

THE SOCIO-ECONOMIC IMPACT OF IUU-FISHING: THE
CASE OF EU GIVE YELLOW CARD TO THAILAND

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ผลกระทบทางสังคมและเศรษฐกิจของการประมงแบบผิดกฎหมาย: กรณีของสหภาพยุโรปมอบ
บัตรเหลืองให้ประเทศไทย



สารนิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต
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ชานิกา ธรรมสโรช : ผลกระทบทางสังคมและเศรษฐกิจของการประมงแบบผิดกฎหมาย: กรณีของสหภาพยุโรป
 มอบบัตรเหลืองให้ประเทศไทย. (THE SOCIO-ECONOMIC IMPACT OF IUU-
 FISHING: THE CASE OF EU GIVE YELLOW CARD TO THAILAND)
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ทรัพยากรทางทะเลเป็นทรัพยากรที่สำคัญอย่างมากต่อการดำรงอยู่ของโลก ซึ่งหากไม่มีการจัดการที่เป็นระเบียบก็
 จะสร้างความเสียหายให้กับทรัพยากรทางทะเลได้ ดังนั้นสหภาพยุโรปได้มองว่าการทำประมงที่ผิดกฎหมาย ขาดการรายงาน
 และไร้การควบคุม หรือ **Illegal, Unregulated and Unreported (IUU) Fishing** ซึ่งคือ การทำการประมง
 ที่ขัดขวาง ละเมิดหรือทำลายมาตรการอนุรักษ์จัดการในพื้นที่ประมงใดๆ และการไม่ปฏิบัติตามข้อกำหนดในการเก็บรวบรวม
 ข้อมูลการประมงตลอดจนไม่รายงานข้อมูลเกี่ยวกับเรือทำการประมงและการทำประมงหรือรายงานข้อมูลอันเป็นเท็จแก่
 หน่วยงานที่รับผิดชอบ จากการทำการประมงผิดกฎหมาย **IUU** อาจทำให้ทรัพยากรทางทะเลในอนาคตอาจจะหมดไป

ทั้งนี้ประเทศไทยมีมูลค่าการส่งออกไปสหภาพยุโรปเป็นรายใหญ่ แต่ประเทศไทยกลับทำประมงผิดกฎหมาย
IUU จึงทำให้สหภาพยุโรปให้ใบเหลืองหรือการขึ้นบัญชีรายชื่อผู้กระทำผิด ส่งผลให้ประเทศไทยได้รับผลกระทบอย่างมาก
 และถ้าประเทศไทยไม่ทำการปรับปรุงหรือปรับเปลี่ยนการบริหารการประมงไทยให้ถูกต้องตามกฎหมายก็จะถูกสั่งห้ามในการ
 ส่งออกทรัพยากรทางทะเลไป และจะส่งผลเสียต่อสังคมและเศรษฐกิจของไทยตามกันมา ซึ่งประเทศไทยจะต้องได้รับความ
 ร่วมมือจากภาครัฐและภาคเอกชนในการปรับปรุงและแก้ไขการประมงของไทยให้เป็นที่ยอมรับ อาทิ การปรับเปลี่ยนกฎหมาย
 และบทลงโทษให้มีความเหมาะสม และออกกฎระเบียบเรื่องการจัดตั้งเรือเพื่อไม่ให้เกิดการออกนอกเส้นทาง เป็นต้น ทั้งนี้เมื่อ
 ประเทศไทยได้แก้ไขปัญหาดังกล่าวจะสามารถทำให้ทะเลน่านน้ำของประเทศไทยมีความยั่งยืนอีกด้วย

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Marine resources are a very important resource for global existence. If there is no organized management, it can damage the marine resources. Therefore, the European Union considers Illegal, Unregulated and Unreported (IUU) Fishing, which is a fishery that obstructs Violation or destruction of conservation measures in any fishing area And non-compliance with the requirements for fishery data collection, as well as not reporting fishery and fishery or false data reporting to responsible agencies From illegal fishing, the IUU may cause future marine resources to be depleted.

However, Thailand has a large export value to the European Union. But Thailand is illegal fishing, so the IUU gives the European Union a yellow card or a list of offenders. Resulting in Thailand being greatly affected and if Thailand does not improve or modify the administration of Thai fisheries to be legally prohibited, it will be banned from exporting marine resources and will adversely affect Thai society and the economy as followed Thailand must have the cooperation of the government and the prime minister in improving and modifying Thai fisheries to be accepted, such as changing the law. And penalties to be appropriate and establishing regulations regarding the installation of ships so as not to cause them to go out of the way, etc. Once Thailand has solved the above problems, it will be able to make the sea waters of Thailand sustainable as well.

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CHAPTER 1: INTRODUCTION

1.1. Background and Problems

"These days, while the worldwide populace is persistently expanding with the interest for nourishment utilization. Nourishment industry turned into the most significant factor of the supportable and development of national monetary and a key determinant for the nature of our day by day lives and it is presumably the greatest business on the planet economy" (*Sustainable fisheries and aquaculture for food security and nutrition*, 2014) this is noted in an FAO report which demonstrates the significance of nourishment comprehensively. Fish is one of the most significant sustenance of the world given by the amount of abuse from fish cultivating or aquacultural exercises that are directed from the wild marine. As of now, worldwide catch fisheries and aquaculture furnish 3.0 billion individuals with very nearly 20 percent of the normal of their capital admission. While the fast development of the worldwide populace tends to the requirement for taking care of and developing the interest for fish utilization. Additionally in Thailand, the fisheries area is a significant factor that makes a lot of gross pay using sent out items and national sustenance utilization. This raised a few issues identifying with the administration of fish because the worldwide utilization rate squeezes characteristic assets and difficulties the manageability of the advancement of marine and inland fisheries. (*Sustainable fisheries and aquaculture for food security and nutrition*, 2014)

The tremendous world interest for fish makes the fish business area in created and creating nations endeavor to build up the fishing innovation to expand the catch fisheries. Also, the expanding interest for fish items because of the result from the quick development of the populace makes another issue which is unlawful fishery. Illicit Fishing happens in each locale and causes a basic impact on the worldwide fishery, for example, over-misuse fishing, abuse, and catch in the confined territory, the utilization of unlawful fishing gear, and so forth. (*Sustainable fisheries and aquaculture for food security and nutrition*, 2014) This is the reason for wrecking the marine condition and fish sustenance. In a brief period, the advancement of the fisheries area makes lost marine assets and environments.

The fundamental normal issues that exist in numerous nations which discourage the administration on the ocean life assets and the reasons for unlawful fishing:

- A lot of unapproved transport fishing in the ocean region.
- Unregulated fishing transport without pronouncing the boat nationality or exchanging the banner.
- The fishing transport which doesn't proclaim or report either the got sum or specific fishing ground to the skilled national authority negates national laws and guidelines.

These illegal behaviors are snags to oversee fish stocks viably and were characterized as "illegal unreported and unregulated (IUU) fishing". Regardless of whether in the Exclusive Economic Zone (EEZ) or the high oceans both are influenced by IUU fishing. (*Review of Impacts of Illegal, Unreported and Unregulated Fishing on Developing Countries, 2005*) IUU fishing turned into the need of numerous districts to discover goals to oversee and continue the significant asset of the fishery. The worldwide association like FAO (Nourishment and Horticulture Association) and other fishing countries attempt to discover and grow increasingly powerful laws and arrangements to forestall, discourage and take out illegal fishing and infer that IUU fishing is the worldwide issue that each nation needs to understand right away.

FAO is the primary association that initiatively sets the general rule of capable fisheries, Code of Conduct to Responsible Fisheries, (CCRF). FAO dispatches the Worldwide Game plan on IUU fishing to forestall, prevent and kill illegal, unreported and unregulated fishing, outstandingly by FAO in 2001. Be that as it may, FAO-IPOA is only a typical rule for different nations and is certifiably not a legitimate instrument, which has non-lawful officials to uphold any nation. All things considered, many created nations, which have a high pace of fish utilization, understood that IUU fishing pulverized the provincial economy and is expanding ceaselessly consistently as supported by the European Commission in 2005. (*Review*

of Impacts of Illegal, Unreported and Unregulated Fishing on Developing Countries, 2005)

Accordingly, they endeavor to locate a successful instrument to control IUU fishing. As indicated by the theme, Illegal, Unreported and Unregulated (IUU) fishing is a significant danger to the feasible administration of marine assets worldwide. 14 EU, the greatest shipper of a fish item, is the primary gathering of nations that order EC guideline to forestall, stop and dispense with illegal, unreported and unregulated fishing to keep up, balance out nourishment demand and supply, continue financial development and set up Nourishment Security. (" On a new strategy for the Community to prevent, deter and eliminate Illegal, Unreported and Unregulated fishing," 2007)

Before the EU authorizes the EC Guideline, the EU has been battling with IUU fishing since 2002 by receiving an EU Activity Plan for the annihilation of IUU fishing. ("Handbook on the practical application of Council Regulation (EC) No. 1005/2008 of 29 September 2008 establishing a Community system to prevent, deter and eliminate illegal, unreported and unregulated fishing ")At that point, in 2008, the first IUU Guideline (EC 1005/2008) to Forestall, Deflect and Dispensed with Illegal, Unreported and Unregulated Fishing: IUU Fishing was established and the guideline was upheld in 2010. IUU fishing guideline was acknowledged by worldwide fishing nations because the guideline is a straightforward and non-separation instrument applying to all fishing vessels, under any banners, which looks to forestall, deflect and kill IUU fishing in all marine time and obviously in Thailand which send out an enormous number of fishery items to EU.

