

# THE IMPACT OF ECONOMIC DEVELOPMENT, POLITICS AND SOCIAL CONDITIONS TO FISHERMEN POVERTY IN SURABAYA CITY INDONESIA

<sup>1</sup>Dewi Casmiwati<sup>1</sup>, <sup>2</sup>Ahmad Zubir bin Ibrahim, <sup>3</sup>Zawiyah Binti Mohd. Zain

**Abstract---***This research aims to analyze the impact of economics, politics and social to fishermen poverty in Surabaya City. The methodology used qualitative with case study in Surabaya City, Indonesia. In analyzing was used thematic analysis from interview with 36 informants. Theoretically, this analysis used structural theory view that saw poverty from external factor. This consisted of development process, policy from government and social conditions that contributed to fishermen poverty. The result showed that all those factors gave negative impact to fishermen livelihood that meant supported their poverty. This article will see the impact of these factors to contribute to fishermen poverty in Surabaya, Indonesia. How they work.*

*Refer to the finding, this research recommends to Surabaya City government and the Central government to protect the environment and marine waters as fishermen livelihood, beside giving subsidy on petrol that is needed for fishing. Also, the government needs to provide staff, capital and a place to absorb the fishing catches from fishermen and needs to improve the implementation of strict waste disposal regulations to solve pollution problem.*

**Keywords---***fishermen poverty, economics, politics and social condition, Surabaya Indonesia*

---

## I. Background

Surabaya, Indonesia has 165 urban villages and 17 of villages are fishermen villages that still faces poverty (Agricultural and Fisheries Agency of Surabaya City, 2017; Statistics Central Agency, 2017). It can be seen from several poverty dimensions, including income, distribution of income and education.

According to previous research by Ekowanti, M.R.L., Sulestiyani, A., Ratnawati, T., Casmiwati, D. (2012), the fishermen household income is in average IDR. 500,000 or USD. 35.7 to IDR. 4,337,400 or USD. 309.8 per month with households' members consist of 5-7 people. The average income is about IDR. 1.100.000 or USD. 78.5 and mostly used for household needs as much as 29% or IDR. 319.000 or USD. 22.7, and other no revenue using: 63% or IDR. 693.000 or USD. 49.5. Beside that, the distribution of income amongst fishermen in Surabaya City is an

---

<sup>1</sup>Department of Public Administration, University of Hang Tuah, Surabaya, Indonesia

<sup>2</sup>School of Government, College of Law, Government and International Study, Universiti Utara Malaysia

<sup>3</sup>School of Government, College of Law, Government and International Study, Universiti Utara Malaysia

obviously unequal. 85% of them are in 40% of the lowest income, 10% of them are in 40% of the middle and only 5% of them are at the top 20% income. It means that the fishermen household income concentrates on the lowest class income and the distribution among them has a relatively high limp (Ekowanti, et. al., 2012).

Similarly, the study by Ismail (2004) also reported bad condition of education, health, houses, food and assets owned by fishermen. This is become an irony considering in Indonesia, Surabaya City is the most developed City than the others amongst 79 districts/cities in East Java Province. So, the question about how eksternal factors contribute to fishermen poverty will be presented in this article.

## **II. Methodology**

This research used qualitative method with reasons qualitative research studied things in their natural setting, to make sense of, or interpret, phenomena in terms of the meaning of what the people say (Merriam, 2009). Likewise, Nasution (2003) stated that qualitative research was essentially observing people in their environment, interacting with them, trying to understand their language and their interpretation of the world around them. Therefore, the nature of qualitative research focused on a process, understanding and meaning. Understanding how one expressed their experiences, how they shaped their world, and what their attitude meant to their experience (Moleong, 2008).

Meanwhile, the type of qualitative research in this research was a Case Study, in Surabaya City, Indonesia that aimed to understand the complex social phenomena and real life events (Yin, 1984; Creswell and Poth, 2016). Moreover, this research used interview, documentation, observation and documentary review in collecting data, both primary and secondary data. Beside that, the research used thematic analysis for identifying, analysing and reporting patterns (themes) within data (Braun & Clarke, 2006). The number of informants were 36 fishermen and 5 government officials.

