Understanding Poverty of Indonesia Maritime Society in Five Point Zero (5.0) Era

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Abstract. Policy, program and budget allocated by the Government of Indonesia increase every year, but the number of poverties decrease which is not corresponding with society's expectation. Interestingly, the biggest poverty occurs in maritime areas. The problem is whether the fisher community on the islands could access fast changing and entering Super Smart Society era or Society 5.0 that is an era that makes people live better as it is able to integrate digital development (cyberspace) with real physical space. This study aims to picture poverty of Indonesia maritime society phenomena in Society 5.0 era with a case study. The data used are primary and secondary data. The results of this study is that Indonesian maritime communities are still experiencing difficulties in the transitional era of Community 5.0, including: (1) the social structure that has been shackling has left people on the poor island and unable to escape from poverty trap; (2) Relatively low level of education resulting in difficulty to find alternative, more decent jobs; (3) Access to information on development, is still very limited, and; (4) Lack of awareness to change and accept a better and more decent life.

Keywords: Poverty; Maritime society; Digital Scoiety; Indonesia

1 Introduction

Very rapid development and changes are experienced by the world community today and are reversed with the current global issues. The paradoxical situation has become a social phenomenon that is increasingly interesting to be studied and examined in depth. It is undeniable that changes in world civilization have taken place so quickly. Social scientists map the changes in civilization starting from the shifting cultivation of civilization (industry pattern 1.0), then turning into an agricultural society (industrial revolution 2.0). After that, it was changed to an industrial society (industrial revolution 3.0), continued to develop again into an information society (industrial revolution 4.0) and now began to change to a network society (civilization revolution 5.0). The whole series of changes in civilization are caused by the development of science and technology. Social scientists agree that technology as a determinant of change towards globalization in the modern and post-modern centuries. The modern age is called the industrial age (from the 18th to the 19th century), while the post-modern age is marked by the information age (mid-1990s) and network age (the 2000s). The occurrence of changes in society and patterns of information and communication flow has changed the behaviors, attitudes and perspectives of society. According to Castells, network society is a special form of social

structure characteristics that occur in the information age[1]. This era marks a historical period where people carry out activities in a technological paradigm built on the development of information and communication technology, as well as genetic engineering. Therefore, the emergence of the era of Society 5.0 or often termed the "Super Smart Society" which was first introduced at the Office of the Prime Minister of Japan is to respond to the changes produced by the industrial revolution 4.0. in which many people are worried that it can degrade the role of humans. The presence of intelligent robots, big data, artificial intelligence and the Internet as a feature of the industrial revolution 4.0 has become a new form of wisdom that is dedicated to increase human ability to open opportunities for humanity. Thus, the Japanese Government defines Society 5.0 as a human-centered and technology-based concept, which is as an effort to transform the progress of information technology to help people live more meaningful lives, so society 5.0 is identical to the revolution of civilization 5.0. The implementation of the Society 5.0 era in Japan was oriented to address the problems faced by Japanese society. Society 5.0 is also called "Super Smart Society" which is a society where various needs are subtly differentiated and met to provide the necessary products and services in the right amount for people who need them, and everyone can receive high quality services and live a full life passion and comfort that makes allowances for their differences such as age, gender, society and nationality[2].

However, the changes in civilization that occur in the life of the world community today is in sharp contrast to the global issues that are still sweeping the world community. At present, the world community has made new commitments and agreements called Sustainability Development Goals (SDGs) which place poverty eradication as the first strategic issue of the 17 strategic issues agreed upon, which is a continuation of the Millennium Development Goals (MDGs) agreement by the United Nations (UN) which was evaluated in 2015. Currently, the world population reaches 7.7 billion people and is included in the extreme poverty category of 767 million people. The extreme poverty in question is the population who spend US \$ 1.90 per day or around Rp. 25,000 [3]. This confirms that behind the development and progress of the information and technology revolution that is sweeping the world today, there are still many poor people who are struggling to get out of from poverty. Indonesia is still struggling to reduce the number of poor people with the current population accounting for 267 million, but there are still 25.4 million people who are poor [4]. The questions are, can poor people in Indonesia who are generally in rural areas escape their poverty through the development of global civilization, namely the era of Society 5.0?; Can poor Indonesian people, utilize the era of society 5.0 so that their lives are better and more prosperous? Based on the above explanation, this paper tries to describe sociologically about the conditions of poverty in the maritime community, especially the case of fishermen in Indonesia amid changes in civilization society 5.0.

