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# **UNDERSTANDING ECONOMIC SUBJECTIVITY OF INDIGENOUS PEOPLE IN CONSERVING TRADITIONAL ECOLOGICAL KNOWLEDGE**

A CASE STUDY OF MATBAT PEOPLE' SASI LAUT IN  
FOLLEY VILLAGE, RAJA AMPAT, INDONESIA

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**WAGENINGEN**  
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**A Master Thesis**

Understanding Economic Subjectivity of Indigenous People in Conserving  
Traditional Ecological Knowledge  
A Case Study of Matbat People' *Sasi Laut* in Folley Village, Raja Ampat, Indonesia  
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*Laut e aknen, ley e ak mam<sup>1</sup>.*

The ocean is my mother and the land is my father.

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<sup>1</sup> *Matbat's proverb*

# Acknowledgement

This is it. Studying abroad is one of my biggest dream and achievement in my 25 years of living. If I could, I would turn back to the 20 years of me and talk to her that I was doing great, all the efforts were not in vain. Today is the day that I proved to myself that nothing is impossible, failure is just the part of the process.

Some people might ask, why conservation, why not tourism? Tourism is the outcome, while conservation is the construction of sustainable tourism development. I witnessed too much the development of tourism in Indonesia ignores the carrying capacity and alienated the local/indigenous people. It has brought me to the eastern periphery of Indonesia to understand the livelihood opportunity they can have from conservation and tourism development.

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Adiska Octa Paramita  
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## Abstract

**S**asi laut is one of traditional ecological knowledge that coastal indigenous people in Raja Ampat are proud of. The practice of *Sasi laut* is the manifestation of Matbat people cultural expression, where the human-environment relation is established through traditional marine resource management. However, the practice of *Sasi laut* in several villages in Raja Ampat is eroding due to unsustainable harvest by indigenous people and marine destruction caused by the migrant and commercial fisher. In Folley village, the Matbat community has been struggling to conserve their traditional ecological knowledge, *Sasi laut*. They implement *Sasi laut* to manage the population of sea cucumbers as it has high economic value. Throughout the history of Matbat people, they have modified the implementation of *Sasi laut* to sustain their livelihood from sea cucumbers. The arrangement of *Sasi laut* has transformed from traditional *Sasi* into Church *Sasi* then co-manage with The Nature Conservation, an international NGO, to secure their sea cucumbers management under *Sasi laut* practice. The purpose of this study is to understand the emerging economy rationality among indigenous people in rationalizing natural resource management of sea cucumbers from *Sasi laut*. The study offers a historical understanding before and after the co-management approach to understand the development of indigenous people's changing economic subjectivity. The study incorporates qualitative approach by using semi-structured in-depth interview, participant observations, and documentary data to cross check and balance the findings. The findings of this study suggest that conservation program in the customary land should undoubtedly offer economic benefits that the local inhabitant can earn, yet make sure that it does not contradict with indigenous' cultural values. Moreover, we suggest to incorporate traditional ecological knowledge in the conservation program to increase indigenous participation. The added value of this study is drawing on indigenous rights to understand the implementation of co-management approach contribution to customary property rights.

Keywords: Conservation, Co-management, Economic Subjectivity, Indigenous People, Neoliberalism, Traditional Ecological Knowledge.

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# 1. Introduction

The combination of indigenous culture and conservation always producing fascinating stories about how nature should be conserved while the local is struggling to make a living from it. Personal interest to explore coastal marine conservation was started from the very beginning of research topic development. The study design was established from personal concern regarding “the Coral Triangle” region or also known as “Amazon of the seas”, where offers such enormous natural wealth and outstanding variety of life forms as the basis of attractive diving experiences (Schultze-Westrum, 2001).

The Coral Triangle region has the richest reefs concentrated in some part of the marine territory in Indonesia, Malaysia, Philippines, Papua New Guinea, and the Solomon Islands (Allen:2008). Among these countries, Indonesia’s Coral Triangle is the world’s premier area for marine biodiversity with an extraordinary wealth of tropical coral reef organism with around 2122 species of it (Allen, 2008). To give a better overview, estimation of species coral reef fish fauna is presented in Table 1.