EC guideline is contained a few arrangements, including collaboration components between third nations and the EU. Accordingly, with the participation system under the guideline giving the lawful structure to the operational cooperation. EC guidelines turned into a model of numerous nations to apply with their national strategy and organization including Thailand.

IUU fishing issues in Thailand happened all the while with the improvement of fishing innovation since 1957.(Siraprapa Thanpong, 2013) The improvement of the fishing apparatus and vessel, which makes abuse gets straightforward, and the expanding demand for fish which builds fisheries area supply make dangerous fishery, illegal and unregulated fishing. (Siraprapa Thanpong, 2013) Our capable divisions know and are worried about the IUU issue in Thailand yet without compelling lawful measures to control all behaviors then the issue is as yet unsolved. Thailand Fisheries Act 1947 has not given compelling measures to forestall, control and kill IUU fisheries to the degree of the global nation measures. Consequently, the administration revises the law and it was simply ordered on April 28, 2015, to guarantee that we are not avoided activity to forestall, hinder, and dispose of IUU fishing. Be that as it may, by a brief period to alter the new Demonstration, there are still some outstanding issues that don't take care of the issue, for example, the trouble with the local nation or taking care of the administration association.

1.2. Research question

The research question is “What is the socio-economic impact of IUU-fishing on Thailand?”

1.3. Hypothesis

The hypothesis is Thailand has got an effect from the ineffective legal measure to prevent, eliminate IUU fishing following international standards which substantially affected the national economic and all fishing industry. Therefore causing many negative effects on both the economy and society negatively and may cause banning Thailand's fishery products.

1.4. Objectives

1. To study and analyze National Law and Regulation in the aspect of regulating Thailand Commercial Fisheries concerned with IUU fishing. Will IUU help Thailand to achieve “sustainable development in the long run”?

2. To study and analyze International Regulation and Convention concerned with IUU fishing to apply and improve national regulation to prevent and avoid the accusation of trade barriers from other countries.
3. To indicate the importance of IUU regulation to prevent, deter and eliminate the illegal fishing problem in Thailand.
4. To study the impact of IUU-fishing on Thailand's socio-economic and make suggestions and recommendation to Thai fishing industries and Thai government

1.5. Scope of study

The scope of this research is to study International, Regional and National Regulation to control and to eliminate Illegal, Unreported, and Unregulated Fishing: IUU fishing; firstly we have to know the importance of fishery sector in economic aspect. In this research, the author shall discuss in terms of IUU law, regulation and international standard which Thailand has duties to comply as a state member.

1.6. Methodology

This is a documentary research. Thus, the agencies concerning with fishing industries. Research in this thesis is conducted based on current information and record of seafood demand and supply from local administrative resources such as National Oceanic and Atmospheric Administration (NOAA), Food & Agriculture Organization of the United nation (FAO), Southeast Asian Fisheries Development Center (SEAFDEC), Ministry of Agriculture and Cooperation, Department of Fisheries, via electronic data. It is also conducted based on textbooks, published articles, research studies, and interviews from government officials.

1.7. Expected Results

1. To understand the international problem of IUU fishing and Thai fisheries situation to be concerned about the risks which could happen from the IUU fishing problems.

2. To understand all international legal framework effectively to improve fisheries law and regulation to make Thailand become the regional leader of economic and food security.
3. To provide recommendations and suggestions to related authority for extreme development in practical aspects and enforcement for commercial fisheries sectors.



CHAPTER 2: THAILAND FISHERIES

Backgrounds

The global demand for seafood protein, whether captured or cultured, whether directly consumed or fed, will continue to be high and will continue to grow. As mentioned, fisheries and aquaculture provide billions of nearly 20 percent of the average animal protein per capita consumption and more than 50 percent in some countries (Costello, Kinlan, Lester, & Gaines, 2012). When population growth includes urbanization, improved development levels, the standard of living and income, all of these factors increase the demand for fish and seafood and also increase the consumption rate. In other words, the fishery has become a major economic sector for the country, with constant demand. Another important issue is that seafood provides high protein content, which is an important component of international food security and nutrition. In 2014, Thailand is expected to export 568,886.82 tons of seafood to the EU28 worth 95,080.45 million baht. We can separate the fishery in Thailand from the fishery area, just like in Thai water and outside Thai water (Costello et al., 2012).

IUU fishing is found in all kinds of fishing equipment. The importance of the seafood sector in the Thai economy has been agricultural for many decades since 1964. The Gulf of Thailand and the Andaman Sea are both the main sea of Thai fisheries that have a variety of fishing gear developed by German fisherman. Commercial fishing does not include rescuing fisheries. But run the business by using high-quality fishing equipment and fishing by trawler boat.

For Thailand, department of Fisheries of Thailand reported "Fisheries Statistics of Thailand 2015" (2017) found that the amount of natural saltwater fishery in Thailand between 1997 and 2016 is the saltwater fishery quantity according to Nature continuously decreases. In 1997, there were 2,679.5 billion tons of natural saltwater fishery, while in 2016 the natural saltwater fishery decreased to only 1,343.3 thousand Million tons, which are considered to have decreased dramatically almost 20 years. One of the reasons that the amount of saltwater fishery decreases Probably

from the decline of Marine natural resources Especially the amount of fish that has decreased and cannot Recovery and production in time for human needs According to the Department of Fisheries, in 2015, there were a total of 42,512 Thai fishing vessels, of which 9,370 were commercial fishing boats and another 33,205 were traditional fishing vessels. From the number of fishing boats that spike a lot and the Falling fish Resulting in Thailand currently being in overfishing situation Production capability of resources or overfishing.

The above demand for fishery products is causing global fishery problems. Suppose that "More needs, more exploitation, and more destruction" when normal fishing is unable to provide fishery products to high demand markets, violations occur(Costello et al., 2012). Every country has conservation and management measures and laws regarding their fishery resources, whether they are sufficient or not, to organize their resources to preserve those resources for future generations. However, entrepreneurs who focus on profits often try to do anything to make a profit, even if it's illegal. Many violations have occurred in Thailand and beyond EEZ, including in the high seas.

2.1. What is the Thailand fisheries situation?

Since 1988, Thailand's fisheries have been developed and attempted to create a sustainable fishery sector to increase the economic value of the fishery sector as Received support from many sectors, whether public or private, to increase the efficiency of all factors to compete with regional and international countries.

However, after 1993, the United Nations Convention on the Law of the Sea (UNCLOS) was enforced in all member states. UNCLOS had an impact on Thai law, which affected the territorial sea, continental shelf, and EEZ from new announcements of other countries. The new sea territory is the loss of 300,000 square miles of the High Sea. It can be estimated that the total catch of seafood will decrease by approximately 600,000-800,000 tons per year. Moreover, the announcement of new territories affects the right to sail at sea. After the announcement, ships that sailed at sea without another land would be illegal.

As a result of the meeting, the Thai fishery sector has developed and adjusted to survive to the new global standards of the Continental Shelf and EEZ, but some fishing vessels cannot survive this change. Fishing boats are divided into 3 types according to the capacity of the boat:

- 1) A small boat (less than 22 meters) that uses low capital to invest in a single sail and change to fishing in the national waters this is one of the main reasons for excessive exploitation in the Thai sea, as these boats use very small fishing nets which are not allowed to operate within 3000 meters from the shore.
- 2) Medium-sized vessels with a high investment rate per investment per shipping these vessels are at high risk in the national seas if competing with small boats for reasons of cost-effectiveness. However, affected by economic problems and no other options, these ships have to sail on the national seas, which is illegal behavior.
- 3) Large vessels that have a high potential for capital and can sail longer due to the ability of the boat These boats can sail very far in the high seas, and some can explore new fishing areas without continental shelves, such as in Indonesia and Malaysia in the maritime regions.

The biggest problem in the fishery sector is medium-sized boats because they have no business options, so breaking the law is the only option they have. They must break the law by fishing in restricted areas or using unregulated fishing equipment in Thailand or other countries and causing worse results that affect the economy, society, and politics. Thousands of Thai fishing boats and over 30,000 Thai fishing sailors have been arrested in other countries. These fishermen are uneducated people who have But concerns about income from fishing, unrelated to the law As a result, when the license is revoked, they will sail out of Thailand and fish in other areas, which causes more problems for the country.

