

Mini Review

New perspective on subsistence ethics: criticism on the fishery development in Indonesia

Authors:

Susilo E and Purwanti P

Institution:

Faculty of Fisheries and Marine Science, Universitas Brawijaya, Indonesia.

ABSTRACT:

Misconception that views socio-cultural condition of fisherman similar to the ones of farmers has triggered fatal mistakes related to the implementation of policies on the development of fisheries in a country. This paper intends to propose a brand new perspective on the subsistence ethics in which it is believed that the principles of ethic subsistence for farmers are not always applicable for fisherman. This study also attempts at expressing criticisms toward the development of fisheries in Indonesia that gives inadequate attention to the ethics of fisherman subsistence. The subsistence ethics cannot be used separately nor can it be exalted through managerial paradigms of either “circular” paradigm or “pyramid” paradigm. The history of Indonesian fishery development has been started from the era of the Dutch colonialism up to present time which is marked by two principles: (1) economy is the commander, and (2) policies are always attached to the situation of the national politics. The result of the analysis on the ethics of fisherman subsistence shows that the development of fishery has to consider the ethics of fisherman subsistence which also plays role as the social guarantee of fishery resources.

Keywords:

Subsistence ethics, coastal fisheries, sustainable development, fishery policy.

Corresponding author:

Susilo E

Email ID:

olisuside@gmail.com

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Susilo E and Purwanti P

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INTRODUCTION

Various names are attached to Indonesia related to its massive marine potency such as “the great archipelago”, “a country of millions of beaches”, “maritime continental of Indonesia” and “the maritime country”. Undoubtedly, Indonesia is acknowledged as the icon of world’s maritime (BAPPENAS, 2016). Limbong (2015) mentioned that Indonesia deserves to be called as the world’s archipelago with thousands of island (17,504) and a 70% (5.8 km²) sea area. The sea lane stretches at a total length of 81,000 km, making Indonesia the second largest country after Canada. The sea area of Indonesia consists of territorial sea of 0.8 million km², Nations’ sea of 2.3 million km² and EEZ of 2.7 km². With its major marine resources, Indonesia used to be the leading maritime country in the past time, in which Indonesia was still in the form of *Srivijaya Monarch* (7th century) and *Majapahit Monarh* (13th century). Therefore, Indonesia is supposed to optimize its potency as the largest maritime country in the world.

One of the indicators to measure a maritime country is the prosperity of the people living along the coast lane. Unfortunately, results of the studies showed that Indonesia has not yet successfully exempted itself from poverty faced by people living along the coast lane. The number of fisherman living in poverty in 2009 reached 90% of the total number of fisherman in Indonesia (Mussawir, 2009). Meanwhile, the data from the Ministry of Marine and Fisheries (*Kementrian Kelautan dan Perikanan*) showed that the total number of fisherman in Indonesia was around 2.74 millions people (BAPPENAS, 2014). Besides, Masyhuri (1996) mentioned that there was shifting on the fishing area to the coast lane in the colonization era of Netherlands upon Indonesia.

The poverty faced by people living along the coast lane is triggered by several factors. Kusnadi (2004) explained that the polemic of fisherman poverty has a strong relevance to the anatomy of poverty proposed by Suyanto (2013). It is also necessary to prioritize small-scale fishermen as suggested by Imron (2015). In addi-

tion, the poverty of fishermen was also investigated by Humaedi (2012) who attempted at finding external causes of poverty and attempts made to minimize it. An interesting analysis was also presented by Harpowo and Tain (2011) stating that the poverty of people living along the coast line is the impact of over fishing.

The other causes that significantly trigger poverty are factors related to social insurance and resources available for the people as mentioned by Abdullah and Saleh (2001). Developing countries usually have the tendency to give inadequate attention to the principles of sustainable development which makes the sustainability of the resources to remain neglected. The status of fishery resources which also correlates to the lives of the fishermen was found at the critical point, or in other words, the Indonesian sea is in the critical condition (Greenpeace, 2014).