Table 1. Countries in Indo-West and Central Pacific with more than 1000 coral reefs  
Source: Allen (2008:545)

| Country                      | Species | Percent IWCP spp. | Reef Area (km <sup>2</sup> ) | Spp./km <sup>2</sup> | Endemics |
|------------------------------|---------|-------------------|------------------------------|----------------------|----------|
| Indonesia                    | 2122    | 54.4              | 51 020                       | 0.042                | 78       |
| Australia                    | 1827    | 46.8              | 48 960                       | 0.037                | 93       |
| Philippines                  | 1790    | 45.9              | 25 060                       | 0.071                | 29       |
| Papua New Guinea             | 1635    | 41.9              | 13 840                       | 0.118                | 22       |
| Malaysia                     | 1549    | 39.7              | 3600                         | 0.430                | 1        |
| Japan                        | 1462    | 37.5              | 2900                         | 0.504                | 26       |
| Taiwan                       | 1374    | 35.2              | 940                          | 1.462                | 7        |
| Solomon Islands              | 1371    | 35.2              | 5750                         | 0.238                | 3        |
| Republic of Palau            | 1254    | 32.2              | 1661                         | 0.755                | 3        |
| Vanuatu                      | 1105    | 28.3              | 4110                         | 0.269                | 2        |
| Fiji                         | 1068    | 27.4              | 10 020                       | 0.107                | 15       |
| New Caledonia                | 1060    | 27.2              | 5980                         | 0.177                | 7        |
| Federal States of Micronesia | 1031    | 26.4              | 4340                         | 0.238                | 7        |

Unfortunately, the opportunity of Indonesia as a hotspot of the mega-diversity centre for reef and fish species is threatened due to overexploitation of marine resources and destructive fishing practices around its waters area by commercial fishers. As one of the region where the Coral Triangle is located, Raja Ampat in West Papua is facing the biggest threat of marine destruction (Agostini et al., 2012). Fisher from outside Raja Ampat region conducted the practice of illegal, unreported, and unregulated (IUU) fisheries catch (McLeod et al., 2009; Varkey et al., 2010) and destructive fishing method such as blast and cyanide fishing (Agostini et al., 2012). Furthermore, Varkey et al., (2010) emphasised that due to these activities, marine destruction in Raja Ampat was reaching its crisis’ peak in the early 2000s. It has an impact on the livelihood of the indigenous people in coastal Raja Ampat. It causes livelihood



pressure for them to rely on marine resources due to depleted fish stock and other marine resources.

Depleted marine resources have impacted to the practices of traditional ecological knowledge. The indigenous people of Raja Ampat have had established a traditional ecological knowledge in marine resource governance, as later known as ***Sasi laut*** (sea *Sasi*). By definition, *Sasi laut* is traditional conservation practice across Melanesia region, which focus on managing specific marine resources (Boli et al., 2014). According to McLeod et al., (2009), *Sasi* is a traditional natural resource management which regulates temporary restrictions on resource harvest on the land and in the sea. Furthermore, McLeod et al., (2009) explained that in *Sasi laut* specific regulations applied such as fishing areas, fishing gear, target species, and period of harvests under customary marine tenure management. Boli et al., (2004) pointed out the advantages of *Sasi laut* contributed to ecological and economic benefits, e.g. the recovery of the regulated species population, protection from exploitation, and the increasing of local/indigenous income. However, due to marine destruction and IUU fisheries caused by non-indigenous people in Raja Ampat waters, the harvest of marine resources from *Sasi laut* was decreasing dramatically.