### **Theoretical Views and Previous Studies**

Someone becomes poor is not contributed by their own mistake, but it is controlled by the outside situation that makes them poor. This is revealed by neo classical theory that defines poverty is more diverse than classical theory and provides explanations for poverty that are beyond individuals' control. These includes lack of social as well as private assets; the exclusion the poor from credit markets; the barriers to enjoy good level of education for the poor; immigrant status; the health and advanced age; and the barriers of employment for lone-parent families (Davis & Martinez, 2015). From this concept, it can be seen many factor outside individual condition that contributes to make someone become poor.

Beside that, poverty is also considered largely as involuntary and contributed by unemployment because the government fails to provide jobs. Accordingly, the strategy to reduce the poverty is by health care, creating infrastructures and promoting low skilled workers (Davis & Martinez, 2015).

This is in line with the structural theory that mentioned various kinds of things outside of individuals that contribute the poverty, one of which is economic, political and social conditions. Whilst, in many part of the world, fishing has been undergoing with process of number of employment and vessel changes as effect of modernization,

technical innovation, specialization, regulation depletion of resources and other environmental changes around them. These changes give impact to fishermen in developing and developed countries (Symes, D.P.J. & Salmi, P., 2015).

In the same vein, previous studies also found that the poverty can be emerged because of several exsternal factors that surround the poor. Study by Rahardjo (1999) found that fishermen poverty in Indonesia is influenced by the lack of infrastructures especially market and road. Furthermore, some scholars (Subidia and Marhaeni, 2015; Sumodiningrat, 1989; Retnowati, 2016; Yücel, 2006; Çeliker, et. al., 2006) argued that poverty was influenced much by the lack of technology, infrastructure and institutional facilities and other social factors.

Moreover, Sarkar (2012) study about poverty in Indian coastal fishermen communities showed that the problems overexploitation of fishery resource as an impact of open access and the existence of dual sectors (tradisional and modern) in fishery, added by poor accessibility of social infrastructure such as health and education, faulty regulations and the issues related to marketing including commercialization and the existence of intermediaries forced them to continue in poverty.

However, all of the factors that have been mentioned above could be categorized in economics, politics and social factor. And due to those theory and previous studies, this article will analysis the impact of these factors to fishermen poverty in Surabaya City, Indonesia as shown in Figure 1.

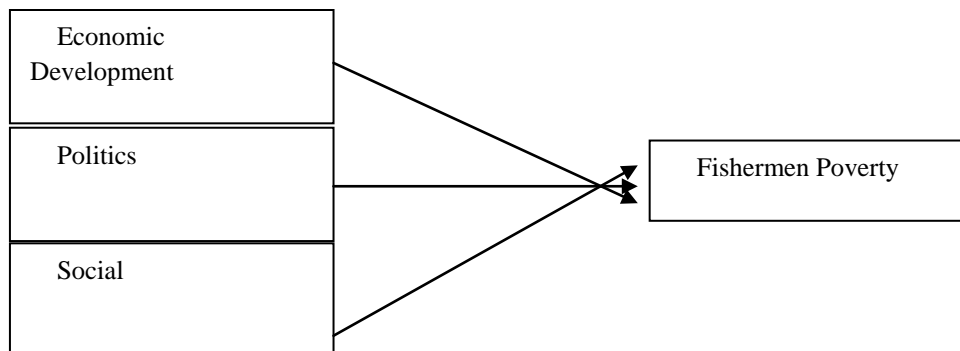


Figure 1: The Impact of Economic Development, Politics and Social Conditions to Fishermen Poverty

### III. Discussion

#### a. Economy

The poverty amongst fishermen community in Surabaya City was contributing by economic factor which means economic development. In the North of Surabaya City including Morokrembangan and Greges Sub Districts are heavily affected by industrial development of Lamong Bay, Pelindo III. The development gives negative impact to fishing area in North Surabaya that is getting narrow, even in Greges Sub-District; are now only 600 meters left. This is caused by the reclamation (means close the beach with soil) done by Pelindo III so the fishermen's catch dropped dramatically, as explained by Informant Th:

*“There are 3 stages of Pelindo, the first stage is really destroy the fish area, many hectares of it decreases. If the reclamation until 3rd step, we will die, so we propose that this reclamation will end until TPI, so we can still continue our livelihood. So, there is a bridge, the flow still existing and the fish is still there. If everything is closed, what we can do? The reclamation will finish fishing area. What will fishermen eat?. I heard from the Department that the remaining sea for fishing is only 600 meters”* (Interview, 9 November 2018).