The marine potency of Indonesia is quite massive yet its ecosystem is in threat. As much as 30.45% of its coral reef is in very awful condition, 37.25% is in fair condition, 27.18% is in a good state and only 5.3% of it is in excellent condition. The condition of mangrove is also not much different regarding to the fact that Indonesia has lost more than 50% of 4.2 million hectares of mangrove forest since 1982 to 2000, remaining only two million hectares of mangrove forest at present time. The mining industries throw away their tailing at a huge amount of 80 million tons per year which most of it ends up at the sea, threatening the corals. The fishery crisis in Indonesia is triggered by a condition called Brown (1982) as “the end of fisheries” which is predicted to happen by 2048 at either national scale as well as global scale.

The endangered marine resource has certain relation to the subsistence ethics of fishermen as the ones who rely their lives on marine resource. Mangrove forest, coral reef, sea bed and fish are the treasure of the marine resource for the lives of fishermen. Even-though within the social structure, fishermen share patron-client relationship. Satria (2005) mentioned that fishermen as the clients do not have any rights to seek for subsistence from

the patron, yet they are allowed to demand betterment on the marine condition. Fishermen's rights are quite different from the farmers' for farmers are allowed to sue for the subsistence rights from their patron. There are at least two different fundamentals between fishermen and farmers;

- (1) within the socio-cultural evolution context, fishermen are at the "hunting and fishing state, while farmers are at the "agriculture" state (Sukadana, 1983; Schutkowski, 2006);
- (2) (2) fishermen's ownership of the marine resource is "common property", while farmers have "private property" ownership of their field (Nikijuluw, 2002).

The aim of this review is to propose new perspective toward the appropriate subsistence ethics for fishermen which is different from the subsistence ethics proposed by Scott (1985) that applies for farmers. This study employs a subsistence analysis to explain the neglect of fishermen ethical subsistence done by the government regarding to its relation to the national development of marine and fisheries in Indonesia.

The history of fishery development policies in Indonesia

Ever since Indonesia reached its independence in 1945, Indonesia has gone through various changes of governmental system. Every governmental system has given certain influence toward the economy development, especially related to the aspect of natural resources exploration and management. Government, as the decision maker in the macro level often neglect the multi-cultural characteristic of Indonesia and the specific area location to put into consideration. Criticisms thrown by social scientists are often considered as the obstacles to develop. In this reformation era, there have been issues in either local level or national level related to the declining state of natural environment which has certain impacts on the nation's social condition.

In this review, the researcher presents deep and intensive analysis on the life of people in coast lanes regarding to multi-dimensional and rapid changes that occur

in Indonesia. Salim (2002) stated that there are five major drives to innovation called "The Five Contemporary Prime Mover" which include; (1) communication and mass media, (2) bureaucracy, (3) capital, (4) technology and (5) ideology (*Pancasila* or Religion). However, those five factors occur simultaneously, creating major changes in quite large scale which people in coast line find them difficult to come up with.

The focus of this study is to find the main factor that controls the bureaucracy, besides it also looks into other driving factors of the bureaucracy. The direction of national fishery development policy can be seen from the colonization era by the Netherlands and the Japan until today (2016). Masyhuri (1996) described the economic development of fishermen in the era of Netherland colonization in Java and Madura during 1850-1940. Fishermen seemed to be pushed aside to the coast lines due to their inability to grow their business as the impact of the abolishment of the patcher system in 1888-1905 which used to protect fishermen's business.

The journey of Indonesian fishery development was also presented in detail by Widodo (2007), showing that beginning from the late 19th century, fishery industries were pushed aside to the coasts in order to support the East Asia War (Indonesia was under Japan's colonization), followed by the issues occurred during the early phase of Indonesian independence, up to the time national institutions were strongly built. Widodo also highlighted the irony that until 1960s, imported fish still dominated the fishery industry in Indonesia at National scale. The chronology of the fishery development taken from various sources is presented in Table 1.

Two major fishery issues are explained as follows. Economy is the leader; the policies on fishery exploration had not yet put the principle of ecology sustainability as the, causing unavoidable ecology damages which became the main issue of the conflicts occurred among fishermen.