Thailand represents the remarkable growth of fishery production in the last three decades. The fishery sector has become one of the most important economic sectors of the country along with the growing agricultural sector. In 1992, the Thai fishery sector tried to develop all materials and factors that stimulate the quality and

quantity of fishery. Seafood production the total income from the fishery export sector is higher than 98.9 billion baht or 11.87% of the total agricultural income or 1.27% of the GDP in 2006. In 2007, the total production was about 3.9 million tons, 58.2% came from the sector. Marine fisheries the balance comes from coastal aquaculture. Freshwater aquaculture and freshwater fishery catch fishery at 22.9, 13.1, and 5.8 percent respectively ("Fisheries Statistics of Thailand 2015," 2017).

2.1.1 Laws and regulations related to fisheries in Thailand

Laws related to important fisheries in Thailand and respectively enforced are

(1) Fisheries Act 1947 played a very important role in preserving coastal resources and the environment. To create sustainable use and in this Act there will be an emphasis on the prevention of water pollution and the control of methods, tools, and seasons for catching fishery. However, it appears that the aquatic resources in Thai waters still suffer from deterioration. Until beyond crisis the main reason is that the law lacks strict enforcement. The state lacks manpower and budget sufficiently the conservation of aquatic resources in Thai territories faces alternating problems. Complex, excessive exploitation of aquatic resources, Also, the old law Not yet allowing the community to participate in resource management Even fishermen in many areas have the potential to manage their fishery resources, Therefore, there is a joint amendment and implementation of a new fishery law, namely the Fisheries Act 2015.

(2) Fisheries Act 2015, there are important principles which are to control activities related to fisheries, that is to say, starting from the production process to processing. In the use of consumption and consumption, there is a set of management measures. Maintenance and utilization of aquatic animal resources by the policy committee national fisheries minister or provincial fisheries board promoting the participation of local fishery communities in management maintenance, conservation, restoration and utilization of fishery resources including promoting community organizations local fishing the said organization will have the right to propose guidelines for the development or resolution of fishery problems and to assist the work of the competent officers following the law. Has set fisheries statistics. For the benefit of fishery

research and management in the control of fisheries, there are rules regarding the control of various activities. Related to fisheries or may affect aquatic resources there is a designated fishing area, namely coastal fishing areas. Offshore sea fishing zone and freshwater fishing zone according to the characteristics of the area for the benefit of controlling the utilization of aquatic animal resources properly, promoting the aquaculture, etc., to be governed by administrative measures such as the suspension of licenses, suspension of licenses and revocation of licenses or a license to come into force to enable law enforcement to be fast and effective and specify the rules for appealing the said order to ensure fairness to those who do not intend to commit an offense and there are criminal provisions that are appropriate for the offenses in each matter. However, it appears that illegal fishing due to the fisheries act 2015, there is still a lack of measures to monitor, control, and monitor fisheries in Thai territories and outside Thai waters.

(3) Fisheries Royal Decree 2015 B.E. due to the situation of illegal fishing And the above necessities, Therefore, the enactment of the 2015 Fisheries Act was urgently implemented to increase control measures. Surveillance And inspect fisheries Which is to prevent, stop and eliminate fisheries by Unlawful following international standards And prescribe guidelines for conservation and management of fishery and fishery resources for sustainable use Later, in December 2015, the National Legislative Assembly approved the Fisheries Emergency Decree 2015, making the said Ordinance equal to the Act, but still maintaining the name of the Royal Decree. Outside Thai waters must obtain a fishing license outside of the waters from the Director-General and there must be observers onboard the fishing vessels, enforced by strict administrative and criminal measures.

2.2. What are Thailand fisheries' problems?

In Thailand, illegal fishing is not a new phenomenon. Illegal fishing in the legal sense means an act that violates national or international laws and regulations. Recent facts show that the Fisheries Act of Thailand 1947 cannot control the fishing behavior of IUU and has not been updated. Ineffective legal measures for controlling fishery activities are causing major problems, which means overfishing and

destruction. This fact is developing into a national problem from the importing countries which put pressure on our export sector

EU countries have announced to fight IUU fishing by following all the IPOA-IUU measures that will ban all fishery products entering the region. They estimate the value of IUU fishery products occurring around the world worth around 10 billion euros per year. This means that IUU's fishery is the second level of fishery production in the world they see this to be unfair for legal fishing operators, so they intend to reduce illegal fishing in all areas by following market-related measures to stop illegal products from entering come to region("Lack of reporting on regulations for the prevention of IUU," 2009).

EU regulations to combat IUU fishing have an impact on all fishery products exported to the region. EU regulations impose duties on exporting countries to comply with regulations. The catch certificate issued by the flag status of all fishing vessels and countries that pass fish is a requirement for sending fish or processed fish products into the region. EU import reports show that EU countries order a large number of our fishery products, around 30,000 million per year ("Lack of reporting on regulations for the prevention of IUU," 2009). In early 2015, the European Union issued a yellow card on our fishery products because Thailand There are not enough measures to combat IUU fishing and refrain from resolving the IUU's problem. If we do not solve the problem within six months, the EU will issue a red card and prohibit the product. All fishing situations from Thailand which will cause great losses in the business and economic sectors of the country.

The Department of Fisheries says that all existing problems must be resolved by legal tools and then we need to study from international standards to amend our laws to comply with international and regional measures (Archari Thawonmat, 2015). Therefore, must study all fisheries Ethics, which is a current problem that needs to be resolved by legal measures.

Destroyed fish

The Gulf of Thailand and the Andaman Sea are important fishing grounds for our country, and every fisherman with a variety of fishing gear has their activities in these areas. Especially in the 50 meters deep sea, many fishermen use dangerous fishing equipment such as trawl, trawl, fishing nets, trawl nets, etc. Each type of fishing boat equipped with fishing gear has a fall area. Fish suitable for use in each gear. Smaller fishing boats tend to fish in shallow waters due to boat safety and safety reasons. However, since 1992, the trawler has been modified to be able to catch fish in remote areas. The main reason that encourages fishing vessels to increase their ability is to catch the fish that the market needs, which are often in deep zones such as mackerel and anchovies.

Overfishing

The high demand for fishery products influences the dissemination of the fishery industry which is difficult to control and leads to too many fishery problems. The problem with overfishing can come from high-priced fishing products that can encourage fishermen to take advantage of the notion that fishing resources are not limited to overfishing. More round-the-boat fishing or bigger trawl According to the research of the Department of Fisheries, the fishery statistics in the Gulf of Thailand are continuously increasing. This raises the consideration of economic and environmental concerns regarding the future of the fishery industry in Thailand. Also, the overfishing problem in the Gulf of Thailand has led to a bigger problem, which is unauthorized fishing in other state territories and the high seas. This problem comes from destructive fishing and over-fishing, which has reduced fishery resources in the water.

Another reason that provokes too much fishing is the decline in fishery resources. With the acceptance of neighboring countries and the ratification of the United Nations Convention on the Law of the Sea (UNCLOS) and the declaration of their Special Economic Zone (EEZ), we lost our maritime territories to the 300,000

square miles of high seas which calculated losses have Marine resources are 600,000-800,000 tons ("Overfishing,").

From the aforementioned factors, the concerned government sectors are more concerned with controlling our fishery activities. Fishing rules Fishing season and fishing grounds for the first time since the Fisheries Act 1947. The Ministry of Agriculture and Cooperatives and the Department of Fisheries have issued regulations to prohibit and control fishermen regarding fishing equipment, fishing areas, and Fishing season, however, without systematic enforcement and effective enforcement agencies, they cannot control all fishery activities, whether on the Territory or the High Seas.

Flag State measure problems

With the growth of the fishery sector in the past several decades, the number of fishing vessels has increased over time, and boat and unregistered vessels have been registered. Thailand continues to maintain its long-distance fleet of services in international waters and the EEZ of other countries.

The Department of Fisheries is responsible for issuing licenses for certain fishing equipment. Some fishing equipment has a limited number of licenses that may be issued such as trawl, nets, push nets, and can only be renewed by current license holders or direct members of the family, therefore meaning that new licenses cannot be issued. For anyone, however, there is no section in the Fisheries Act 1947 which specifically states the issue of fishing boat licenses for fishing. Boat registration is under the responsibility of the Harbor Department, which has to issue and renew the registration and annual business license for each type of boat, whether a motorboat or boat that does not use motor vehicles. However, the Harbor Department does not register many non-motorized vessels and therefore does fishery without official registration, including many art vessels operating in the territorial sea with long tail boats. This is an important problem in fishery management in Thailand because we have many relevant sectors that are responsible for each duty.