2 Research Method

This study aims to examine and describe the lives of maritime communities in Indonesia amid highly dynamic social and global changes. Now, the development of society has entered the era of the information society and is moving towards a networked society or Society 5.0. This study is a descriptive qualitative with the basic research is a case study. The data used are primary and secondary data, in which primary data are obtained based on direct results in the field, while secondary data are based on library research and other data from agencies and institutions related to this research. This research begins with the identification and formulation

of problems, data collection, data processing and analysis including classification and reduction of data, drawing conclusions and verification, discussing research results and compiling reports. Data analysis is carried out qualitatively. This qualitative analysis is not only to describe a fact or phenomenon, but more important is also to explain the meaning and describe the phenomena or social facts that arise.

3 Result and Discussion

3.1 Poverty of Indonesia Maritime Society

Policy, program and budget allocated by the Government of Indonesia increase every year, but the number of poverties decrease which is not corresponding with society expectation. The Statistics of Indonesia from 2012 to 2019 records that poverty alleviation budget in the Indonesian Budget increase 2.31 percent reaching Rp. 38 Billion, but the poor only could reduce as much as 13 million people for the same time period and accounting for 25,14 million the poor in 2019. Interestingly, the biggest poverty occurs in maritime areas[4].

This proves that the development carried out since the old order era, the new order until the current reform order has not significantly reduced the poverty rate. From various studies examining development in Indonesia in the new order era explain that Indonesia's development strategy oriented towards economic development and growth has implications for social inequality in all fields. The indications are capital accumulation in certain groups, unbalanced physical and social development between Java and Outer Java, and also economic disparity between cities and villages. According to Drucker (in Baharsjah) [5], this problem cause a high level of tension in Indonesia. Baharsjah [5] sees poverty in Indonesia is actually caused by more factors such as (i) the large number of poor people; (ii) the large number of people with low education; (iii) development disparities between regions; (iv) vertical socio-economic inequalities between citizens; (v) the severity of environmental damage and the depletion of natural resources, especially mining and forest materials, and; (vi) the vulnerability of almost all parts of Indonesia to natural disasters whether due to natural events or because of human activities or a combination of both.

This explains that the development strategies implemented in the New Order era had failed in alleviating poverty. From studies that study poverty in Indonesia, such as those conducted by Tan in Baharsjah[5], Baharsjah [5], and others, generally conclude that poverty in Indonesia is caused more by structural factors rather than cultural factors. The most highlighted structural dimension is the Government of Indonesia's policy related to poverty alleviation policies. Literally, poverty can be interpreted that a person is very difficult to meet their daily needs due to various causes, which is the low level of income.

Indonesia is a maritime country and has around 60 millions of Indonesians living in coastal areas and contributing around 22% percent of national gross income[6] in which there are 18,126 underdeveloped/ poor villages which are generally located in the islands and outermost regions[7]. There are many factors that cause fishermen poverty naturally, structurally, and culturally. Naturally, the sea is difficult to predict. High waves, strong winds or storms, and the destruction of nature make fewer catches. On the one hand, fishing communities have structural weaknesses. Weak capital capabilities, low management, weak institutions, under the grip of middlemen, and technological limitations.

3.2 Poverty and How to Solve it

There are three approaches that can be used to look at the problem of poverty. First, the traditionalist approach. Followers of this approach still believe that the poverty of the people is essentially God's provisions and plans. In their view, poverty is precisely placed as a test of one's faith. The theological root of this paradigm rests on the Sunni concept of destiny (predeterminism), namely God's provisions and plans that were created long before the creation of nature. In their views, humans do not have the free will to create their own history. Even though humans are encouraged to try, God finally determines it. Likewise, in the problem of poverty, no matter how strong the efforts of humans are, if God has not willed, then he will remain poor.

Second, the modernist approach. The thinkers of this approach say that the poverty faced by the Indonesian people is basically caused by their way of thinking, mentality and culture. The loss of confidence to face the future is the key word that always makes people not dare to speculate to change themselves, including getting out of poverty. For this group, humans fully have the opportunity to change themselves. If the factors that encourage poverty are feeling lazy, not creative, uncompetitive, not diligent and undisciplined, then it becomes an individual responsibility that the solution can be through education, coaching, training and others. But if the causes of poverty are outside the poor themselves such as the existence of oppression, exploitation and structured exploitation, then there is no other way except by making radical social changes. The implementation of a free market, for example, must be addressed by preparing a reliable, resilient, competitive and independent society, which no longer depends on oppressive social structures and theology.