For instance, when the government attempted to fill in the vacancy of prawn export which resulted from

the banning of the use of trawl as stated in the President's decision no. 39 of 1980, the intensification of prawn breeding was shifted to the use of dikes, sacrificing million hectares of mangrove forest to support this program. Government also has made some effort to repair the condition of the resources. However, the amount of production has become the main focus that drives people to neglect the impacts on the ecology which often are not worth the exploration. Secondly, in relation to the condition of the national politics, political policies implemented for people in the village in 1980s made a number of fishery industries bankrupt. Some regions were impacted by this policy including the East Java which has lost its cultural values. Some regions have successfully endured the impacts such as the 'Panglima Laot' in Aceh (Abdullah *et al.*, 2006), 'Sasi Laut' in Maluku (Soselisa, 2001), and 'Awig-Awig' in Lombok *Timur* and *Bali*. Even

though the law number 5/1979 has now discontinued, the repairment process of the resources cannot be done instantly. The law of fisheries, coasts, and small islands have also been revised.

Ethics and subsistence ethics in the life of fishermen

Subsistence ethics was first introduced by Scott (1977). Basically, Scott (1985) stated that the typical subsistence-oriented economic behavior among farmer families in the south east Asia is considered as a unit of consumption and production. Subsistence is the minimum earning limit obtained by farmer families to live. The principle that puts safety first and risk distribution is the safest decision to take. The indicator of justice should not be determined by the patron/nation, yet it deals with the remaining amount to consume. Subsistence ethics is a moral obligation to fulfill by the patron to guarantee the lives of fishermen.

Table 1. The chronology of fishery development in Indonesia from 1970 to 2015 (Susilo *et al.*, 2017).

S. No.	Year	Tagline	Events
1	1970s	<i>Motorisasi Perikanan</i> (Fishery Motorization)	Social conflicts, environment damages, the legalization of President's decision number 39/1980 that bans the use of trawl.
2	1980s	<i>Cool Chain System</i>	-
3	1980s	<i>Intensifikasi Tambak (INTAM)</i> (Dike Intensification)	Failure due to limited infrastructure, high export quantity and high damages on the coast ecology.
4	1980s	<i>Introduksi Koperasi Unit Desa/Tempat Pelelangan Ikan (KUD/TPI)</i> (Introducing Village Cooperatives/ Fish Market)	Newly formed economics institution were difficult to be integrated with the settled local structure (patron-client).
5	1985 s 1990s	<i>Agribisnis</i> (Agrobusiness)	Integration of agrobusiness components with fishery sectors.
6	2003	<i>Protekan 2003</i>	Failure in achieving the export value target of 15 billions
7	2003- 2004	<i>Holistik 4 dimensi (ekologi, ekonomi, kelembagaan dan politik) Gerbang Mina Bahari.</i> (4-Dimension holistic aspects; ecology, economy, institution, and politics) <i>Gerbang Mina Bahari</i>	Integration of politics and economics components.
8	2005	<i>Revitalisasi Pertanian, Perikanan dan Kehutanan (RPPK)</i> (Farm, Fishery and Forest Revitalization)	Focus on the fishing of tuna, shrimp, and seaweed
9	2010	<i>Minapolitan</i>	Area expansion
10	2012	<i>Industrialisasi Perikanan</i> (Fishery Industrialization)	Area expansion
11	2015	<i>Perang pada IUU Fishing</i> (War against Fishing Law)	Fishing-vessels burn down

The ethics itself is a set of rules that contain the norms and moral values which guide people to behave in relation to the sustainability of the nature and it also contains moral principles that should be internalized by the people in interacting with the nature. Ethics is also a critical reflection on how human should live their lives in the most concrete situations as well as in certain situations. Ethics is also a set of moral philosophy or knowledge that critically explores and reviews the appropriate way to behave in certain concrete situations (Keraf, 2002).