This statement showed the development has reduced fishermen fishing area and disturbed fishermen livelihood. Even the informant asked how about fishermen live if the reclamation will continue. This fact is also reinforced by a study conducted by Fitria (2016), who explained fishermen suffered from reclamation that cause them to lose their fishing area and their lives more difficult. Actually, the purpose of development of Pelindo III (Port for big ships) is good that is to improve people welfare and serve the high technological port, but the development already affected the fishermen lives in bad ways. They lose their fishing area so they can not get good results anymore in fishing.

The next impact of development was the fishermen income reduced and even many of them changed professions. Previously, majority of residents in the northern region were fishermen, but now became workers in construction, and also some of them were searching for oil on large ships when unloading. Whilst, for younger people, they preferred to work at the factory rather than become fishermen, because the income from fishery was little. It means the future of fishermen profession can't be continue as main livelihood.

Actually, the negative impact of development on fishermen lives also happens in other areas of Surabaya City. Fishermen in the East and South area also in the midst of economic development. Many housing and apartments are built, which locates close to fishermen's houses, even some locations for fishing are sold for housing as revealed by Informant Mo:

*“In the past, the original people were only around village office, around 100 people. The RW (community organization) also has only 3 RT (Neighborhood Association). But after this development, all resident's land was sold and bought by the developer and turn to housing, now there are 9*

*Neighborhood Association. The original people here now live in small houses and many of their farms are sold” (Interview, 11 November 2018).*

Informant confirms that many areas in Gunung Anyar, Rungkut, Surabaya City which is previously used for fisheries are sold and make it into housing, for middle to upper class. This condition put the fishermen now living in the midst of middle-class housing and even apartments, and other public facilities such as universities and big shops that can not be accessed by them.

Accordingly, economic factor in the form of development influences the fishermen lives, because it takes the area that is used for fishing. Fishermen lose their previous fishing area, putting them to get a lower income, and finally supporting them to stop fishing and look for other jobs that is mostly low labor jobs that only provide low income. By this pressure, fishermen face difficulty in their lives and make them become poor.

In fact, negative impact of development to fishermen livelihood occurs in other cities of Indonesia. For instance, fishermen in Jakarta Bay changed their livelihood in the vicinity because of economic development by establishing many factories in northern Jakarta. The development forced them to seek income from other sources outside fishing (Prabowo, H., Suprpto, H., & Oswari, T., 2008). Thus, the process of impoverishment of traditional fishermen did in the context of the strong structural pressures originating from Indonesia's government policies in implementing the development of the marine fisheries sub sector (Tindjabate, 2001).

Likewise, in other south east Asian countries such as Cambodia, fisheries productivity has declined dramatically, which one of the factors was because of agricultural activity and development for settlement (Try & Somony, 2002). Similarly, in Myanmar, small scale fishermen should be shift to agricultural sector because of economical need that can not fulfilled only from fishing (Win & Aye, 2002). So that development is not always giving positive impact to the people surrounding if it not done carefully.

Those findings highlight the development process give negative impact to fishermen livelihood. This fact is in line with idea by Bradshaw (2006) that economic became one factor that caused the poverty. Davis & Martinez (2015) mentioned that neo classical theory emphasized the poverty caused by the condition beyond individual's control. Indeed, the poverty amongst coastal fishermen in Surabaya City is contributed by development that purposed to increase their welfare, eventhough in the same time reducing fishing resources as their main livelihood. Conclusively, economic factor has been contributed to poverty amongst fishermen in Surabaya City.