Third, structuralist approach. Followers of this group assume that poverty in Indonesia results from the emergence of social structures in oppressive countries, repressive political systems, dominative socio-cultural systems, created for the benefit of the ruling elite, and exploitative economic systems. There are two characteristics of this structural poverty, namely: a). wide social inequalities between the rich and the majority of the poor, and b). slow social mobility due to the confinement of the existing structure. In short, structural poverty is a massive poverty that is experienced by the majority of people due to an unjust structure, which only benefits certain elites[8].

Related to the economic characteristics of the poor, according to Primahendra the economic phenomenon of the poor is characterized by two main characteristics[9]. First, the scale of the economy that develops among the poor is the scale of the micro economy. Second, their economic life is characterized by high risks and insecurities as a result of their informal, subscriber and marginal types of activities. These characteristics resulting the consequence is that their economic activities are difficult to connect with formal financial institutions.

To be able to survive in the economic environment that was not ideal, the poor developed several mechanisms. First, the mechanism of risk distribution. That is, they are aware that risks such as loss of work, illness and the like if borne alone are very heavy and almost impossible to bear. Therefore, they develop togetherness in a variety of local and traditional institutions. The existence of institutions such as mutual cooperation, joint responsibility or 'sithij ending' (mechanism of various limitations). Second, the mechanism of utilizing social capital as a substitute for physical capital and financial capital which is very limited. Social capital that is positively formed such as trust and good relations, as well as negatively like isolation and access to communication as a form of social punishment has proven to be able to effectively replace costs such as transactions and physical collateral. Third, the mechanism of saving activities loans in various forms which are often also functioned as by various community groups, arisan,

village granaries, *lumpih pitih nagari*, *jimpitan* and various other forms of lending activities have been a mechanism that has lived in society for decades.

There are three main needs of the poor, namely the life cycle needs, emergency needs, and the need to take advantage of opportunities (opportunity needs). The life cycle needs of financing is not small. The financing of various types of expenditure often exceeds the ability of the poor to meet these needs, it is clear that they need sources of funding from outside. The poor often also experience a variety of expenses that are sometimes unexpected both personal and non-personal, so they need emergency needs. Unpredictable expenses of a personal nature such as illness, loss of work, traditional ceremonies, theft and others. While non-personal expenditures such as the exacerbation of education are left by businessmen, riots and others. Considering that most of their income is used up for consumption. Thus, emergency events are almost impossible for them to bear on their own.

To overcome these various needs, according to Primahendra, the poor in general have three ways, namely: (i) selling assets that are already owned (such as household goods, jewelry, and clothing) or will be owned (such as rice, palawija or livestock harvests). The sale of these assets basically reduces their economic capacity and endurance because in many instances transactions that occur are unfair and detrimental to the poor, (ii) mortgaging their assets when they need immediate money and they are confident they will be able to redeem it, (iii) managing income whose nominal value is small and is often not continuous becomes a sum of money which is of greater value. This is done in general by storing credit data.

3.3 Analysis of the Causes of Fishermen Poverty:

The causes of fisherman poverty in Indonesia are complex, individual, family, sub-cultural, agency and structural causes are interrelated. According to Kusnadi[10], the main causes that cause poverty in fishermen are:

- a) The absence of policies, strategies and implementation of development programs for coastal areas and fishing communities is integrated among development stakeholders.
- b) There are inconsistencies in the quantity of production (catches), so the sustainability of fisheries socio-economic activities in fishing villages is disrupted which is caused by the condition of fisheries reaching the condition of "over fishing", a prolonged famine season, and rising prices of fuel oil.
- c) The geographical social problems of fishing villages, making it difficult for the flow of goods, services, capital and people, which disrupts socio-economic mobility.
- d) There are limited capital and business or investment capital, making it difficult for fishermen to increase their fisheries economic activities.
- e) The existence of social relations of fishermen household income level, so it has a negative impact on efforts to increase business scale and improve their quality.