Port State measure problems

Of course, before the fishery product comes to the processing, they have to go through the first port, which is the port. The port is known due to a lack of enforcement or limited monitoring of important points for IUU fishermen to move their illegal fish products to the market. Thailand has not stipulated the Port State Measures in the Fisheries Act 1947, but we have just revised and inserted the new Port Status Measures in the Fisheries Act 2015. This new act empowers agencies that have the power to reject. Entering or accessing port services, including disembarkation and delivery of fish to foreign boats, however, new actions may not be systematically enforced due to certain limitations with business processes.

From the traceability system in Thailand, it is found that there is no general legal requirement in the Fisheries Act 1947 and 2015 for the application of traceability systems in the Thai fishery sector, which found "there is a clear indication" that tuna processors in Thailand may be using fish from unauthorized sources for export to EC. This discovery is due to export tuna to the United States. From ships marked by certified third-party suppliers, which account for only about one-third of tuna equipment in Thai canneries. Thai canned processors have identified and selected only fish from a ship.

Transshipment at sea

Cargo handling occurs in all regions as a way to move fishery products, whether legal or illegal. "Loading" in this context is a method of transferring consignment products from one fishing vessel to another. One generally is a chilled cargo ship or "refrigerator" either on the harbor or on the sea. In some countries, there is sea transportation that is permitted by law. But there are still groups of ships that operate illegally or without permission (Thitiwat Aussawarangkul, 2014).

The reason that transshipment is favored by fishing boats is that it is an easy way to wash, fish, IUU, and gives coastal states and flag state the ability to monitor all actions. Of course, it can be avoided by controlling the port. Therefore, many

countries have laws requiring that transportation should be controlled or operated only at ports under the supervision of inspectors.

Developing countries do not have the logistical ability to inspect ships at sea before unloading, therefore they cannot be confident if fish are legally caught. The Fisheries Act of Thailand, 1947 and 2015, did not set regulations for the control of unloading. It is widely used by IUU fishing boats. This is a very big hole in which IUU fishermen can bring illegal products to the market.

Foreign labor

Unsustainable practices in the Thai fishery industry, including the low wage and service conditions, which appear to be unsafe, make Thai people not want to work with fishing boats. But not for foreigners such as Myanmar, Cambodia.

This problem has been the same for decades. Rural residents of poor neighbors such as Burma and Cambodia seek higher wages and improved living standards that Thailand can offer to them. They are lured by brokers who propose to take them across the border to work on a fishing boat or in a fish processing plant to earn money. Of course, most people who accept the offer do not know that after the fees and payment, most of their income goes to the broker.

Illegal immigrants on a boat in the sea don't have many options. The story of a refugee who fled to Bangkok depicting a terrifying ship like a slave ship in which fishermen have to work 15 hours a day. According to the UN Inter-Agency Program on Human Trafficking (UNIAP), most men working on board say that bashing and even killing are part of marine life. However, labor problems are included in IUU fishing due to illegal fishing. But there is a law under the Ministry of Labor. There are certain measures regulated by the Fisheries Act (Thitiwat Aussawarangkul, 2014).

2.3 Conclusion

Commercial fisheries in Thailand have decreased steadily since 2005. The key factor is the degradation of marine resources which directly affects the fish production rate in 2008. In that year, the fishery sector in Thailand totaled approximately

1,644,800. Tons decreased by about 20% from 2007 and reduced to 1,500,200 tons in 2012. The situation of marine fisheries in Thailand EEZ has 4 problems affecting the fishery economy. The total includes

1. The collapse of marine resources solving problems arises from nature and humans. Examples of natural causes of thawing are the tides, the collisions of the coastal regions, and the changes in water temperatures. All of these situations influence the livelihoods, breeding, and food chain of fish. Excessive exploitation is a remarkable human action that generates the decay of resources. This is due to the rapid development of fishing technology and the high capacity of the boat. All of the factors encouraged the fishing industry to grow rapidly in a short period, which caused a rapid collapse at the same time. Government policies are not effective enough to control violations due to the inability of department coordination.

2. Reduction of fishery resources this is the impact of the EEZ announcement that Thailand has lost 300,000 square miles of fishery areas in the high seas area. This factor affects the medium-sized fishery sector that is unable to invest in navigation far away from the coast, so they turn back to fish in the territorial sea. After that, a shortage of marine resources arose from the high competition in the territorial sea and the medium-sized fishery sector had to move to the nearby seas of neighboring countries, causing disorder.

3. The shortcomings and the increase in the cost of factors of production, such as trawl boats, with the cost of production per trip 40-40 percent of the total cost of production the main cause of their business problems is the price of oil. When oil prices are high, most medium-sized fishing sectors are unable to sail, and this effect is linked to unemployment, food processing industries, ice factories, and more.

4. Fish price slump this problem is caused by the price of imported fish. The quality is better than the national aquaculture which is a disadvantage to our fishery sector in the market.

The freshwater fishery is another commercial land that is an important part of the national economy. New fishery technology is an important factor in the rapid

growth of the Thai fishery industry and causes the dissolution of marine resources. The new technology that makes our fishery sector expand the scope of use there are more fishing areas such as the Bay of Bengal, Borneo Bay, and the South China Sea. Of course, the following problems occur when Thai fishermen catch fish in the water of other countries. Of course, the following problems occur when Thai fishermen fishing in the bodies of other countries and fishing illegally in those countries. This is the cause of international relations problems, as those countries have seriously enforced laws against our ships that violate their laws. At the same time, our national laws are not strong enough to fight IUU fishing, so we need to develop our laws in line with international standards.



CHAPTER 3: IUU-FISHING

3.1. What is the definition of IUU-fishing?

Marine resources is an important resource and an important food source for humans without marine resource management And supervise sustainable sea fishing in the ocean Marine resources may be exhausted. The European Union considers that IUU fishing is destroying the sustainability of marine resources. And biodiversity, which in the future may disappear until it was not left in the next generation the statistics on fishery catch from IUU fishery account for 19 percent of all fishery catch in the world. Worth more than 10 billion euros (Archari Thawonmat, 2015). The European Union considers that illegal fishing. As a criminal in a multinational country, Thailand is one country that the European Union has issued a yellow card. This means the risk that Thailand will be classified does not cooperate, the possibility of non-identifying as to cooperating bio country under the rules of IUU will affect Thailand's imports of fishery products at fishing boats Thailand Drive.

Illegal fishing, IUU stands for Illegal, Unregulated, and Unreported (IUU) Fishing, which means illegal fishing, lack of reporting, and lack of control. Which has the meaning according to the Food and Agriculture Organization (FAO) as follows (Camilleri):

Illegal Fishing is fishing by coastal fishing vessels, which the owner state of the fishery itself or by boat Foreigners in any state's jurisdiction without permission Or against the law Ship fishing by a country that is a member of Regional fisheries management organizations (RFMOs) which conflicts with conservation measures managed by the RFMO's resolution, in which the country has obligations or is in conflict with relevant international laws. If the State is a party to RFMO, fisheries that violate national law or international obligations covering the actions of the state cooperating with the relevant RFMO.

Unreported fishing is fishing that is not reported, which false reports to government agencies which Acting in violation of the laws and regulations of that state Fisheries in the area of RFMO responsibility which has not been reported or

reported. Or notices in violation of the RFMO organization's procedures will be specified in the fisheries regulations, which fishermen and those fishing vessels that establish a registration or request for fishing permission in that fishing area must comply with non-reporting fisheries, from boat registration to reporting the amount of catch.

Unregulated Fishing is fishing by a non-nationalized (non-flagged) boat or a nationalized boat, flagging any state that is not a party to RFMO, which does not comply with or contradicts the conservation measures of that organization. Inland fishing or fishery that has no conservation measures managed by the RFMO, which is against the responsibility of the state that is bound to international law. IUU fishing can occur on both large fishing vessels that operate in the ocean to Small fishing boats that conduct coastal fishing and in territorial waters under the jurisdiction of the state Coastal or on the high seas are under the management of the RFMO organization.

Therefore, the IUU fishing effort framework has many levels, including international levels. Regional or sub-regional and national level this irresponsible fishery activity directly affects the correct and appropriate aquaculture service. And is an important obstacle to the development of sustainable fisheries goals.

From the foregoing, the IUU fishery is a type of fishery that prevents Violation or destruction of conservation measures in any fishery area And non-compliance with fishery data collection requirements so that they do not report information about fishing vessels and fisheries or false information reports to government agencies and RFMO organizations, or to Illegal fishing Considering the definition of " illegal fishing " according to Article 5 of the Fisheries Regulation 2015, which means that fishing is done in violation of the unregistered fishing laws and Without fishing, there will be found The meaning that is consistent with the definition of illegal fishing, lack of reporting and lack of control, or IUU fishing of FAO and IPOA-IUU shows that the relevant agencies in Thailand in The draft Fisheries Royal Decree 2015 has studied the definitions according to international principles, and the definitions are referenced from FAO as well.