#### **b. Politics**

The government has an important role in alleviating poverty considering many conditions out of individual capacity that contribute to it. One of the conditions is politics that refers to government policy (Davis & Martinez, 2015). Based on the data from informants, they are not satisfy with some government policies that are applied to them. This is proven by fishermen in Northern Surabaya who are dissapointed with government policy that has

been reclaimed their fishing area. They think major general regulation policies are not good for them, as expressed by Informant Th:

*“... It is really painful for fishermen here. In fact Tambak Oso is not too affected by the project. The fishermen here are hit too much. That's why there are fishermen who make a proposal to Pelindo on behalf of fishermen to get an assistance. There is something like that” (Interview, 9 November 2018).*

Beside that, in term of fuel policy, this research found that the fishermen got difficulties in buying fuel for their boat. For fishermen who stayed in north Surabaya, they could only buy in one fuel station, but for the others from east to south should buy in retail. The price was different and it could add to the fishermen cost as stressed by Informant Wa:

*“..... In fact, we feel pressured again when buying fuel; we cannot buy at gas stations (SPBU). Who feels devastated ... for me it's because I can't use conductors? On behalf of the group of fishermen, I ask for recommendation or ask for a letter from the village. How the fishing community can get priority to get fuel. You can't use any special letter. I've been to the village office; I've met the General Manager (GM) of the gas station. Still can't Mom.... I ask specifically for the priority for fishermen so there is no need to buy fuel with expensive price in retail. I asked for help from the Village office, still cannot. I asked for a letter from village, from sub district, still can not. I use 10 liters Mom every fishing... 10 liters multiply by 8 thousand already 80 thousand. If we buy at gas station it will be enough with 50 thousand, and if we should buy at the retail, that is 10 bottles Mom, not a liter. Ten bottles are enough” (Interview, 1 November 2018).*

Informant expresses that fishermen have problems with the petrol policy. They can not buy the amount that they needed, because the government ban the use of jirigen, which in turn force them to buy in retail from small shops, whose price is higher than the gas station. Gasoline becomes a problem for fishermen because the cost must be incurred for fishing. Regardless of the results obtained, fishermen still spent money for the petrol. Eventhough it looked small thing from government side but fishermen are really suffered because they must expense the cost for their boat for fishing. Sometimes they get many in harvest season (like in January-July) but within tide season (between September-December), many times they don't get catheas at all. In other side their expense for daily needs are still same, so the fishermen sometimes can not fulfill their household needs from fishing result.

Notwithstanding, this finding is same with previous study conducted by Suyanto (2011) where the gasoline policy had a negative impact for fishermen. He found that when fuel prices increased, followed by the increased production costs for operations at the sea, the fishermen benefits decreased. Their savings also could not be used to reserve capital and operational costs kept incresing slowly and this lead to capital erosion for coastal fishermen in Surabaya City.

Accordingly, the fishermen are unsatisfy with government policies on the condition around them. Not all government policies bring positive impacts to the coastal fishermen livelihood. Similarly, this reality happens in other parts of Indonesia, and other countries like Cambodia. In Cambodia, there is political practise in managing fishing areas. The government issues policy to devide the fishing areas that previously belong to small scale fishermen based on zone (lot) and by then, some of lots are owned by some people who has capital. Beside that, the military also takes over open-access ground and sell it to individual who have money. In addition, the fishing lots owners that mainly rich people do not allow small scale fishermen to catch fish anymore inside their lots. These practices affect fishermen livelihood and stimulate conflicts amongst stakeholders and small scale fishermen. It has occurred in many provinces in Cambodia, and high-ranking politicians, including the prime minister have had to intervene (Try & Somony, 2002). Conclusively, the politics contributes to fishermen livelihood and poverty, includes fishermen in Surabaya City, Indonesia.

### **c. Social Conditions**

Beside economy and political factors, this research found that poverty amongst community fishermen in Surabaya City was contributed by social conditions outside them, namely the difficulty in accessing various available infrastructures, such as difficulties in accessing capital and credit, marketing, adopting new technology and the polluted water

According to informants, they have problems in accessing capital and credit markets because they do not have a home certificate or other assets as collateral to get credit or capital from the Bank. Instead, they borrow from relatives, and some even borrow from *juragan* because no certificate is required as guarantee.

