

**THE BACKBONE OF FISHERIES: INDONESIAN WOMEN IN SMALL-SCALE
FISHERIES ORGANIZE TO OVERCOME GENDER INEQUALITIES**

By

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ABSTRACT

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Worldwide, women's contributions in the fisheries sector are significant and include fish harvesting, processing, and marketing, among others. However, women often face discrimination and are not recognized in the sector by their male counterparts, managers, and policymakers. This thesis aims to examine the motives for the establishment of women organizations in Indonesia, the Indonesian Fisherwomen's Sisterhood Group (Persaudaraan Perempuan Nelayan Indonesia/PPNI), and to investigate how the lives of women belonging to the organization have changed. This study is based on a qualitative case study using both primary and secondary sources. The primary data consists of interviews conducted via Zoom and phone interviews. This study adopts a Feminist Political Ecology (FPE) framework to examine barriers that women experience that led to the collective action to establish a women-specific fishery organization. Issues related to economic and environmental changes, lacking access to decision-making processes and resources, and lacking recognition were pivotal for women in the sector to organize themselves. This study found that being part of the organization can become a strategy for women in fisheries to overcome barriers in the sector. This study also shows that PPNI allows women in the sector to renegotiate their roles and rights within their households, communities and in the sector. Thus, since the establishment of PPNI, the organization has made efforts to foster gender equality, mainly to support changing women's lives through women's empowerment.

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KEY TO ABBREVIATIONS

ADS	Alliance for Prosperous Village
CFPA	Central Fish Processors Association
COVID 19	Coronavirus disease 2019
CSS	Collaborative Spouse Status
FAO	The Food and Agriculture Organization
FMA	Fisheries Management Area
FPE	Feminist Political Ecology
HP-3	Hak Pengusahaan Perairan Pesisir/ Coastal Waters Concession Rights
JPKP	Jaringan Pengembangan Kawasan Pesisir/ Coastal Area Development Network
KIARA	Koalisi Rakyat Untuk Keadilan Perikanan/ The People's Coalition for Fisheries Justice
LBH	Lembaga Bantuan Hukum (Legal Aid Institute)
MMAF	Marine Affairs and Fisheries
NGO(s)	Non-Governmental Organization(s)
PERMEN-KP	Peraturan Menteri Kelautan dan Perikanan/ Marine Affairs and Fisheries Ministerial Decree
PPNI	Persaudaraan Perempuan Nelayan Indonesia/The Indonesian/ Sisterhood of Fisherwomen Organization
SMS	Short Message Service
STS	Science Technology Studies
TURF	Territorial Use Rights for Fishing
UN	United Nations
VGSSF	The Voluntary Guidelines for Securing Small-Scale Sustainable Fisheries

WFFP

World Forum of Fisher People

CHAPTER 1: INTRODUCTION

Women's contributions in small-scale fisheries are fundamental for food security and people's livelihoods, with women representing 14 % of the world's captured fisheries and aquaculture (FAO, 2020). However their role is largely invisible and often overlooked in decision-making processes at all levels in the sector (E. Bennett, 2005; FAO, 2016; Mills et al., 2011), and their participation is often perceived as that of helpers to their husbands (Kleiber et al., 2015). But women engage in fishing, processing, selling, marketing, and environmental activism, and nowadays, different authors have shown women's contributions and/or roles within the sector (Batliwala, 1994; Deb et al., 2015; Harper et al., 2017, 2020; Kleiber et al., 2015; Matsue et al., 2014; Szymkowiak, 2020). Gender disaggregated data in the fishery context is still limited (E. Bennett, 2005; Frangoudes & Gerrard, 2018) failing to capture the actual contribution of women in the sector (FAO, 2013).

In fisheries, the topic of gender is a significant concern for many scholars that aim to examine the aspects influencing the heterogeneity of gender roles in fisheries, such as biophysical, social, economic, and cultural diversity, which includes norms and values (Harper et al., 2017; Kleiber et al., 2015). Fisherwomen are underrepresented (Zhao et al., 2013), undervalued (Szymkowiak & Rhodes-Reese, 2020) and face discrimination (Solano et al., 2021) in the fisheries sector. Finkbeiner et al. (2021) note that gender roles, social relations, and discrimination could increase women's vulnerability in fisheries because they lack access to rights, resources, social services, tenure, capital, being left out of leadership roles and decision-making processes, and they earn lower incomes (Finkbeiner et al., 2021). Gender equality is an essential component that tends to be missing in implementing sustainable fisheries (Torre et al., 2019). Moreover, promoting gender equality is important not only in terms of policy in order to overcome power relations that harm women (A. Bennett et al., 2021) but it is essential to food security and nutrition (Bennet et al., 2018)

Some effort has been spent to bring gender issues in fisheries as a concern in public discussions, such as the discussion about inequality and difficulties faced by women in the *UN Decade for Women* (1975-1985), a discussion about sustainable development and women in the *UN Conference of Environment and Development* (1992), and the discussion about poverty eradication and food security in small-scale coastal fisheries and aquaculture of women at *Earth Summit* (2002) (Ram-Bidesi, 2015). In 2015, a global instrument called *The Voluntary Guidelines for Securing Small-Scale Sustainable Fisheries* (VGSSF) was established to incorporate gender equality in the *Context of Food Security and Poverty Eradication* (Biswas et al., 2017). This instrument aimed to promote equal rights, opportunity, and full recognition of women's involvement in the sector, acknowledging that women make significant contributions in fisheries but face multiple burdens and struggle to fully achieve their role (FAO, 2015). Further, the Food and Agriculture Organization of the United Nations (FAO) (2013) argues that strengthening fishery organizations and women's involvement with them could foster gender equality in terms of sustainable small-scale fisheries.

Jentoft et al. (2018) mention that organization building, and collective action could become a medium to help fisherwomen in getting access to resources and fight against discrimination. However, women's organizations in fisheries tend to be understudied¹, particularly women's leadership in fishery organizations (Dasig, 2020). The lack of studies on

¹ Many authors believe that women's organizations are an important part of tackling a variety of difficulties and inequalities (Alonso-Población & Siar, 2018) in the Global South. However, the studies are limited in that they do not fully capture the role that women's organizations contribute in gender equality movements. For example, a study in Brazil details the fight for gender rights (fisherwomen's movement) such as equal social security policies (Alonso-Población & Siar, 2018) and another study in Chile emphasizes the lack of participation by women in fishing organizations (Iacomini, 2006). Furthermore, Nayak (1996) reported on women in fisheries organizations in India that include a women's group that is the women's wing within the general fishworkers union or the women that have their own local fisheries organization that aims to help uplift the voices and interests of women, such as to obtain infrastructure (Jose, 1996) and/or financial credit (Lucas, 1996). However, neither of these studies investigate a fully independent women's organization that works at both the state and the grassroots level. Thus, these studies from the Global South, while a helpful starting place, do not fully capture the process of establishment and the roles of women's organizations as independent entities, both at grassroot- and state-level movements. Through my work, I am contributing to filling the still-present gap in women-owned organizations in fisheries, and their roles and means of dismantling gender inequality.

fisherwomen's organizations is not surprising, knowing the scarce data about gender and women's participation in the fisheries sector (E. Bennett, 2005; Frangoudes & Gerrard, 2018). Thus, there is urgency surrounding the need to increase our knowledge related to fisherwomen's organizations, namely their struggles, and to showcase their contributions to women involved in the sector, in particular, in small-scale fisheries in the Global South. In my thesis, I am aiming to start filling that gap.

In Indonesia's fisheries sector, 95% of fishers are small-scale operators, with women accounting for 42% of them based on data received in 2011 from the Ministry of Fisheries and Marine Affairs (Ariadno & Amelina., 2016). In 2014, approximately 2 million individuals worked in small-scale fisheries in Indonesia (Halim et al., 2019), and women have a significant role in productive, domestic, and social activities in the sector, but as in other places of the world, it is rarely recognized (Fitriana & Stacey, 2012). Women's involvement and their work in fisheries are not counted in Indonesia's census data collection at the district level, and because in coastal village, women tend to be identified as fishermen's wives which implies that only their domestic role is recognized (Fitriana & Stacey, 2012; Parawansa, K, 2002). Furthermore, the definition of fishers in Indonesia's regulation does not have a gender associated with it, but it is implicit that the ones fishing are fishermen. Thus, women have been left out in decision-making for marine resource management and village development (Fitriana & Stacey, 2012) including the fact that they do not have access to fisher's health insurance (Pratiwi & Boangmanalu, 2017).

This research aims to understand the reasons that motivated the establishment of a women's fisheries organization in Indonesia, the *Persaudaraan Perempuan Nelayan Indonesia/The Indonesian Sisterhood of Fisherwomen Organization (PPNI)* and more importantly, the role this organization played in the lives of fisherwomen and in the sector by using a qualitative case study. In particular, the following research questions are intended to be

answered by this study: What were the barriers that women in the fisheries sector were facing that motivated the creation of PPNI? and, how has the creation and work of PPNI changed the lives of women in the sector? PPNI was created by a group of women, together with other organizations that are concerned with traditional or small-scale fishers, and the discrimination faced by women in the sector. PPNI has the mission to fight for fisherwomen's rights, support women, and their families, and encourage State policies to be gender inclusive (KIARA, 2018).

This topic is crucial because PPNI is advocating for gender equality in a country where gender norms deny rights to fisherwomen, even more than in other countries. Additionally, most of the studies on women's organizations in fisheries come from case studies from the Global North, such as highlighting women's organizations in European countries, Korea, and Japan (Alonso-Población & Siar, 2018; Kim, 2003; Soejima & Frangoudes, 2019). This case study therefore will make a valuable contribution to the literature as it expands our understanding of women's organizations in the Global South, especially enriching the diversity of topic and context of women's contribution and experiences in fishery organizations.

The following is how this document is organized: In the following section, I will provide a general context of Indonesian small-scale fisheries, including a section on fisherwomen in Indonesia. Then, I will introduce an overview of the conceptual framework covering topics, such as, gender discrimination in the fisheries sector, Feminist Political Ecology (FPE), and Women empowerment, followed by a literature review on women's organizations in the fisheries sector. Further, I will introduce the methodology for this study. Then, I will present the results of the research question/topics that consist of the establishment of the Persaudaraan Perempuan Nelayan Indonesia/the Fisherwomen's Sisterhood Group (PPNI). This includes the barriers that women face in the sector, which provides context for understanding the establishment and the role of PPNI in women's lives in the sector. Lastly, the discussion and

conclusion of the study. This thesis concludes with discussion of results and recommendations for future research.

CHAPTER 2: GENERAL CONTEXT OF THE SMALL-SCALE FISHERIES IN INDONESIA

Indonesia consists of more than seventeen thousand islands. The Indonesian fisheries area consists of the Exclusive Economic Zone of Indonesia of 2.7 million km² from a total maritime area of 5.8 million km² (Oegroseno, 2009). According to Marine Affairs and Fisheries (MMAF) Ministerial Decree No 18/2014, the ocean area in Indonesia is classified into 11 Fisheries Management Areas (FMA) (Muawanah et al., 2018). The determination of the FMA refers to the physical, ecological, and oceanographic conditions. The first FMA map that consisted of 9 FMAs was published in 1999, and was based on the agriculture Ministerial Decree No.995/Kpts/IK210/9/99 concerning potential fish resources and the permitted catch amount (JTB) (Kadariusman et al., 2019). Further, in 2009, based on MMAF Ministerial Decree No.01/ 2009 of the Republic of Indonesia Fisheries Management Area, the FMA expanded into 11 areas, and it was renewed again based on the MMAF Ministerial Decree No 18/2014. FMA refers to fisheries management, fisheries development, capturing fisheries and marine culture, conservation, and research (Muawanah et al., 2018). Every FMA has different characteristics in term of fishers' population and institutional arrangements (Adrianto et al., 2019).

The fisheries sector contributes significantly to national food security. Based on the FAO (2015), "Small-scale and artisanal fisheries, encompassing all activities along the value chain- pre-harvest, harvest, and post-harvest- undertaken by men and women, play an important role in food security and nutrition, poverty eradication, equitable development and sustainable resource utilization. Small-scale fisheries provide nutritious food for local, national, and international markets and generate income to support local and national economies" (FAO, 2015, p. viii).

Indonesian small-scale fisheries are "not regulated and are exempt from the existing fisheries management instruments—they are free from fishing licenses (...); free to conduct

fishing operations in all Fisheries Management Areas (...); and obliged to register their vessel but do not pay a fee (...)" (Halim et al., 2019). Further, according to Indonesian Law No. 7/2016, a small-scale fisher is: "a fisher who involves fish catching to meet daily needs without or with a fishing boat measuring <5 gross tonnages (GT)" (Halim et al., 2019, p. 239).

Indonesia's small-scale fisheries consists of various social, technical, and ecological attributes such as fishing grounds, type of fishing gear, occupational (full-time or part-time fishers), market orientation (self-consumption, local, national, or export markets), unit of business (decision making process), and gender (Halim et al., 2019). Further, gender becomes an essential attribute because not only men are involved in this sector, but also women. Unfortunately, as Stacey et al. (2019) revealed, Indonesia has inaccurate quantitative data related to the number of women involved and the diverse roles women involve in small scale fisheries; this situation leads to underestimating the importance of the contribution of women in the sector.

In 2014, the elected president of Indonesia promoted an initiative called "Indonesia as the World Maritime Nexus" that focused on five pillars: revitalize maritime culture, manage marine resources for food security, develop maritime infrastructure, improve maritime diplomacy, and foster capacity for maritime defense (Ayunda et al., 2018; KOMINFO, 2016). However, this reform lacked attention to women's involvement in the sector; women were left behind in fisheries policy and its implementation in the sector (Alami & Raharjo, 2017).

The Law No.31/2004 defines fishery as: "all activities related to the management and use of fish resources and its environment, ranging from pre-production, production, post-production and processing to marketing carried out in a fishery business system " (p.4). Further, the fishery sector is crucial for fishers and all the marine and fisheries business actors. According to Marine Affairs and Fisheries Ministerial Decree, No. 42/PERMEN-KP/2019 on Marine and Fisheries Business actors, Article 2 (2) states that: "Marine and fishery business

actors are a fisher, fish farmer, salt farmer, fish processor, and fishery marketer” (p.6). In terms of gender, the Law No. 7 of 2016 concerning protection and empowerment of fishers, fish cultivators, and salt farmers, mentions women once. The article 45 mentions the women’s role in the fishing household, but the law fails to recognize the existence of fisherwomen (Wulandari, 2020). Thus, further studies are required, particularly on how those laws were implemented, how they affect women in the sector, and how women handle and adjust to this lack of recognition.

Different authors mention that women in Indonesia are engaged in fishing and aquaculture production, but they are more involved in post-harvesting work, as fish sellers and processing fish (Fitriana & Stacey, 2012; Halim et al., 2019). Additionally, Akbarini et al (2012) found that women in Pangandaran, West Java, contributed 31.32 % to the family income with an average of 9 hours of involvement in productive activities such as salt fish processor, fishmonger, or entrepreneur (Akbarini et al., 2012). Further, Stacey et al. (2019) examined the evaluation of development projects in Indonesia’s coastal communities and how gender was taken into account and incorporated into the projects (Stacey et al., 2019). The study reveals that women have contribution in pre-harvest, harvesting, and post-harvesting and the trade activity in small-scale fisheries. A study from Febri et al. (2017), shows that women in Kuala Langsa village do many activities related to fisheries, such as catching oysters, fish processing, and selling fish products. Another study by Fitriana and Stacey (2012) in Pantar Island found that women involved in the fishery sector catch fish and other marine resources like invertebrates, and sell them. The authors found that women gleaned shells, sea cucumbers, and edible sea urchins, and fished juvenile and demersal fish as well as farmed seaweed. They also have a role in the pre- and post-fishing activity such as preparing equipment for fishing (e.g., hooks, nets, lines, and bait), helping to repair cast nets and maintain their fishing gear, and fish processing and trading (Fitriana & Stacey, 2012).

Overall, in Indonesia, one of archipelagic countries, fisheries play a vital contribution in people's livelihoods (Adrianto et al., 2019). Studying the complexity of the gender dynamics in the fisheries is essential. Besides the multiple roles that women engaged in fisheries, women also face multiple barriers in their participation in the sector. The elaboration about gender in fisheries including relevant conceptual framework will be presented in the next chapter.

CHAPTER 3: CONCEPTUAL FRAMEWORK

This research is concerned with enhancing not only the understanding of fisherwomen's organizations, but also to discuss the urgency to organize women to dismantle gender inequality and discrimination in fisheries, and to show the impact women organizations can have on women empowerment. This chapter presents an elaboration of the gender discrimination in the sector, then it introduces Feminist Political Ecology (FPE) and women empowerment.

3.1 Gender Discrimination in the Fisheries sector

Understanding the issue of gender inequality and discrimination in the fisheries sector is not complete without understanding what is considered as gender. Lorber (2005) notes that gender is a construct about social status and personal identity. Social processes of gendering, gender division and certain role expectations and norms are influenced by social institutions of society (Lorber, 2005). Gender for West and Zimmerman (1987) is not a set of roles or traits, rather, gender is an accomplishment of action because of normative expectations assigned to sex categories. Gender is created through interaction, and it is something that we achieve (West & Zimmerman, 1987). Similarly, Rolston (2010) notes that gender is “as contested, fluid, and emergent through everyday practice” (p.914). There is no true binary system, rather, the feminist literature acknowledges many sexes, genders, and sexualities (Lorber, 2005). However, in the context of this thesis, we worked with women because the organization we are working with is trying to amplify women’s voices and improve their lives.