The study case took place in one of the coastal villages in Raja Ampat. Folley village is populated with Matbat ethnic, the indigenous people of Misool island. One of livelihood supports in Folley village was sea cucumbers from *Sasi laut*. Sea cucumbers, as one of the important commodity in Folley village, have introduced the economic system and the value of money to Matbat people. In the practice of *Sasi laut*, Matbat people in Folley village have been facing a profound social and cultural transformation in the last five decades brought by two interconnected processes. The first was the establishment of private-customary land in the 1970s due to neoliberalism that has produced economic strategies from land and marine resources. This land tenurial reform caused the establishment of Church *Sasi laut*. The second was the co-management of *Sasi laut* by the international non-governmental organization (NGOs) in the 2010s to conserve sea cucumbers through Modern Church *Sasi laut*. The co-management of modern church *Sasi laut* is one of interesting stories in marine resource governance that contributed to the notion of simultaneous practices of marine conservation and marine resource governance. In this case, TNC was not only revitalised the practice of *Sasi laut*, but also imposes Western (Euro-American) concept of modern conservation paradigms, e.g. ecological monitoring, protected area management, and law enforcement through the establishment of local patrol rangers.

Based on this, the study investigates the underlying motives of Matbat people to preserve their traditional ecological knowledge, *Sasi laut*. Economic subjectivity is used to rationalise the reason to conserve their traditional ecological knowledge. According to Popke and Torres (2013), economic subjectivity is the reaction of neoliberal forms of governmentality that encourage individuals and communities to adapt to the changing environment by

implementing survival strategies in order to achieve new social and economic opportunities. In other words, this study opposed to the prevalent perspective towards indigenous people; indigenous people are the rightful conservationists (Robinson, 2013). However, the foundation of this study incorporates intrusion of the market as the reason in the changes of their motive to conserve their customary territories through traditional ecological knowledge.

Further, the study argues that the economic subjectivity can be assessed further through the concept of 'Governing of the Soul' by Rose (1999). This concept explains the political technologies as the canons of personal ethics through an understanding of the inseparable nexus of power-knowledge-subjectivity. On the one hand, the study celebrates the empowerment of marginalised community and indigenous rights compliance through co-management of traditional marine territory. On the other hand, this study proposes a narrow ideological perspective by borrowing Foucauldian way of thinking to address the production of subjectivity. According to Read (2009), human beings are made subject in which regimes of power-knowledge intersected. Furthermore, Read (2009) affirmed Foucault<sup>2</sup> argument that "neoliberal as a new regime of truth and a new way in which people are made subjects". This argument is the foundation to examine the way subjectivity is produced, through the interaction of power/knowledge.

### 1.1. Research Objectives and Research Questions

In general, the research objective I would like to address in this study is to understand the establishment of economic subjectivity to conserve customary marine area and its influence to the shifting of power relation and human-environmental relation (traditional ecological knowledge) of indigenous people. Based on this, the historical events of *Sasi laut* arrangement in Folley village is suitable as the central point of the analysis. The concept of the 'Governing of the Self' is addressed as the framework of thinking to strengthen the central argument of the thesis, **conservation notion is only happening if it delivers economy benefit**. Based on this, this study develops a theoretical and analytical framework to examine of economic subjectivity that grounded in indigenous people because of privatisation of their customary land and questions whether it represents a favourable opportunity for their culture and economy. Therefore, the research questions of this study are presented as below:

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<sup>2</sup> Read (2009) address his concern regarding the shift of exchanging creature to competitive creature in the formation of subject due to neoliberalism expansion. He referred to Foucault's work in *The birth of biopolitics: lectures at the Collège de France, 1978-1979*.

### Main Research Question

- How does economic subjectivity of indigenous people transform power/knowledge nexus in conserving their traditional ecological knowledge?

### Sub-research Questions

1. What are the implications of economic subjectivity of Matbat people to the power/knowledge nexus in conserving **Church Sasi laut**?
2. What are the implications of economic subjectivity of Matbat people to the power/knowledge nexus in conserving **Modern Church Sasi laut**?