Yet, the difficulty of access is felt by all fishermen in Surabaya City, from the North, East to South of Surabaya City. This is in line with the studies by Suyanto (2011) which emphasizes one of the characteristics of the poor is they have difficulty in obtaining capital from the formal institution because they do not trust them. Same condition happened with fishermen in Shahrasti Upazila of Chandpur District, Bangladesh in which they got difficulty in accessing credit from formal Banks (Hossain, M.S.I., Rahman, M. F.1., Thompson, S.2., Nabi, M. R.1., and Kibria, M. M., 2013).

In the other side, the goverment gives little solution to handle credit and capital issues because of financial resources capacity. From interview with informants showed that almost all of them never got capital or credit from government that specific providing for them. Public Bank as government formal financial institution provides capital and credit for all people in which the conditions cannot be met by fishermen. Finally, the fishermen look for their own solutions, either borrowing from the *juragan* (here means middlemen) or making their own savings and loan business. They also formed an institution of their own to facilitate credit by collecting their own money, whether in the form of mandatory savings or voluntary savings.

Similar to access credit, fishermen in Surabaya City face difficulties in marketing, especially in the harvest season. Indeed around their residence there is a traditional market to sell fish, but they can not sell it especially when the fishes are too many. Even for fishermen who usually sell to the *juragan* directly, but during the harvest season, all fishes can't be absorbed by *juragan*, because *juragan* has limited capital. During this time, fishermen have to sell to the markets directly, which sometimes are far.

This is a problem for fishermen, as noted by Informant Wa:

*".....Our difficulty is there... tomorrow when it's harvest time, the fish are many, the prices is standard... for example IDR. 9000 or USD. 0.64, standard. But their capacity of juragan is limited, for example has already fulfilled, they then stopped to buy fishes. The rest is not taken. That's how hard we are. We go alone to see the fish, like Mr. Mohadi, if there is a market, we are looking for the market for the remaining fish, we go to Kalang Anyar there, Mom ... the problem of fishermen here is this"* (Interview, 1 November 2019).

Moreover, related other social issue, is using of traditional fishing technology that are not meet the current situation anymore. Fishermen in Surabaya City have used to do fishing with nets, waring, petorosan and so on according to the season. For example, during snapper fish season, they will use snapper nets, if they have anchovy, and they will use anchovy fishing tools. They get difficulty in using new fishing technology, This is stated by Informant Ma:

*"For myself, I don't have another work besides fishing. I only change fishing tools. There are a lot of fishing tools owned by fishermen here. Apart from the one that I mentioned which I call Petorosan or fishermen said as waring, the second is the net. There are 3 kinds of this net, there are trammel nets which are triplicate, the second is gill nets with size  $\frac{3}{4}$  inches, less than 1 centimeter that catch anchovy, skini, or bulu ayam. That is the catch, then there is also the snapper net that I mentioned with the top part are rather large, about 10 centimeters. The catch is sumbal, snapper, and then another is rajungan nets. There are only few people who has it then the divers..."* (Interview, 12 October 2018).

The informant's statement shows there are various kinds of fishing tools owned by fishermen. The problem is that not all fishermen have all kind of these fishing tools, especially large nets due to the price. Big net is expensive so only small proportion of fishermen who have it. From 36 informants, only 2 informants have it, while the others had fishing tools according to their respective skills. Besides fishing tools are considered expensive, also not every fisherman can use all the tools. Sometimes fishermen A can use petorosan, but he cannot use waring, as is the case with fishermen B can use waring but he cannot use nets. Thus, social conditions contribute also to fishermen poverty in Surabaya City.

