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Unveiled the Stories of the Fisherman's Families: A Phenomenological Study

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ABSTRACT

Illegal fishing is a common practice among Filipino fishermen and the families who are left behind were the ones to suffer the consequences of their actions. This study unveiled the stories of illegal fisherman's families. The study was conducted in selected barangays in Ozamiz City, Misamis Occidental. There were eight immediate families of fishermen that were interviewed using a structured questionnaire made by the researcher. The study used Moustaka's Transcendental Analysis of the data. The phenomenological study revealed the following four main themes such as worries and concerns of families, avoidance of illegal acts, financial instability, and pillar of the home. This research clearly speculates that the family of fishermen experience a wide variety of challenges related to their husband getting caught by Maritime Police. As a fisherman who got caught for illegal fishing, families could not help but worry and be concerned for their welfare. Avoid fishing illegally again as it can detriment the income, they have that could lead to a greater financial burden and instability. Families of fishermen may explore ways in which they can use to sustain their financial needs other than their husband's income from fishing. They should also persuade their husband to stop doing illegal fishing and start being a law-abiding citizen to be able to continuously fish without the burden of guilt and fish peacefully.

Keywords: illegal fishing, fishermen, families, financial instability, worries and concern

INTRODUCTION

Fishing that is illegal, unreported, and unregulated has long been seen as a regulatory problem (Rosello, 2020). Various parties may break the law carelessly or on purpose. Families who are left behind after their member has been detained due to illegal fishing's major concern is the lack of food and income (Milne, 2021). Most, if not all, families depend directly on fishing as their primary source of income (Rizal & Anna, 2019). Families mostly relied on their husband's or fathers' catch for food and expenses.

Fish is the second most common food in the Philippines after rice and has been a significant source of income for Filipinos since the beginning of time (Bairagi et al., 2022). Correspondingly, Ngov (2018) added that it is very important to understand and know the different fishing laws and their equivalent penalties to avoid getting arrested due to ignorance. It is a stated policy to restrict access to the Philippines' fisheries and aquatic resources for everyone's use and enjoyment, particularly the female and youth populations (de la Cruz et al., 2022). It strives to enhance fishing operations while preventing any environmental harm and maintaining the available natural fishing resources (Alfio et al., 2021). It can aid in our understanding of the requirements needed to protect fish populations for future generations.

The Republic Act No 8550 or the Philippine Fisheries Code of 1998 was amended by Republic Act No10654 also known as an act to Prevent, Deter and Eliminate Illegal, Unreported, and Unregulated Fishing was enacted in December 2010 to improve the management of Philippine fisheries resources

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(Gomez, 2020; Acosta, 2019). The main purpose of the code is to promote sustainable fishing practices and to protect the environment (Stephenson et al., 2018). The code sets out regulations for the catch, possession, and trade of seafood. In addition to punishing fishermen who engage in unlawful fishing, the rule also enhances monitoring, control, and surveillance systems by fostering tight collaboration between local and federal governments, with the involvement of the corporate sector (Alvarico, Cuevas-Ruíz, & Dinsay, J. B. 2021). It highlights the reciprocal of their respective areas' control over the prevention of illicit fishing (Gomez, 2020; Acosta, 2019).

Due to family's tight concerns, they resort to fishing illegally to get more than what nature has to offer (Phelan et al., 2020). They rob marine life of the food and shelter it needs to live for its sake (Crist, 2019). Alvarico et al. (2021) noted that fishermen were motivated to engage in illicit fishing by their families, friends, and communities. They spur to shift their traditional fishing methods due to their family needs, particularly the education and the unexpected hospitalization among family members (Alvarico et al., 2021). According to Dunaway & Macabuac (2022), illegal fishermen frequently need to discover ways to supplement their nutrition with other sources to survive. Regrettably, the government has not been able to assist the fishing business sufficiently. Many fishermen have turned to illegal activities to make ends meet, and that includes dynamite fishing, fishing without a license, fishing using a fake license, fishing with inappropriate gear, and fishing in illegal waters (Resosudarmo & Kosadi, 2018). As a result, such fisheries typically experience high levels of illegal fishing.

In the Philippines, many fishermen are arrested for illegal fishing (Song et al., 2020). Illegal fishing is a common practice among Filipino fishermen, particularly in province areas (Macusi et al., 2021). Under the Philippines' law, fishing without authorization and causing damage to the marine ecosystem is considered illegal and punishable. Some of them are released, while others are not. Many of the released fishermen are not able to return to their homes because they do not have the money to pay for their boats and equipment (Sidiq et al., 2022). The released fishermen are also not able to find work because they do not have the money to buy the necessary equipment (Mozumder et al., 2018). The country only has a small amount of arable land. As a result, many people rely on fishing for their livelihoods (Coulthard et al., 2021).