3.1.1 Impact of Illegal and Unregulated Fishing (IUU Fishing)

IUU Fishing by the Southeast Asian Fisheries Development Center (SEAFDEC) found that the impact of illegal fishing, lack of reporting and control is a problem that affects food security Economy and society IUU fishery can occur in both small-scale fishery or commercial fishery at sea, in the ocean, or even in freshwater sources and can occur in both the exclusive economic zones and the royal highlands. Which can be divided into 4 main points, which are

IUU fishing is a violation of conservation measures and Manage fishery environmental resources and affect the sustainability of fishery resources as part of IUU fishing is overfishing and using destructive tools, which is the cause of many problems such as the decreasing number of fish and the problem of destroying marine ecosystems in a rate that is too high for natural resources to be able to restore aquatic resources in time. For examples of fishing equipment that often destroy sea ecosystems, such as trawl, which are important for destroying marine ecosystems. In which the fishing tools will look like a bag Which will use the trawler boat to provide Moving forward continuously Dragging from the seafloor to the water surface, which the amount of fish caught Not a lot of target aquatic animals And not yet fully grown, causing the risk of extinction and the United Nations Food and Agriculture Organization (FAO) has predicted Almost 30 percent of the total fishery production may come from IUU fishery, causing some fish with high economic values to be caught more than 3 times the allowable level.

3.2. What IUU fishing conduct in Thailand?

At present, Thailand's export value of fishery products Fishery GDP is estimated at 1.14 trillion baht, Thailand has the potential to produce fishery products is approximately 3 million tons per year to consumers(Archari Thawonmat, 2015). And buyers in the European Union Not only looking at the quality and price of the products but also focusing on the social and environmental conservation in the production of products, which international or Non-Governmental Organizations (NGOs) are non-profit and do not directly state or is a private voluntary organization has looked at Thailand in the area of IUU fishing, which aims to preserve marine

natural resources Conserve the environment and promote sustainable fishing in the fishing industry The European Union has declared Thailand a yellow card for illegal fishing. A yellow card means there is a risk of being identified as a possibility of identifying as a noncooperation country under the IUU regulations of the European Union. Regarded as a warning only Which in the past does not affect the suspension Entering fishing products caught by boats Thailand sent to sell in the EU market in any way. If getting a red card Thailand flag vessels to catch weeks to draw water, then suspended imports. Access from the European Union Which Thailand received the yellow card that results in affecting Thailand, divided into 4 areas as follows (Phuangthong Onura, 2018):

1. The image of the country which is the fact that Thailand received a yellow card shows that Thailand is a country that captures aquatic animals. Regardless of the environment and the law, it also affects the image of the use of human trafficking in the fishery sector.
2. Marine product exports an important aspect of the fishery against the law (IUU on Fishing) is shipped by sea. If Thailand received a red card that means being suspended from importing marine products to the European Union. Including other countries. Participating in the Party will cause the country to lack income from exporting sea products. And being an economic chain resulting in unemployment, fishery losses, abolishing the fishing industry, causing being snatched by trading partners from competitors in the marine economy and will take a long time to revive And increase investment to keep markets from the card back into the sea another time.
3. Ecology and aquatic animals The true content of the IUU Fishing Act, to raise awareness of marine and ecological resources and not catch too much fish, must come from Marine resources are recovering from the capture of new fishery instead of captured fish. If we have control of sustainable fisheries, Thailand will have endless marine resources. And continue to do sustainable fisheries in the future.
4. On the reorganization, due to Thailand being shown a yellow card which is a warning signal Illegal fishing (IUU Fishing) is considered a good opportunity for

development. Organize Thai fisheries to control and do legal fishing preserving the ecosystem in the sea and catching fish by considering the restoration of marine resources, which will also make the fishery sustainable.

From the above, it shows that the effects of illegal fishing are affecting in many ways, including the image of the country. Product exports aquatic ecosystem and reorganizing Thailand has various measures to prevent illegal fishing, which measures to solve the problems that come out. Has affected the local fishermen, resulting in a lack of income, economic decline, unable to continue fishing, therefore, quit fishing, sell boats, and turn to many other careers.

3.2.1 Do IUU-fishing apply to Thailand fisheries?

The problems of IUU in Thailand have been exacerbated by the importing countries that use and implement market-related measures with the exporting countries. Importing countries prohibit fisheries imported from their countries. The European Union, the world's largest fishery importer, is the first region concerned about IUU's fishing problems after their IUU Fisheries Regulations (EC 1005/2008) to prevent, stop, and eliminate illegal fishing. Reported and unregulated: IUU fishing has been enacted and enforced in 2010. EU has warned trade partners. IUU Fishing Support Measures If any partner does not comply with the measures, they can add market-related measures to ban all products from the exporting country.

From the current problems that Thailand receives a yellow card from the European Union on fishery products, because Thailand has not given much importance to the IUU's fight against fishing, they comment that Thailand's fishing laws are not effective in Fight IUU's current fisheries since they are not modern and do not comply with international measures or laws. From exporting fishery products from Thailand, if we are unable to export fishery products to the European Union, it may cause severe losses to the country's economy. Therefore, the state needs to analyze how our fishery law needs to be amended, and the new Fisheries Act 2015 is enough to comply with international standards such as FAO's CCRF and IPOA-IUU, including EC regulations to avoid additional problems that may arise from other

importing countries such as the United States and Japan, which can introduce new trade protectionism rules, such as countries in the European Union.

3.2.2. What IUU-fishing effect on Thailand fisheries problems?

From the analysis of measures to solve fishery problems of the government and related agencies, it is evident that the state has applied the framework and mechanism to solve the Western problems under the principle of the fishery that provides the highest return and is sustainable Maximum Sustainable Yield (MSY) to think about fishery management. Even though it is a universal concept that is accepted internationally But under the Thai society, it creates problems and complexities in fishery management, especially the creation of conditions that lead to conflicts and various types of problems, while the measures to resolve the problems in the above categories It is a command-and-control solution to liberate Thailand from the "yellow card" of the European Union. More than a correction problems for sustainable fisheries Considering the problems from the announcement of measures to resolve illegal fishing for local fishermen Saw that the problem occurred was a matter of adjustment of local fishermen to measures that solve problems that are fast due to the past enforcement Laws related to fishing as a way of lessening the past there was momentum from the European Union. Causing the Thai government and relevant agencies to adjust and formulate measures to remedy fisheries causing problems and impacts on fishermen in various ways as follows:

First, problems related to fishing license and fishing license which affects the fishery lifestyle in which local fishing boats by section large, no license or sometimes there is a license, but it is the wrong type of license due to the way of life in fishery of local fishermen, their fishing gear will be modified to be consistent. With seasons and fish species causing only one local fisherman to have a variety of fishing tools. Therefore, requiring one fishing boat to have a license therefore not consistent with the original way of life of the local fishermen and if continuing fishing, fishermen without a license or license mismatched card then the offense two devices none.

Second, problems related to the definition of offshore seas prohibiting those who get a local fishing license conducting fishing in offshore seas. Later, after stating that unless

permission has been granted by the Director-General or a person assigned by the Director-General, the Rights of local fishermen due to the past local fishing methods, there are no boundaries in the area. But will rely on local knowledge the size and potential of the fishing tools determine the extent and distance of the fishery. Therefore, limiting the extent of local fisheries to Coastal sea areas is based on principles and knowledge in science which is not consistent with the path, and at the same time, these measures are like conditions that lead to degradation of coastal resources. And does not cause fisheries like Sustainable as according to the spirit of the law because it will cause local fishing boats that have more than 80 percent of the total fishing boats in raying Must fisheries in all coastal areas, which will cause the concentration of fisheries in the coastal areas. The competition for resources and may cause conflicts between local fishing boats Which the local fishermen consider that Coastal sea area Should be designated as a protected zone for fishing vessels that have high-potential fishing tools to engage in fisheries rather than to limit the scope of fishing of local fishing vessels.

Next, Problems related to the definition of stateless vessels following the Fisheries Decree 2015, especially when the Ministry of Agriculture and Cooperatives has not been issued. Concerning the determination of the size of the vessels for local fishing or inland fisheries resulting in folk fishing boats all types and all sizes that are not registered under the law and cannot go fishing, so the local fishery in the morning must stop fishing temporarily lack of income for sustaining fear of being prosecuted by the state affecting the income and well-being of family members.

Final, Lack of clear measures to support or treat local fishermen affected by IUU measures, commercial fishing vessels, and folk fishing boats affected by the IUU measure to resolve different fishing problems vary according to the fishing conditions. At the same time, many remedial measures are inconsistent. With the lifestyle and ecological conditions in each area, it is a measure that uses centralized thinking and top-down, or some measures do not respond to traditional fishing practices that fishermen used to carry and carry on from one generation to another. The state has remedied by buying fishing boats but it is not a solution to social problems way of life

in any way is also an increase in unemployment problems must refrain from fishing for a new course.