The different roles and behavior-based gender may lead to disadvantageous treatment or experience (discrimination) and unequal access to opportunity (inequality) of individual or groups in society (Shastri, 2014), and this is especially true in the fisheries sector (Castro-Diaz et al., 2018; Ferguson, 2021; Hue, 2006; Koralagama et al., 2017; Lwenya & Yongo, 2012). Further, Koralagama et al. (2017) highlights some types of gender discrimination in the

fisheries sector, for instance women's access to means of production and the lack of women's opportunity in the decision-making process. The authors note that access to resources, which includes control of fishing spots or ownership of fishing gear/boats, are gendered. This situation is described in Lake Victoria in Kenya, where women are excluded from accessing fishing grounds (Lwenya & Yongo, 2012). Another example is the lack of control over assets and ownership of shrimp pond for shrimp farming as it is reported in a case study from Vietnam. (Hue, 2006). In Mexico, women face discrimination in terms of access to management (e.g., fishing concession) and are excluded in decision-making processes in fishery cooperative (Solano et al., 2021). Harper et al. (2017) show another example showing the lack of decision-making in case studies in Vietnam, Peru, Senegal, South Africa, and Mexico. The authors found that even though women have substantial roles in the fisheries sector, they are not included in the process of decision-making, such as making decisions about fisheries management. Women lack representation and control in the organization and management of fisheries (Koralagama et al., 2017). Finally with regards to discrimination, Koralagama et al. (2017) explain that women face discrimination because of their identity and cultural background (Deb et al., 2015). For example, in the Brazilian Amazon basin, women are not permitted to touch the fishing gear or the boats when they have their periods, because that will bring bad luck to fishermen (Castro-Diaz et al 2018.). Another example is about access to become a member of a cooperative; in a case study in Mexico, there is a membership channel based on inherited legacy membership, and if a fisher died, the membership will be inherited by a son, not his wife or daughter (Solano et al., 2021).

In the literature, there is a lack of discussion about efforts of women (individuals or groups) to dismantle discrimination and inequality in the fisheries sector. Thus, this study shows how women overcome discrimination and inequality in the sector.

3.2 Feminist Political Ecology (FPE)

What is the root of gender inequality and discrimination? Different strands of feminist scholarship provide various analyses to answer that question, such as Ecofeminism, Feminist Environmentalism, and Feminist Political Ecology (FPE).

For this particular research, I will use Feminist Political Ecology (FPE). FPE understands that gender roles could be influenced by different types of social-political processes, spaces, knowledge, and resources (Meinzen-Dick et al., 2014). FPE is based on the understanding from political ecology and feminist cultural ecology that's concerned with the unequal distribution, control and access of resources (Rocheleau et al., 1996). Further, FPE is concerned with how gender and essential attributes like culture, ethnicity, class, race, and other identities could shape control and access over resources and define how women and men sustain their livelihood. For example, the study from Mollett & Faria (2013) in Honduras reveals the lack of access for women to a natural resource, like customary land, because of ethnicity and identity.

The study from Rocheleau et al. (1996) also notes that gender interacts with culture, ethnicity, class, and national identity in influencing experience and interest in the environment, and FPE provides three themes to comprehend in both global and local contexts. First is the topic of knowledge, gendered science. Gendered science highlights the definition about what is science and who does science, especially to define the relationships between people and nature, as well as gendered knowledge of everyday life. The second subject concerns rights and responsibilities, specifically gendered rights. In terms of gendered rights, the theme of gendered environmental rights and responsibility considers who controls resource rights and who bears the responsibility to resources. Gendered rights focus on the contestation between men and women, or different communities, regarding use rights and ownership of land, trees, water, animals/wildlife, and other rural resources. Gendered responsibility considers

understanding the responsibility to procure and manage resources for family and community. Further, resource responsibility and rights are distributed unequally between men and women because of the gendered power relation. The last theme is gendered organizations. In gendered organization, the discussion concerns the involvement of women in grassroots groups/activism, local political organizations, and social movements to environmental, political, and other socioeconomic struggles. Women's activism begins locally because of critical situations in their own lives, home, family, or in the places that are essential for the livelihoods. The damaged ecosystem and politically marginalized women lead women's consciousness and responsibility to lead the movement (Wastl Walter, 1996). They develop collectivity to secure their lives, protect their family and ecosystem when the system is absent to provide for their needs, including the struggle for access and distribution over resources, increase their availability in the community, and influence political change.

There are some studies that used Feminist Political Ecology (FPE) in the fisheries and coastal community settings. These studies focused mainly on the description of the interplay between intersectionality and Feminist Political Ecology, especially using race, ethnicity, politics, or other identity categories as a lens for understanding the unequal access to resources and power that could influence the relationship between gender and environment or natural resource. For example, the study from Bavington et al. (2004) showed, based on a case study of the fisheries of Newfoundland and Labrador, that women have been marginalized and invisible, which lead to their lack of participation in recovery and protection of the ecosystem. This situation steered social, economic and health impacts on women. Other studies also showed that socioeconomic status and ethnicity (Cole, 2017), as well as marital status and nationality (Ferguson, 2021) could shape access for women to obtain and control resources in the fisheries sector. The study from Elias et al. (2021) uses FPE to examine restoration issues in peri-urban lakes in India, showing that gender shapes the way restoration is designed, the

sources of knowledge used, the uneven distribution of rights and benefits, and the means to achieve environmental and social sustainability; they also found that gender interacts with other social differentiations and shapes environmental management processes and access to resources.

As mentioned earlier, prior research focused on describing how gender and intersectionality identities shape women's access to resources or exclude women as environmental agents. However, these studies are not reporting the actions women are making to challenge and change the uneven situations they face in the sector. Further, FPE is also concerns with the renegotiation of gender roles and responsibilities, space, and human environment interactions (Hovorka, 2006). Therefore, it is also crucial to highlight why there are many women who have experienced barriers, but only some of them use that as an opportunity to be involved in the renegotiation to change things and be empowered. **Because of that, this study adopts FPE not only as a way to describe the problematic issues related to women's experiences in the sector, but also to examine the actions women are taking to change the situation and be empowered through women's organizations.** Thus, this study also spotlights the importance of gendered organization and collectivism in FPE and its relation to women's empowerment in the fisheries sector.

3.3 Women Empowerment

Fostering gender equality also means promoting empowerment in the fishery. The idea of empowerment is crucial for the feminist movement because it implies gaining access and opportunities—this later becomes a component in social fisheries research to increase the visibility and role of women and how they can overcome marginalization (Freeman & Svendsen, 2022).

The term empowerment has diverse interpretations. Empowerment is a process (Batliwala, 1994; Cornwall, 2016; Kabeer, 1999; Parpart et al., 2002) especially to challenge

power relations and gain control (Batliwala, 1994). It also means to exert power over (Parpart et al., 2002), and to have the ability to make choices (Kabeer, 2017). Because empowerment means shifting political, economic, and social power among social groups or individuals (Batliwala, 2007), empowerment is a process, and there is no fixed state or endpoint, no single pathway fit for empowerment (Cornwall, 2016). Cornwall (2016) described that empowerment is the process of transforming how people perceive and experience and later can influence their awareness about injustice and inequality and perform change. In short, empowerment consists of the effort to build critical consciousness. Thus, empowerment then is a process of emancipation (Nam, 2018).

In 1999, Kabeer offered key elements to examine empowerment, especially in reference to women. The key elements of empowerment are resources, agency, and achievement. Resources can consist of social, human, and material resources that could enhance the ability to exercise choice. Some examples of resources are attitudes, beliefs, ideas, financial/material assets, institutions, and social capital. Agency is “the ability to define one’s goals and act upon them” (p.438) and achievement is defined as an outcome. In empirical studies on gender in fisheries, Kabeer's position on wellbeing and capabilities has not been incorporated (Weeratunge et al., 2014). However, there are some prior studies that used the elements from Kabeer (1999) to understand women’s capacity in making choices in the context of fisheries.

In 2003, Kusakabe used Kabeer's theoretical framework to understand women’s choices in the research of women in aquaculture in Northeast Thailand. The study found that some women were reluctant to have an aquaculture manager’s role because they wanted to avoid conflict within their households. Even though women have resources, they still have limitations to choose from because of the roles, responsibilities, and social expectations based on their gender. Another study from Torre et al. (2019) about women's empowerment in Mexican fisheries uses Kabeer’s empowerment definition (resource, agency, and achievement)

and identifies women participation in conservation and sustainable fisheries. The study found that increased women participation is related to new skills and leadership capacities that women gain through the empowerment that is brought by civil society organizations. This study also observed elements that could have inspired women's decision to participate in fostering sustainable fisheries, not only from the support of civil society organizations, but also from support from women's role models, and the willingness from men and women in learning and challenge the status quo (Torre et al., 2019).

Further, Heninnk et al. (2012) offered a set of mechanisms of empowerment to foster development. There are six mechanisms of empowerment: knowledge (i.e., access to training, education and information), resources (access to physical, financial resource and skills), agency (i.e., capacity to act and make choice independently, self-confidence to decide and achieve goals), opportunity structures (support from social, political, and institutional environment), capacity building (i.e., capacity to advocate), and sustainability (ability to develop and support initiatives). Heninnk et al. (2012) note the important linkage between domains of empowerment, such as how political empowerment can facilitate economic empowerment. Similar to Hennink et al. (2012), Kabir (2011) notes the importance of capacity building and institutional building in empowering people and developing fisheries. Kabir (2011) notes the importance of some of the variables of empowerment, such as accessing rights for fishers; the ability to establish access rights; leadership, involvement in decision making; influencing the community; the capacity to enforce regulations and rules; and the ability to control resources, and influence government, NGO officials, and political leaders and also having recognition. Another study from Meetei et al. (2016) examined the women empowerment index in their participation in fisheries based on the elements of the ability of women to take decisions within the family, cosmopolitaness (i.e., proximity to a social system like attending a relative's house), spending ability, access to assets and resources, and social participation. Meetei et al.

(2016) highlighted that women's contribution in fisheries—such as in capture fisheries, post harvesting, marketing and stocking fish—influences the empowerment of women compared to the rural women before becoming involved in the sector, and they also noticed that women lack access to training, credit, resources, and technology.

In sum, prior research adopted the concept of empowerment as a valuable concept to show enabling conditions, elements, and mechanisms for women to develop their abilities and gain more choices, especially in the fisheries sector. **However, the discussion on how women's organizations influence empowerment for women belonging to organizations is not well studied.** An exception is a study from Hudaya et al. (2021) about a model of empowerment in the context fisheries in Indonesia based on case study of a processing unit in West Java. Further, this study focused on showing that being members in a group can benefit empowerment based on the examination of internal and external factors supporting empowerment. The internal factors consist of business experience and age. Experience and age are correlated with success, and in particularly among productive age groups (30-60 years old). The external factors included the fishery extension programs (e.g., socialization, training, extension visit that brought by fishery extension workers) and being members of those groups. Thus, the study notes that external factors have stronger effects on the level of empowerment than internal factors. However, this study only provided the information about the role of the group as an essential factor in empowerment, such as how the group could support effective marketing and provide a platform for sharing the information as well as helping women emotionally. However, there is limited discussion about the role of organizations to support beyond individual capacity such as contributing to the women's movement to exert power for gaining access and opportunity in the sector as well as dismantle gender inequality.

Therefore, **my study also aims to understand the strategy and challenge of women's organizations to perform and give impact to women's empowerment in the sector.**

Women's empowerment is not only important for increasing the capacity of women or the process to manage fisheries resources, but also as an important process to foster equality development in the sector. Nielsen (2004) highlighted that empowerment of the fishing community is a mechanism that gives people an opportunity to influence their future in order to deal with the effect of globalization, compete for the use of the coastal environment and freshwater, and face other issues in fisheries.

CHAPTER 4: LITERATURE REVIEW

4.1 Women' Organization in Fisheries

Understanding the connection between women's participation in organizations and their empowerment in order to fight gender discrimination and foster gender equality is essential in the sector. Siar and Kalikoski (2016) mention that organizations are solutions to disempowerment and marginalization, and Jentoft et al. (2018) argue that the involvement of fishers in collective action is an essential step to empower them from vulnerability and poverty conditions.

There are diverse factors that drive the establishment of women's fishery organizations. More comprehensively, the study from Frangoudes et al. (2014) highlights the motives that influence women to start organizations in fisheries in European countries, such as improving working conditions, rights to fishing, and obtaining formal recognition and education. One motive that impacted women's decisions to organize in fisheries was to respond to a crisis and help their families. Based on case studies from Europe, Frangoudes et al. (2014) note that the declining fish prices and the subsequent drop in fishing families' income was the reason why many women decided to create organizations. Dutch fisherwomen with their *VinVis Network* (Women in Fisheries Network) responded to the regulation-related cod and shrimp crisis by creating their organization; they fought for the survival of their family enterprises as a response to the European Union's decision to legally prohibit shrimp fishing in the North Sea (Frangoudes et al., 2014). The strategy of the VinVis in the Netherlands is to participate in public meetings and advocacy to influence policy (Koster, 2007). In France, the first women's association in fisheries established in the 1980s as a response to price crisis. In 1999, there was a fishing women's association that was concerned with providing advice to industry leaders and other authorities as well as to recognize fishermen's wives in the sector (MacAlister, 2002). Another example, in Ireland, women created the association of Women of the Sea (Mna Na

Mara) for building solidarity among wives of fishers and facing pressing issues in the sector, like providing training and psychological support (Chuenpagdee et al., 2006)

A second motive driving the formation of fisherwomen's organizations is to improve working conditions. Frangoudes et al. (2014) mention that women formed organizations because of the unsafe job conditions on fishing vessels. Such is the case of Finnish fisherwomen involved in the campaign aiming for sustainable seafood harvesting, or fisherwomen organizations in France involved in safety awareness-raising campaigns. Pena et al. (2020) note that improving job conditions was one of the motives that led women to create the women's organization Central Fish Processors Association (CFPA) in Barbados. CFPA is an all-women fisher's organization that works in post-harvest. The association has mottos like "uniting fisherfolks for positive development," "fulfilling the member's needs," and "promoting savings and mutual support" (Pena et al., 2020).

A third motivation is to gain fishing rights. Frangoudes et al. (2014) note that in Spain, women in El Palmar fought through their organization, *Tyrius*, for the women's right to fish and fight against gender discrimination. The organization had to fight a local customary law that denied women the right to fish in the local lagoon (Frangoudes et al., 2014). Similarly, women in the fishing community in Coliumo, Chile, organized themselves to obtain exclusive user rights from the allocation of a Territorial Use Rights for Fishing (TURFs) system (Gallardo-Fernández & Saunders, 2018).

Organizations could provide not only a comfortable place for women by advocating for their interests, but they also could help to promote beneficial policy changes in the sector, such as conserving fishery resources, protecting the ecosystem, and handling fisheries' mismanagement (Kalikoski & Franz, 2014). The study by Soejima and Frangoudes (2019) in Japan also found that women, through an organization, could contribute to community development and environmental sustainability. In addition, in Korea, women divers have their

own organizations to manage and protect the interest of women divers and the environment (Kim, 2003).

Further, the need to gain more education and training is another factor that motivates women to organize, because through organizations, women found a place to share skills and knowledge (Hauzer et al., 2013). Women's organizations encourage their members to join trainings to improve their skills, such as marketing, communication, and management (Frangoudes et al., 2014).

Alonso-Población and Siar (Alonso-Población & Siar, 2018) mention that denying women decision-making positions and the ability to fully participate in fisher organizations is a cause and a result of the unequal access to basic economic, labor, social, and environmental rights. Women's action in the political arena through an organization could be a strategy to overcome these barriers. Thus, when women participate in groups, these might provide an opportunity to amplify their voices and pool their resources (Majokweni & Molnar, 2021). Women foster collective action to fight for welfare and their rights as well as the rights of their communities, including fighting against gendered discrimination in the sector.

Women organizations also create social capital which could result in empowerment (Jentoft et al., 2018) and facilitate social safety nets and mutual assistance (Anandajayasekeram et al., 2008). So, organization can encourage women to mutually support each other and to solve problems together. Further, gender solidarity within women' groups could also provide a safe space to amplify their voices and overcome marginalization (Majokweni & Molnar, 2021). In addition, women could instigate, lead, and organize movements (Veuthey & Gerber, 2012). When women engage in the action, they make a visible impact by undertaking the new role in the community and challenging power relations (Veuthey & Gerber, 2012). So, with women involved in the organization, they are not only challenging gender expectations but also

empowering themselves as activists leading to an improvement of their life and community (Miller & Razavi, 1995).

Further, this thesis research will provide a story of women's organizations in the fisheries sector based on a case study in Indonesia. This study could enrich the study from the Global South context and enhance understanding of the significance and challenges of organizations for fostering gender equality in the sector.

CHAPTER 5: METHODOLOGY

This research follows a feminist methodology to elaborate upon the realities of women in the fisheries sector in Indonesia, particularly based on the story of PPNI (Persaudaraan Perempuan Nelayan Indonesia/The Indonesian Sisterhood of Fisherwomen Organization) and their members' experiences. Feminist methodology provides a set of approaches to produce knowledge of gender relations (Ramazanoglu & Holland, 2002) that consists of theory and analysis about how research should be conducted.

Harding (1987) notes that the issues of epistemology, methodology, method, and connection between these three are important discussions in feminist research. Epistemology is the theory of knowledge (Harding, 1987), and in feminist research, there is a strong foundation and acknowledgment that women are knowers and agents of knowledge. Thus, this research provides a feminist analysis in discovering women's experience and conditions that can be useful when understanding social phenomena about gender in fisheries more comprehensively since data about gender in the fishery context are usually limited (E. Bennett, 2005; Frangoudes & Gerrard, 2018).