Furthermore, Keraf also proposed three types of ethics; deontology ethics, teleology ethics and primary ethics. Deontology ethics is taken from the word "Deon" that means "obligation". Deontology ethics deals with "how to behave". This deontological principle was formed based on the need to do the obligation as human as stated within the norms and values of morality. Meanwhile, the teleology comes from the word "Telos" which means "direction". Based on this principle, human are required to take actions which direct to good effects. This view is also called utilitarian which focuses on bringing benefits for all the people. Actions should be made based on the benefits that they can give for the people. Lastly, the primary ethics which focuses on the development of moral characteristics within each individual. Human should always do actions which are morally acceptable such as faith, trust, honesty, willingness to offer sacrifice, compassion, generosity, patience and sincerity in any situation.

Meanwhile, Asya'rie (2010) explained that ethics is a branch of philosophy that seeks for essence of good values as well as bad ones done by certain person based on full-consciousness and based on certain thoughts. Ethical issues are issues that correlate with human existence which includes any of their aspects (as individual as well as a group, their relationship with God and their relationship with nature), regarding the social, economical, political, cultural and religious relationships.

Hence, ethics is a set of guidance for human to think, speak, and act as human regarding to their role as

individuals, as a social creature, and as a God's creature who interacts with the nature. Ethics should be done based on full-consciousness that guides people to choose good ways to live out of various choices of the ways to live.

Conclusions on the definition of ethics can be drawn based on the view proposed by Scott (1985) who stated that typical subsistence-oriented economic behavior shown by farmer families indicated that unlike capitalistic companies, farmer families are a unity of consumption and production units. They are living close to the subsistence limit which requires them to prioritize short-term safety instead of seeking for greater long-term benefit. In order to achieve the short-term safety, they have to do "self exploitation", in other words, they have to exploit themselves for quite low wages, or they have to perform "hunger rent" in which they pay very high price for a land. Those actions are considered irrational, yet farmer families have to perform them to maintain their subsistence limit.

Scott highlighted the "safety first" principle which was previously introduced by James Roumasset as the economic subsistence. The explanation is presented in a fluctuative curve on farmers' wages by comparing the wages to their subsistence necessities. If a farmer family needs as much as 80 baskets of rice or equal as 50 baskets of fish, the subsistence limit is illustrated in Figure 1.

The subsistence necessity is determined by the minimum physical necessity and families basic necessity which are reflected upon the value of regional minimum wages. The subsistence values for families that do not directly produce rice are fluctuative based on the correct price which is dynamic. 80 is a limit in which when this point is not fulfilled, it shows that fishermen families are experiencing physiologic threat and they are also under the condition of malnutrition. Therefore, it is understandable that fishermen perform the "safety first" actions which other people find them irrational. Hence, Javanese people always believe in "alon-alon waton kelakon" principle that reminds them to always act carefully. Since most

fishermen are Javanese, they put the safety fist which is in line with Scotts' idea. It is clear that Scotts' idea is sensible that subsistence is a moral requirement.

In relation to the subsistence ethics, Susilo (1986) wrote a hypothesis stating that; fishermen are not allowed to sue their rights toward the middlemen since the rights are not under middlemen's responsibility but it is the nature that should provide greater products. The hypothesis was then proven when Maulana *et al.* (2015) proposed three major propositions and a thesis as follow:

Major proposition-1: Social-economy protections for clients by the patron within a small relation unit or illusory relational framework and the economic necessities in a greater relation are the efforts to maintain fishermen's subsistence rights.

Major proposition-2: Competition on the fishery exploration in the form of conflict-value organization and the generosity and care that construct an awareness in maintaining the value of harmony and peace are efforts to maintain the rights of subsistence.

Minor proposition-3: The fishing management done through ecofriendly ways in the form of group empowerment and fishing creativity as well as the awareness to protect the nature from getting damages as the result of adequate knowledge and experience are the factors that strengthen the resilience of the social-ecology within fishermen's attempts to maintain their rights and lives of the natural resources.

Thesis: Fishermen's effort to grab their rights upon marine resources are done through social actions which are intended to defend their rights upon their subsistence and

the rights to receive social insurance of the marine resources within the scope of fishermen relationship arena, harmony and conflict value nurture arena, and empowerment of socio-ecologic resilience arena.