Furthermore, the other social condition that contributes to fishermen in Surabaya City is most severe pollution, especially occurs in South and North Surabaya. From observations it is found that there was a lot of waste in the fishing area, even the fishermen had to go far from where the ship leaned because the nearby area had no fish



anymore. This pollution mostly originates from household waste, as explained by Informant Sb, “ ..... Yes, it’s the river Mom; people throw garbage in the river, sometimes sandals, like this. Yes, it is like that. Even in the northern part like tourist place has many more” (Interview, 11 November 2018). This statement shows the amount of garbage inside the beach that is used for fishing. The household waste enters the waters where fishermen are looking for fish, such as plastic, food wrap, dried leaves, sandals and even mattresses.

The water becomes smells and looks very dirty and it can be seen in Picture 1 (Observation, 2019). The condition is very detrimental to fishermen because the fish cannot live. A lot of garbage is blocking the passages of fishing boats, besides garbage is also caught in the fishing net when they pull the net from the sea.



Picture 1: River Pollution

#### IV. Conclusion

Conclusively, fishermen poverty in Surabaya City can not be separated from the environment where they live, whether from economy, politics and social conditions. These are economic development, policy, difficulty in accessing credit from public bank and marketing, limited capital for *juragan* to buy all fishermen catches, incapability for fishermen in changing all fishing tools and pollution. This condition makes them faces difficult situation and contributes to their poverty.

Refer to the finding, this research recommends to Surabaya City government and the Central government need to halt development which could have an impact on the life threatening of fishermen. So, protecting the environment and marine waters as their livelihood needs to be done by government. Beside give subsidy on petrol that is needed for fishing. By taking this policies, economics and political problems that burden the fishermen can be solved.

Then, associate with social conditions, the government needs to provide staff, capital and a place to absorb the fishing catches from fishermen. Even if it is difficult to do in the short term because of the budget, the Surabaya City can cooperate with *juragan* by providing capital for them and paying them, without taking advantage of fishermen. In term of pollution, Surabaya City government needs to improve the implementation of strict waste disposal regulations.