In addition, this research is feminist research that provides knowledge related to gender and fisheries based on the cultural context of Indonesia. Since 1998 in Indonesia, feminist organizations have made the effort to enrich the connection between feminist theories and political practice in the women's movement, establishing feminist journals, conducting training, and developing feminist methodology in their projects (Arivia & Subono, 2017). This research has the objective to contribute to the knowledge production that is beneficial for the transformation of gendered subordination and injustices (Ramazanoglu & Holland, 2002).

Further, this research also seeks to contribute to the creation of fair science that incorporates critical perspective from essential social groups, like women's groups in research (Campbell, 2009). In other words, as a researcher, I highlight that the important aspect in terms

of a feminist perspective on science is not just to make science less masculine or less white, but more “human.” What I mean by a more “human” science is to develop fair science from different perspectives, as mentioned by Campbell (2009). Thus, this research provides a contribution to the agenda for justice and equality in knowledge production related to gender issues, especially in the fisheries sector in Indonesia.

5.1 Positionality Statement

Doing feminist research also means acknowledging the researcher's background to understand the research more critically (Harding, 1987), and it can be the modality to secure feminist objectivity by accommodating diverse points of view. Ramazano and Holland (2002) note that experience and knowledge are inextricably linked, saying that, “knowledge of social life is shaped by theory, culture and ideas, but does not come only from theory or language. It is a historical product, generated in particular social, political and intellectual conditions and situations” (p.2). Further, Haraway (1993) also noted that knowledge never comes from no viewpoint, and knowledge is always situated. Because of that, this methodology section provides not only the elaboration of data collection and data analysis process but also an elaboration of my positionality as a researcher.

A positionality statement informs the reader about the nuance of situated knowledge in this study. Situated knowledge means that the knowledge comes from a certain position, and contextualism could give epistemic privilege that makes reliable science, so researching women's lives could generate less partial and distorted research (Haraway, 1993). So, understanding the researcher's positionality or experience with the topic or subject of study could lead to critically understanding the connection between knowledge and condition of the knowledge it produced. Thus, the positionality of researchers influence the way research is conducted including research outcomes and results (Rowe, 2014).

In qualitative research, the researcher is a pivotal instrument and having a rapport with the participants is critical to the way the study is conducted, especially to situate the researcher's social background and the way they relate to the participants (Naples, 1996). Thus, it is essential for me as a researcher to articulate my positionality that consists of the dynamics of the research process and context, as well as my relationship to the research participants (Holmes, 2020).

This research focuses on examining the story behind the establishment of the PPNI, including the experiences of its members in the sector and whether PPNI has contributed to change women's lives to be more empowered. My past work experience became key to the way I engage with PPNI, including how/why I started this project of research.

My relationship with PPNI is not new as I have known them since 2016 when I was working as a program officer for a Non-Governmental Organization (NGO) that is an essential partner for PPNI. I was involved in a workshop that aimed to socialize regulations related to small-scale fisheries and to arrange capacity building forums, and PPNI was the participant of that workshop. Those experiences helped me get to know the leaders and some of the members of PPNI and their activities. In 2018, I changed my career from an officer in an NGO to become an employee in the government research center and think tank. I have still maintained a good relationship with PPNI through social media and attending events that PPNI participates in. From 2018 to 2019, I was involved in a research project studying how to eradicate poverty in the coastal area, and four of the five research locations were in areas where PPNI also had local members. When my research team conducted community meetings or focus group discussions, PPNI was one of the participants. Thus, I have maintained good relations with PPNI.

Because of my work experience, I have had more chances to learn about the condition of small-scale fishing communities in Indonesia, and especially about gender issues. Consequently, I have realized the importance of bringing academic and political attention to

the issues of women in fisheries through my research. Thus, by conducting this research I want to bring to the forefront women's voices, actions, and problems in fisheries, especially concerning their efforts to be empowered and to dismantle gender inequality. Further, the stories about women in the fisheries sector are limited, and I hope to broaden our understanding of women and women's work in fisheries, especially about women's organization in the sector through PPNI's story. PPNI's story is inspiring, interesting and will enrich the broader story of women's organizations from the context of the Global South

Moreover, having those past work experiences not only led me to maintain a good relationship but also provided me more chances to articulate a story about PPNI and obtain their trust. Gaining trust from participants relates to whether the participant perceives the researcher as an insider or an outsider. Insider and outsider positionalities can shape power differentials and experiential differences between the researcher and the researched (Naples, 1996). I acknowledge that my position is unique since I have personal experience working with PPNI before, but I am not a member of the organization. Insider and outsider are not static positions; it can be fluid (Naples, 1996) or blurred and unstable, and that can depend on the research moment (e, g., politics and time) (Sultana, 2007). Thus, in my case, I needed to gauge the participant's sense of my "outsiderness" and "insiderness" in order to locate myself in front of participants during the research. For example, I consider myself as an ally of the organization, not only because of their work on gender equality but also having and sharing similar social networks in the fisheries sector in Indonesia. They often also consider me as an insider because I used to help, meet, and work with them in the past. Being open about myself with participants is the starting point to embrace my self-reflection in my positionality. Because of that, I could be an insider for some of the participants, especially those PPNI leaders and members who have worked or shared an informal relationship with me (like I visited their home, had traveled together to visit sites and to help in training or workshops). But I also

recognize that I could also be an outsider for them because now I am working for the government, and they may see I am not a part of them as a civil society alliance. To fit into the fluidity of outsider and insider, the term "partial insider" can more accurately describe my positionality.

Developing ethical relationships (Subedi, 2006) and being honest about relationships and experiences (Sultana, 2007) within the research process is also a key consideration for this research. Thus, as the researcher, I developed an initial conversation with PPNI before the research started in order to be ethical from the beginning of the research process as well as to prevent harm to the PPNI and its members when the research is being conducted. In addition, I also promised to share my research findings with them and with the public as an academic paper or policy recommendation that may be useful for fostering gender equality in the fisheries sector in Indonesia.

5.2 A Case Study of PPNI

This research is a qualitative case study looking at a women's organization in Indonesia, PPNI (Persaudaraan Perempuan Nelayan Indonesia/The Indonesian Sisterhood of Fisherwomen Organization). To collect and analyze data, this study use a variety of methods and tools (Meredith, 1998). To start this research, in January 2021, I made initial contact with the leader of PPNI via phone, and she was very welcoming about the idea to do a research project based on PPNI. PPNI was selected for this study because this organization is actively alleviating the struggles of fisherwomen in Indonesia. In brief, PPNI was established based on the collaboration between groups of women and civil society organizations concerned with the empowerment of coastal/fishing communities in Indonesia (KIARA, 2018). PPNI works with fisherwomen such as women in shrimp aquaculture, women in post-harvesting or processing, and women with other livelihoods related to fisheries and aquaculture.

5.3 Data Collection

In prior studies about women's organization in fisheries, researchers have used interviews, focus groups, and document analysis as tools for data collection. For example, Soejima and Frangoudes (2019) used interviews, focus group meetings, as well as published and written sources with women's groups; Gallardo-Fernández & Saunders (2018) held 17 interviews (nine fisherwomen, six fishermen, and two entrepreneurs), and Dasig (2020) conducted interviews with eight women's leaders of fisherfolks organizations. Hauzer et al. (2013) used multiple tools to collect data such as interviews with fisherwomen, leaders of cooperatives or groups and government, and two focus groups with fisherwomen. In addition, the study from Frangoudes et al (2014) used data from a workshop of women in Europe's fisheries and aquaculture. In contrast with prior studies, my research was conducted during the COVID-19 pandemic. I started my data collection in summer 2021, in which traveling was restricted and doing in-person research in places like Indonesia, where people were not yet been fully vaccinated had ethical concerns. Thus, the research for this study was conducted remotely from the U.S to gather both primary and secondary data.

The primary data collection was conducted via phone interviews using Zoom, WhatsApp, and Google Voice. Zoom and WhatsApp are popular and widely used in Indonesia, therefore they were the perfect tool to use for my research. Google voice is very suitable for reaching the informant with a lack of internet connection because it can call home lines or cell phone numbers. Those call apps also provide voice recordings that are very convenient in terms of helping researcher record and store the data. Further, this study also used secondary data. The secondary data are documents providing additional information not obtained from the interviews and information that allow me to triangulate the information from interviews. Secondary data was crucial in the expansion and continuation of study in the context of

international immobility in pandemic times (DeHart, 2020). Thus, the documentation is also crucial in enriching the data of this research.

5.3.1 Interviews

I used the contacts that I already had with PPNI to help me identify other key informants, such as the founders, other leaders, partners, and members of the PPNI to start the data collection. In other words, I used my current professional and personal network to help nurture new contacts remotely (Douedari et al., 2021). I used purposive sampling (Palinkas et al., 2015) to select interviewees of this case study. Purposive sampling involves purposely selecting knowledgeable informants about the topic of study (Palinkas et al., 2015). In this case, participants were recruited based on the recommendation of the leader of PPNI as the starting point. Having a recommendation from a leader can have positive and negative biases. One positive one is that it allows me to recruit informants from the different areas and with different livelihoods because the leader recommended me to many informants. However, this approach may lead to cultural or personal bias, like the leader may suggest an informant close to her personally or to her politically views. She could also avoid recommending informants that may not share her views with regards to the organization. However, to solve that potential problem, the leader provided a me a list of potential informants with their contact number, but I did not only rely in the list she provided me. I ultimately had the authority as the researcher to decide who will be contacted to participate and conduct my engagement with other informants through snowball sampling to gather other knowledgeable informants that were not on the list. Snowball sampling means "to identify cases of interest from sampling people who know people that generally have similar characteristics who, in turn know people, also with similar characteristics" (Palinkas et al., 2015, p. 17).

All the interviews were conducted in multiple phases, pre-interview and interview. The pre-interview consisted of the initial conversation that was conducted through video/voice

note/chat in WhatsApp, text Short Message Service (SMS) or direct call. I introduced myself and my research, enquired about their willingness to take part in the research, and if they agree, I followed the consent form to do the research with them (Appendix A), and discussed about the time to conduct the interview. Then, in the interview, data was gathered through a semi-structured interview.

The process for sampling and interviewing was conducted by using synchronous methods (Hooley et al., 2012) such as telephone interviews. Telephone interviews are appropriate in certain circumstances and can reach an informant in diverse geographic locations (Berg, B. L., & Lune, 2012). Irvine (2011) concluded that a telephone interview is just as good as a face-to-face interview; however, there are some considerations such as duration of the interview, the amount and balance of researcher and participant talk, and the need for explicit prompting questions (Irvine, 2011). However, in this research, I found some obstacles to using phone interviews. First, the difficulty to reach some informants who did not own a cellphone. In order to get an appointment with those informants, I needed to reach their husbands and/or children. The schedule of the appointment depended on the availability and willingness of the husband and/or children to lend the phone to the participant. In other cases, I had to ask for help from other PPNI officers to come to the women's house to start the conversation and to lend the phone to the women. Second, uncertain situations due to flooding or COVID pandemic made the interviews complicated. In areas where PPNI's members live, for example the Demak coastal area faced tidal flooding in which the water level reached almost 75 centimeters in November 2021. Further, the communities faced lockdowns because of COVID surges and in some cases the fisherwomen or someone in her family dealt with COVID. In these circumstances, I waited to do the interview until the situation was better. Third, during the interviews in some cases the signal dropped, and I needed time to call the informant and repeat the question again. Although I faced some obstacles, I successfully conducted 29 semi-

structured interviews² that lasted approximately 45 to 120 minutes. I also did follow up interviews with some participants to delve deeper into some topics discussed previously. All the interviews were recorded, and important notes were handwritten during the interview. The notes are very useful for contextual reference to the data essential for data analysis.

There are two research questions for this research, and for each one of the research questions I interviewed different informants. The first research question aims to understand the reasons why PPNI was created. The informants for this research question included six people who were involved in the process of establishing PPNI (three female informants -one of them is the current female leader of the PPNI- and three male informants from the organization that supported the establishment of PPNI). I only interviewed six people for this topic, because those people were involved in the process of establishing of PPNI and from those interviews, I reached data saturation, the point that no new significant issues or information were identified (Hennink & Kaiser, 2022). The interview questions covered some general information, such as the background of the establishment of PPNI, and their knowledge about activity and strategies of the PPNI to handle women's problems in the sector (the interview questions for this research question are in Appendix B).

The second research question is about how PPNI has changed women's lives. For that purpose, I interviewed women from different livelihoods in the sector and local origin area, such as: fisherwomen, women shrimp farmers, women in post harvesting, and local leaders of women's groups that come from different areas in Indonesia, from Aceh to East Nusa Tenggara. A total of 23 women participated in these interviews (the interview questions for this research question are in Appendix C).

² In addition, during the participant recruitment process, there were three potential informants who were not successfully recruited; two people did not respond to the first communication; they did not reply to the message or pick up the phone call, and one person could not be reached because the contact number belongs to her daughter who lived not in the same city with her.

5.3.2 Documentation or document analysis

Table 1 List of Documents as Secondary Sources

Document Name	Year Publication
Proseding PPNI: Kilas Balik Persaudaraan Perempuan Nelayan Indonesia Proceeding of PPNI: A flashback The Indonesian Sisterhood of Fisherwomen Organization	-
Anggaran Dasar Persaudaraan Perempuan Nelayan Indonesia <i>Memorandum of Association of</i> The Indonesian Sisterhood of Fisherwomen Organization	2015
Anggaran Rumah Tangga Persaudaraan Perempuan Nelayan Indonesia <i>Articles of Association of</i> The Indonesian Sisterhood of Fisherwomen Organization	2015

The data from existing documentation/reports are part of the secondary data sources in this research. Using the documents as part of the analysis is applicable for a qualitative case study to produce a detailed description and help the researcher to enrich understanding and discover any relevant insight into the research problem (Bowen, 2009). Berg and Lune (2012) also note the need for an intertwined strategy or technique for data collecting. Intertwined strategy in data collection is useful in order to do data triangulation. Thus, as a strategy to collect the data, I developed a contact with PPNI and its coalition organization to get any documents related to women's issues in fisheries and PPNI's activity, including any relevant legal documents as well as looking from news articles related to the topic of research. The documents are included in the table 1.

5.4 Data Analysis

Data analysis consisted of an iterative process that started even before the data was collected (e.g., deciding which methods to choose, what case, and research question) and continued throughout the data collection process until conclusions were drawn (Miles et al., 2020). After data were collected, I stored the raw data file on a network hard drive and backed up using OneDrive. All recordings from the interviews were kept in a folder. I also created spreadsheet documents to do data matrix records. This document consists of some information such as: name, pseudonym, place, profession, date of interview, notes (referring to which research topic/question), the file name for recording, type of data, length and format of data, language, transcript information, translation information, and additional data. All the data were organized by using a data matrix to identify basic information related to informants. The data matrix helped me stay on track in the research process (Galman, 2016). Then, all the interview recordings in this study were transcribed with the help of a professional transcriber who signed a confidentiality agreement for the transcription service. Further, all the transcriptions are in Bahasa Indonesia, and they were uploaded in the MAXQDA platform.

As Bazeley (2021) notes the importance of developing familiarity with the data sources and seeing them comprehensively before starting the coding steps (Bazeley, 2021). Thus, after all the interviews had been transcribed, I reviewed the transcriptions and went back to my notes from the interviews. I read the transcription and double checked again with the recording and notes from the interview. Then, to be more familiar with the data, I created memo by using the facility on MAXQDA. Having memos during the data analysis is very useful to help extract the meaning from the data (Birks et al., 2008) and to make notes related to any decision in analyzing data. Thus, this study also used memoing to increase transparency and reflexivity in the research process.

Next, I described, *classified, and interpreted data into codes and themes*. The codes came from both the theory and the literature review I had done, and from the interviews as well. This study combined the techniques of inductive and deductive approaches for thematic analysis. The study starts with deductive coding with a set of code from a conceptual framework, then the new code could come up through the data by using an inductive approach. In this coding process, the interviews were coded by using MAXQDA. In qualitative data analysis, the first cycle of coding aims to summarize segments data from some interview transcripts. While in the second cycle of coding, I re-updated my codebook and analyzed both the codebook and the data by looking at categories/themes and relationships among the codes. Thus, I created a thematic network to understand the connection among codes and categories based on research topic. The example of a codebook could be seen in the Appendix D.

The codebook is important to give me insight about how to develop the narrative of the writing. Then, I interpreted again the data. This process consisted of abstracting the code and themes into broader interpretations or meanings of the data. In other words, this is a process for telling the story, discussing the result, and describing analytic thinking (Galman, 2016). In addition, to write the research findings, I used pseudonyms to refer to informants involved in the interviews. In the writing process, I also developed visualizing data. Data visualization is a phase in data analysis that refers to displaying data in various visual representations (Creswell, 2013). The way to create data displays is based on my goals of how to understand the data, such as to inform the general situation, interaction, action, chronologies, and so on (Miles et al., 2020). Thus, I created data displays through tables in order to help to understand discussion of this study. Overall, following these steps helped me conduct the data analysis process more systematically, which is beneficial for formulating a solid conclusion for the study.

CHAPTER 6: RESULTS

In this results section, I answer my two research questions, and therefore it is divided into different subsections. To answer research question 1: *What were the barriers that women in the fisheries sector were facing that motivated the creation of PPNI (Persaudaraan Perempuan Nelayan Indonesia/The Indonesian Sisterhood of Fisherwomen Organization)?* I will describe in 6.1 the barriers that small-scale fishers faced in Indonesia and then the barriers that women in the sector had to provide the context for the establishment of PPNI. Then, in 6.2 and 6.3, I will address the establishment and post-establishment of PPNI.