Illegal fishing offenses can have serious consequences (Hanafi et al., 2019). Bycatch, or unintended catches of fish, can be devastating to populations and ecosystems. Fishermen who engage in illegal fishing face stiff penalties, including fines, prison time, and even loss of their licenses (Ame et al., 2021; Ilyas et al., 2019). Those who choose to engage in this practice are putting themselves and others at risk, both themselves and their families (Sutinen et al., 2018; Ayu, 2018). The families who are left behind were the ones to suffer the consequences of their actions. Their families who rely mostly on their fishing job will be forced to work and earn money on their own once they are arrested just to provide for the family's daily expenses.

Hence, the researchers were interested in finding out the stories of the family of the fisherman who were arrested due to illegal fishing.

MATERIALS AND METHODS

This study used the qualitative approach using the descriptive phenomenological design. The descriptive phenomenology of research consists of four steps: bracketing, intuiting, analyzing, and describing (Bahtiar & Sahar, 2022). Intuition entails remaining open to the meanings assigned to the phenomenon by individuals who have experienced it. Using this method, the researchers attempted to approach the phenomenon in a new, rather naive way (Churchill, 2018). Carcary (2020) implies that analysis focuses on discovering and extracting key remarks and reflections from persons who were interviewed, categorizing and evaluating them for their contribution to understanding the phenomenon under study. Researchers performed the last step by simply describing their conclusion which was drawn from the data analysis

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(Castleberry & Nolen, 2018). This research design is considered in exploring the stories of illegal fisherman's families: a phenomenological study. The study was conducted in selected barangays in Ozamiz City namely: Barangay San Antonio, Barangay Carmen Annex, and Barangay Malaubang where families of the fishermen are currently residing. The researchers chose these barangays because of the fishermen and families residing in the area. Ozamiz City is home to the Fuerte de la Concepcion y del Triunfo also known as Cotta Fort and Shrine, a fort built in 1755. It is known as the coastal component of Misamis Occidental.

The study includes eight (8) immediate families of fishermen. Snowball sampling was used to identify the participants of the study. The participants were chosen based on the following criteria: (1) family of fishermen (2) who are residing in selected barangays in Ozamiz City, (3) of legal age, and (4) willingness of participants.

The researchers developed an interview guide that served as the main tool in gathering the needed data from the participants. The participants were asked for their personal information. Further, families were asked the core questions about their experiences. Recording devices were used to record the responses of the participants during the interview.

This study employs Moustakas Phenomenological data analysis. In the way of thinking phenomenological data, Moustaka's statement says, follow a systematic procedure that is flinty yet accessible to qualitative research. This method is used to transcript all information that was gathered from the interviews that were analyzed using the Moustakas (1994). The Moustakas' Data Analysis or transcendental phenomenological reduction is the best suited methodologically for the study and used to achieve a textural-structural synthesis and essence of the experiences or challenges. This method served as a guide in analyzing the data gathered. The steps in this method are (1) Bracketing, (2) Horizonalization, (3) Clustering into Themes, (4) Textural Description, (5) Structural Description, and (6) Textural-Structural Synthesis.

RESULTS AND DISCUSSIONS

The analysis of the written transcript from the participants' in-depth interviews revealed four (4) commonly unveiled stories of illegal fisherman's families. With the prevalence of these experiences, the following themes were formulated: worries and concern of families, avoidance of doing illegal acts, financial instability, and pillar of the home. The participants of this study were eight (8) immediate families of fishermen. They were all female and the majority of them are families who were only relying on fishing alone.

3.1 Worries and Concerns of Families

This theme shows that one of the challenges encountered by families of illegal fishermen is worries and concern of families towards fishermen. As a fisherman who got caught for illegal fishing, families could not help but worry and be concerned for their welfare. It would take a lot of emotions, time, and money when a member of your family is caught. Concern for their welfare and worries of where to get money to bail them is inevitable.

Results show that participants are worried and concerned about their husband getting caught as they are the only one who provides for their daily needs. Some even were worried about where they would get money for their bail just to get their husband out of lock-up jail. Some even were worried because fishing has always been their only source of living. Being caught for illegal fishing could cause them to worry and be concerned both for their member and for their income. This was mentioned in the answers of the following participants:



Code Name	Responses
P1	"We bailed out six thousand per head, we were so worried because that is the only way to gain and provide our daily needs."
P2	"I was so nervous the moment that I heard that my husband is arrested by the Maritime Police, it was really hard for us to look for three thousand for bail."
P3	"I'm worried because fishing is the only way we make a living."
P6	"We were so worried that time because we had to bail eleven thousand each and we don't have that kind of amount of money."
P7	"I was worried that my son gets arrested but then I'm happy because my son is okay, and he can be able to go home at that time because of the bail."