According to Arifin[11], the reaction is in the form of *Ponggawa-Sawi* ties (skipper and subordinate), in addition to being a medium of interaction it also becomes a place for the movement of functions in the social service system. In the life of mustard, the most basic and very binding problem is the high dependence of fulfilling the needs of his family's life to large and small committees. Therefore, the existence of a mustard in the social relations of service is in the weakest position and tends to be unable to meet the needs of family life without the help of a *ponggawa*. This is what Arifin calls a poverty trap that occurs in fishing communities and has become a social structure that is difficult to change. Poverty experienced by fishermen also

makes them vulnerable to conflicts both internal and external. Violations committed by fishermen related to fishing patterns are a shortcut to be able to obtain adequate catches. There are a number of indicators used to assess the fishermen's poverty, including; (a) Natural conditions. The complexity of the problem of community poverty is caused by fishing communities living in a harsh natural environment that is always filled with uncertainty in running their business; (b) Fisherman education level. Poor fishermen are generally not much touched by modern technology, the quality of human resources is low and the level of productivity of their catch is also very low. The education level of fishermen is directly proportional to technology in the field of fishing and preserving fish. Fish quickly decompose compared to other food ingredients caused by bacteria and chemical changes in fish. Therefore, fishermen only use traditional methods to preserve fish. This is partly due to the low level of education and fishermen's adoption of technology; (c) The pattern of life of fishermen themselves. Stereotypes such as wasteful and lazy by various parties are often considered to be the cause of fishermen's poverty, although the culture of fishermen, if observed, actually has a reliable work ethic. They leave at dawn to go home at noon, then take their free time to repair the tissue. There are some fishermen who have extravagant habits and culture and these cause the poorer bargaining position of the poor; (d) Catch marketing. Not all coastal areas have a Fish Auction Place. This makes the fishermen are forced to sell their catch to the brokers at prices far below the market price; (e) Government program that does not favor fishermen. One of them is the increase in fuel which is a scourge for fishermen, seeing their high dependence, especially on the type of diesel fuel. If a 5-12 PK-engine boat requires an average of 10 liters of diesel at a time at sea, each boat will cost Rp. 21,000 in standard price conditions or at the base of Rp. 2100. But in general it is reluctant to buy diesel prices of Rp. 25.00-27,000, because it depends on the level of agents who play in the field the more agendas the longer the market chain and the higher the market price and the more it gets into the hands of fishermen.

3.4 Poverty of Maritime Society and Society 5.0

The life of fishing communities on the islands in the context of advances in information technology is quite adaptive to the development of information technology. The indicator is the increasing number of internet users in Indonesia, which has now reached 171 million internet users throughout Indonesia¹12]. This proves that the maritime community in the islands has accessed information technology massively. Nevertheless, the use of information technology is intended for things that are personal (such as communication with family, relatives and friends). This technology has not been used for the purposes of increasing production, market access and others. In the context of society 5.0, maritime communities, especially fishermen in Indonesia, have not yet realized the function of information technology in developing productivity and welfare. This is a common phenomenon that occurs in fishing communities, requiring intervention so they can be aware of the urgency of advancing information technology for their progress and prosperity.

4. Conclusion

The results of this study illustrate that the Indonesian maritime community is still experiencing obstacles in entering the era of Society 5.0, including: (1) social structure has been shackling life on the islands, causing people to experience structural poverty and have not been able to escape the poverty trap; (2) Relatively low level of education resulting in difficulty to

find alternative decent work; (3) Access to information on developments is still very limited, and; (4) Lack of awareness to change and obtain a better and more decent life. From the general explanation, it can be concluded that poverty that afflicts fishermen in Indonesia requires efforts to find an effective way out of this condition. Because in the experience of many countries, the lives of their fishermen are actually more prosperous and more prosperous. This inspiration, which underlies the need to formulate policies so that Indonesian fishing communities can get out of the poverty trap. In countries like Denmark, Japan, South Korea, Brunei Darussalam and others, their fishermen are well-fed and prosperous. Therefore, it is recommended that the Government of Indonesia provide space and access to island communities, thus better education and information development is more easily obtained. In addition, easier regulations are needed to access capital, production and markets. Civil society groups are advised to be more systematic and sustainable in helping as well. In this way, it is easier for maritime communities on the islands to enter the era of society 5.0.

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