From government measures to prevent illegal fishing is a solution to the problem of responding to the EU in the economy which will make Thailand send marine products, which can be sold to the European Union It is also a good image of Thailand. Sustainable fisheries save the environment and also organizing fisheries, which have good results and various impacts, causing fishermen groups to protest against the state because it affects both social, economic and environmental, causing the local fishermen unable to go fishing, can't find less fish or can't find any fish at all. Not enough to support until having to quit fishing local people go to other careers that have enough income to make a living from preventive measures for illegal fisheries.

3.3 The case study of other countries receiving yellow cards from the European Union

But not only Thailand has encountered the problem of limitation of product delivery to developed countries. Especially in the case of receiving yellow cards from the EU, but many countries can dismantle the entire fishing industry until receiving "green card" that are worth studying as an example lesson.

The Philippines having been attached to the yellow card trap for 1 year from 2014-2015 as a base for not cooperating with foreign countries in IUU- fishery management. The Department of Agriculture of the Philippines has proactively implemented bilateral cooperation with Pacific countries to be able to monitor fishery of Filipino vessels, which is outside of the maritime boundary and to improve the Philippine Fisheries Code of 1998 by adding provisions regarding offenses and increase measures to enforce penalties for violators including traceability.

While South Korea received a yellow card from the EU Due to illegal fishing in western African waters The Ministry of Ocean and Fisheries has established a boat inspection system. That can track the movement of ships from satellites and all fishing vessels must be equipped with a logbook system that can share information about real-time fishing operations, as well as amendments to the Distant Water Fisheries Development Law. Act: DWF), effective since July 2015, authorizing officials to

confiscate fishery products Illegal at the port Which increases the ability to perform with fishing vessels Korean nationals who conduct IUU fishing in waters outside of Korean jurisdiction and increase more severe penalties for violators

As for Fiji Solving problems through collaboration from many the agency passed a memorandum of understanding with other islands. In the same area As well as collaborating with police, navy, and the central bank. To solve various problems of these countries the important thing is Determination and determination to solve problems and with strict law enforcement.

Also, the European Union announced a red card and banned all fishery products from Cambodia from March 2014. The Cambodian red card means that all fish products from the European Union are banned. Will affect Cambodia's overall fishery exports to the European Union Due to the importation of fishery products between ASEAN member countries such as fishmeal and fresh squid As raw material Before being processed and exported to the EU market Other ASEAN member countries that do not receive a red card, therefore, must avoid using raw materials from the countries receiving the red card. Which is an obstacle to achieving ASEAN's vision of being the same market and production base.

CHAPTER 4: WHAT HAS BEEN THAILAND'S RESPONSE?

4.1. Thai business sectors' response?

Aside from improving Thai fishery management and creating a system for catching Thai fisheries to determine the origin of Thai fishery products Not to involve fishing in IUU, the enforcement of the EU IUU regulations. Also causing cooperation between the private sector with the cooperation in formulating solutions to tackle IUU fishery problems during the private sector along with promoting the implementation of measures to solve the problem of illegal fisheries by the government, such as the establishment of the Thai Fishery Producers Coalition by the cooperation network between the fishery industry and the main fishery product manufacturers of Thailand, consisting of 8 associations, namely the Fisheries Association of Thailand Thai Fishmeal Producers Association Thai Feed Manufacturers Association Thai Frozen Food Association Thai Food Processors Association, Shrimp Association, Thai Tuna Industry Association. And fisheries associations outside Thai waters jointly set up a confederation Thai Fishery Producers Coalition (TFPC) to promote responsible and sustainable fisheries throughout the supply chain, which will lead to an effective and sustainable fishery management solution for IUU.

The Confederation of the Confederation's preliminary guidelines provides a minimum standard of practice between the fishing industry and fishery product manufacturers. By focusing on fishing from legitimate sources and tools Fisheries that do not destroy the environment And not using illegal labor Including the production process following food safety principles, consisting of 3 methods which are

The first approach is to reduce illegal fishing. Through collaboration between feed mill operators, Fishmeal factories and Surimi fish processing plants do not purchase raw materials from fishing boats during the spawning period for 3 months from April 1 - June 30 of every year.

The second approach is responsible for fishery promotion. Under the push and development of the process manufacture of fishery products to comply with production standards and responsible fisheries. And support fishermen to comply with the requirements of the market mechanism The main goal is to increase the trawl size

to 4 centimeters and to use the labor in the fishery sector legally. As well as supporting the fishmeal factory that is ready to adjust the production to meet Good Manufacturing Practice (GMP) standards.

And the last way to support sustainable fisheries in various processes From the production area fishery, the fishing environment, including the employment of fisheries in the fishery sector by marketing mechanisms, beginning with operations in the Andaman Sea region First.

4.2. Thai government's response?

Since the first IUU came into force on January 1, 2010, the Department of Fisheries, as the competent authority of the IUU, has improved. Measures for managing Thai fisheries following Thailand's obligations under the law International and IUU fishery solutions at the international level, as well as establishing a process for inspecting and certifying the origin of Thai fishery products. Under the Thai fisheries certification system under the IUU regulations, the Department of Fisheries also cooperates with representatives of the European Commission. In examining the progress of the Thai operations since July 2011 and October 2012 until the latest inspection and evaluation of the country's progress in October 2014. Which the Office of Foreign Agricultural Advisors to receive an informal notification from the European Commission About the tendency of declaring Thailand to be a country that does not cooperate The Department of Fisheries has been negotiating and cooperating in resolving deficiencies in Thai fishery management measures. According to the notification of the European Commission, however, after the European Commission still has the opinion that Deficiencies in Thai fishery management as informally alert Has not been resolved to be effective And does not appear reasonable progress Therefore announcing that Thailand is likely to be a country that does not cooperate Or giving a yellow card to Thailand on 21 April 2015, which the Department of Fisheries has cooperated with officials of the European Commission. In the examination and evaluation of the progress of Thailand between May 2015 as well.

Although the announcement to give a yellow card or the status of countries that are likely to be uncooperative countries will not have a direct impact on the quantity and value of Thai fishery exports to the European Union. However, to avoid

the potential effects on Thai fishery product exports if the expiration of the 6 months since the announcement of the yellow card given to Thailand the European Commission believes that there are still shortcomings in Thai fishery management. Without showing any progress in resolving deficiencies in Thai operations to be consistent with the obligations under international law. Including guidelines for solving IUU fishing problems. According to the IUU (IPOA-IUU) Fisheries Action Plan, as recommended by the European Commission. Leading to the announcement that Thailand is a non-cooperative country under Article 33 and enforcing measures to restrict the import of fishery products from Thailand under Article 38 of the IUU regulations, which will affect the quantity and value of fishery exports Of Thailand in an instant as a whole As a result, the Department of Fisheries has formulated an action plan for solving the 4 IUU fishing problems in Thailand, as described above. To be a way for the Thai government and private sector to improve Thai fishery management measures to be in line with the obligations under Thai international law and the IUU fishery solution plan according to the action plan between countries against IUU fishing following the recommendations of the European Commission. To prevent the potential impact on Thai fishery product exports from the announcement that Thailand is a country that does not cooperate and enforces measures to restrict the import of Thai fishery products by the rules of the said IUU regulations.

Action plan for solving IUU fishing problems in Thailand consists of 6 action plans Covers amendments and prevention of IUU fishing in Thai fishing vessels. And within Thai waters and foreign waters As well as preventing the importation of aquatic products from IUU fishing into Thailand including

1. Fishing boat registration and fishing license
2. Marine Stewardship Council (MSC)
3. Vessel Monitoring System (VMS)
4. Improvement of traceability systems
5. Fisheries Act and Secondary Law Amendments
6. National Plan of Action - IUU (NPOA-IUU)

The implementation of the IUU fishing action plan in Thailand is following the Department of Fisheries' operational guidelines. This is the main unit responsible for the implementation of the IUU regulations in Thailand and is the agency that has the power to cooperate and coordinate with EU officials to ensure the implementation of the Fisheries Action Plan Thailand's IUU is efficient and systematic. Consistent with the urgent operation situation According to the amendment period of operations within 6 months from the announcement of the European Commission's yellow card, Therefore, the Command Center for Combating Illegal Fishing (CCCIF) has established the command center for combating Illegal Fishing (CCCIF) which has the power and duty to integrate the operation of related government agencies such as Harbor Department, Department of Provincial Administration, Department of Local Administration. Water Police Division Royal Thai Navy Coordination Center for Preservation of National Interest by the Andaman Sea, Customs Department, Ministry of Foreign Affairs Ministry of Labor And the Ministry of Social Development and Human Security Including local fishery associations in 22 coastal provinces And various private sector associations Including overseeing the implementation of the action plan Said to be systematic and effective As well as coordination and cooperation with officials of the European Commission.