The second part of the results section answers the question: *How has the creation and work of PPNI changed the lives of women in the sector?* To answer this question, in subsection 6.4, I will first introduce the women joining PPNI, in particular some of the characteristics that made them join the organization and how they got involved with PPNI. Further, in subsection 6.5, I will elaborate on the influence or roles of PPNI on women's lives. The description of any accomplishment of PPNI is in subsection 6.6. Elaborations about some obstacles and driving factors that could challenge or support the roles of PPNI are provided in subsection 6.7.

6.1 Barriers women were facing before the creation of PPNI

The barriers or problems that lead to the creation of PPNI could be classified in two categories, problems faced by the small-scale fisheries sector in general, but that are especially difficult for women, and problems faced exclusively by women working in the fisheries sector.

6.1.1 Barriers faced by the small-scale fisheries sector

The proceeding document of PPNI consists of meeting reports from the process of establishment of PPNI, in this document issues that appear as a problem faced by small fishing communities were poverty, the criminalization of the fishing community³, and policies in

³ In Indonesia, Law No. 27 of 2007 concerns the management of coastal areas and small islands, that which regulates Coastal Waters Concession Rights (HP-3). The HP-3 was considered to have the potential to impact small communities, particularly to limit the access of fishers and coastal communities (Kompas.com, 2010). In Indonesia, there are land or ocean grabbing projects in the name of development, such as mining and land

fisheries and coastal areas that disadvantage traditional fishing communities. Such as the Coastal Waters Concession Rights (HP-3) that give more rights to business and revokes rights for traditional fishing communities to use marine space. Further, the document mentioned that women handle the biggest burden of these conditions.

The proceeding document also described other fundamental problems that not only women, but all in the small-scale fisheries sector face, such as extreme weather that is led by climate change. Severe weather influences the time and opportunity for the fishers to go fishing. These conditions disturb their livelihood and financial stability. The situation is even worse because fishers do not have insurances⁴ or subsidies.

reclamation, in the coastal areas that impact not only the ecosystem but also threaten the socio-economic life of the small-scale fishing community. Those projects led to resistance from the coastal/fishing community. These protestors are usually criminalized when they fight to protect their interests through protest rallies (Yudhistira, 2013).

⁴ Fisher card and insurance for women: In 2016, there was the Minister of Marine Affairs and Fisheries Regulation No. 16/ PERMEN-KP/2016 concerning fisher's cards. A fisher's card is a fishing identification card issued by the district/city service in charge of maritime affairs and fisheries. Several requirements must be met in order to process the fisher's card, including the completion of a form with a photocopy of the resident's identity card and a certificate from the village/district/'lurah' stating that a person works as a fisher. The fisher's card has a function to provide the identity of the fishing profession, a database for protection, empowerment, and guidance, and to make it easier to implement government programs. A fisher's card provides benefits such as receiving a fuel subsidy, insurance, assistance with fishing gear and other necessities, managing free land certificates, receiving technical guidance or capacity building, and receiving rice reserve assistance (Eriyanti & Yanto, 2019).

Further, in 2017, in order to provide protection and empowerment in the sector, the Minister of Marine Affairs Regulation No. 39/2017 jo No. 42/2019 concerning Kartu Pelaku usaha kelautan dan perikanan (Marine and fishery business card/KUSUKA card) was issued. The KUSUKA card replaces the fisher card because, as part of the One Data Program, integrated data collection related to the marine and fisheries sector in Indonesia is being implemented (Eriyanti & Yanto, 2019). Previously, the ministry had a policy that provided specific cards based on specific professions. KUSUKA is the identity card for fishermen, salt farmers, fish cultivators, fish processors, fish traders, and fisherwomen involved in the sector. It serves as a professional identity card that is part of a database that facilitates protection, empowerment, service, and development for the sector's business actors, as well as monitoring and evaluating ministry program implementation.

There are fishery instructors who will assist in submitting the proposed KUSUKA data collection in order to obtain the card. Access to fisher insurance requires both a fisher's card and a KUSUKA card. Fisher insurance is essential for fishermen to have because of the high risk that they face as a result of an accident at sea or occupational diseases. Fisher insurance in Indonesia consists of any compensation for accidents due to fishing activities and compensation for accidents other than fishing activities (Eriyanti & Yanto, 2019). To obtain insurance, a fisher can pay independently or through the government's Fisher Insurance Government Assistance Program (Bantuan Premi Asuransi Nelayan/BPAN), in which the government will pay insurance premiums for a fisher for one year. There will be 120,000 insurance targets for the fishing profession in 2021 (Pradana, 2021). The requirements to access the BPAN program are being small-scale/traditional fishermen, having a fisherman card, maximum age 65 years, have a vessel that's at least 10 GT, not using prohibited fishing gear, and never receiving assistance from previous insurance programs (Marroli, 2017). However, the distribution of benefits from government programs of BPAN is not equal, especially for fisherwomen.

According to the different informants that were interviewed about the origins of PPNI, there were other problems small-scale fishing communities face that make the survival of the sector hard such as environmental and economic changes related to uneven developmental impacts. For example, in the Java coastal area, rapid industrialization and widespread pollution cause destruction to the environment, like coral reefs, seagrass, and juvenile fish. Informants discussed that everyone in the small-scale fishing communities are vulnerable to the impact of land and ocean grabbing in their area. For example, sand mining impacts the livelihoods of the fishing community because exploitation can degrade the ecosystem, consequently threatening people's livelihoods. With regard to women, an informant mentioned "mining, land reclamation, and palm oil expansion are threatening women's lives" (Dara, Interview, October 6, 2021).

In sum, small scale fisheries and in particular women in the sector were facing several difficulties such as ecological crisis and extreme weather from climate change, but also the consequences of the country's economic development policies. When considering this, along with a lack of policies to help small-scale fishing communities and women in the sector mitigate all these problems, women are put in a very precarious situation.

6.1.2 Barriers faced exclusively by women working in the fisheries sector

Lack of Recognition

A primordial thing that was discussed by all informants and in the proceeding document is that women and their role are not recognized in the sector neither by the government nor by some community members including fishermen. In Indonesia, women's contribution in the fisheries sector is only conceived in pre- or post-harvesting, ignoring that women drive wooden boats to the sea and harvest fish. Informants were clear that both women and men are involved in the fishing activity on the sea, and that means they face similar work risks, but only men that

could access the protection programs (fisher insurance assistance) that the government provides for fishers.

All the informants discussed that because of this lack of recognition, women's occupation in their national identity cards is not fishers or fisherwomen, but instead they are classified as housewives. "Acknowledging women as fishers or fisherwomen could influence the way women are treated as equally important actors in the fisheries sector." (Mira, interview, October 6, 2021). Subsequently, because their occupation is not fisherwomen/fishers they do not have access to the health insurance provided to their male counterparts. As one informant mentioned: "women do not have protection programs like fisher insurance from the government compared with men" (Sari, interview, July 26, 2021).

In theory, it is possible to change their occupational information in their ID card to "fisher," however, in order to do that, women need to get a letter of recognition from the (male) head of the village. Getting this letter is not easy because the strong patriarchal culture functions as a barrier to accept women's role as a fisherwoman. So, one of the informants noted that:

"Women need to have a specific identity that recognizes themselves as fisherwomen related to their livelihood role, not just housewife because housewife refers to marriage only and that has nothing to do with their jobs or livelihoods. If her identity as a fisher is acknowledged, women could have more freedom and more space to sustain their participation in the sector" (Dara, interview, October 6, 2021).

The difficulties recognizing women as fishers have origins in social norms based on culture that lead to the stereotype that fishing is a male job, and women cannot be called fishers (because according to the social norms, they do not fish) and they are just helpers doing things before (preparing food) and after (cleaning the fish) the fishing is done. So, calling women fishers means challenging the social norms. As explained by one informant: "there is a stigma

from society. Women have responsibility only at home for doing domestic work. That is a challenge. At the local level, the village chief or local leader is also not recognized and not trusted if there are women to go to the sea. They do not understand why women need to have a fisher card. This is one of the barriers for women” (Karya, Interview, August 27, 2021).

Another informant said: “Women are not allowed to be recognized as fishers because they just help the husband. The village officer, religion leader, parliamentary officer all claim that it is inappropriate to be called fisherwomen because they just help, and they do not need to be recognized by the state. Calling women as fisherwomen is similar to insulting women, and so no need for them to have recognition” (Mira, Interview, October 6, 2021). In other words, women have entered the male domain by fishing, and therefore they are violating the norms that women should stay at home, but women want to be recognized as fisherwomen because they actually fish. The consequences of that are that women face scorn (“Calling women as fisherwomen is similar to insulting women”) from society because of their livelihood as fisherwomen.

To handle that situation, there is a need to redefine fisher. A fisher said: “in the regulation the definition of fisher should be changed, not only as one who catches the fish in the sea; but also, people who depend on marine resources. The definition can be broader, including fisher in shrimp farming, gleaning, fish processing. Because they are dependent on coastal and marine resource activity” (Mira, Interview, October 6, 2021). Another informant had a similar point of view, where she said: “because women are actively involved in the pre-, harvesting and post-harvesting, so it is important to recognize them as fisherwomen or in Bahasa means “perempuan nelayan”. So, the word “perempuan (women)” stands before the word “nelayan (fisher)” in order to make the visibility of women’s role in the sector; We cannot just leave women behind when the state does not give protection to women. Is about identity; the

definition of fisher needs to be changed to be more inclusive to women”. (Dara, Interview, October 6, 2021).

Lack of Participation

All of informants discussed the lack of participation, especially the inadequate opportunity women have in the decision-making processes related to the establishment of regulations or policies in the fisheries sector. As example, one of the informants said, “there are many legal regulations that do not recognize the existence of women as legal subjects who are equal to men” (Karya, interview, August 27, 2021). The proceeding document of PPNI summarizes this situation as a lack of support for gender equality in policy processes and policies implementation.

One of the informants argued that the lack of community participation, especially the participation of women in decision-making processes is due to the legacy of the New Order regime (Orde Baru) in Indonesia, and the mentality in government officers. The New Order was in power for over thirty years (1966-1998) under the leadership of General Suharto. Under this regime of nation-building, women have a role as bearers of culture that should follow a certain moral code ("kodrat") as wives or mothers. “The problem is in the mind of the village chief that is still using the mentality of a New Order, where it’s hard to understand what justice is about. The context of the New Order era led to gender blind regulation because of the strong sense of patriarchy and feudalism” (Dara, Interview, October 6, 2021).

The processes in the small-scale fishing sector are done, according to the informants, by people who have a very strong patriarchal culture and will work to protect men’s interests first. The informant said: “The patriarchal culture is very powerful in shaping subordination of women, including in the policy making process, to produce regulations that are so patriarchal. The consequences for women are not recognized, and their interests are left behind. That is an

example of how patriarchy comes to the decision-making process, because the decision has a biased male perspective “(Karya, interview, August 27, 2021).

Then, women need to do something to change that situation, so that in the regulations of protection and empowerment of fishers, fish farmers, and salt farmers, all groups could be include as “legal subjects” and no group could be discriminated against, especially women. An informant said: “processes of decision making, like regulations, should be good both in process and implementation. Without knowing and being involved in decision making process, women in fisheries only are welcome when the socialization of the regulation occurs” (Karya, interview, August 27, 2021). The lack of participation is so extreme that one informant mentioned “meetings are a public space for men not women” (Arie, Interview, October 6, 2021). An informant eloquently explains it this way:

“We still have a barrier that the decision-making process is dominated by people with a strong patriarchal culture. They are not aware of what happens with women in the sector and tend to be gender blind. So, women themselves need to have initiatives for direct involvement. They need to fight to have more opportunities to participate. The right is not free or easy to get, and there is something that we should earn by fighting. The policy maker is, in its condition, unaware of the fight and needs to be educated through advocacy. So, we needed to organize fisherwomen so they can be involved in decision-making processes” (Karya, interview, August 27, 2021).

With the lack of recognition and participation then it is not surprising that women are excluded from accessing facilities and programs from the government, for example accessing productive resources. One of the informants mentioned that "women find it difficult to access available resources and facilities provided by the state or those in nature. For example, it is difficult for fisherwomen to get assistance, whether it be necessities, business capital, or managing coastal resources” (Arie, interview, August 6, 2021). In other places, women are

not allowed to access reservoirs, this is the case of East Java “The rule is to protect the source of water but why should women not access that” (Dara, interview October 6, 2021). In Sulawesi, there is a tradition that while women are menstruating, they could not join in any sea activities.

Overall, based on the interviews, barriers could be understood as problems and challenges, as well as obstacles that women face to participate in small-scale fisheries. There are some barriers that all in the sector face like the negative impacts from economic/development or environmental change in a coastal area, and policies that favor big fishing industries. But informants were very clear about some other barriers and issues faced only by women in the sector such as the lack of recognition for women as fisherwomen, the lack of participation, and the limitation to access productive resources.

6. 2 The Establishment of PPNI

PPNI: Persaudaraan Perempuan Nelayan Indonesia/The Indonesian Sisterhood of Fisherwomen Organization was initiated by groups of women at the grassroots level, with national level organizations who are actively involved in empowering small-scale fishing/coastal communities in Indonesia. The collaboration was based on the common belief to develop a movement to help women in the small-scale fisheries sector. As one of the informants said: "there is common belief about the importance of building women's organizations to connect women in the fisheries sector around Indonesia with similar experiences and problems so they could fight together." (Arie, Interview, August 6, 2021)

According to the Memorandum of Organization of PPNI, PPNI's vision is the realization of intelligent, advanced, and independent fisherwomen to improve the welfare of fisher's families in Indonesia. Further, PPNI's missions are: Encouraging fisherwomen in fighting for their rights; encouraging and facilitating the capacity building of fisherwomen and exploring the potential and promoting the economic empowerment of fisherwomen. From the interview,

the informant also noticed that "the background was the need for women to organize themselves because self-organizing is the way for PPNI to fight for women's rights "(Karya, August 27, 2021). "

The idea of establishing PPNI was inspired by grassroots movements around Indonesia understanding the problems and barriers women face in the sector, including the lack of platforms for amplifying women's voices at the national level. The informant said that "PPNI started from the existence of women at the grassroots who have no access to information or assistance and were far from being noticed at the national level, but we still carry out empowerment movements. There is a minor concern with the issue of women in fisheries when speaking about traditional fishing because there is the stigma that fishers are always men. So, "bringing women's voices at the local and national level through PPNI is important" (Dara, Interview, October 6, 2021). Thus, "there is a need for women involved in the advocacy at the national level, so organizing women as PPNI was very rational" (Arie, interview, August 6, 2021). PPNI focuses on women in fisheries and other women involved in aquatic livelihoods such as aquaculture and mangrove tourism. PPNI believes that when women are empowered, the benefit are not experienced only by women; as one of the informants put it, "the beneficiaries of women's struggles and justice are not the women themselves but the whole family" (Dara, October 6, 2021).

Based on the interviews, I found that the establishment of PPNI consists of two significant phases. The first phase is the initiation of PPNI or declaration, and the second one is the post-declaration, or the process of formalization.

6.2.1 Initiation of PPNI or declaration

There was an effort to conduct a capacity-building forum in Bau-Bau, Southeast Sulawesi in 2010 that consists of women's groups from the grassroots level around Indonesia as the participants (i.e., East Nusa Tenggara, Demak, North Sulawesi, North Sumatera, Jakarta,

Tasikmalaya, Serdang Bedagai, Surabaya, etc.). The forum was initiated, and fully supported by KIARA ⁵(The People's Coalition of Fisheries Justice) and its members like Jaringan Pengembangan Kawasan Pesisir (JPKP) Buton and Alliance for Prosperous Village (ADS) (KIARA, 2018). One of the informants said that:

“We need to understand that the initiator and founder of PPNI are different; the initiators were KIARA by establishing capacity building and also individuals involved in the capacity-building forum at the time; JPKP Buton including its leader as the facilitator in that capacity building; Alliance for Prosperous Village (ADS) who support as a funder in that capacity building. Then, the founders are the JPKP, KIARA, and women⁶ who were involved in the capacity building forum altogether” (Arie, Interview, August 6, 2021).

The capacity-building forum in Buton was conducted because fisherwomen were not included in fishermen groups, and fisherwomen felt the need to amplify their voices according to their complex problems and interests “there is a need break the stigma that fishers are only men and make women more visible in the sector” (Sari, interview, July 26, 2021). That capacity-building forum consisted of women's training and education related to gender, women's rights, economic and financial management, and family education. By the end of the forum, all the participants declared a common belief about the importance of having organizations at the national level to amplify women's voices and aspirations. The reason to organize women is that we need advocacy for fisherwomen at the national level (Karya, Interview, August 27, 2021).

⁵ KIARA (Koalisi Rakyat Untuk Keadilan Perikanan/The People's Coalition for Fisheries Justice) is a coalition organization in fisheries concerned with giving assistance to coastal communities, fostering justice in fisheries, and facilitating any advocacy to amplify the voice of fishers.

⁶ The women are representatives of the Puspita Bahari women's group, the Muara Tanjung women's group, the Lamalera tribe, a women's group from Gresik, a women's group from Jakarta Utara, the Antra Manado organization, a women's group from Bau-Bau, and Forlani.

Thus, in the forum, they agreed to establish an organization and to use "fisherwomen and sisterhood" in the name (read: PPNI) to represent that the organization is a family that would help each other without boundaries with mutual sharing and trust. One of the informants said that "if fisherwomen in one location have a problem, they can share their story and talk with other women in another area who face a similar problem, so they can build solidarity from that." (Dara, October 6, 2021).

6.2.2 post-declaration, or the process of formalization

During this phase, according to the informants there were many meetings for brainstorming and preparation, building formal structures, formulating the organization's rules, recruiting members, writing vision and mission statements, and creating empowerment and capacity programs.