Fishing is one of the oldest ways of living, and those who live by the coast rely on the wealth of aquatic resources (Said & MacMillan, 2020). Due to the great demand, many fishermen, unfortunately, turned to illicit ways for a quick and more lucrative method of fishing (Okafor-Yarwood et al., 2022). The acquired illegal practices among fishermen resulted from the worries and concerns of the families of those fishermen (Da?tekin et al., 2022). The family experienced anxiety, terror, worries, and concern upon being discovered engaging in illicit fishing activities (Denton & Harris, 2021).

Findings show that being caught in illegal fishing can cost a lot of time, effort, time, and money for the families who were left behind. Families worry for their husband's welfare and worry about the food that they would eat when the only source of income they have is through fishing. The finding is consistent with the finding in the study of Da?tekin et al. (2022) and Denton & Harris (2021) that families show worries and concern for their husbands when caught in illegal fishing. These were supported by Conflict Theory which shows signs of conflict due to their family members being caught illegally fishing which could cause them to worry and be concerned.

This implies that being caught illegally fishing could get the family worry and concerned about them. It entails that fishing illegally, through means or ways of fishing, or through fishing without a permit, is accompanied by worries and concern knowing that you are doing illegal things just to earn. It is important that families of fishermen should talk to their husbands not fish illegally and not to take life fishing. They should also seek the help of the local authorities for proper guidelines on fishing.

Avoidance of Doing Illegal Acts

This theme shows that one of the coping strategies of families of illegal fishermen is avoidance of doing illegal acts. Being caught in illegal fishing could get the fishermen to learn a lesson and they would be most likely to avoid that situation again. Violators would tend to avoid doing illegal acts especially when caught from doing it. This is one of the ways they would do to avoid being caught again and be able to fish peacefully and without thinking of being caught.

Results show that participants would avoid doing illegal acts. They would stop doing prohibited acts and do things legally. Some even mentioned that they taught their family member to stop involving themselves in illegal fishing anymore and reprimand them to stop so they could continue to fish as it is the only means of income for them. There are even those who declared that they do not involve themselves again in such illegal acts and try to be a law-abiding citizen.

Some participants revealed that they do not want to involve themselves in illegal fishing anymore as it is the only means of living for them. This was mentioned in the answers of the following participants:



Code Name	Responses
P1	"The only way to avoid the problem that we encounter is to stop the prohibited method of fishing."
P4	"I taught them about the law and what I've learned about the law that it is not good to be involved in illegal fishing."
P5	"I have reprimanded them to stop their illegal fishing method, so they do have a continuous living by means of fishing."
P6	"After that incident happens, we really don't engage in such things that might put us into that situation again."
P7	"I want to become a law-abiding citizen; I don't want to go against the law."
P8	"It is hard to go against the law especially we are just a fisherman our income is just good enough to sustain our daily needs."

The fishermen's decision to quit using the illegal fishing method after being apprehended by the authorities was a turning point (Nunes et al., 2023). Their experiences served as an eye-opener for all apprehended fishermen. Because of the severity of the penalty and the law enforcement agency's strict enforcement, the families and fishermen were compelled to cease and return to traditional but legal fishing techniques (Nahuelhual et al., 2023). They were forced to halt and look for alternative legal fishing methods because they had a duty to cater to their family's needs (Omar et al., 2019). They tend to return to traditional fishing, which was law-compliant and safe, and avoid illegal acts (Sabran & Burhan, 2023).

Findings show that once caught in illegal fishing once, families were deemed to avoid doing it again. Families would advise their husbands to fish legally and be law-abiding citizens to avoid getting caught again and causing further problems. The finding is consistent with the finding in the study of Nunes et al. (2023), Nahuelhual et al. (2023), Omar et al. (2019), and Sabran & Burhan (2023) that families show obedience to the law for their husbands who were caught for illegal fishing once. These were supported by Conflict Theory which shows signs of conflict due to their family members being caught illegally fishing could cause them to avoid doing illegal acts again.

This implies that families would try to avoid doing illegal acts once their member was caught for illegal fishing. It serves as a deterrent for them that would teach them a lesson knowing how hard it is to be caught. Families should try to persuade their members to fish in a legal means to be able to continue fishing free of worries and concern of being caught again. They should also be a law-abiding citizen at all times even when there are no Maritime Police in the vicinity to be free of guilt and worries.