## 1.2. The Relevance of the Study

The study investigates the influence of neoliberal in an indigenous society that causes social and economic implication to indigenous' power structure and their grounded knowledge to the environment. There has been little research on the changes of indigenous subjectivity influenced by neoliberal pressures towards their cultural existence and economic resilience. In this perspective, conservation is not only about governing the environment but also a matter of making up the people. There are social and scientific relevancies of this study to the academic discussion in natural resource management realm.

### Social Relevance

The findings of this study case might useful to address conservation strategy or natural resource management imposed by external stakeholder (international/local NGOs and the government) in the customary land of indigenous people. The neoliberal notion has transformed my aspect of modern society, however, does it implies to indigenous people as well? This study offers a new understanding of seeing indigenous people as productive subjects with economic rationality. Therefore, recognizing their underlying perspective to conserve their customary marine area might offer the suitable strategies to overcome the conflicts within the protected area. As a result, the incorporation of co-management with neoliberal understanding might offer a new approach for the success of natural resource management. This study also suggesting the significance of traditional ecological knowledge in the construction of the co-management approach to promoting local/indigenous customary property rights in modern conservation strategies.

### Scientific Relevance

First, the study adds to the critical perspective of the emerging **trend of 'co-'** as a new form of development expansion of the global north to the global south. The conservation effort by the international organisation has been articulated as development intervention, including co-management approach as the modern conservation paradigm. Co-management approach stressed the importance of partnership and people oriented to achieve shared common goals. However, it has been controversial as conservation and development cannot be served

simultaneously (Berkes, 2004). Berkes argues that nature conservation cannot deliver to the social development of a community. The contribution of co-management in this discussion can add another perspective in collaboration work of conservation as a development project.

Second, the result of this study enriches **social science perspectives** in nature conservation field which in a few decades was strictly measuring biological and ecological impact. In fact, conservation is a matter of human development. Higgins and Lockie (2002) argue that social comprehension is crucial to apply the best practices and strategies to manage natural environments. The study case addresses contemporary social study through anthropological perspective to assess the implication of natural resource management. As stated by Escobar (1998), a fundamental asymmetrical relationship exists between modern science, economics, traditional ecological knowledge, and practices of nature.

Third, the study proposes a new understanding of the **human-environmental relationship** in neoliberal reality. It refers to Read (2009) argument that claimed 'the market is in human nature' as the most significant terrain in our times. Neoliberalism has influenced in all facets of life, including the natural world as the result of global capitalist expansion. The notion of neoliberalism-capitalism capable of explaining the underlying driver of interaction between human and non-human in the current world systems (Heynen and Robbins, 2005). However, there is a dynamic caused by neoliberalism. As stated by Popke and Torres (2013), neoliberalism can align or conflicts with the existing social and ethical agency. Therefore, in this study case, the neoliberal mentality is linked to how indigenous people responsible for maintaining their customary land through traditional ecological knowledge.

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## 2. LITERATURE REVIEW



### *A SUMMARY OF RELATED LITERATURE IN THE AREA OF STUDY*

Picture descriptions: hunting shrimps to catch big.

Two little boys were spending their evening with their spearhead or batonda in Matbat language to get some shrimps. These shrimps are not for daily consumption, instead they use it as bait to catch fish. They put some shrimps on the hook that attached to a string. Living without electricity during the day influence Matbat children to spend more time with the ocean to gather some food for dinner.

## 2. Literature Review

Chapter 2 contains a literature review regarding concept and theory that supported this study. In subchapter 2.1., I open up the discussion with indigenous rights recognition in development and conservation project. Indigenous rights is not a concept used in this study. Instead, it provides a background that is necessary to understand the indigenous struggle over their customary land, including from conservation programs. In subchapter 2.2., I incorporate modern paradigm in natural resource management, co-management approach, as the solution to tackle indigenous right violation in conservation projects along with its pros and cons. In subchapter 2.3., I explore the importance of traditional ecological knowledge as suggested by some academia to tackle the asymmetrical power relation in co-management. Based on that, in subchapter 2.4., I established a conceptual framework that fit to analyse the influence of economic subjectivity on the changes of power/knowledge.