Based on *Articles of Association of PPNI*, the logo of PPNI consists of two figures of women and fish that represent the spirit of fisherwomen fighting for their rights to foster independence and welfare, and the pink color represents friendship, trust, and goodwill in achieving common goals. Using the term sisterhood is significant for the name and spirit of PPNI and influences how PPNI drives internal relations in the organization. In PPNI, dialogue is key: "The joys and sorrows must be shared together, discussed together, because that is the essence of a sisterhood" (Arie, August 6, 2021). Based on a *Memorandum of the Association of PPNI*, PPNI was formally established on May 16, 2014, upon the agreement among women's groups (14) in the fisheries sector during the meeting in Central Jakarta. The name of groups of women can be found in the table 2.

6. 3 Post- Establishment of PPNI: How the Organization is managed

PPNI consists of diverse women's groups from around Indonesia with different livelihoods and involvement in the fisheries sector as members. PPNI has the objective to help women's rights in the sector, to meet that objective, PPNI has certain rules regarding general

organization regulation and membership. According to the *Articles of Association of PPNI*. There are some requirements to become a member of PPNI, for instance: Those who can become PPNI members are women's groups/organizations in a fishery that has integrity and organizational commitment to fight and work on the issues of women in fisheries. The women's group should have existed for at least two years and received recommendations and have been approved by at least 5 (five) PPNI members. The idea of PPNI is to consolidate women's group movement in the fisheries and aquaculture sector in one platform. That is why becoming a member of PPNI should be via women local groups.

Table 2 List of Women's Groups that Formally Established PPNI in 2014

No	Name	Location
1.	Mekar Baru	North Jakarta
2.	Muara Tanjung	North Sumatra
3.	the fisherwomen's group in Buton Raya	Buton, Southeast Sulawesi
4.	Udang Sari	Jepara, Central Java
5.	Ibu Mandiri	Surabaya, East Java
6.	PPNI Gresik	Gresik, East Java
7.	PPNI Indramayu	Indramayu, West Java
8.	the women's group of Sulawesi Utara	Manado, North Sulawesi
9.	the women's group of Lombok	Lombok, West Nusa Tenggara
10.	PPNI Batang	Batang, Central Java
11.	Puspita Bahari	Demak, Central Java
12.	P3UW	Lampung
13.	KSU Keluarga Bahari	Langkat, North Sumatera
14.	Sekar Wilujeng	Kendal, Central Java

(Source: KIARA, 2018)

The discussion about the approval and determination of prospective members can only be carried out at the national meeting. Such as, membership can be terminated if the members resign, disband, violate the *Articles and Memorandum of Association*, also if they have been inactive for 1 (one) full year, have ideas contrary to PPNI vision, or defame the organization. Further, women's groups should be independent and free from political affiliation because, as one informant explained otherwise "it can prevent PPNI from always speaking loudly about gender equality and the truth for women's rights in the fisheries without problems" (Mira October 6, 2021).

Based on the document of the Memorandum of Association of PPNI in the article 11, each member of PPNI has the rights: a. to elect and be elected both as the Presidium Council and as Secretary-General; b. to give an opinion; c. to get capacity building; d. to be involved in every activity and program; e. to get legal assistance; to participate in the national and annual meeting; f. to accept or reject the report from the Presidium Council and the Secretary-General; g. to resign as a member.

Further, each PPNI Member is obliged: a. to maintain the organization's good name. b. to grow and advance the organization. c. to provide information, suggestions, and opinions. d. to comply with the *Articles of Association and Memorandum of Association* of PPNI regarding the advancement the organization. In some cases, PPNI also helps to establish women's organizations at the grassroots level (Mira, interview, October 6, 2021) and the women's group have their own autonomy to formulate programs based on their own contextual needs and situations.

According to *Memorandum of Association* and *Articles of Association* of PPNI, the leadership structure in PPNI national consist of Presidium council (the chief is from PPNI Serdang Bedagai, members of presidium are from PPNI Demak and PPNI Gresik), Secretary-General (from PPNI Demak), and Admin (from PPNI Lampung). Currently, PPNI has 16

members in eleven provinces in Indonesia, such as PPNI local in Aceh, Serdang Bedagai, Langkat, Lampung, Demak, Kendal, Jepara, Sikka, Lombok, Surabaya, Gresik, North Jakarta, Indramayu, Bau-Bau, Batang, and Manado. According to *Articles of Association of PPNI*, the Presidium has the role to evaluate the organization progress, amplify the voice of the members, and provide any strategic insights to the general secretary. The Secretary general must follow the mandate from the national or yearly meetings of PPNI, has the responsibility to lead program and management organization as well as building networking.

Informants discussed that having PPNI as a national organization and their members from grassroot (local) levels is very strategic because women could build solidarity to share experiences and information to benefit advocacy at all levels. Further, as PPNI consists of local and national level, PPNI has regular coordination meetings. As one of the informants shared that there are formal officer meetings, but they also have intense communication through WhatsApp groups to build coordination. In general, PPNI has some important forums for the decision-making process, first is the National meeting, Yearly meeting, Presidium meeting, and Presidium and Secretary general meeting. The highest forum for the decision-making process is a national meeting every three years to choose the presidium and secretary general and new members. Yearly meetings are held every year to evaluate the program and prepare the plan for the yearly agenda of PPNI. Related to financial sources for their program, based on the Memorandum of Association of PPNI, the sources of funding of PPNI consists of membership fee, voluntary support from members, donations from the public or other organizations and/or donors that are not binding, and the organization's own business (e.g., selling fish crackers products with PPNI label and joining the bazaar). PPNI had also received funding from an NGO that had core funding⁷ from other international NGOs. All of the funding sources are regulated according to PPNI's regulation documents.

⁷ Core funding means the organization can use the funding depending on their decision, not driven by the funder. (Sari, interview, July 26, 2021).

According to proceeding document of PPNI, PPNI can do several activities in order to strengthen the Indonesian fisherwoman movement, such as meetings or forums to train and educate fisherwomen; discussion and consolidation to promote collective initiatives of fisherwomen (e.g., an agenda from women related to face climate change issues and women's initiatives on reform Indonesian policy). Further, PPNI has programs such as political education for fisherwomen, inviting other fisherwomen to join PPNI, strengthening PPNI groups in the local areas, advocacy, campaigning, and other capacity building programs. In addition to capacity building, as one of the informants said, “human capital in the fisher community is still low. They are still lacking critical thinking and they do not know about their rights. Because of that, more established organizations can assist them to be more critical thinkers” (Karya, interview, August 27, 2021). Some of the informants feel that because the patriarchy is so powerful, women need to think critically to understand what are the rights that they have, and this can only be achieved if they do this collectively as a group, and as a movement, PPNI aims to be that.

6.4. Introducing the Women that Joined PPNI

Women play various roles in Indonesian small-scale fisheries, they engage in a wide range of activities such as fishing, shrimp farming, fish/shrimp processing, and they are fishmongers. The following part presents stories from some women that joined PPNI, talking about why they joined the organization, and how the organization has contributed to their lives.

Fisherwomen

This part of the study gathers information based on the interviews with four fisherwomen from PPNI Demak. They are fisherwomen who drive a wooden boat and harvest fish in the sea with their husbands. They are Darmi (37 years old), Neno (60 years old) and Jena (45 years old) and Sumarni (35 years old). Women go to the sea with their husbands and are also involved in other fishing activities. In the boat, they have a division of labor. They set sail at

midnight, with the husband riding the ship until it is time to spread the net, then women steer the boat, and men spread and hang the gillnet. It takes about 2 to 3 hours, or even 5 hours, to get to the fishing ground. No matter how many fish they catch in a day, they will return home, and fisherwomen believe it is God's provision for them on that day. Even if they cannot get any fish, they still give thanks and return home. At home, their husbands fix the boat's machinery, while women sell fish. Following that, women are responsible for their household duties, while men are responsible for cleaning the fishing equipment and getting everything ready for the next day.

Having livelihood as fisherwomen is not without challenge for them. **They all have felt inferior as a result of their decision to fish, because of the social norms.** Neno stated that “People saw me as awkward and ungrateful for the income my husband brings, but in reality, I went to the sea because no one else can help him catch the fish” (Neno, Interview, March 1, 2022). Another informant said: “To be honest, I was too shy to accompany my husband to the sea because of the community stereotype, but I also felt sorry for him. We have a son, but he attends school” (Sumarni, Interview, February 17, 2022). Darmi's situation is similar to Sumarni's, she and her husband hope that their children will not be fishers like them because the fish population is declining, and they hope their children will find another job on the land.

These four women have been working as fisherwomen as a **coping strategy for the financial issues caused by overfishing** and the lack of boat crew members in the village, as one of them stated: “Six years ago, I went to sea with my husband because it was difficult to find a boat crew member who could accompany my husband to the sea” (Darmi, Interview, September 7, 2021). In their communities, men prefer to work in factories rather than as fishers. One of the informants stated “If they (people) work in the factory, they will earn around two million rupiahs (USD 150). Working in the factory is more promising because there is less uncertainty than in the fisheries. We may catch fish one day, but not the next” (Dina, Interview,

March 4, 2021). However, despite being mocked and belittled for fishing, they continue to go to sea as fisherwomen. Darmi said: "At first, my husband was ashamed because I went fishing with him, and fishermen in the village make fun of the women that go to the sea" (Darmi, Interview, September 7, 2021). To deal with this situation, the fisherwomen had to dress like men, wearing hats, pants, and t-shirts to avoid being mocked by fishermen or people from other villages.

These fisherwomen also mentioned how difficult it is **to be recognized as a fisherwoman and treated as a such**. Fisherwomen found it difficult to access government programs for male fishers, like a fisher's card and free fish health insurance. For that reason, they are eager to have joined PPNI. Jena emphasized how significant it was to join PPNI because that allowed her to obtain her fisher identification card and other program/assistance from the government (Jena, Interview February 15, 2022). She also mentioned that having a familiar person in the organization encourages women to join: "I am happy because there are so many familiar people I know in that organization. Furthermore, PPNI is a place where people can express their grievances and learn more" (Sumarni, February 17, 2022).

Women in shrimp aquaculture

PPNI includes women's groups doing different activities within the fisheries, including women in the aquaculture sector. For example, there is a PPNI in Lampung, which consists of women's shrimp farmers. According to the three women interviewed, women play an important role in shrimp farming activities doing things like feeding and checking the shrimp condition, checking the oxygen and the pinwheel of the pond, managing the overall pond and marketing. They are Eka (39 years old), Kirana (42 years old), and Surti (49 years old). They all live in the area of shrimp production center Dipasena, Lampung. Each of them have their own pond located close to their house: "Living in the pond area is difficult because there is no clean water, no good roads, you are isolated and because getting to the city is difficult" (Eka, Interview,

August 12, 2021). Eka and Kirana both completed vocational school, whereas Surti only completed junior high school. Shrimp farming can be managed together with their husbands or separately. Surti, like Kirana, has managed her pond separately from her husband, "right now, I have two ponds, one is my husband's business, the other is my business, we have our respective ponds. Yes, so it's the same, you know, he does shrimp farming, I also do shrimp farming" (Kirana, Interview August 18, 2021).

They all joined PPNI for different reasons: **getting recognition as women shrimp farmer, personal growth, and gaining new skills to add value to the shrimp.** Karina said that before joining PPNI she thought: "If I joined PPNI, I would gain experience and be able to receive assistance. Because I have never received any government assistance" (Karina, Interview, March 1, 2022). Surti mentioned "my husband is recognized as shrimp farmer in his ID, while I am a housewife in mine (Surti, interview, August 26, 2021). Surti, on the other hand, wishes to gain more experience and friends in order to cope with the loneliness she experiences as a result of spending all of her time caring for her shrimp pond and her family. Further, Eka said she wanted to be independent and do things that were meaningful by joining PPNI, "I wanted to make a change in my life. My community used to be very patriarchal. There is no space for women to grow because women are under their husbands' shadows. But I know women's role in aquaculture is very significant. I wanted to join PPNI because it would change my way of thinking. Another reason is that PPNI can assist me in honing my skills in the shrimp processing into more value-added products." (Eka, Interview, August 12, 2021).

Women in post-harvesting

Women's contributions to post-harvest can be as fishmongers and fish processors, such as making dried fish, fish crackers, and shrimp paste, some women do those fishing related activities as their secondary source of income. For Dina (43 years old), Usi (40 years old), Tina (42 years old), Nina (26 years old), Ulia (28 years old), Surati (37 years old), Karina (50 years

old), Rina (39 years old), Fani (49 years old), and Jamilah (30 years old), working in post-harvesting in the fisheries is their main livelihood. For Sally (43 years old), Julia (41 years old), and Rara (40 years old), being involved in post-harvesting activities is a secondary livelihood, something that they do in addition to another job. All of them joined PPNI for different reasons (e.g., **gain new skills related to post harvesting, help to expand their business, protect the environment where they live, and having support system**) and under different circumstances.

Dina is a fish processor who married a fisherman and became a housewife whose daily work was to care for her family and sell fish caught by her husband. Dina felt her family's income was not enough and decided to seek additional income. However, Dina's husband refused to accept her working, and she became a victim of domestic violence. She divorced him and became the family's backbone. In 2015, she joined PPNI and **learned many skills related to fish processing**. Since then, she has been more involved in fish processing and has become a leader in PPNI.

Usi is a fish processor, and she was previously a fish seller. At the age of 17, she married a fisherman. Usi stopped selling fresh fish in 2015, and she looked for another source of income, this is when she got involved with PPNI. Usi joined PPNI because she was interested in the training and workshops they provided. PPNI taught her how to process raw fish into more valuable food products with higher added value, Usi learned to process fish crackers, the smoke soft bone milkfish, shrimp paste, nuggets, and others. Further, Usi defines herself as a fisherwoman because according to her, a fisherwoman is someone who fishes and is also involved in fish post-harvesting.

Like Usi, **Tina** is actively involved in fish processing to make more food that has added value and also is innovative. She also notes that fisherwomen are not only women that go to sea, but also those who are involved in fish processing. Tina lives in a fishing village in Jepara,

Central Java. She is the leader of a women's group that is particularly opposed to sand mining in her area. Her group joined PPNI with **the primary motivation of keeping her village safe from sand mining.**

Nina is a fish processor who specializes in making and selling dried fish. Nina has a bachelor's degree in religious studies, but she does not work on that topic, because she must manage her mother's dried fish business. Nina joined PPNI in 2015 to improve **the capacity of the business and become more confident.** She mentioned that she has to face challenges related to both the weather and the capital. Nina said, “the weather is making it difficult for me to dry the fish” (Nina, interview, August 17, 2021). Previously, she was constrained by capital because she required funds to purchase raw materials (fish), while waiting for the payment from buyers. Getting into debt used to be the only way for her business to survive. She stated that being in debt is very common for people living in the coastal area. In her area, there are many mobile banks or “informal loan sharks” that provide loans to fish processors like her who do not have collateral. PPNI in Demak, has created a saving system for emergency fund (during bad season or when Eid al Fitr). In other regions PPNI build a cooperative system where people can borrow from PPNI.

Other stories come from **Ulia** and **Surati**, who live in a Demak fishing village. Ulia used to work in a crab factory, but she got fired and then she joined PPNI Demak/Puspita Bahari⁸ and became a fish processor focusing on producing shredded fish. Surati works as a fish processor and a fishmonger at the local fish market. She joined PPNI with the expectation to **gain more knowledge and to network with women from other areas.**

⁸ When the organization is unified or decides to affiliate to PPNI, they can choose to change their name with PPNI or use their own name alone or combine it with the name of PPNI. "So, to have called them as PPNI, there is a flexible rule on how they call themselves. They can use the name PPNI by using the name of a place like PPNI Aceh or their original name like PPNI Demak/ Puspita Bahari. Such as in local level, the name of women's group is Puspita Bahari, but then the Puspita Bahari become a member of PPNI, and their name become PPNI Demak/Puspita Bahari." (Karya, interview, August 26, 2021).

Fani, like Surati, is a fish trader and the leader of PPNI in Aceh, which has members who are actively involved in fish and clam processing. Fani was interested in joining PPNI because she believes **there are not enough people in the sector who care about women's issues**.

Karina, Rina, and Jamilah are actively producing shrimp paste products. Karina has made shrimp paste for almost 16 years. She started this livelihood because the income from the sea was very low, and she tried to gain additional income by making shrimp paste. She sometimes also makes fish crackers. Similarly, to Karina, Rina and Jamilah became shrimp paste processor to get income to fulfill the needs of her family. Jamilah has been making shrimp paste for the past three years. All of them joined PPNI in order to **enhance their production and marketing for their shrimp paste product**. There is talk that PPNI could rent out ponds owned by someone else to women. However, it will be difficult to manage because women have limitations in handling or guarding the pond at night (Dina, Interview March 1, 2021). Jamilah has a specific reason to join PPNI. She expects to expand her business with PPNI's mentorship. She emphasizes how, in the absence of a group, women processors in shrimp paste production tend to be individualistic, but PPNI offers assistance and supports them in **growing collectively through the group**. Similar to Jamilah, Rina also expects to get assistance from PPNI because she considers herself lacking knowledge in marketing strategies and packaging methods.

Julia has multiple livelihoods. She is an active fish processor, and she is involved in managing mangrove tourism in her village. She is also the leader of PPNI in Serdang Bedagai, North Sumatra, and an environmental activist who works to protect mangroves from shrimp aquaculture expansion. For Julia, her involvement in PPNI is because she believes that "It is important for fisherwomen to have a place where they can share inspiration and show solidarity. So far only men's groups have been able to access government programs. we also

need that to get assistance for fisherwomen, we need to fight for our rights." (Julia, Interview, August 23, 2021).