Financial Instability

This theme shows that one of the challenges encountered by families of illegal fishermen is financial instability. Getting caught doing illegal acts could get you in detention and banned from fishing for some time. Not being able to fish detriments their income especially when it is the only source of income they have. This could lead to a greater financial burden and instability.

Results show that participants before being caught in illegal fishing, have adequate income to sustain their daily needs. They mentioned how challenging it was to have inadequate income and how difficult it is to find another source of money. They also disclosed the difference before and after they got caught. This was mentioned in the answers of the following participants:



Code Name	Responses
P1	"Supporting our daily needs has become a challenge to us because of inadequate income, unlike before we have enough income for our necessities.
P2	"We find it difficult, because before we used to get enough income but now it cannot sustain our daily needs there is a big difference between the income before and now after that incident happen.

Given the number of dependents they are supporting, fishermen's revenue barely covers their daily needs (Lola & Iranto, 2023). As a result, after years of fishing, they turned to illegal fishing to obtain more fish or increase their profit, and it has since become their only source of income (Tikadat et al., 2022). Considering the risk that these fishermen have to take, they thought of the earnings they gained from illegal fishing methods and never thought of the consequences it beholds (Kusumanti et al., 2022). Getting caught in illegal fishing gets them to do less and burden their families more (Villadiego, 2022). Fishermen experienced a financial burden as they were cut off from fishing during the period of detention (Torell et al., 2021).

Findings show that one of the challenges that families encounter is financial instability. After getting caught in illegal fishing, the financial income of the family deteriorated. They got more income before they have been caught than they have after they have been caught. The finding is consistent with the finding in the study of Kusumanti et al. (2022), Villadiego (2022), and Torell et al. (2021) that families show financial instability after their partner got caught. These were supported by Conflict Theory which shows signs of financial conflict due to their family members being caught illegally fishing which could cause them to have an unstable financial income.

This implies that getting caught in illegal fishing can make the finances unstable. It entails that before getting caught in illegal fishing, finances, and income are stable. However, it started to deteriorate right after they were caught. Illegal fishing can help increase income, nevertheless, once caught, you pay a costly price. It is advisable that fishermen fish legally and avoid getting the Maritime Police sight you. They should also try to budget their expenses from the priority bills and avoid spending unnecessary expenses.

Pillar of the Home

This theme shows that one of the challenges encountered by families of illegal fishermen is the difficulty to stand as their husbands are the only pillar of the home. Fishing served as the main source of income for fishermen and their families. When husbands were caught in illegal fishing, their main source of income is cut off and it creates a burden on the family especially when it comes to supporting their daily needs. Husbands are the pillar of the home who provides for the family's needs and difficulties arise when they were caught.

Responses of the participants show that husbands are the only ones who worked for them in order to support their needs. They are the pillar of the home whom when cut off, every other thing would fall off. They mentioned how scared and worried they were when their husband was caught as they are the head of the family. They were the ones who provide for their daily needs and the ones who make an income for the entire family. This was mentioned in the answers of the following participants:

Code Name	Responses
P1	"It's really hard for me especially that my husband is the only one who work for us to support our daily needs.
P2	"When the incident happened, I got worried and scared because he is the head of the family and the one who makes an income to provide our needs





Husband has a sense of benevolent responsibility to lead, protect, and provide for their family (Yao et al., 2022). It is a rational choice of a husband to provide for the needs of the family and weigh his action based on good and bad consequences (Crosbie, 2019). Most of the time, bad overpowers the good due to the equivalent monetary benefit (Lawton, 2021). Fishermen viewed traditional fishing as a low-profitable method (Yanfika et al., 2019). They were motivated to commit such illegal methods to sustain their family's needs, particularly for their children's education and support for their day-to-day needs (Romeo & Marciano, 2019). Fishermen are considered the head of the family, a pillar needed for a building to stand (Maldonado et al., 2022).

Findings show that fishermen are considered to be the pillar of the home that provides for the needs and supports the family. It was also found that there were no other sources of income aside from fishing. When the pillar of the home cuts off, the rest would befall down, not knowing how to stand alone. The finding is consistent with the finding in the study of Yanfika et al. (2019), Romeo & Marciano (2019), and Maldonado et al., (2022) that fishermen are the pillar of the home that provides for the family's needs. These were supported by Conflict Theory which shows signs of conflict due to their family members being caught illegally fishing could cause them to fall off without the help of the pillar.

This implies that fishermen, as the pillar of the home, serve as the main source of funds, and without them, it would cause the families to worry and experience difficulties. This also entails that without the fishermen, families cannot stand on their own and cannot provide for their daily needs as they were relying more on the income from fishing. Participants should start forming their own businesses and they should get another source of income even small ones to provide for their needs in case of emergency. Families should not always rely on the fishermen and think of other possibilities.

