).

From 2006 to 2017 fisheries partnership agreement

By the end of 2006, the European Community and the Mauritanian government agreed to continue the cooperation by taking in consideration the Cotonou Agreement. The agreement was applied for six more years and ended in 2012. The aim of this agreement was to re-establish closer administrative cooperation and developing financial investment in industrial fisheries by:

1. Developing economic, financial, technical and scientific cooperation on two points:
 - a. Encouraging sustainable fishing in the ZEEM;
 - b. Improving the Mauritanian fisheries sector.

During the signature of this agreement many other international conventions were considered such as the International Labor Organization (ILO), an independent Joint Scientific Committee which will meet every year in order to find methods to ensure the sustainability of the agreement execution. The most important preoccupations of this agreement were to step up in the economic, financial and technical cooperation in the fisheries sector. The agreement aimed also to combat IUU through a close administrative cooperation and information exchange according to the Council Regulation (EC, July 2008). At the end of the agreement of 2006-2012, a new agreement was signed on December 30, 2012 and will expire on November 29, 2018. For

this last protocol EU pays €59.125 million per year to the partnership for a total catch of 281 500 tonnes per year and in addition EU will give €4.125 million for the promotion of Mauritanian local fishing communities sector.

<Table 10>Main Features of the FPA

Duration of the agreement	6 years renewable (30.11.2006 - 29.11.2012; 30.11.2012 - 29.11.2018)
Nature of the FPA	Multi-Species agreement
Duration of the protocol	4 years (from 16.11.2015 to 15.11.2019)
Financial contribution	€ 59.125 million/year, of which € 4.125/year to support the fisheries sector
Fishing opportunities and fees for ship-owners	<p>Category 1 – Fishing vessels specializing in crustaceans other than spiny lobster and crab (maximum 5 000 tonnes / year; maximum 25 vessels): Fee: 400 €/t, annual advance fee of 1 000 €/vessel deducted from total fee due.</p> <p>Category 2 — Black hake (non-freezer) trawlers and bottom long-liners (maximum 6 000 tonnes / year; maximum 6 vessels): Fee: 90 €/t, annual advance fee of 1 000 €/vessel deducted from total fee due.</p> <p>Category 3 — Vessels fishing for demersal species other than black hake with gear other than trawls (maximum 3 000 t; maximum 6 vessels): Fee: 105 €/t, annual advance fee of 1 000 €/vessel deducted from total fee due.</p> <p>Category 4 — Tuna seiners (reference tonnage 12 500 tonnes; maximum 25 vessels): Fee: 60 €/t in the 1st and 2nd years; 65 €/t in the 3rd year; 70 €/t in the 4th year/. Annual flat-rate advance fee of 1 750 €/vessel.</p>

Category 5 — Pole-and-line tuna vessels and surface long-liners (reference tonnage 7 500 tonnes; maximum 15 vessels):

Fee: 60 €/t in the 1st and 2nd years; 65 €/t in the 3rd year; 70 €/t in the 4th year. Annual flat-rate advance fee of 2 500 €/pole-and-line vessel and of 3 500 €/surface long-liner.

Category 6 — Pelagic freezer trawlers (maximum 225 000 tonnes; maximum 19 vessels):

Fee: 123 €/t, annual advance fee of 5 000 € / vessel deducted from total fee due.

Category 7 — Non-freezer pelagic vessels (maximum 15 000 tonnes/year, deducted from category 6; maximum 2 vessels):

Fee: 123 €/t, annual advance fee of 5 000 € / vessel deducted from total fee due.

Category 8 – Cephalopods: not applicable (no fishing opportunities)

Source: European Commission (2016)

However the EU's agreements with third countries had been criticized several of times by NGOs and scientific investigators, they were accused to seek only their interests and binging natural matters in third world countries waters. The most popular critics and arguments against the fisheries get to assertions between the EU and developing countries are coordinated towards some of these distinctive focuses.

2. Criticisms towards the EU Fishing Agreement

- 1) The 'export' of EU fishing fleets to areas with already scarce resources;*
- 2) The limited capacity of signatory states to monitor or control the activities of the EU fishing fleets;*
- 3) The lack of transparency in the negotiation of agreements and a lack of communication and coordination between the Directorate General for Development and the DG for Fisheries during negotiations which has led to institutional disagreements within the EU;*
- 4) Fishing methods that can cause long term environmental damage;*
- 5) Fundamentally, the policies have attracted criticism because of the conflicting impact of EU fisheries policies on the EU development policies in West Africa.*

Source: Brown, O. (2005).