Sally and Rara are the leaders of PPNI in Kendal and Surabaya, respectively. They both have university bachelors and work as teachers in their local schools. Sally wakes up every day at 2 A.M and she joins her husband to unload the boat and sells the fish. Her husband is an experienced fisherman who goes to the sea in the afternoon until midnight, he used to work on foreign fishing vessel in Taiwan. Her son studies fisheries science at a college and wants to become a fisherman. By joining PPNI, Sally believes women can enhance sisterhood, networking and get more knowledge (Sally, Interview, August 22, 2022). Rara spends the weekday teaching and making fish crackers, clam crackers, or other seafood products. Rara is involved in PPNI because she attended some of PPNI's workshops. She believes that PPNI will help her to broaden her knowledge and get additional money.

6. 4.1 How do women get involved in PPNI?

One of the questions I asked during the interviews was how women got involved with PPNI, and got different answers that I try to summarize in the categories below:

Individual initiative. For example, Usi (August 22, 2021) heard about PPNI, and she went to meet the leader of PPNI and showed her interest to join the organization. Others have similar experiences to hers.

Women are encouraged by their friends and family members. According to Ulia, "Dina (friend) persuaded me to join PPNI. I had just been fired from the factory at the time, so I joined PPNI, where they taught me how to make shredded fish as an extra skill and source of income" (Ulia, Interview, August 17, 2021). In the case of Nina, she learnt about PPNI from her sister, who introduced her to the leader of PPNI (Nina, August 17, 2021). Rina followed her mother, and became a PPNI member (Rina, Interview, December 17, 2021). On the other hand, Julia joined PPNI because her husband is part of the fishers' alliance in North Sumatra. Julia has

already built the local women's group, and her group is invited to join the meeting to prepare for the establishment of PPNI.

The leader or members of a local PPNI actively engage the community and invite women to join PPNI. “We, the women making shrimp paste, were often neglected. But PPNI is now in our area, and with their support we agreed to form a special group of women processing shrimp paste and become part of PPNI Demak/ Puspita Bahari” (Jamilah, Interview, December 26, 2021). One of the PPNI coordinators said that “When I encouraged them, I never made any promises. I knew they wanted to join PPNI, but they were embarrassed, so I encouraged them by asking them to join and help them” (Dina, February 15, 2022). Further, there is also an effort from existing women in PPNI to invite other women: “many women in Demak have yet to join PPNI Demak/ Puspita Bahari. As a result, the members endorsed PPNI to other women because they believe that other women need more knowledge and assistance to improve their lives as well” (Rina, December 17, 2021).

The involvement of women in Lampung was different because it started from a *collaborative event of PPNI and other NGOs*. The women were invited to discuss women's issues in shrimp aquaculture: "I was invited to participate in a meeting or discussion in the village hall. At first, I assumed it was going to provide logistical aid, but then there was a discussion about PPNI and women's protection in the sector. As a result, I was interested and supportive of the establishment of PPNI in Dipasena Lampung " (Eka, Interview, August 12, 2021).

6. 5 PPNI Influence on women’s lives

6.5.1 Capacity Building

From the responses that I got from the interviews, it is clear that from the perspective of women who are involved in PPNI (both the ones that helped in its creation and fisherwomen), the organization invests a lot of time and effort in capacity building. This capacity building

could be summarized around two main efforts to improve women lives, such as: **to improve women's knowledge and skills** in the sector by providing them training to add value to fish/shrimp in the post-harvest sector; to improve skills regarding marketing strategy, to grow their business and self-esteem; The second aspect that is crucial on capacity building is **to help women gaining agency** by improving women's critical thinking to trigger them to speak up, providing an understanding about gender equality, and a chance to be part of movement and to enhance knowledge about policy/regulation in the sector. Thus, women have improved their knowledge, skills, and agency to advocate for rights, such as fighting for fisher insurance assistance and fisher ID cards for fisherwomen.

6.5.1.1 Capacity building: Improving women's knowledge and skills

PPNI organized capacity building activities such as: trainings, workshops, or seminars to improve women's abilities and skills in the sector.

PPNI provides capacity building in any topic that could improve women's livelihoods in the sector: First, related to improving marketing strategy for women in post-harvesting. As Jamilah said: "the aim is to improve the quality of the products which includes marketing systems such as packaging. They also provide knowledge to improve financial management" (Jamilah, Interview, December 26, 2021). Women are practicing the knowledge they acquired from PPNI, including marketing their products online. Further, PPNI is also incentivizing them to work as a group, and from that to improve all their lives, "for example, include women selling their products through shops or bazaars managed by PPNI" (Sally, Interview, August 22, 2021).

Second, to find innovative ways to add value to fish or other seafood products, as Dina describes: "PPNI gave me a lot of advantages because thanks to them I was able to learn how to make money from priceless fish into a valuable fish processing product that generates income to pay for my son's expenses until my son goes to college now. If I did not join PPNI,

I may not know how to run and develop a fish processing business, including how to understand marketing and how to access programs and information" (Dina, Interview, August 25, 2021). Women also not only try new techniques for food processing, but they are also improving the quality of the products they were used to making and they are complying with food health standards, such as not using formalin for making fish ball and crackers.

Third, to grow their business and self-esteem. For example, Jamilah's now works in post-processing and making shrimp paste products, and she says "I used to be very shy but now I am more confident. In the past, I was embarrassed because people made fun of me because I was selling shrimp paste. It made me feel inferior. But PPNI helped me so I could grow my business and now, I am more confident" (Jamilah, Interview, December 26, 2021). From fisherwomen like Jena, she said: "I used to be very shy, so I had to dress like a man so people wouldn't recognize me and made me feel bad. But now I am more confident and prouder as a fisherwoman" (Jena, Interview, February 15, 2022). Thus, it is the role of PPNI to change women's perceptions of their abilities and the work they do in order for them to become prouder and more confident, rather than feeling inferior.

6.5.1.2 Capacity building: Helping women to gain agency

Facilitating women to speak: Increasing women's voice

PPNI provides a welcoming environment with a variety of meeting settings (such as demonstrations, training, and events). In the meetings, women are motivated to speak because each member can learn from one another by providing examples. PPNI provides room for women to speak not only with the audience or group that is made up entirely of women but also to wider public: "Previously, women were afraid to speak up, to have an opinion, but now, thanks to PPNI in Demak, women are encouraged to come to the district office and express their views" (Rina, Interview, December 17, 2022). Women are also becoming more confident in speaking in public. For example, one of the Surati, she has the courage to express herself in

a formal forum and Kirana, she was willing to participate to the protest rally and meet with the Minister of Fisheries and Marine Affairs. There is another story from Tina, she used to be indoctrinated not to express her opinion. She was told, by those around her not to speak at public gatherings or events. However, after joining PPNI, she realized that her opinion is important, and she attempted to voice her opinion when participating in a public meeting or discussion on behalf of PPNI.

Further, PPNI is increasing women's voice by improving critical thinking about women's rights issues and regulations, such as: "Having training in legal understanding or regulation, how to access public service, for community, own self, and family, and where to go for help if needed. Understanding civil rights is also important" (Usi, Interview, August 22, 2021). Women can know how to speak up for themselves when something is not right or fair, they are gaining confidence to argue with government officials in the sector, for things such as the right to be called fisherwomen. Another example, Eka has critical thinking about the situation faced by female shrimp farmers. She said: "We at PPNI do not come from wealthy families and do not wish to fight the government; rather, we wish to request our rights so that the government can understand the situation. We began with the same experience as fisherwomen, shrimp fisherwomen, who need to ask for our rights if no one listens to us" (Eka, Interview August 12, 2021). Through PPNI, she can understand her role in protecting women's rights.

To develop critical thinking, PPNI provides or facilitates various activities that can help women gain confidence in speaking up and become more critical thinkers and make a change. Based on the story from Usi as example:

"In 2017, we tried to access the fisher's card, but it was only for men, and there was one fisherwoman, Mrs S, but she was rejected by the agency. So, I confronted the situation: Her job, like her husband's was to fish in the sea. But the agency said that there were no fisherwomen, so I said if you don't believe me, just follow us to see for

yourself. So, we started to gather a lot of fisherwomen and set up an organization. We were perplexed as to why women were barred from getting the fisher's card. We advocated to the village chief, but he said it would take time to learn, and it took two years for us to get women's insurance. The official from the Fishery Agency said, why do you women interfere in the affairs of men (Usi, Interview, August 22, 2021)

Further, not only are women becoming more confident in speaking in public, but interviews also show that they are also becoming more confident in using that skill to improve their livelihoods and claim their rights. For example, Dina had an argument about recognition of fisherwomen as fishers not just helpers. "If the fishery official says that women are just helpers, being a helper is only for two or three days, but this is every day" (Dina, Interview, February 15, 2022). Dina also could improve her skill in terms of leadership.

The capacity building also improves knowledge about policy/regulation in the sector. Women also have more advanced knowledge of the regulatory and bureaucracy systems. "By joining PPNI, I got to know people in government, such as in the fisheries and marine service, and I know the regulations that could improve my business. For example, I can understand how to get a PIRT (Home Industry Product Licensing)" (Rara, Interview, August 17, 2021). Another story from Dina, after learning about the program process at the fishery and marine service, she also shared and helped other groups, such as helping men's groups to get to the marine and fisheries office to get permits.

Facilitating a chance to be part of movement

PPNI facilitates discussions, meetings, or visits in and outside member's location in many regions in Indonesia. According to Nina: "PPNI provides knowledge about what happened about a particular issue in another region. The opportunity to travel to different areas, such as Pari Island, gave me insight to help other people and be a successful person rather than being oppressed by others (Nina, Interview, August 17, 2021). PPNI went to Pari Island to advocate

for and encourage women who are involved in a tenure conflict between the coastal community and a company in order to access the Pari Island. PPNI also conducted a forum discussion to gain women's aspiration.

The knowledge they gain from capacity building training or workshops from PPNI, or its network can be shared and develop innovative actions. Some members are initiating knowledge sharing activities or activism for fishing communities. For example, PPNI in Lampung also conducted activities to do mangrove plantations. In Serdang Bedagai, Julia actively manages cooperatives and manages mangrove tourism in her village, including caring for mangroves. In addition, Nina created a school program for fisher's children. She taught children to read, use a laptop, understand environmental issues and other relevant topics. Even though she faces rejection from the children's parents because they see PPNI taught women how to argue and have the critical thinking, so the parents worry PPNI will influence their children to disobey them, she continues to do that until people recognize what she did is useful (Nina, Interview, August 17, 2021).

Providing an understanding about gender equality

To enhance their roles for helping women's lives in the sector, PPNI understand the importance to provide knowledge related to gender issues. As one of the informants said, "PPNI also provides training related to gender and regulation" (Marni, Interview, August 16, 2021). An introduction to gender issues and domestic violence are examples of topics that PPNI brings to the meeting or training. Especially for domestic violence, PPNI also inform women about what to do and how to report if they face that situation. Nina explained what she learned about gender, for instance: "After learning, I learned that gender is actually about the roles of women and men (...) such as if men can work, women can work as well, men can take care of children like women. So, there is equality between men and women".

All the capacity building done by PPNI is not always well received by everyone in the community, and some face additional rejection and are labeled as a provocateur. This is an example story from Eka:

“I attended village meetings until I was labeled as rebel because I taught women to be more critical and fight against village authorities. People told me that I was a provocateur, that I was brainwashing women in my village. And I say, I'm not a provocateur, I don't influence bad things on women including your [his] wife. But you need to understand that your [his] wife obeyed you because she wasn't brave enough to share her opinion. They [men in her village at the time] are afraid that women will become smart and have more knowledge. Because I was too direct and spoke up in the forum, I was not allowed to buy the seeds or shrimp from the village cooperative and I had to sell my shrimp elsewhere” (Eka, Interview, August 12, 2021).

Women are also labeled as rude people because they dared to advocate for obtaining fisher's cards and assistance for insurance.

The capacity building is done only by PPNI themselves or in collaboration with other organizations. For example, PPNI in Sikka have many programs like training for fish production, and they collaborate with PKK (Family Welfare Movement organization), Perindag (Industry and trade service (governmental agency)), or other organizations to provide the training. PPNI has also been invited to participate in workshops or seminars hosted by other NGOs or government agencies on numerous occasions. In that case, PPNI sends their representative to the event, and when the representative has gained new knowledge or skills as a result of the program, they will share it with other PPNI members. For example: Eka went on a study visit to women shrimp farmers in Vietnam for a program led by KIARA and SEAFish for Justice, and after that she went to visit other PPNI areas in Indonesia. She shared her experience with the different groups, and as a result of her experience, she is proud of her

job and of PPNI. “I was so happy, I realized that women shrimp farmers in Indonesia are great, we as women can handle everything. Here, we have various and more innovative shrimp products. There, they only have crackers. When I shared with them what PPNI does, they gave me a round of applause (Eka, Interview August 12, 2021).”

6.5.2 Assisting and mentoring: Increase women’s access to resource and opportunity

PPNI provides assistance to help women access resources and develop proposals to be presented to banks or government agencies in order for women to receive assistance. Women receive assistance, for example equipment for making shrimp paste products such as grinding and drying equipment (Jamilah, Interview, December 26, 2021).

Further, networking helps women in fish processing and improves their business. Women not only have relationships with government agencies but also have networks among members, especially networks for price information. For example, Jamilah is a shrimp paste processor. In PPNI, she can meet other members who are also shrimp paste processors. They usually discuss and share information about the selling price.

When women lack access to financial resources. PPNI helps women create a system for facing financial problems and debt trap problems. There is also the example of a fisherwomen's cooperative group at PPNI Demak/Puspita Bahari. There were 30 fisherwomen who agreed to build a cooperative that could be used as mutual savings. For example, women have to pay 5000 IDR (approx. 0.3 USD) monthly for the mandatory fee, and 30,000 IDR (approx. 2 USD) as the base fee. When any members need the money, they can ask for a loan. Darmi, the head of the fisherwomen group in PPNI Demak/Puspita Bahari, stated that the cooperative was formed because the women fishermen lacked collateral to obtain a bank loan. Women in the processing industry do the same, especially to avoid the ‘bad season’. “Each week we save 70.000 rupiah. It is for bad season saving or ‘*tabungan rendeng*’, we collect the money every week” (Sally, Interview, August 22, 2021).

PPNI also provide access to aid assistance. Based on the interview, the informants note that the pandemic impacted the coastal community. For example, for women in post-harvesting, the rise of raw material and the marketing were problems: “Because of COVID, the marketing is difficult. The exhibition center is closed. Before COVID I could make 1,5 million, but now 500 thousand is hard” (Dina, interview, August 25, 2021). Another informant said, “during COVID, the shrimp seeds for farming are more expensive” (Surti, Interview, August 26, 2021). During the COVID-19 pandemic, both women in harvesting and post-harvesting face a problematic situation, PPNI was there helping in many different ways.

6.6 Accomplishment in Brief

The complexity of problems that women face in the fisheries and aquaculture sector led to the creation of PPNI as the only national-level forum or organization for women in the fisheries sector in Indonesia. In this section, I aim to summarize PPNI accomplishments not only for fisherwomen, but also for the fisheries sector.

PPNI empowers women in the sector, this can be noticeable in change related to gender relations in the household, the community and with the changes of some rules. One of the informants said that she tried to talk with her husband about gender balance and tried to ask him to help her do the domestic work. Her husband was never taught to do housework by his family because he was a man, and doing it was a woman's job. However, thanks to this conversation, they are now sharing the workload. Stories like this were described by many women, many mentioned that they were negotiating things at home and not simply obeying others.

Tina shared: “the village officer once asked me to take my product to the market as a village product without using the PPNI logo. People said I was rebellious and stupid for turning down a good opportunity to market my product and make money. However, I thought that

having a product with the PPNI logo is profitable and is part of their movement to make themselves visible”.

At the community level, women in PPNI become an agent of change. For example, PPNI in Serdang Bedagai is a backbone to developing and running mangrove tourism and empowerment through cooperation in their area. PPNI also produces products from fisheries not only for added value and income-generation but also as a symbol for resistance to show their existence is visible and can be independent to take care of mangrove areas without government help.

At the local level, PPNI have already become a partner to the government. In PPNI Demak/Puspita Bahari as example, they have been invited to join a forum related to the decision-making process and planning of zones for marine areas. They also built partnerships with other NGOs and government agencies. The fisheries agency acknowledges them as a strategic partner to distribute programs and information related to fisheries. PPNI also gain the trust of the private sector like banks, and this sector is providing financial assistance to women (Tikno, interview, September 1, 2021).

Thus, PPNI is a trusted partner for diverse stakeholders and simultaneously they are empowering women in the fishery sector. Further, with their program and activities, the fisheries sector in Indonesia is becoming more gender inclusive. For example, at the national level, PPNI was involved in the advocacy of Law Bill no. 7 in 2016, about women protection and influencing the change to give women insurance.

PPNI has been invited by the government at the national or local level to present the work they are doing. They have also been invited to attend international events to share their experience with a global audience, for example, PPNI was invited to join an international meeting to discuss gender issues in India (Tikno, interview, September 1, 2021) conducted by the World Forum of Fisher People (WFFP).

6.7 Challenges

All PPNI accomplishments come with obstacles or challenges as well. Some of these are related to balancing activities, others are related to PPNI in itself (internal dynamics), while other challenges are more because of social norms.

A first factor identified by the fisherwomen is the difficulty of **balancing activities**. There are women who give up participating in activities in PPNI because they are busy with their lives, handling their business and taking care of children. For some of them, they need to decide whether to do some activities that will get them some income or attend a meeting: “Before I was not active in the organization because I had to focus on making money. But if I am handling it, and I can be active again in PPNI” (Usi, interview, August 22, 2021).