CHAPTER 5: ANALYSIS

The importance of the EU fishery market, which is the third-largest fishery export market in Thailand, after the US and Japan fishery markets, especially the importance of the canned seafood and processed seafood industry in Thailand. As a result, after the entry into force of the EU IUU regulations on fishery products imports according to the scope of the IUU regulation in Article 2 (8) from 1 January 2010 onwards. Major export fishery products of Thailand are shrimp and squid products and products. Including canned tuna falling under the scope of the IUU's regulation to provide a catch certificate to certify the origin of Thai exported fishery products which do not involve IUU fishing following Chapter 2 of the IUU regulations. At the same time, it also affects cross-border amendments to improve Thai fishery management to be in line with IUU fishery resolution measures of the European Union following IUU regulations to maintain the export market of fisheries in Thailand worth over 32,000 million baht per year.

Which before the enforcement of IUU regulations on 1 January 2010, the Ministry of Agriculture and Cooperatives Assigned the Department of Fisheries to perform duties as the main organization of Thailand (Authorized authority in the implementation of IUU regulations, such as the preparation of operational data and problems in Thailand. Establishing a certification system for catching fish and aquatic products obtained from non-fishery IUU for export of fishery products to the European Union. Including assigning the Department of Fisheries to conduct negotiations with EU agencies to discuss ways of operating in Thailand the Cabinet has approved the Department of Fisheries as the main responsible agency in Thailand on 28 July 2011. The Department of Fisheries has issued a letter stating the assignment of powers and duties as a competent authority of Thailand to the Department of Marine Affairs and Fisheries of the European Union (DG-MARE) of the European Union. Following the provisions of Article 20 of the IUU Regulation, which gives the Department of Fisheries status as a responsible agency in Thailand for the implementation of IUU regulations completely.

After the Department of Fisheries discussed with the Department of Marine Affairs and Fisheries of the European Union. About the guidelines for Thai operations

following the regulations of the IUU. Especially the establishment of a system for catching fisheries in Thailand Which causes amendments to Thai fishery management to be in line with and covers the 3 solutions of global IUU fishery, including

- 1) Illegal fishing control, including measures to expedite the registration of Thai fishing vessels and requesting a license to use fishing equipment legally including port state measures to monitor IUU fishing in Thai fishing vessels
- 2) Control of unreported fishing, including measures to encourage Thai fishing vessels to record fishing records By using a fishing logbook to collect fishery data and statistics on Thai fishing vessels, including measures to install a VMS tracking system on fishing vessels of 30 tons or more for Monitoring and list of fishery results of Thai fishing vessels Especially for fishing outside waters In the exclusive economic zone of a third country Or the high seas area
- 3) Unregulated fishing: control measures for Thai fisheries According to the Fisheries Act 2015, both in Thai waters According to rules in the secondary or subordinate laws And the announcement of the Ministry of Agriculture and Cooperatives Announcement of the Department of Fisheries And more than 50 other relevant regulations and measures to control fisheries outside of Thai waters. Combined with the measures to install a fishery tracking system (VMS) for the control and monitoring of fisheries of Thai fishing vessels Especially fishing boats that fish outside waters In the exclusive economic zone of a third country Or in the high seas area Including establishing an organization responsible for supervision and control of Thai fishery And the use of fishery resources by the Thai fishery resource management guidelines

Also, the Thai private sector is cooperating in the establishment of the Federation of Thai Fishery Products. To promote the operations of the private sector to be following the rules and regulations of the IUU together with the operations of the Department of Fisheries as the main agency of Thailand as well following by

First, revising the rules of the new Fisheries Act of Thailand to be in line with the international fishery management measures. And penalties should be established appropriately and severely enough to correct and prevent IUU fishing.

Second, improving the draft of the national plan for prevention to stop and eliminate IUU (Thailand National Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing: Thailand NPOA-IUU) to suit the Thai fishery conditions. And following the criteria of the IUU's Anti-Fishery International Plan.

Third, speeding up the installation of the Vessel Monitoring System (VMS) quickly, especially on Thai fishing vessels that operate in offshore waters.

Last, increasing rigidity in traceability systems throughout the production line more robust and effective

Although the announcement to Thailand is likely to be listed as a country that does not cooperate or give yellow cards to Thailand of the European Commission like this. It will do not have an immediate impact on Thailand's fishery exports because it still does not comply with the rules for enforcing trade restrictions. After the European Commission announced that the country exporting fishery products to a status of non-cooperation country and with the approval of the European Council to enforce trade restrictions under Article 38 of the IUU regulations, but if the Thai government and private sectors continue to ignore after 6 months Not cooperate in the improvement of fisheries management and fishery product export procedures following IUU regulations and the European Commission's recommendations for improvement of Thai operations. This is in line with the IUU's approach to solving fishery problems at the international level, including following the obligations under international law in Thailand. The listing of Thailand is a non-cooperative country, such as the announcement of the list of Cambodia, Guinea, and Sri Lanka of the European Commission. In such cases, will inevitably result in the European Commission With the approval of the European Council Enforce trade restriction measures under Article 38 of IUU regulations on Thai fishery product exports Which not only affects the export of Thai fishery products to the EU Which is worth more than 242,691 million baht per year immediately but may also affect the image and credibility of Thailand with other trading partners Including the impact that exports of Thai fishery products to other countries as well.

5.1. What is the impact of receiving the yellow card from the European Union on the Thailand's Socio-Economic?

Currently, the value of the shipping of the Thai fishery industry is enormous. Thailand is considered a country with high potential for the production and processing of seafood and fishery products which is an exporter of aquatic animals such as shrimp, squid, frozen fish and tuna products are one of the world's top exporters. The export of fishery and seafood products has a high proportion of income generation in the country and fishing profession that is important to the country's economy by being a source of labor employment income and causing many downstream industries after the European Union (EU) has given a yellow card as an official warning. In the case that Thailand does not have a concrete resolution regarding illegal fishing or IUU Fishing in line with international law such problems if not properly resolved urgently causing the suspension of imports of Thai fishery products may cause damage to the whole Thai fishery industry.

The fact that Thailand is given a yellow card means that the EU has determined that Thailand is at risk will be listed as a possibility of identifying as a non-cooperating country under the IUU regulations of the European Union. The yellow card is considered a warning and does not affect the suspension of fishery products caught by Thai which export to the European Union in any way. If a red card is issued, all types of fishery products caught by Thai flag vessels will be suspended from entering the EU market. Except for exempted items such as aquaculture products for fishery and processed fishery products that import raw materials from other countries for processing in Thailand may be affected, such as canned tuna, with Thailand having to improve the traceability system. So that the European Union can be confident that there will be no mixing of aquatic products captured by IUU ships into the supply chain. If EU countries are not confident in the traceability system can refuse to import products.

If Thailand is unable to resolve the IUU Fishing assessment, the impact of the ban on fishery products exported to Europe By extending the overall picture, the government will lose the export figure by 100 billion and the whole system of fishermen experiencing the crisis Both fishing boat owners in the country Over 100,000

Thai and foreign workers. Including the originator such as ice maker Packaging and fishing equipment manufacturer Including destination operators such as product exporters and distributors Although the Thai government has played a role in resolving illegal fisheries in the past But seems to be creating a new problem Causing the price of fishery products in the country to rise due to high production costs Many entrepreneurs are unable to operate. More than 60,000 workers are also affected. Including the processing industry that lacked raw materials due to the part of the fishermen unable to operate the business. It is very closely watched on the current IUU fishery solutions, whether or not they can be resolved. How to solve the problem in the next direction and will not add new problems to both the Thai fishery industry and adversely affect both the people in the country as in the past.

Besides, the impact on the EU's IUU measures on Thai law The European Union has been conducting a campaign against IUU fishing for a long time by adopting IPOA-IUU, which has only international status. Therefore, the IUU regulations are internal laws that apply only to member countries of the European Union. However, the reason that the EU IUU measures are effective in countries outside the EU. That Europe Due to the assessment of the fishery situation of those countries by the European Union which is designated as a yellow card and a red card for yellow cards means to warn the country to solve the IUU fishery problem. The red card means to prohibit EU member states from importing their fishery products because EU member states must respect the rules of the union. Europe These Member States must, therefore, deal with fishery products from countries outside the European Union following the assessment of the fishery situation. Therefore, countries that export fishery products to the EU Member States must inevitably proceed by EU IUU measures. The reason why Thailand As well as other countries in Asia, the European Union considers yellow and red cards such as Cambodia. Sri Lanka, Philippines Taiwan Vietnam because two-thirds of EU fishery products are imported from foreign countries. Also, the Asian countries that export these fishery products are countries in the production belt to convert resources into products. Causing these countries to change their fishing methods without using IUU fishing would result in a chain. For example, Thailand changed the import of tuna from Cambodia, which received yellow

cards. Is importing tuna from India to produce canned tuna products to allow the said products to be allowed to be sold in the Member States of the European Union, In other words, the IUU measure has resulted in Thailand changing its trade partners into countries that do not receive yellow or red cards. Therefore, there is a question that must be considered in the future that countries in the ASEAN region do not cooperate in producing fishery products.