In this term the Greenpeace organization reported both in 2001 and 2006 that the European Union is depleting West African fisheries ground and is the major responsible of IUU (Greenpeace, 2001; 2006). According to the publication of Martin Visbeck (Marine Policy, 2014), the free access to, and availability of the ocean resources and services have caused a fort pressure on marine systems , occurring overfishing, increasing resource exploitation , alteration of costal zones and others various types of pollution . Therefore, International cooperation and states leaders have to protect the marine environment and to promote the sustainable use of marine resources. In such way, the world could satisfy both current and future generations' needs in economic, social and environmental field. For this purpose, the only solution is that developing and agreeing on one Sustainable Development Goal (SDG) specifically for the Ocean and Coasts could prove be an essential element (Martin Visbeck, et alt, Marine Policy,

2014). In their investigations, the Greenpeace concluded that Europeans fish capture in Mauritania did not respect all the clauses of the protocol and creating food security in the world's poorest countries. While Mauritania is suffering from hunger, EU's registered fleets capture 235.000 tonnes of fish per year in Mauritanian and Moroccan waters according to the UN's Food and Agriculture Organization (2008). Willie Mackenzie campaigner in the Greenpeace organization stated in the guardian journal that Europe has already overexploited its water ground fisheries and is trying to do the same in West African, but the most alarming situation is the case of Mauritania (the guardian, 2004). The commercial nature of the fisheries agreements between the EU and West Africa are more dominated by the ambitions of commercial negotiations. And according to Anthony Acheampong (1997), ACP (African, Caribbean and Pacific group of states) and European scientists are agreed on the need to manage fish resources on a sustainable basis, including strict monitoring and control.

Therefore, the European Commission in response to this criticism changed the name of its agreements into Fisheries Partnership Agreements (FPAs) and some clauses of the protocol.

3. EU's response to critics

After many critics of fishermen for overexploiting the fishing ground, environmentalists for pulling the marine nature, and the European Court of Auditory (ECA) for its gap of efficiency and enforcement of sanctions, the Common Fisheries Policy (CFP) was unforced some reforms in 2002.) Many changes were made in order to bring a response to overfishing issues. In 2006, the European Commission renamed the cooperation into Fisheries Partnership Agreement (FPA) and increased the promotion of sustainable fishery by increasing the proportion of the financial compensation for sectoral support and encouraging governments for the management

of their fisheries sectors (short resolution for the issue). The Fisheries Policy Commission (FPC) created in 1983, is dealing specially with such issues both in agriculture and fisheries in European waters and in the external internal water such as the case in West Africa (European Commission, 2009c). According the European Commission report, the principal purpose of the creation the CFP is to promote “sustainable fisheries and aquaculture in a healthy marine environment which can support an economically viable industry providing employment and opportunities for coastal communities” (European Commission, 2009c, p. 8). The reform concern three dimensions: environmental, economic and social. These included long-terms goals such as fisheries management, the protection of the environment, to replenish and to manage the fish stocks and developing new bilateral fisheries protocols (European Commission, 2009a). Moreover the European Commission’s green paper recognized the failure of the CFP to achieve the main objectives fixed in the reform of 2002 (European Commission, 2009a, 2011a). The principal explanation provide by the European Commission (2011a) below.

“[...] Overcapacity is the main driver for overfishing. However, overfishing is also a driver for overcapacity, as the reduction of quotas intended to curb it, further increases overcapacity. Similarly, overcapacity implies also poor economic performance of catching sector. But that poor economic performance in turn, fosters overfishing as a short term fix for diminishing revenues. The poor economic performance also results in the continuous industry call for public financial support, which maintains overcapacity. The poor economic (and social) performance also fosters overfishing indirectly because it council’s deviation from TACs proposed by scientists.” (Source European Commission, 2011a, Impact Assessment Accompanying Commission proposal for a Regulation of the European Parliament and of the Council on the Common Fisheries Policy[repealing Regulation (EC) N° 2371/ 2002] (pp.1-84), Brussels,

13.07.11, p. 5). To give an answer to some accusations that were direct to the EU's fisheries and trade policies, including depletion of the fish stocks and degrading the marine environment, the European Commission denied the majority of these accusations first. They stated that these accusations "are based on a number of misconceptions" (European Commission, 2009c. p.25). Moreover they underline the fact that some of the West African waters are indeed overfished and the European fleets did not participated massively in the depletion in Mauritania as NGOs thought (European Commission, 2008). However they cannot guaranty that some non-EU's members are overfishing in Mauritanian EEZ, they point out the presence of China and the "laissez faire" attitude of the coastal state (The EU delegation in Senegal, 2011).