CONCLUSIONS

Therefore, the illegal activities of the fisherman greatly affect the family which makes them worried all the time since they already knew the circumstances when the fishermen got caught doing illegal fishing. It is concluded that the study has observed that the fishermen who got caught for illegal fishing could not help but worry and be concerned for their welfare. Based on the results of the theme worries and concerns of the family that they should stop doing illegal activities and provide another alternative livelihood or acquire a permit from the LGU of the city for them to be legalized. It would take a lot of emotions, time, and money when a member of your family is caught. Being caught in illegal fishing could get the fishermen to learn a lesson and they would be most likely to avoid that situation again. Violators would tend to avoid doing illegal acts especially when caught from doing it. Getting caught doing illegal acts could get you in detention and banned from fishing for a period of time. Not being able to fish detriments their income especially when it is the only source of income they have. This could lead to a greater financial burden and instability. It was also found that there were no other sources of income aside from fishing. When the pillar of the home cuts off, the rest would befall down, not knowing how to stand alone.

RECOMMENDATIONS

Based on the findings and conclusion, the following recommendation is hereby forwarded: Families of fishermen may explore ways in which they can use to sustain their financial needs other than their husband's income from fishing. Families of fishermen should start their own businesses to sustain their needs and provide for them when an emergency arises. They should also persuade their husband to stop doing illegal fishing and start being a law-abiding citizen to be able to continuously fish without the burden of guilt and fishing peacefully. Thus, future researchers can use these findings to support their prospective investigation, particularly in the unveiled stories of illegal fisherman's families: a phenomenological study.

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REFERENCES

- 1. Acosta, P. (2019). Purchase of an endangered species. The Manila Times, A4. Pauly, D., Christensen, V., Guénette, S., Pitcher, T. J., Sumaila, U. R., Walters, C. J., ... & Zeller, D. (2002). Towards sustainability in world fisheries. *Nature*, *418*(6898), 689- Retrieved From: shorturl.at/lqvJ6 On: October 22, 2022
- 2. Afoakwah, R., Osei, M. B. D., & Effah, E. (2018). A guide on illegal fishing activities in Ghana. *USAID/Ghana Sustainable Fisheries Management Project. Narragansett, RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island. Prepared by the University of Cape Coast, Ghana. GH2014_SCI048_UCC, 64. Retrieved from: https://www.crc.uri.edu/on: September 27, 2022.*
- 3. Alfio, V. G., Manzo, C., & Micillo, R. (2021). From fish waste to value: an overview of the sustainable recovery of omega-3 for food supplements. Molecules, 26(4), 1002. Retrieved from: https://www.mdpi.com/1420-3049/26/4/1002 on: September 10, 2022.
- 4. Alvarico, A. B., Cuevas-Ruíz, J. L., & Dinsay, J. B. (2021). Illegal Fishing: In the Eyes of Filipino Fishermen. *Mediterranean Journal of Basic and Applied Sciences (MJBAS)*. Retrieved From: at/cNPR9 on: November 3, 2022
- 5. Ame, E. C., & Mayor, A. D. (2021). Efficient Fishing Method to Control the Population of Rice Eel, Monopterus albus (Synbranchidae) in Rice Fields in Cagayan Valley, Philippines. Retrieved From shorturl.at/LNSX9 On: September 23, 2022
- 6. Arostegui, M. C., Anderson, C. M., Benedict, R. F., Dailey, C., Fiorenza, E. A., & Jahn, R. (2021). Approaches to regulating recreational fisheries: balancing biology with angler satisfaction. Reviews in Fish Biology and Fisheries, 31(3), 573-598. Retrieved from: https://evanfiorenza.com/s/Arostegui-et-al-2021_Rev-Fish-Biol- Fisheries_Regulating- Rec-Fish.pdf on: May 14, 2023.
- 7. Ayu, H. (2018, November). Government Policy Directions on Illegal Unreported Unregulated (IUU) Fishing in Indonesia. In *Proceedings International Conference BKSPTIS 2018*. Retrieved From shorturl.at/aijU2 On: September 18, 2022
- 8. Bairagi, S., Zereyesus, Y., Baruah, S., & Mohanty, S. (2022). Structural shifts in food basket composition of rural and urban Philippines: Implications for the food supply system. PloS one, 17(3), e0264079. Retrieved from: https://journals.plos.org/on: September 29, 2022.
- 9. Battista, W., Romero-Canyas, R., Smith, S. L., Fraire, J., Effron, M., Larson-Konar, D., & Fujita, R. (2018). Behavior change interventions to reduce illegal fishing. Frontiers in Marine Science, 5, 403. Retrieved from: https://rb.gy/aihc4 on: May 14, 2023.
- 10. Beddington, J. R., Agnew, D. J., and Clark, C. W. (2007). Current problems in the management of marine fisheries. Science 316, 1713–1716. doi: 10.1126/science.1137362 Retrieved From: shorturl.at/AIKO7 On: October 22, 2022
- 11. Coulthard, S., Johnson, D., & McGregor, J. A. (2011). Poverty, sustainability and human wellbeing: a social wellbeing approach to the global fisheries crisis. *Global Environmental Change*, 21(2), 453-463. Retrieved from: shorturl.at/qEY05 On: October 22, 2022
- 12. Crist, E. (2019). Restoring the living ocean: The time is now. *The Ecological Citizen*, *3*(Suppl A), 27-41. Retrieved from: v03sa-05.pdf (ecologicalcitizen.net) On: September 29, 2022.
- 13. Crosbie, P. V. (2019). Rationality and models of reproductive decision—making. Culture and Reproduction, 30-58. Retrieved from taylorfrancis.com on April 10, 2023.
- 14. Dağtekin, M., Gücü, A. C., & Genç, Y. (2022). Concerns about illegal, unreported and unregulated fishing, carbon footprint, and the impact of fuel subsidy-An economic analysis of the Black Sea anchovy fishery. Marine Policy, 140, 105067. Retrieved from https://doi.org/10.1016 on April 10, 2023.
- 15. De la Cruz, J. M. V., Alingasa, R. D. C., & Superio, D. L. (2022). Communicating Science Information to the Fishing Community in the Philippines. In Sustainability Communication across Asia (pp. 200-222). Routledge. Retrieved from: https://www.taylorfrancis.com/ on: October 18, 2022.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VII Issue VI June 2023