Moreover, the dimension of relations between Thailand and the European Union is a new dimension of international law, although Thailand has not signed any bilateral agreements that force Thailand to comply with the EU's IUU measures. But the reason why Thailand has to comply with the EU's IUU measures is that the relationship dimension is created from the EU's Bargaining Power to Thailand in all 4 aspects, namely, first, market power. Thailand can utilize the market power of the European Union in terms of creating credibility for the quality of Thai products to other countries outside the European Union, through the permission of Thai products to be distributed in the member countries of the European Union. This is to show all countries that Thailand's products have standards. Second, technical power. Because the European Union determines the scope of the IUU measures, it must have the expertise and methods to resolve IUU fisheries. In this part, Thailand can ask the European Union to help transfer the said knowledge and methods to Thailand to release the yellow card. Third, the monitoring power The EU has a regulatory structure for fisheries by competence authorities. Therefore, Thailand must consider whether it has such an organization or not, for example, the Department of Fisheries has the power to determine whether Thailand's fishery products comply with the IUU measures or not which power to set the scope of the agenda-setting power, which is the power to control the agenda or negotiations. And proposals received from those meetings or negotiations.

Therefore, although the EU has more power to negotiate with Thailand. But Thailand can turn the crisis into an opportunity by studying the bargaining power and using it for benefit especially the implementation of the EU's IUU fishing solution without employing experts. However, Thailand should consider their social and cultural conditions, consisting of not complying with all EU rules and procedures,

such as studying whether the European Member States use different fishing methods or not and how is it different. This is based on any reason which does not conflict with the EU IUU measures and study what aspects of fishery in Thailand are different from the member countries of the European Union. After that, the study will be considered and adapted to suit the context of Thailand. For example, the EU often sets the number of fishery quotas for different countries. If the amount of fishery quotas is distributed to all member countries, it appears that there are still stocks remaining. The remaining fishery products have to become food for other animals. However, Thailand can claim that this practice is inconsistent with the consumption context of Thai society which can use fishery products for consumption in a variety of methods. In this case, Thailand may negotiate by determining the season that allows fisheries to use the system for calculating the number of catch fish that is appropriate for Thailand. Specify the fish that needs to be preserved Etc. Instead of determining the number of quotas for fishery products or if the technology that the EU uses in fisheries following the IUU measures is expensive, Thailand does not need to comply by proposing other methods instead.

In addition, IUU fisheries can affect the economy at both the national and regional levels. It will have a severe negative effect on the economy and national income of developing countries with medium-sized wealth. Including poor countries especially the countries that have the main income from fishing and industry related to fishery activities. Damage from fisheries IUU allows the state to have a turnover of lower-than-expected domestic income from the fishery. Including lower taxation that has real fishing activities also causes the state to lose resources which are a source of income for the country. IUU fishery from ships smuggling into the waters or smuggling on the high seas and will affect the employment of coastal states or territorial countries. Because the smuggling boats use fishermen who are not fishermen of the coastal state and the fishing boats that operate in the High seas are usually modern fishing vessels. A small number of sailors tend to be unloading in the sea. And sending those fish to a third country without passing through the fishing country host country or the country in which the boat is registered. In both cases

resulting in There is no direct or direct fishery labor hires from the ongoing fishery industry in the country's territorial waters.

IUU fishing will impact fisherman's income in the small fishing community. Local fishery groups in developing countries by the IUU fishery have reduced their income. Expenditure on fishery and plantations will increase as fish population's decline, the quality of fishery decreases which may have a smaller proportion of fish than the market size.

5.2. What IUU-Fishing create sustainability for Thailand's fishery system?

Thailand's fisheries are illegal, unreported, and unregulated. In addition to destroying fishery resources still affecting the ecosystem and mainly for economic benefits by ignoring the conservation of fishery resources and often bypassing state controls, resulting in numerous impacts such as

IUU fishing is a violation of conservation measures and Manage fishery environmental resources and affect the sustainability of fishery resources as part of IUU fishing is overfishing and using destructive tools. Which is the cause of many problems such as the decreasing number of fish and the problem of Destroying marine ecosystems In a rate that is too high for natural resources to be able to restore aquatic resources in time Examples of fishing equipment that often destroy sea ecosystems, such as trawl, which are important Destroying marine ecosystems In which the fishing tools will look like a bag Which will use the trawler boat to provide Moving forward continuously Dragging from the seafloor to the water surface In which the amount of fish caught not a lot of target aquatic animals And not yet fully grown, causing the risk of extinction? And the United Nations Food and Agriculture Organization (FAO) has predicted Almost 30 percent of the total fishery production may come from IUU fishery, causing some fish with high economic values to be caught more than 3 times the allowable level.

Illegal fishing, lack of reporting, and lack of control In addition to destroying fishery resources Still affecting the ecosystem Due to illegal fishing, lack of reporting, and lack of control Mainly aimed at large predatory fish, causing the population of these fish to drop dramatically As a result, the balance of the food chain in the

ecosystem when large fish decreases, resulting in illegal and uncontrolled fishing vessels. Turned to catch more small fish Resources are therefore used more quickly than they can be produced to replace them in time.

Illegal fishing, lack of reporting, and lack of control Mainly focus on the fishery for economic benefits By not interested in the conservation of fishery resources And often bypassing state control and therefore are free to use fishing boats Fishing tools And fishing methods regardless of area or season Resulting in a large number of aquatic animals that are not the target aquatic animals being caught inappropriately or dumped into the sea United Nations Food and Agriculture Organization (FAO) reports that no more than 20 million tons of fish are discharged into the sea per year, or equivalent to one-quarter of the world's aquatic products.

IUU Fishing reflects the impact on conservation measures, marine ecosystems, and biodiversity. As Thailand receives a yellow card for fishing on the world stage, the public, private sectors, and Thai fishermen become aware of actions and collaborated to solve the said problem to be accepted again on the world stage and also to create sustainable development that meets international standards for Thailand.

5.3. Recommendations

Measures to resolve IUU fishing following EU anti-IU fishing regulations Causing impacts on Thailand as a country of exporters of many fishery products Including causing control, inspection and certification of the origin of Thai exported fishery products Under the Thai fisheries certification system by the rules on fisheries certificates for importing fishery products from third countries And the improvement of fishery management following the IUU Fisheries Action Plan in Thailand, which is in line with the suggestions for fishery problems. The European Commission's IUU, following the rules for listing non-cooperative countries Resulting in Thai fishery management in line with the obligations under international law, In particular, the state obligations under various conditions according to the United Nations Convention on the Law of the Sea 1982 (UNCLOS) and in line with fishery resolution solutions. IUU following the IUU's International Plan of Action against Fisheries.

At the same time, Government and private sector operations in Thailand to comply with EU anti-fishery regulations IUU also causing burdens and expenses for the government and private sectors of Thailand as well, such as the burden of the government in accelerating the implementation of the action plan to solve the problem of illegal fishing in Thailand within 6 months to release the status of The countries that are likely to be listed are those that do not cooperate and prevent the enforcement of measures to restrict the import of Thai fishery products. Which leads to the conflict between the government agencies and the private sector that is unable to improve the operations to be following the criteria in the action plan for resolving illegal fishing in Thailand within the specified period or the burden of supporting expenses to assist the operators in the installation of the Vessel Monitoring System (VMS) according to the action plan to solve the problem of illegal fishing in Thailand. Which has a high operating cost including the burden of expenses of Thai fishery product exporters also affects the competitiveness of Thai fishery products in the EU fishery market.

Although the announcement for Thailand is likely to be considered and listed as a non-cooperative country or the European Commission's yellow card on 21 April 2015. The European Commission's yellow card announcement for Thailand Government agencies and the private sector of Thailand, it is necessary to cooperate in the improvement of fishery management by the Thai Fisheries Illegal Action Plan, which is in line with the European Commission's fishery management recommendations, such as cooperation in fishery improvement. Black Operate and enforce compliance with the Fisheries Act 2015 and secondary laws of Thailand And cooperation in controlling and inspecting fisheries in Thailand According to the control measures of entering and exiting the fishing port of Thailand To improve the internal fishery management of Thailand To be consistent with the obligations under international law. And lead to deposition of Thailand from a country that is likely to be a non-cooperative country.

Therefore, government agencies and the private sector of Thailand need to cooperate in implementing the action plan to solve the problem of illegal fisheries in Thailand according to the recommendations of the European Commission's Fisheries Management Amendment. To have an amendment to improve Thai fishery

management effectively Comply with international legal obligations and the criteria in the IUU's International Action Plan against Fisheries, which are effective and sustainable solutions for improving Thai fishery management.



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