For the Mauritania, the change occurs first by increasing to 10% the sectoral support of the total compensation for the development of the national fishery (EU, 2006) and helping the government to track and fight IUU. Under the partnership the Joint Scientific Committee (JSC) was created in order to advise the EU and Mauritania. The quotas and fishing methods were reviewed and technical support was provided to the Mauritanian government.

However, recently some critics pointed the EU's Development policy as incompatible with its Fisheries partnership agreements in West Africa.

4. The incoherence between EU's Fisheries partnership agreement and its Development policy in west Africa

Although the EU's policy of development has been focus on sustainability, according to many critics its Fisheries Agreements seem in West Africa is unfair. As the <Table 9> titled "estimated average landed value, access value, official and actual compensation by Europe and China from West African countries for the period between 2000 and 2013 USD x 106". The case of Mauritania" shown the EU's fleets had the most important IUU catch between 2000 and 2013. Moreover, the EU's fleets in West African fisheries ground is confronted to many environmental issues due to the overfishing, the discard, West African fishermen are confronted to the rude competition of Europeans fleets and more than the half of the population depending directly or indirectly on fisheries cannot any more feed themselves . The EU demands of fish is increasing year after year specially in the Eastern and Central region of Europe (European Commission, 2011a), while in African malnourishment is gaining area. In the recent agreement with Mauritania, the EU decided to increase its fish owner's fee for most access from €36 to €59.125 million per year for a total of 281 500 tons per annum and only \$4.125 million for the fisheries management. While for Morocco the voted budget per year is €30 million and the earmarked for a sustainable fishery is 14 million for less tons of capture (European Commission, 2015). That means the EU still in their logic of "pay, fish and go".

However, the European Development Policy is trying to help African government to fight against IUU, environmental issues, illegal migration, and stability and hunger in their states. In 2014, the European Development policy decided to allocate the Mauritanian government amount of €195 million to enable the implantation of access projects in different areas (European Commission, 2014). In additional the European Development Fund (EDF) and other donors non-European Institution participated to an allocation of \$46 million to the Mauritanian government for a period of three years 2009 (European Development Fund, 2014). However,

due to coup d'état in 2008 of the actual president Mohamed Ould Abdel Aziz the program was stop until 2011. This program concerned only the fisheries sector in Mauritania as shows the following table.

<Table 11>Fisheries-related development aid actions during 2010

Donor	Activities	Million Dollar
Spain	-Extension of Nouadhibou port	6.02
	-Project supporting the sustainable development of small-scale fishing activities	0.85
	-Fisheries surveillance	
Germany	-GTZ - Consultancy in the fisheries sector (management plans, shellfish farming, fresh pelagic fishing)	0.01
	-KFW - Fisheries surveillance	0.02
	-GTZ - Natural resources management programme	0.04
France	-Fisheries management plans	1.98
	-Development of small-scale fishing	
	-Fisheries surveillance	
	-Sustainable management of fishery resources	
Japan	-Diawling Park, Banc d'Arguin and Banc d'Arguin ecosystem research	
	-Extension and repair of pontoons and small-scale port infrastructure at Nouadhibou	3.53
	-Purchase of research vessels	
	-Extension of Nouakchott fish market	
	-Improvement of health quality of fishery products	
	-Technical assistance with fishing	

IDB	-Development pole with small-scale fishing port at Tanit	7.74
OPEC	-Development pole with small-scale fishing port at Tanit	

Source: European Parliament Annual Report 2009.(2010).

Other funds have been promised by other donors such as China and the World Bank; however this infrastructure will have a direct impact in the fisheries sectors.



VII. Findings

1. Theories

Wallerstein's approach on the World system is strongly similar with the Mauritanian's fisheries case. The Mauritania fisheries ground have been hugely exploited by foreigners vessels (The EU, Japan, Russia, China and others). According to Wallerstein's World system theory, the world is divided into core nations, semi-periphery, peripheries and external. Mauritania represents in this case the periphery by providing the raw materials (fish) and EU can be considered as the core state and the value added take place in Europe. The fish captures are generally made in Mauritanian EEZ while the procession is made in "offshore Europe" and sold to others periphery state or semi-periphery for consumption (e.g. Nigeria). The most considerable party of the Mauritanian government budget is base on the fisheries trade and aids receive from European Union, however the Mauritanian government has its sovereignty of decision. Even if that sovereignty is limited by fact of dependency on European investments, some time the government does not accept all the propositions of the European Commission such as in politic. The relation stays in the level where Mauritania is trying to save its sovereignty and the EU trying to protect its interest in long term.