- 16. Denton, G. L., & Harris, J. R. (2021). The impact of illegal fishing on maritime piracy: Evidence from West Africa. Studies in Conflict & Terrorism, 44(11), 938-957. Retrieved from tandfonline.com on April 10, 2023.
- 17. Dulvy, N. K., Pacoureau, N., Rigby, C. L., Pollom, R. A., Jabado, R. W., Ebert, D. A., ... & Simpfendorfer, C. A. (2021). Overfishing drives over one-third of all sharks and rays toward a global extinction crisis. *Current Biology*, *31*(21), 4773-4787. Retrieved from: at/yC359 On: September 27, 2022.
- 18. Dunaway, W. A., & Macabuac, M. C. (2022). Endlessly Toiling: The Gendered Inequalities of Fisher Household Survival. In Where Shrimp Eat Better than People (pp. 260-302). Brill. Retrieved from: https://brill.com/display/book/9789004522657/BP000017.xml on: November 2, 2022.
- 19. FAO, 2020. The State of World Fisheries and Aquaculture 2020. Sustainability in Action. Fao. https://doi.org/10.4060/ca9229en Gomez, E. J. (2020). BFAR urged to fast track fishing vessel trackers. The Manila Times, A7. Retrieved from https://bit.ly/31Cgfe0 On: June 30, 2020.
- 20. Hanafi, M. A., & Dimyati, K. (2019, November). Law enforcement for fisheries crime (illegal fishing) through a transcendental approach. In IOP Conference Series: Earth and Environmental Science (Vol. 370, No. 1, p. 012070). IOP Publishing. Retrieved From: shorturl.at/NUV79 On: September 23, 2022.
- 21. Kim, K. I., & Lee, K. M. (2020). Convolutional neural network-based gear type identification from automatic identification system trajectory data. *Applied Sciences*, 10(11), 4010. Retrieved from: applsci-10-04010.pdf on: May 14, 2023.
- 22. Kromah, A. Z., & Bangura, K. Z. (2022). The WTO's Fisheries Subsidies Agreement: What's New and What's Next?. *Global Trade and Customs Journal*, *17*(10). Retrieved from: The WTO's Fisheries Subsidies Agreement: What's New and What's Next? Kluwer Law Retrieved From: shorturl.at/vzBU8 On: September 27, 2022.
- 23. Kusumanti, I., Oyinlola, M. A., Nanda, M., & Hamka, M. P. P. (2022). Aquaculture and Its Impact of The Covid-19 Pandemic on The Fish Processing Industry: Case Study from Local Community. In E3S Web of Conferences (Vol. 348, p. 00022). EDP Sciences. Retrieved from https://www.e3s-conferences.org on April 10, 2023.
- 24. Lawton, R. N., Gramatki, I., Watt, W., & Fujiwara, D. (2021). Does volunteering make us happier, or are happier people more likely to volunteer? Addressing the problem of reverse causality when estimating the wellbeing impacts of volunteering. Journal of happiness studies, 22(2), 599-624. Retrieved from springer.com on April 10, 2023.
- 25. Lola, D., & Iranto, D. (2023). ANALYSIS OF FACTORS AFFECTING FISHERMAN'S INCOME IN KAMAL MUARA, NORTH JAKARTA CITY. JOURNAL OF HUMANITIES, SOCIAL SCIENCES AND BUSINESS (JHSSB), 2(2), 424-441. Retrieved from ojs.transpublika.com on April 10, 2023.
- 26. Macusi, E. D., Liguez, A. K. O., Macusi, E. S., & Digal, L. N. (2021). Factors influencing catch and support for the implementation of the closed fishing season in Davao Gulf, Philippines. Marine Policy, 130, 104578. Retrieved from: https://www.sciencedirect.com/ on: September 10, 2020.
- 27. Maldonado, J. H., Sánchez, R. D. P. M., Morales, M. E. V., & Leguízamo, E. (2022). Livelihoods Characterization of a Small-Scale Fishing Community in the Colombian Caribbean. Marine & Fishery Sciences (MAFIS), 35(2), 181-210. Retrieved from dialnet.unirioja.es on April 10, 2023.
- 28. Milne, R. A. (2021). The social profile and impact of illegal fishing in the Tsitsikamma Marine protected area (Doctoral dissertation, Cape Peninsula University of Technology). Retrieved from: https://etd.cput.ac.za/handle/20.500.11838/3341 on: October 20, 2022.
- 29. Mozumder, M. M. H., Shamsuzzaman, M. M., Rashed-Un-Nabi, M., & E. (2018). Social-ecological dynamics of the small scale fisheries in Sundarban Mangrove Forest, Bangladesh. Aquaculture and Fisheries, 3(1), 38-49. Retrieved From: shorturl.at/loAIQ On: October 22, 2022
- 30. Nahuelhual, L., Vallejos, T., Campos, G., Vergara, X., Gelcich, S., & Estévez, R. (2023). Reframing illegal fishing in small?scale fisheries as a wicked problem. Fish and Fisheries. Retrieved from https://doi.org/10.1111/faf.12741 on April 10, 2023.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VII Issue VI June 2023