## References

- [1] Agricultural and Fisheries Agency of Surabaya City. (2017). available at <http://www.dkpsurabaya.com>
- [2] Bradshaw, T.K. (2006). Theories of Poverty and Anti-Poverty Programs in Community Development, *RPRC Working Paper*. No.06-05, 1-22.
- [3] Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative research in Psychology*, 3(2), 77-101.
- [4] Çeliker, S.A., Korkmaz, Ş., Dönmez, D., Gül, U., Demir, A., Genç, Y., Kalanlar, Ş. and Özdemir, İ. (2006). Socio-economic Analysis of Fishermen in Black Sea Region. *Agricultural Economics Research Institute, Publication*. No: 143, Ankara, 122, 1-160.
- [5] Davis, E.P & Martinez, M.S. (2015), Economic Theories of Poverty. An Overview of the Main Economic Theories Relating to the Contributes of and s to Poverty in the UK. *Report. JRF (Joseph Rowntree Foundation)*, 1-45.
- [6] Creswell, J. W., & Poth, C. N. (2016). *Qualitative Inquiry and Research Design: Choosing Amongst Five Approaches*. Sage Publications.
- [7] Ekowanti, M.R.L., Sulestiyani, A., Ratnawati, T., Casmiwati, D., (2012). Peningkatan Ekonomi Rumah Tangga Nelayan melalui Peningkatan Pemberdayaan Wanita Nelayan di Pantai Timur Surabaya City. *Aplikasi Administrasi*. Vol. 15 No.2, 119-198.
- [8] Hossain, M. S.1 , Rahman, M. F., Thompson, S., Nabi, M. R. & Kibria, M. M. (2013). Climate Change Resilience Assessment Using Livelihood Assets of Coastal Fishing Community in Nijhum Dwip, Bangladesh, *Pertanika Journal. Science & Technology*. 21 (2). <http://www.pertanika.upm.edu.my/>,397-422.
- [9] Fitria, U. (2017). Strategi Adaptasi Kelangsungan Hidup Masyarakat Nelayan Kota Surabaya (Studi Deskriptis Masyarakat Nelayan dalam Menghadapi Reklamasi Industri di Wilayah Pesisir Kelurahan Morokrembangan Kecamatan Krembangan Kota Surabaya). *Skripsi*. Program Studi Ilmu Administrasi Publik, Fakultas Ilmu Sosial dan Ilmu Politik, Universitas Hang Tuah Surabaya, 1-99
- [10] Merriam, Sharan. B. (2009). *Qualitative Research*. John Wiley & Sons. Inc. Jossey-Bass.San Francisco. USA., 1-193.
- [11] Moleong, L.J. (2008). *Metode Penelitian Kualitatif*. Bandung: PT Remaja Rosdakarya.
- [12] Nasution, S. (2003). *Metode Research (Penelitian Ilmiah)*. Jakarta: Bumi Aksara.
- [13] Prabowo, H., Suprpto, H. & Oswari, T. (2008). Environmental Degradation and Fisherman Livelihoods in Jakarta Coastal Area. International Conference” The 21th Biennial Global Conference of the International Association for the Study of the Commons University of Gloucestershire, Cheteham, UK, July 14-18th, 1-14.
- [14] Ratnawati, T. (2016). Ekonomi Rumah Tangga Nelayan melalui Pemberdayaan Ekonomi Wanita Nelayan di Jawa Timur. *Laporan Penelitian*. UNTAG Surabaya City.
- [15] Rahardjo. (1999). *Pengantar Sosiologi Pedesaan dan Pertanian*. Gadjah Mada University Press.
- [16] Sarkar, P. (2012). Verifying the Statement of Gordon Scott 1954, the Fishermen Remains poor, in the Context of Coastal Fishery in India. *International Journal of Scientific and Engineering Research Volume 3, Issue 12*, December 2012, ISSN 2229-5518, 1-10.
- [17] Statisticks Central Agency, 2017, available at [www.bps.go.id](http://www.bps.go.id).
- [18] Suyanto, B. (2011). Mekanisme Survival, Identifikasi Kebutuhan dan Pemberdayaan Nelayan Miskin dalam Masa Kritis Akibat Kenaikan Harga BBM, Volume 24, Nomor 1, 74-83
- [19] Sumodiningrat. (1989). Pengertian Kemiskinan. Available at <http://www.kompasiana.com>.
- [20] Symes, D., Phillipson, J., & Salmi, P. (2015). Europe's Coastal Fisheries: Instability and the Impacts of Fisheries Policy. *Sociologia Ruralis*, 55(3), 245-257.
- [21] Subidia, I.K. & Marhaeni, A.I.N. (2016). *PIRAMIDA Jurnal Kependudukan dan Pengembangan SDM*. Vol. IX, No: 1-14. ISSN: 1907-3275, 1-25.

- [22] Tindjabate, C. (2001). *Kemiskinan pada Masyarakat Nelayan: Studi tentang Proses Pemiskinan dan Strategi Bertahan Hidup Masyarakat Nelayan Tradisional di Daerah Kabupaten Poso Propinsi Sulawesi Tengah* (Disertasi) Yogyakarta: Program Pasca Sarjana, Universitas Gadjah Mada.
- [23] Try, I.S.V & Solomy. T. (2002). Small-Scale Fisheries Management in Cambodia, in Food and Agriculture Organization of the United Nations Regional Office for Asia and the Pacific Bangkok, Thailand.). *Report of the Regional Consultation, Bangkok Thailand, 26-29 November 2001*, RAP Publication. p. 30-37.
- [24] Win, Hla and Khin Maung Aye. (2002). Small-Scale Fisheries in Myanmar, in Food and Agriculture Organization of the United Nations Regional Office for Asia and The Pacific Bangkok, Thailand. *Report of the Regional Consultation, Bangkok Thailand, 26-29 November 2001*, RAP Publication, 61-66.
- [25] Yücel, Ş. (2006). Middle Black Sea Region Fishing and Socioeconomic Status of Fishermen. E.Ü. Journal of Fisheries and Aquatic Sciences, 23, 529-532.
- [26] Bhatia S, Namdeo AG, Nanda S. "Factors Effecting the Gelling and Emulsifying Properties of a Natural Polymer." *Systematic Reviews in Pharmacy* 1.1 (2010), 86-92. Print. doi:10.4103/0975-8453.59517