The relationship among ecology, economy and social aspects has received massive attention, besides it is also being used as the base to implement the principles of sustainable development which is called the circle paradigm. This awareness has grown to become an international motion which was issued in 1992 when the United Nation held Earth Summit event in Rio Janeiro, Brazil. This event was attended by 178 country leaders (including Indonesia) who made an agreement to run the sustainable development program. Within the context of fisheries, the Code of Conduct of Responsible Fisheries (CCRF) was introduced as a set of international fishery ethics (Kementerian PPN (Ministry of National Development Planning), 2014). Within the global scope, an awareness on the urgency of sustainable development had been known since 1970s ("Quick Guide To", 2015), even more, some people stated that it had been started since the 1960s ("History of Sustainable", 2012). In Indonesia, the awareness appeared by the time the government issued the law number four at year 1982 about the basic requirements in exploring and preserving the natural resources and the environment. Most of the basic principles of the management of natural resources were made based on the optimum sustainability principle.

The paradigm of the relationship among those three aspects; ecology, economy and social is illustrated in Figure 2. However, some problems still appear during the implementation of this system, especially when ecological problems are contradictory to the short-term economic development plans. BAPPENAS (2014) admitted that fishing activities in Indonesia have not yet been conducted sustainably which is caused by the failure in implementing the principles of CCRF.

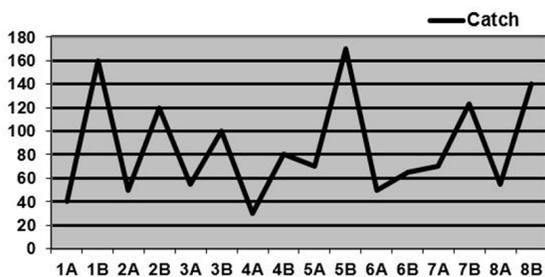


Figure 1. The subsistence limit (simplified from Scott, 1985)

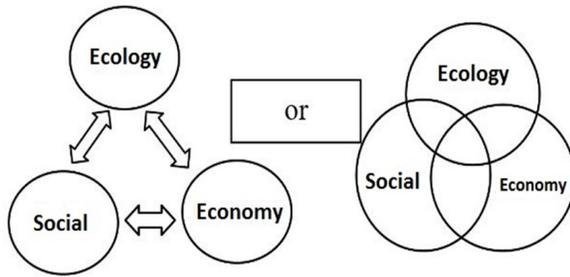


Figure 2. The Circle Paradigm (adopted from Holling, 2001)

The new proposed perspective for subsistence ethics of fishermen

Even-though the circle paradigm has been used as the basic philosophy of the sustainable development, the ethics and the CCRF have not yet been optimally implemented. Thus, it is necessary to replace the circle paradigm with the pyramid paradigm. This idea appeared based on the pyramid paradigm idea proposed by Daly (1990); Jalal (2010) stated that without functioning natural systems, everything collapses; without functioning economic systems, societies cannot advance; and without functioning social systems, people cannot develop. There are four levels in pyramid paradigm; environment, economy, social and the social welfare at the top of the pyramid. This impels that social welfare can be sustainably developed when the system of economy and the social

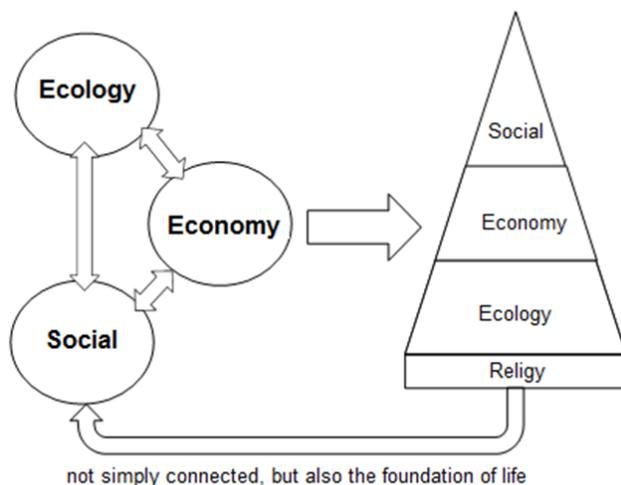


Figure 3. Circle Paradigm to Pyramid Paradigm (adopted from Susilo, 2010)

system do not appear as a threat for the sustainability of the ecology system.