The application of the coercion approach helped to understand the relationship between Mauritania and European Union in a comprehensive and clear manner. However, this theory is more focus on holistic view of the underline concepts. The theory considered the periphery state as only serving the core; however the cooperation between the EU and Mauritania does not match perfectly to the description of this theory. It is not reasonable to think that Mauritania a sovereign state is serving the enrichment of the core by supplying raw materials without gaining anything from this cooperation. The theory can be use only to explain only why the EU is interested to the exploitation of Mauritanian resources and why there is sometimes incomprehension between the core and the periphery but not how this cooperation functions

clearly and which factors lead the periphery to accept its exploitation. That situation leads to a rapport of power and dominance.

According to Morgenthau (2006), power is the major factor in political agreements and cooperation. Therefore, nonappearance of the quest for domination in the EU-Mauritania fishery agreement would proclaim the protocol as apolitical and non-imperialistic. As it was underlined earlier, the first agreement was just a “pay, fish and go”, at that time no proof existed that the EU had an influence on Mauritanian policies decisions because the sum received from this cooperation was not high as nowadays. From 2001, EU became the most important partner and started to become an essential source of incomes the Mauritanian fisheries, and then the European Commission became interested more in how these payments were used. The EU’s fishery payments represent over 20% to 30% of the Mauritanian government budget; consequently the European Commission became a co-decider of the Mauritanian budget. Therefore, in 2008 when the actual president did a coup d’état the European Commission suspended all its aides and activities in Mauritania. In the same logic, the EU asked the Mauritanian government for transparency in its governance several times. Furthermore, it has been proved that generally the Mauritanian government does not respect the earmarked funds utilization as stipulated in the agreement. Consequently, the European Commission is planning to separate the payment of the earmarked from the waters access payment. In this way the Mauritanian authorities are obliged to use the funds as stipulated; otherwise the EU could keep the earmarked due. This act can be analyzed as the intension to facilitate and to mark its political over Mauritanian marine policy. However, by increasing contribution of the oil, iron and others resources exploitation to the Mauritanian budget is providing the government more independence from the EU. Moreover cooperation with other countries non-European Union members

such as Japan and China are challenging more and more EU in the Mauritanian fishing ground and that gives to the government a better position to deal with the Europeans. Additionally, civil society and several NGOs are criticizing the SFPA because of the lack of common policy.

Viewing the Mauritanian fishery case in the angle of the common theory approach helped a lot to understand why the Country is earning a considerable in the fishery while the citizens are suffering from malnourishment. As analyzed some critics the country is the most rich in term of resources in West Africa but with poor population revenues. The CPR in the theory of common can be compared as the EEZ in Mauritania. There is one minority exploiting the common resources for their own benefice. It was proved that about 60% of the population depends on the fisheries sectors directly or indirectly, however the government occupied by a minority of Moor or white Arabs who is not fishermen or working in the fishery via the SFPA is exploitation for their benefit. The second fact is as asked a fisherman to European in interview that “by what right European children are eating Mauritanian fish, while Mauritanian kids are dying from hunger”. Therefore the common theory helped to understand the logic in this partnership. Furthermore, it makes totally sense to consider the agreement as pure commercial. In addition, the reform of this agreement made the comprehension of this partnership more complicate with the insertion of the sustainability program.

2. Sustainability

According to definition of the theory, the sustainability can be reached only when we arrived at a level where there is economical, social and environmental equilibrium. Therefore, it is not easy to measure the level of sustainability in fishery and sometime the goal of this approach