The next challenge is related to the **internal dynamics of PPNI**. Internal dynamics refers to things that had happened inside the organization. One of these is leadership issues. One informant argued that the national PPNI focuses too much on problems in Java, but pays less attention to PPNI in other areas far from Java” (Rasti, Interview, September 6, 2021). Another informant said: “We need to agree on how to delegate responsibility. Not everything has to be handled by the Secretary General, the Presidium and the Secretary General ” (Julia, Interview, August 23, 2021).

Other internal issues are related to communication and coordination. To achieve the mission and vision, PPNI need to re-evaluate their communication strategies and think about the problems currently being faced in local PPNI areas and how the secretary general or leadership can help them. In addition, it is difficult for local PPNI groups to communicate between each other. As one informant said, “We need to re-consolidate the vision and mission of the local PPNI, and how PPNI can accommodate them. In times of COVID, it's getting more challenging. Usually we meet every year, but now it's difficult, only via Zoom” (Julia,

Interview, August 23, 2021). Thus, adaptation during the pandemic is also part of the PPNI problems.

There is a challenge because of social norms that influence **resistance from other groups**. For example, leaders are frequently the targets of local political opposition. The leader of PPNI in Demak was almost expelled from the village for violating social norms when she began to advocate for victims of domestic violence. Issues of domestic violence are considered to be a private matter and not in her domain. Further, political figures in her community perceived her advocacy as a threat to the social norms.

In addition, related to resistance from others, there is also the resistance from the middlemen who think PPNI challenges their business. "There was resistance from middlemen when we set up the cooperative because many women stopped being in debt to them and actively joined the cooperative" (Julia, Interview, August 23, 2021). Further, regarding the resistance from government officials, "I went to the Fisheries and Marine Agency to help the fishermen there, but the government officials said that I was a broker and accused me of doing this for my own benefit. I got angry and said I was a volunteer here, and he could ask the fishermen about me. I explained that I am from PPNI to help fishers because they are afraid and don't know how to process their fisher's card" (Dina, Interview, August 25, 2021).

CHAPTER 7: DISCUSSION AND CONCLUSION

7.1 Understanding Women's Barriers

Women contribute significantly to small-scale fisheries and those have been examined by a multitude of studies, such as Harper et al. (2017), Matsue et al.,(2014), and Szymkowiak (2020). This research shows once again, the essential role of women in harvesting, post-harvesting, and other related fishery activities in the small-scale fisheries and aquaculture sectors. However, the study also revealed the many challenges women face, in particular in Indonesia, as well as how some of those barriers could be overcome by a women's organization such as PPNI.

As the study reveals, fishers that rely on small-scale fisheries for a living are facing hardship (environmental issues impacting their work, development projects and policies that impact their wellbeing), however the specific difficulties of women in the sector are often overlooked. PPNI (Persaudaraan Perempuan Nelayan Indonesia/The Indonesian Sisterhood of Fisherwomen Organization) was created to address the intersectional issues faced exclusively by fisherwomen such as the lack of recognition, the lack of participation, and the social norms that constrained their lives as fisherwomen.

Feminist Political Ecology (FPE) frames the distribution of resources, impacts, access, and risk to environmental decision making as based on gender as a vital social category (Lutz-Ley & Buechler, 2020). As shown in the results section, women experience gender discrimination and inequality in the sector. Fisherwomen are underrepresented in fisheries governance, marine resource management, and development and policymaking (Alami & Raharjo, 2017). In the context of Indonesia, a strong patriarchal culture and legacy from the New Order regime⁹ about gender construction influence women's participation in the decision-

⁹ The New Order government was characterized by a repressive political approach and a deeply rooted patriarchal culture in Indonesia. The state freely regulated the criteria for the ideal woman and the homogenization of women's identity. In the New Order regime, there was construction from the state about Indonesian womanhood through "Darma Wanita" (the five basic women's obligations) that determines the roles, obligations, and

making processes, not only in fisheries, but in general. The doctrine under the New Order regime tends to influence the way women's concerns are considered and resolved, and how women's voices are not heard in the public domains and not represented in the policy making process. In sum, the strong patriarchal culture sees women as passive actors, and this is evident in coastal communities.

In addition, the study found that women are undervalued, seen only as wives of fishers, as supporters, and as helpers in fishery activities. That construction of prejudice leads to discrimination against women in accessing productive resources because they are perceived as unimportant actors in resource management. This is connected to what Rogers (2008) noted about hegemonic masculinity that refers to the domination or exploitation of others and the symbolization of certain things based on gender¹⁰. In this case, fishing in the sea is perceived as the domain of men and therefore under the concept of masculinity, so women are restricted from doing that. In contrast, women are perceived to be responsible for community and families. This hegemonic masculinity, including patriarchal domination, creates this distance between women and the sea, and therefore, women lack access or control to the resources in the sector. Thus, gender differences matter in shaping and influencing how resources could be distributed and recognition to be given.

The lack of recognition of women in the sector is made evident in different domains, starting with the fact noted by Warassih et al., (2018) that the term fisherwoman is not found in any regulation or law. The term is emerging because women and organizations such as PPNI, as I am showing in this document, are fighting for it, in their communities against the

capacities of women to their husband, family, community, and state (Hyunanda et al, 2021). The moral code of Indonesian women is to be obedient to male members of the family, and be passive, self-sacrificing and nurturing (Wieringa, 2003). Though the New Order is no longer officially in power, the period has still left its legacy. Therefore, there is a need to consider how this New Order regime is incorporated in the local context

¹⁰ Rogers (2008) provides a unique analysis of hegemonic masculinity, based on the analysis of gender as it's symbolized in the advertisement where consumption of meat is the way to validate masculinity, masculinization with meat, and feminization with vegetarianism. Thus, he notes that it is important to reconceptualize the concept of masculinity.

patriarchal system and social norms. In this fight, not only women that fish want to be called fisherwomen, but also other women involved in direct and indirect ways in the value chain and using the marine and coastal resources. Thus, there is urgency to change the meaning of the term fisher more explicitly to accommodate and acknowledge women's involvement in the sector. This will imply that not only the identity cards have to change, but also the fisheries policies need to be more inclusive. This will make the women more visible in the sector, which authors such as Pratiwi & Boangmanalu (2017) have noted is essential and is the first step to improve fisherwomen lives and dismantle inequality. Additionally, this could help to address the fisheries sector's lack of gender-disaggregated data.

A prior study from Frangoudes et al. (2014) determined the motives that triggered the establishment of women's organizations in European countries. The authors found many reasons were in response to an economic crisis, improving working conditions, accessing a fishing rights, obtaining formal recognition, and improving skills (Frangoudes et al., 2014). My data supports these claims because PPNI was established for some of the same reasons. However, Frangoudes et al. (2014) noted that recognition and formal acknowledgement for women's contribution in family fishing enterprises could provide women with the opportunity to represent their family and gain access for social security through their status under the legalization of Collaborative Spouse Status (CSS)¹¹. My research finds that recognition in Indonesia means to acknowledge women's identity as fisherwomen, not "helpers" or spouses, and to recognize their rights and roles in the fisheries sector. Recognition is foundational to the effort of gender mainstreaming in formulating programs or policies related to the fishing community and dismantling gender-blind policies in the sector. Further, this study found the differences women's organizations based on the context of fishing rights; for example, fisherwomen in the Global North fight to access productive resources such as fishing licenses

¹¹ Based on a case in France in 1995 (Frangoudes et al., 2014).

or fishing grounds (Frangoudes et al., 2014; Gallardo-Fernández & Saunders, 2018). However, in the context of Global South, a right that can be included is access to a good environment because of the impact of environmental degradation and uneven development on women's lives. This has happened in the case of PPNI in Indonesia. Not only that, in specific cases in Indonesia, small-scale fishers do not have fishing licenses (Halim et al., 2019), so their struggle for the expansion of rights and resources is not about access to natural resources but more about the struggle to challenge social norms that influence the way fisheries policy is established and disadvantages women.

Moreover, this study notes that, as in Global North organizations, women's organizations in the Global South are fighting for the recognition of women's rights in fisheries. Although both women's organizations from Global North and South have various contexts of barriers as starting points, later their objective evolved to fighting for women in coastal or aquatic settings in general, not only to fight for themselves.

That exclusion and discrimination of women in the sector prevent them from obtaining their rights as a fisher, especially rights that have been created to protect fishers like fisher's health insurance. This has been reported in the literature elsewhere (Pudjiastuti, 2019; Solidaritas Perempuan & Transnational Institute, 2020). Further, fisherwomen in the study also talked about the lack of training to get new skills and obtain financial credit. Another study with sea cucumber fisheries in Palau reveals a similar finding of how men obtain access to technology, authority, and knowledge (Ferguson, 2021). In terms of access to resources, this was also revealed in another study completed in 2010 by Adrianto et al. based on a case study in East Nusa Tenggara, Indonesia, finding that women have fewer opportunities for employment, income, capital, and fishing-related activities, as well as less access to the benefits of local fisheries and marine resources, and lack of opportunities to access any training.

It has been discussed in the literature that bringing the voices of women could benefit not only women but also the development of the fisheries sector (Calhoun et al., 2016). However, opportunity of women in decision making process is still problematic. Solidaritas Perempuan & Transnational Institute (2020) argues that in the development of marine spatial planning in Indonesia, based on case study in Makassar, women are not recognized as essential stakeholders, and are not invited to planning meetings. A study from Meinzen-Dick et al., (2014) notes that although women can participate in meetings, they have limited involvement in the local or national dialogue compared with men that have greater decision-making power in higher-level dialogue.

7.2 The importance of PPNI

The establishment of PPNI is interesting because the organization did not develop spontaneously in a social and political vacuum, rather its establishment required collective action among different organizations and fisherwomen. This collection action process became a strategy for women in fisheries to overcome barriers not only within the sector.

Throughout the document, I am showing that PPNI is essential because women need a platform both at the national and grassroots levels to amplify their interests, voices, and rights. PPNI is offering women the opportunity to switch from being victims of the barriers that prevent them to have the role they deserve in the sector, to become proactive in overcoming those barriers by being part of the movement themselves. In other words, PPNI is a movement empowering and changing women's conditions.

PPNI has established itself in the center of the movement of women in the fisheries in Indonesia. This is because, the establishment of PPNI facilitated the dialogue between different grassroots level organizations that did not have the power and resources to amplify women struggles and fights beyond the local level, but that were already helping fisherwomen in their regions. PPNI is consolidating all these efforts from the local to the national level.

Why are specific organizations only for women like PPNI needed? because women's organizations are a safe space where women can share their problems and barriers. As it has been reported already in other context, Agarwal (2000) noticed the need for women to have specific women's organizations because women's groups could be more comfortable for women to share their voices than mixed-gender ones. In the results section, I show that PPNI allows for social capital that is represented in as a safety net in order to cope with risks, and as a network where women can share limited resources, but also knowledge, and skills. As described in the results section, women in PPNI feel empowered to do things they did think they could do before such as vocalize their concerns in decision-making forums, and in front of government officials.

In addition, grassroots coalitions in fisheries are dominated by male fisher organizations, and thus women's issues in fisheries usually are not a core issue in this coalitions. Thus, having specific women's organizations in the fishery sector matters to give attention to women's interests.

One of the missions of PPNI is a fight for women's rights in the sector. The rights are not limited to gaining access to resource. This study notes that the rights are also related to living in a healthy and comfortable environment. As leaders of PPNI mentioned the organization is fighting as well for the rights that these women, their families, and their communities have of living without the fear of environmental destruction like land and ocean grabbing that could destroy the fishery forever. So not only they fight for women rights, but they are also environmental stewards because they recognize women rights are link to environmental issues. This experience shows that women's organizations could ensure massive women's contribution in the fishery sector toward environmental protection. This is similar what Kalikoski & Franz (2014) highlight that women's the organizations can also help women

promote policies in the fishery sector, including the opportunity to be involved in policy advocacy, to conserve fishery resources, and protect the ecosystem.

Women's organizations, like PPNI can help dismantle gender inequality. PPNI supports women in the sector by increasing their capacity to improve and diversify their livelihoods and their roles in the society. Further, PPNI also facilitated to build solidarity and networking among women and women's groups. In this sense, the organization became a place for women to enter the political arena and be a safe space to overcome patriarchy (Majokweni & Molnar, 2021).

7.3 The Roles of PPNI and Women's Empowerment

This section examines the efforts that PPNI makes to dismantle barriers and foster gender equality. Based on the stories of women highlighted in the previous section, this study observed that there is a diverse variety of activities women do in the fisheries sector, and it was also shown all that the women join the PPNI for different reasons. PPNI embraces this diversity. For example, *fisherwomen* desire to gain recognition and access to resources, *women in shrimp aquaculture* aim to obtain not only recognition and access but also support for personal growth, and *women in post-harvesting* seek support for increasing their skills and business as well as a support system.

PPNI provides resources and supports the agency of women in order to challenge or renegotiate gender/power relations, which leads to the empowerment for women in the sector that helps them to change their lives within households and communities. This could help in the fight against gender discrimination and foster gender equality in the fisheries sector. Below I summarize how they are achieving that:

Resources refer to any economic, human, and social resource (Kabeer, 1999; Torre et al., 2019) that PPNI is providing to support women in the sector. As presented in the result section, PPNI provides capacity building focusing in two areas, a). skills and knowledge and

b). agency, understanding that both are essential to develop critical thinking, technical capacities, entrepreneurship, and political rights education. Further, all are understood from the lenses of women rights that could improve women's lives and to empower them beyond fisheries-related activities.

Fisherwomen stewardship because, as a group, they understand what they need in terms of capacity building, policy and regulation change, and ways in which women can be more involved, and also, they require a livable environment that is not only healthy but also inclusive for them in sustaining their participation in the sector. Then, the group fights to dismantle injustice and inequality. As Miller and Razavi (1995) note, women's involvement in organizations could empower them to be activists, leading to a better quality of life not only for women but also their community.

PPNI motivates and encourages women to advocate for themselves. This effort is significant in supporting women's **agency**, their ability to act and decide (Kabeer, 1999; Heninnk et al., 2012). In the results section, I had shown some of the ways in which PPNI helps women to gain agency: they are eager to speak in public in order to raise their voices. This study found that women gain the ability to negotiate with other people, including their husbands, which can lead to changing gender relations. Then, PPNI provides understanding about gender equality and facilitates an opportunity to be part of movement for women.

Cornwall (2016) notes that empowerment as a process means the pathways are not fixed and universal. Thus, the way PPNI provides effort for women's empowerment is very dynamic with some obstacles, such as PPNI having resistance from other groups. Although PPNI face limitations in their participation to empower women, they also have created strategies to help to handle those limitations. For example, PPNI has developed collaborations with other NGOs, with that support, PPNI has a support system that helps them achieve their goals. Thus, PPNI

is a bridge connecting women to other women, but also to other organizations at the grassroots level enhancing everybody capacity and resources.

Overall, this study shows the bond between women's participation in the organization and the sense of women's empowerment in the agenda to fight against gender discrimination and foster gender equality in the fisheries sector. Further, this study also confirms that FPE noted gender could define access to knowledge, resources, and engagement in the social-political process related to a natural resource (Elmhirst et al., 2017; Meinzen-Dick et al., 2014). Thus, PPNI has roles in providing resources and supporting women's agencies to become more empowered. Women could change their lives and address their barriers by challenging or renegotiating gender power relations.

Furthermore, to sustain its roles in the sector, PPNI needs to keep evaluating its obstacles/challenges and strategies, for example, facing resistance because of the social norms. PPNI could do more to show that their efforts and movement about gender equality is not about women, but about fostering equality that can benefit everyone regardless of gender and other intersectional identities in the sector to support sustainability and inclusivity.

Although this thesis research contributes on elaborating the stories of women's experiences in terms of livelihood and the organization/activism, further studies are needed. For instance, it would be interesting to compare how male or mixed organizations and governments perceived gender equality in the sector and how the network dynamics among stakeholders (such as power relations between more established NGOs with smaller ones; NGOs between governments) related to issues of gender, development, and sustainability in the sector.

APPENDICES

APPENDIX A:

Research Participant Information and Oral Consent

Title of Research Project : The Backbone of Fisheries: Indonesian Women in Small-Scale Fisheries Organize to Overcome Gender Inequalities

Researcher and Title : Annisa Meutia Ratri, Graduate Student, MS-A

Department and Institution : Community Sustainability, Michigan State University

Contact Information : Mobile: +1 517-9441606, Email: ratriann@msu.edu

PURPOSE OF RESEARCH

The study's goal is to learn about the formation of women's organizations in the fisheries sector and their role in promoting gender equality in the sector based on the case study of the Indonesian Fisherwomen's Sisterhood Group (Persaudaraan Perempuan Nelayan Indonesia/PPNI) in Indonesia.

WHAT YOU WILL BE ASKED TO DO

The researcher will set up an appointment with you and conduct the interview virtually through zoom, Whatsapp or phone for approximately one hour. The researcher will record your video or audio statements and use an alias for you in the transcript, analysis and everywhere else in the research.

POTENTIAL BENEFITS

Your involvement in this research may contribute to the understanding of the role of woman's organization to overcome gender inequality.

POTENTIAL RISKS

It is unlikely that you will experience any risks due participating in this study.

PRIVACY AND CONFIDENTIALITY

- All information collected for this project will be treated with confidentiality.
 - The data will be saved on the computer of the researcher which is password protected.
 - The data will be coded and a key for the codes maintained separately.
- Personal identifying information will be accessible only to the researcher.

YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

It is absolutely voluntary for you to participate. You have the right to refuse to answer any question or to leave the interview at any time. You also have the right to withdraw at any moment if you change your mind. Your answers will be completely confidential and only the research staff will see your answers and will have access to the identifiable data.