In 2010, Susilo stated some ideas as follow: In a discussion held a year ago, I tried to offer a change on the paradigm of marine and coastal resource management. The new idea facilitated an interaction among the ecology, economy, social (circular) which are changed into a pyramid system in which ecology is the fundamental aspect, followed by the economy aspect and the social aspect at the top of the pyramid. This pyramid model always puts the ecology aspect as the first concern in exploring the marine resources in order to maintain the sustainability of the ecology as well as the economy which automatically becomes the basic aspect to maintain harmony and social interaction. However, considering the fact that Indonesia puts religious values as the philosophy, the pyramid concept should be built upon the religious values in order to strengthen the energy reflection from the bottom of the pyramid up to the top of it and vice versa. The modification of circle paradigm into pyramid paradigm is visualized in Figure 3.

A crucial aspect in the concept of sustainable development is the ecological sustainability. It is explained by Abdullah and Saleh (2001) that within a vast changing society, people need a social insurance. Hence, the subsistence ethics is a fundamental aspect to determine the social insurance and the natural resources management system. Benda-Beckmann *et al.* (2001) also stated that social insurance on the natural resources appears as the future for people in villages. They stated that people who live in village take natural resources as the source of living and social insurance as well. They need the resources to fulfill their life necessities and to provide them savings for their future. In the other words, natural resources is a social insurance for people living in villages.

Two other important issues that relate with the criticism on the fishery development in Indonesia and the subsistence ethics include; First, the Subsistence Ethics of Fishermen Society. This hypothesis had been written firstly in 1986 (Susilo, 1986), on the subsistence ethics of

fishermen which was then proven in 2015 (Kusumah *et al.*, 2015) who found that conflicts among fishermen society are usually related with the failure to fulfill their subsistence ethic rights by the nature. This is an interesting fact that the theory of import that applies for farmer society is not always compatible to apply for fishermen society. The analysis on the subsistence ethics presented in this study is a new approach or new perspective of the subsistence ethics which is specially designed for those who live in the coast lanes. The second point is the Natural Resource as Social Insurance. The rights upon the subsistence ethics of the nature is a social insurance of the natural resources for fishermen society which has to be achieved since it is also a fundamental aspect to consider in determining the orientation of the fishery development. This view goes in line with the shift on the paradigm of the coastal resources management which used to be seen as a circular relationship among three components (ecology, economy and social) into a pyramid-shaped paradigm in which the religious values become the bottom part of the pyramid, followed by ecology, economy and the social aspect on the top of it.

CONCLUSION

Based on those explanations, it can be concluded that the subsistence ethics in fishermen society appears in a different form from the one of farmer societies. This insight is a new perspective that is proposed to the development of the subsistence ethics. Within the context of farmer society, farmers are allowed to seek for their subsistence rights from the patron. However, even though fishermen also possess the patron-client relationship, they can only seek for their subsistence rights from the nature. It implies that the ecology sustainability should be put as the main consideration in the fishery development in Indonesia, by adding the religious values as the base of the pyramid-shaped paradigm. This concept goes in line with the term “conservation bonus” proposed by Wiadnya (2012) which is also identical to the view that urges the

government to pay for an economic incentives to preserve the natural resources (McNeely, 1992).

Regarding to the criticisms on the fishery development in Indonesia, the dynamic state of the politic and ecology should no longer become the most influential aspects in determining the policies in the fishery development. The use of the principle in which natural resources are seen as the social insurance for the society is a subsistence ethics that should be fulfilled by the government through the policies made for the development of the fisheries in Indonesia. Philosophically, there has to be a change on the fishery paradigm from the circular-shaped paradigm into pyramid-shaped paradigm.

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