seems like unreachable but not impossible. The understanding of this approach is different from one state to another and at different level (short-term and long-term). However, according to the standard definition given by the FAO, the sustainable fishery can be defined as: every “fishing activities that do not cause or lead to undesirable changes in biological and economical productivity, biological diversity, or ecosystem structure and functioning from one human generation to the next” (FAO fisheries Glossary: sustainable fishing.). The Sustainable Fisheries Partnership Agreement has the same comprehension but with different perspectives and different actions. According to the European Commission (2011a), discard is not a big obstacle to sustainable environment but the main problem is the Illegal, Unreported and unregulated fishing practices and the transparency of the states. The unemployment rate is estimated to 30% and the population below to poverty line to 40% while the GDP is estimated to \$16.71 billion in 2016 (CIA World Fact Book, 2017) for population of 4 million. As it was mentioned, the EU gives by its right hand and takes it by the left hand. In 2013 the estimations of the EU’s legal and illegal landed value is clear proof of this assertion; the EU’s legal landed value was estimated to \$295.7 million while at the same year the illegal landed value was estimated to \$115.7 million for a total value of \$ 411.4 million (Dyhia Belhabib et al, 2015). That means the fishery partnership in the present case is far from been a sustainable, not only because of the EU’s FPA and its policy development have some contradictions but because of the Mauritanian government also has its part of responsibility of the issue.

Therefore, the fisheries sustainability appears as an unreachable objective. However, as it was proven the insertion of the policy pillar is essential if the partnership want to reach its aims in the term of sustainability. The Mauritanian government is known as suffering from corruption and the social pillars is not considered seriously at all.



VIII. Conclusion and recommendation

The conclusion drawn from the studies of this special case is also trying to give a response to all issues similar to the Mauritanian fisheries case through recommendations for how to promote sustainable development in fisheries.

The fisheries agreement EU-Mauritania has many advantages for both partners, however many issues also appear at the same time. The agreement with European Commission helps the Mauritanian government to sell its fish resources and to improve its policy in fishery also. The fisheries sector accounts for nearly 7% of the GDP in 2016 according to World Bank (April 19, 2017). That mean the fishery sector has a considerable value to Mauritanian's GDP. The most important partner in fishery for the Islamic Republic of Mauritania is EU, and for the last agreement the total contribution budget of EU per annum is € 59.125.000 with an earmarked for fisheries sustainability of € 4.125.000 (European Commission, 2016). Additionally, the partnership generated 192 direct jobs in Mauritania according to Cofrepeche investigations (cofrepeche, 2014b). The partnership permits to the European Commission to fill the gap of its fishing vessels for the European Union population. The EU received many accusations from Mauritanian local fishermen for threatening their livelihood (by reducing fish resources), from environmentalists for fishing near to Mauritanian coast which will not permit the flourishing or disturbing the reproduction cycle of the fish, and from the European Court of Auditors for its absence of sanctions. Therefore, CFP reformed in order to make its policy more sustainable and transparent. However, the agreement still not sustainable according to some environmentalists, NGOs in this field as it is underlined earlier. Actually, the major issues are the Illegal, Unreported and Unregulated fishing practices, the incoherence between EU's FPA and its PCD, and corruption in the Mauritanian government.

Therefore, if the partners want to reach this stage of sustainability in fisheries it becomes urgent to improve the partnership in the social, environmental and economic. The small-scale fisheries in Mauritania need a better understanding and a better adoption of “Human right approach” from authorities of government. A cross-sectoral cooperation need to be established between NGOs, MNCSS and government in order to improve the local fishermen community and all other people depending on this sector. By doing so, some issues like marine environmental pollution, food insecurity, issues of by discard, lack of access to resources and problems of illegal immigration will surely disappear (FAO, 2010a). NGOs and governmental institutions through cooperation should rapidly promote and encourage ladders, who stand for rights to food, rights to healthy society, and justice in the fisheries sectors. In the same way for a long term solution, the government should invest more in the education and sensitization of its citizens about fisheries overexploitation. As it is mentioned that fishermen attempt to achieve their social and economic success, while the government trying to achieve a public social success by improving institutions. However none of these two parties can achieve its objectives without a serious cooperation. Fisheries management cans success only when the three pillars are completed: the economic success, environmental protection, and social well-being. The FPA must respect UNCLOS provisions relating to surplus stocks and therefore the organic process and socio-economic desires of local population. The Mauritanian government has to demands to all partners after fishing to land and process the fish in the territory by this way, the authorities can control or reduce the bycatch, IUU and create more employment for Mauritanians. Moreover, they have to provide a serious protection of at-risk bycatch species and the biodiversity within the protected zones. As it is mentioned earlier, the overfishing is a phenomenon that concern everyone, therefore states and ONGs should collaborates or cooperate

in order to save the futures generations needs. Based on findings, the European Union and alternatives fishing nations ought to either to stop fishing in the third states' waters or change its behavior.



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