- 31. Ngov, E. L. (2018). Police Ignorance and Mistake of Law Under the Fourth Amendment. Stan. JCR & CL, 14, 165. Retrieved from: https://heinonline.org/ on: November 2. 2022.
- 32. Nugraheni, S., Sitanggang, A. P., & Lala, G. L. INDONESIAN FISHERMAN TERM OF TRADE: BEFORE AND AFTER THE FIGHTING AGAINST ILLEGAL FISHING 12. Retrieved From: shorturl.at/gKLX6 On: October 22, 2022
- 33. Nunes, D. M., Bezerra, A. C., Barros, W. M., Araújo, P. V., Branco-Nunes, I. S., Magris, R. A., ... & Cardoso, A. T. (2023). Evidence of illegal fishing within the largest Brazilian coastal MPA: Turning a blind eye to the obvious. Marine Policy, 147, 105324. Retrieved from researchgate.net on April 10, 2023.
- 34. Okafor-Yarwood, I., Kadagi, N. I., Belhabib, D., & Allison, E. H. (2022). Survival of the Richest, not the Fittest: How attempts to improve governance impact African small-scale marine fisheries. Marine Policy, 135, 104847. Retrieved from on April 10, 2023.
- 35. Omar, A. J., Mohamed, A. A., & Bambale, S. A. (2019). Impacts of illegal, unreported and unregulated (IUU) fishing on developing countries: The case of Somalia. Asian Research Journal of Arts & Social Sciences, 1-15. Retrieved from academia.edu.com on April 10, 2023.
- 36. Phelan, A., Ruhanen, L., & Mair, J. (2020). Ecosystem services approach for community-based ecotourism: towards an equitable and sustainable blue economy. Journal of Sustainable Tourism, 28(10), 1665-1685. Retrieved from: https://www.tandfonline.com/ on: November 11, 2022.
- 37. Resosudarmo, Budy P. and Ellisa Kosadi. 2018. "Illegal Fishing War: An Environmental Policy during the Jokowi Era?", Journal of Southeast Asian Economies, 35(3): 369-85. Retrieved From: shorturl.at/ehpRY On October 22, 2022
- 38. Rizal, A., & Anna, Z. (2019). Climate change and its possible food security implications toward Indonesian marine and fisheries. World News of Natural Sciences, 22, 119-128. Retrieved from: https://yadda.icm.edu.pl/ on: November 18, 2022.
- 39. Romeo, G., & Marcianò, C. (2019). Evaluating the economic performance of fishing systems using fuzzy multicriteria analysis in a Fishery Local Action Group in South Italy. Fisheries Research, 218, 259-268. Retrieved from https://doi.org/10.1016/fishres .2019.05.015 on April 10, 2023.
- 40. Rosello, M. (2020). Illegal, Unreported and Unregulated (IUU) Fishing as a Maritime Security Concern. In Global Challenges in Maritime Security (pp. 33-47). Springer, Cham. Retrieved from: https://link.springer.com/on: November 10, 2022.
- 41. Santos, B. M., Serrano, K. S., & Pigao, K. J. (2022). An Assessment: The Philippine Outstanding Debt and other Economic Determinants towards its Implication on Economic Growth. *Journal of Economics, Finance and Accounting Studies*, 4(2), 126-147. Retrieved from: Paper+11+(2022.4.2)+An+Assessment+The+Philippine+ Outstanding +Debt.pdf on: May 14, 2022.
- 42. Sabran, M. S., & Burhan, N. A. S. (2023). Resiliency and Sustainability after Oil Spill in Imo State and the Niger Delta Region of Nigeria. Journal of Contemporary Issues and Thought, 13(1), 50-61. Retrieved from upsi.edu.my on April 10, 2023.
- 43. Said, A., & MacMillan, D. (2020). 'Re-grabbing'marine resources: a blue degrowth agenda for the resurgence of small-scale fisheries in Malta. Sustainability Science, 15(1), 91-102. Retrieved from ifremer.fr on April 10, 2023.
- 44. Sidiq, R., Sofro, S., Sulistyani, A., & Achmad, W. (2022). Duanu's Tribe Local Wisdom And Traditional Ecology: A Way To Survive. Webology, 19(1). Retrieved from: https://www.webology.org/on: October 29, 2022.
- 45. Song, A. M., Scholtens, J., Barclay, K., Bush, S. R., Fabinyi, M., Adhuri, D. S., & Haughton, M. (2020). Collateral damage? Small-scale fisheries in the global fight against IUU fishing. *Fish and Fisheries*, 21(4), 831-843. Retrieved from: shorturl.at/vGHLN On: October 22, 2022
- 46. Stephenson, R. L., Paul, S., Wiber, M., Angel, E., Benson, A. J., Charles, A., ... & Sumaila, U. R. (2018). Evaluating and implementing social–ecological systems: a comprehensive approach to sustainable fisheries. Fish and Fisheries, 19(5), 853-873. Retrieved from: https://onlinelibrary.wiley.com/doi/abs/10.1111/faf.12296 on: November 3, 2022.

ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume VII Issue VI June 2023



- 47. Sutinen, J. G., Yahaya, J., & Hirunruk, V. (2018). Fisheries Law Enforcement Programs, Practices, and Problems in Malaysia, the Philippines, and Thailand. Resources and Environment in Asia's Marine Sector, 129-159. Retrieved From https://shorturl.ae/qrt21 on September 18, 2022
- 48. Tikadar, K. K., Islam, M. J., Saha, S. M., Alam, M. M., Barman, S. K., & Rahman, M. A. (2022). Livelihood status of small-scale fishermen and determinants of their income: insights from north-eastern floodplains of Bangladesh. Geography and Sustainability, 3(3), 204-213. Retrieved from sciencedirect.com on April 10, 2023.
- 49. Torell, E., Castro, J., Lazarte, A., & Bilecki, D. (2021). Analysis of gender roles in Philippine fishing communities. Journal of International Development, 33(1), 233-255. Retrieved from wiley.com on April 10, 2023.
- 50. Villadiego, L. (2022). Safer now at sea: developing a lower-cost system for tracking small-scale fishing vessels in the southern Philippines. Fish for the People, 20(1), 31-34. Retrieved from seafdec.org on April 10, 2023.
- 51. Yanfika, H., Listiana, I., Mutolib, A., & Rahmat, A. (2019, February). Linkages between extension institutions and stakeholders in the development of sustainable fisheries in Lampung Province. In Journal of Physics: Conference Series (Vol. 1155, No. 1, p. 012014). IOP Publishing. Retrieved from iopscience.iop.org on April 10, 2023.
- 52. Yao, L., Chen, X. P., & Wei, H. (2022). How do authoritarian and benevolent leadership affect employee work–family conflict? An emotional regulation perspective. Asia Pacific Journal of Management, 1-29. Retrieved from springer.com on April 10, 2023.
- 53. Zhuang, W., Liu, M., & Gao, Z. (2021). A new method for quantifying the value of ecological environment damage caused by illegal fishing: A case study. *Marine Pollution Bulletin*, 172, 112819. Retrieved from: at/agjlvon: September 27, 2022.