COSTS AND COMPENSATION FOR BEING IN THE STUDY

There's no cost or compensation offered to participate. We are not selling anything or offering any services to you right now.

RESEARCH RESULTS

Researcher will pool together your answer with the answers of other participants to provide understanding about woman's organization in fishery. The research report will be provided as one of the outcomes of this research.

CONTACT INFORMATION

Please contact the researcher if you have any problems or questions about this project, such as scientific issues, how to complete any component of it, or how to report an injury, Annisa Meutia Ratri, 1270 Garden City Road, 340, East Lansing, 48823, ratriann@msu.edu, +1 517 9441606 or PI, Dr. Maria Claudia Lopez, Michigan State University, Department of

Community Sustainability, Natural Resources Building 480 Wilson Rd, East Lansing, MI 48824: mlopez@msu.edu/ 517-432-6143. Please contact us if you have any questions or concerns about your roles and rights as a research participant, if you would like additional information or feedback, or if you would want to file a complaint about this project, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 4000 Collins Rd, Suite 136, Lansing, MI 48910.

DOCUMENTATION OF INFORMED CONSENT.

By continuing with this interview, you are indicating your willingness to participate in this research.

Do you agree to the interview being recorded on audio or video? If not, please tell me now, before we begin the interview.

APPENDIX B:

Interview Guidelines (1)

[INTRODUCTION]

Thank you for agreeing to spend your time to this project.

My name is Annisa Meutia Ratri and this research aims to understand the establishment and role of PPNI (Indonesian Fisherwomen's Sisterhood Group or Persaudaraan Perempuan Nelayan Indonesia).

I'm looking forward to hearing about and learning from your experiences.

[READ THE CONSENT FORM]

[START THE INTERVIEW]

This question will not be read to participants, it is just to remember what the guiding question behind all the questions is asked. The interview topic is to understand the reasons that motivated the establishment of a women's fisheries organization in Indonesia, the PPNI (*Persaudaraan Perempuan Nelayan Indonesia/The Indonesian Sisterhood of Fisherwomen Organization*).

- Background Information: a. Name; b. Address/ village name; c. Age; d. Marital status; e. Education; f. Contact number; g. organization.
- Knowledge about gender in fisheries in Indonesia:
 - What are the most serious gender challenges in the fisheries sector?
 - Do you think men and women have the equal access and rights in small scale fisheries in Indonesia?
 - Do you think there is gender discrimination in fisheries?
 - Are there any barriers that limit the women's role in fisheries?
 - What are the main problems that women face in fisheries in Indonesia?
- Please describe your relationship with PPNI.
 - When the relation started? For what occasion?
 - Why did you become familiar with PPNI?

- Experience with PPNI
 - What do you know about the establishment of PPNI?
 - What do you think about PPNI? What are their role and existence in fishery sector in Indonesia?
 - Do you know about what are the vision, mission or roles of PPNI?
 - How do you know about the definition of “fisherwoman” and Why PPNI use the term as their name?
 - What do you think are the main accomplishments of PPNI? (For women? For the organization? For other women organization? For the sector?, in terms of regulations/ social norms?)
 - Do you think PPNI has been able to increase the conditions of women in the sector? Where? Why yes, or why not?
 - What do you think are the main constraints PPNI has to accomplish their goals?

Before we finish, can you tell me

- How do you think PPNI has changed the lives of the fisherwomen that belong to the organization?
- What you think is the role of PPNI in the livelihoods and personal lives of these women?

PEDOMAN WAWANCARA

(Bahasa Indonesia)

[PENGANTAR]

Terima kasih telah bersedia meluangkan waktu anda untuk berpartisipasi selama kurang lebih 60 menit untuk penelitian ini. Nama saya Annisa Meutia Ratri dan saya sedang melakukan penelitian dalam rangka memahami pembentukan dan peran PPNI (Persaudaraan Perempuan Nelayan Indonesia).

Saya berharap dapat mendengar dan belajar tentang pengalaman anda.

[BACA FORMULIR PERSETUJUAN]

[MULAI WAWANCARA]

Pertanyaan ini tidak akan dibacakan kepada peserta, hanya untuk mengingat apa pertanyaan pemandu di balik semua pertanyaan yang diajukan. Topik wawancara ini adalah untuk memahami motif dari dibentuknya organisasi perempuan nelayan di Indonesia, PPNI (*Persaudaraan Perempuan Nelayan Indonesia/The Indonesian Sisterhood of Fisherwomen Organization*).

- Informasi Latar Belakang: a. Nama; b. Alamat/nama desa; c. Usia; d. Status pernikahan; e. Pendidikan; f. Nomor kontak; g. organisasi.
- Pengetahuan tentang gender dalam perikanan di Indonesia:
 - Apa isu terbesar terkait gender di sektor perikanan?
 - Apakah menurut Anda perempuan dan laki-laki mendapatkan hak dan akses yang sama dalam perikanan skala kecil di Indonesia?
 - Apakah menurut Anda ada diskriminasi gender dalam perikanan?
 - Apakah ada hambatan yang membatasi peran perempuan dalam perikanan?
 - Apa masalah utama yang dihadapi perempuan dalam perikanan di Indonesia?

- Jelaskan hubungan Anda dengan PPNI.
 - Kapan hubungan dimulai? Untuk acara apa?
 - Mengapa Anda mengenal PPNI?
- Pengalaman dengan PPNI
 - Apa yang anda ketahui tentang pembentukan PPNI?
 - Apa pendapat Anda tentang PPNI? Apa peran dan keberadaannya dalam sektor perikanan di Indonesia?
 - Tahukah Anda apa visi, misi atau peran PPNI?
 - Bagaimana anda mengetahui definisi “nelayan” dan Mengapa PPNI menggunakan istilah tersebut sebagai nama mereka?
 - Apa capaian utama PPNI menurut Anda? (untuk perempuan? Untuk organisasi? Untuk organisasi perempuan lainnya? Untuk sektor? dalam hal peraturan/norma sosial?)
 - Apakah menurut Anda PPNI telah mampu meningkatkan kondisi perempuan di sektor perikanan? Dimana? Mengapa ya, atau mengapa tidak?
 - Menurut Anda apa kendala utama yang dimiliki PPNI untuk mencapai tujuannya?
- Sebelum kita selesai, bisakah Anda memberi tahu saya:
 - Bagaimana menurut Anda PPNI telah mengubah kehidupan perempuan nelayan yang tergabung dalam organisasi tersebut?
 - Menurut Anda bagaimana peran PPNI dalam kehidupan dan kehidupan pribadi para perempuan ini?

APPENDIX C:

Interview Guidelines (2)

[INTRODUCTION]

Thank you for agreeing to spend your time to this project. and participation for this research. My name is Annisa Meutia Ratri and this research aims to understand the establishment and role of PPNI (Indonesian Fisherwomen's Sisterhood Group or Persaudaraan Perempuan Nelayan Indonesia).

I'm looking forward to hearing about and learning from your experiences.

[READ THE CONSENT FORM]

[START THE INTERVIEW]

This question will not be read to participants, it is just to remember what the guiding question behind all the questions is asked. This topic of this interview is about the role this organization played in the lives of fisherwomen and in the sector.

[INTERVIEW QUESTIONS]

- Background Information: a. Name; b. Address/ village name; c. Age; d. Marital status; e. Education; f. Contact number; g. Household/ Family member; h. ethnicity; i. religion
- Women's involvement in fisheries activity (Women's livelihood):
 - Can you tell me what do you do for a living? Can you tell me how you become a fisherwoman? And why?
 - Describe the significant socio-economic and environmental concerns you face in your livelihoods and the fishing communities? How have you overcome difficulties/ barriers?

- What is your other source of income?
- Experience with PPNI
 - When did you join as a member in any group or affiliation or organization for women in fisheries, especially PPNI?
 - Can you tell me the history about your involvement in PPNI?
 - What are the benefits of joining PPNI?
 - Have you notice any difference in your life after joining PPNI?
 - What is the main contribution you think PPNI has brought to you?
- Other issues related to women in fisheries.
 - How do you feel with your living conditions? (Before and after join in PPNI)
 - Do you want to be your child as a fisher? Why and why not?
 - How have climatic shocks and stresses impacted your household?
 - Describe the significant socio-economic and environmental concerns you face in your livelihoods and the fishing communities?
 - Do you mind telling me what kind of program or support that you get from the government? (Before and after join in PPNI)
 - Do you mind telling me what kind of program or support that you get from another party instead of the government? (Before and after join in PPNI)

PEDOMAN WAWANCARA

(Bahasa Indonesia)

[PENGANTAR]

Terima kasih telah bersedia meluangkan waktu anda untuk berpartisipasi selama 60 menit untuk penelitian ini. Nama saya Annisa Meutia Ratri dan saya sedang melakukan penelitian dalam rangka memahami pembentukan dan peran PPNI (Persaudaraan Perempuan Nelayan Indonesia).

Saya berharap dapat mendengar dan belajar tentang pengalaman anda.

[BACA FORMULIR PERSETUJUAN]

[MULAI WAWANCARA]

[PERTANYAAN WAWANCARA]

- Informasi Latar Belakang: a. Nama; b. Alamat/nama desa; c. Usia; d. Status pernikahan; e. Pendidikan; f. Nomor kontak; g. Anggota Rumah Tangga/Keluarga; h. etnis; saya. agama
- Keterlibatan perempuan dalam kegiatan perikanan (mata pencaharian perempuan):
 - Tolong jelaskan bagaimana Anda menjadi seorang nelayan? Apa yang Anda lakukan untuk mencari nafkah?
 - Jelaskan masalah sosial-ekonomi dan lingkungan yang signifikan yang Anda hadapi dalam mata pencaharian Anda dan komunitas nelayan? Bagaimana Anda mengatasi kesulitan/hambatan tersebut?
 - Adakah sumber penghasilan lain.
- Pengalaman dengan PPNI

- Kapan Anda bergabung sebagai anggota dalam suatu kelompok atau afiliasi atau organisasi perempuan di bidang perikanan, khususnya PPNI?
- Bisakah Anda ceritakan sejarah keterlibatan atau keikutsertaan Anda dalam PPNI?
- Apa keuntungan bergabung dengan PPNI?
- Apakah Anda merasakan perbedaan dalam hidup Anda setelah bergabung dengan PPNI?
- Apa kontribusi utama yang menurut Anda telah diberikan PPNI kepada Anda?
- Isu-isu lain terkait perempuan dalam perikanan.
 - Bagaimana perasaan Anda dengan kondisi hidup Anda? (Sebelum dan sesudah bergabung di PPNI)
 - Apakah Anda ingin menjadi anak Anda sebagai nelayan? Mengapa dan mengapa tidak?
 - Bagaimana guncangan dan tekanan iklim berdampak pada rumah tangga Anda?
 - Jelaskan masalah sosial-ekonomi dan lingkungan yang signifikan yang Anda hadapi dalam mata pencaharian Anda dan komunitas nelayan?
 - Apakah Anda keberatan memberi tahu saya program atau dukungan seperti apa yang Anda dapatkan dari pemerintah? (Sebelum dan sesudah bergabung di PPNI)
 - Apakah Anda keberatan memberi tahu saya program atau dukungan seperti apa yang Anda dapatkan dari pihak lain selain dari pemerintah? (Sebelum dan sesudah bergabung di PPNI)

APPENDIX D:

Codebook

Code	Definition	Subcode	Example
Categories	Barrier's women to sustain livelihood in the fisheries sector		
	Include any statement that refers to any problematic situation or context that could influence the sustainability of women's livelihood in the sector		
Discrimination	Discrimination is unfair treatment of the practice of women by other people in the fisheries or aquaculture sector. It consists of access to means of production, especially women access to productive resources, lack of	Recognition for (fisher)women	Acknowledging women as fishers or fisherwomen could influence the way women are treated as equally important actors in the fisheries sector (Mira, interview, October 6, 2021).
		Access to resource	It is difficult for fisherwomen to get assistance, whether it be necessities, business capital, or managing coastal resources" (Arie, interview, August 6, 2021).
		Opportunity in the decision-making process	There are many legal regulations that do not recognize the existence of women as legal subjects who are equal to men" (Karya, interview, August 27, 2021).

	opportunity in decision-making, and identity-based discrimination.		
General barriers	many relevant issues/problem that face by coastal communities/small-scale fishers		In the Java coastal area, the area is rapidly industrializing, and pollution is everywhere and causes destruction to the environment, like coral reefs, seagrass, and juvenile fish (Arie, interview, August 6, 2021).
Gender Issues	The matter raised many others relevant issues about gender, including the impact of patriarchal culture.		The patriarchal culture is very powerful in shaping subordination of women, including in the policy making process, to produce regulations that are so patriarchal. The consequences for women are not recognized, and their interests are left behind. That is an example of how patriarchy comes to the decision-making process, because the decision has a biased male perspective (Karya, interview, August 27, 2021).

Political Context	The political setting in which activities or events occur. This includes the information of the social, political situation, historical situation, period of the regime, timing, and location		The problem is in the mind of the village chief that is still using the mentality of a New Order, where it's hard to understand what justice is about. The context of the New Order era led to gender blind regulation because of the strong sense of patriarchy and feudalism" (Dara, Interview, October 6, 2021).
Categories	Establishment/ Formation of PPNI		
	Include any statement that describes the historical process, trajectory, and story of the existences of PPNI		
Motives	any causes for the establishment of women's organization (read: PPNI). This also	Common belief	There is common belief about the importance of building women's organizations to connect women in the fisheries sector around Indonesia with similar experiences and problems so they could fight together (Arie, Interview, August 6, 2021).

	includes the objective and the driving factors that support the existence of the organization	Needs to raise women's voices	Bringing women's voices at the local and national level through PPNI is important" (Dara, Interview, October 6, 2021).
		Needs to foster empowerment	there is a need for women involved in the advocacy at the national level, so organizing women as PPNI was very rational (Arie, interview, August 6, 2021).
		To fight for women's rights	The background was the need for women to organize themselves because self-organizing is the way for PPNI to fight for women's rights "(Karya, interview, August 27, 2021).
		To dismantle unrecognized	There is a need break the stigma (...) make women more visible" (Sari, interview, July 26, 2021).
Organizational approach	Any purposeful efforts that PPNI act to manage, develop and sustain the organization as well as meet their goals		We have to be strategic to manage time for meeting or workshop because their time is so density, starting from cooking, domestic work and also then other activities. their multiple responsibilities become challenges for us to conduct gatherings for them (fisherwomen) (Karya, interview, August 27, 2021).

Code	Definition	Subcode	Example
Categories	Women' involvement in PPNI		
	Include any statement that refers to any roles of women in the sector and also situations or factors for joining the organization.		
Women in PPNI	Describe various livelihood of women who involve in PPNI including their stories and experiences.	Fisherwomen	People saw me as awkward and ungrateful for the income my husband brings, but in reality, I went to the sea because no one else can help him catch the fish (Neno, Interview, March 1, 2022).
		Women in shrimp aquaculture	Living in the pond area is difficult because there is no clean water, no good roads, you are isolated and because getting to the city is difficult (Eka, Interview, August 12, 2021
		Women in post-harvesting	The weather is making it difficult for me to dry the fish” (Nina, interview, August 17, 2021).
Rationale	a set of reasons for women to decide joining in the organization	To get access over resources	If I joined PPNI, I would gain experience and be able to receive assistance. Because I have never received any government assistance as a fisherwoman (Karina, Interview, March 1, 2022).

		To learn and build capacity	Another reason is that PPNI can assist me in honing my skills in the shrimp processing into more value-added products (Eka, Interview, August 12, 2021).
		To gain women's rights	We also need that to get assistance for fisherwomen, we need to fight for our rights." (Julia, Interview, August 23, 2021).
		To build support system and solidarity	Can enhance sisterhood, networking and get more knowledge (Sally, Interview, August 22, 2022).
Means of participation	refers to any ways of women to join the organization (read: PPNI)	Individual initiatives	I went alone because I was interested in PPNI/Puspita Bahari (Usi, Interview, December 17, 2021)
		Encouragement from others	Dina (friend) persuaded me to join PPNI. I had just been fired from the factory at the time, so I joined PPNI, where they taught me how to make shredded fish as an extra skill and source of income" (Ulita, Interview, August 17, 2021)

Categories	Roles of PPNI as women's organization in the fishery sector		
	Include any statement that provides any comprehensive understanding about the significance of PPNI to the life change of women, especially in the effort for empowerment		
Empowerment	Refers to any contributions, impacts, and advantages of PPNI to the women to be more empowered in terms of resource, agency, and achievement.	Resources	They also provide knowledge to improve financial management (Jamilah, Interview, December 26, 2021).
		Agency	I went to a fisher's agency to KUSUKA card. I prepare the data they want to process, but only some women get it. It is for KUSUKA card, but for fisher, the card is not (Julia, Interview, August 23, 2021).
		Achievements	PPNI also gain the trust of the private sector like banks, and this sector is providing financial assistance to women (Tikno, interview, September 1, 2021).

Challenges	<p>list of obstacles or weaking factor to sustain the existence of PPNI and women in PPNI</p>	<p>Balancing activities</p>	<p>If the event is my village area, I will join, but if the location is quite far, I could not join because I need to take care my business here (Nina, Interview, August 17, 2021).</p>
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		Internal issues	We need to agree on how to convey responsibility, not everything has to be handled by the Secretary General, the Presidium and the Secretary General need to discuss together regarding PPNI (Julia, Interview, August 23, 2021).
		Resistance from other(s) (groups)	When we created cooperative, there is resistance from the middleman because many women stop to make debt to them and actively join in the cooperative (Julia, Interview, August 23 2021).

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