### 2.1. Indigenous Rights over Natural Resources

In the world before state, indigenous people have the maximum authority to extract and maintain all the natural wealth surrounding their lands. It is indisputable that the indigenous homeland is geographically rich with biodiversity and the main target for conservationists and environmental scientists to protect abundant natural resources from unsustainable use, including the indigenous people within the surrounding area. As stated by Colchester (2004), in the history of protected area establishment, social exclusion and marginalization are the costs indigenous people must pay from the establishment of the protected area over indigenous land.

In social context indigenous people refers to specific tribes in isolated locations, however, there is no singular definition of neither 'indigenous people' nor 'indigeneity' (Kingsbury, 1998). The general conception of indigenous peoples cannot be applied in all societies, as it tends to reduce the fluidity and social life across the world. Moreover, the categorization of indigenous people is a critical matter as it implies how those people celebrate these 'special rights' imposed by international development organization. Throughout history, the perception and threat to indigenous people are facing notable changes to frame the limit of the legitimacy of indigenous rights claim which is summarised in the table below:

Table 2. Changing Global Construction of Indigeneity  
Source: Larson and Aminzade (2007:805)

|                              | <b>Characterization of Indigenous People</b>   | <b>Nature of Threat to Indigenous People</b>  |
|------------------------------|--|---|
| <b>Colonial Era</b>          | Racialized natives in the colonies   | Being overwhelmed by advanced colonizing societies  |
| <b>Post-World War II Era</b> | Less advanced, non-integrated subpopulations   | Being overwhelmed by more advanced domestic society   |
| <b>1970s Era</b>             | Distinct subpopulations with a limited right to self-determination                   | Forced assimilation and human rights abused by nation states  |
| <b>1990s Era</b>             | Distinct subpopulations with expanded rights to self-determination and participation | Variety of threats to rights form large-scale economic activity and national interest over which they have no control |

The shifting in indigeneity conception is the result of ‘post-colony’ perspective that is implied to the acceptance of difference between indigenous and nonindigenous population as part of the historical product. According to Muehlebach (2010), indigeneity is not only related to a characterization that inherently shared by indigenous people. Instead, it is a relationship of subordination and violence from the dominant group against marginalized ones due to differential relation to the land and resources. Merlan et al., (2009) also support it, the recognition of indigeneity labelling is not to give distinction over those who are ‘different’ but to include marginalized issues and disadvantaged circumstances caused by the global system.

The discussion over ‘who is indigenous’ is considerably complex as different scholars, academia, and international institutions have their own definition which rises a debate on the indigenous political access and resource allocation (Weaver, 2001). In order to determine the definition of indigenous in this study context, the study refers to two definitions of indigenous which cover the concern of indigenous rights by Anaya (2004) and Bodley (2011). According to Anaya (2004), the term of indigenous peoples refers to culturally cohesive groups that suffer injustice from its national and/or superior government as the result of historical events. While Bodley (2011) stated that indigenous is a term to mark clear ownership of land and sources from colonists, usurpers, and intruders who came to do extractive interest and deprived them of their land (Bodley, 2011). In general, what makes indigenous peoples distinctive with other local inhabitants are community resource management, high levels of local self-sufficiency, and social equality caused by the colonial government, including the nation states.

International concern over the rights of indigenous people was started in the early 1920s by The International Labor Organization (ILO). ILO developed a pioneer international instrument related to indigenous and tribal communities in the Indigenous and Tribal Populations Convention 1957 No. 107 that focus on assimilation approach. However, the Indigenous and Tribal Population Convention 1957 was considered outdated then it is no longer open for ratification. It received many critiques regarding the assimilation of culture into the dominant society (Bodley, 2011) which cause cultural erosion. The main controversy of ILO Convention No. 107 was the assimilation or integration push into the newly independent nation by re-education, re-settlement, and religious conversion (Colchester, 2002) which contributed to identity loss of indigenous peoples.

As a response of ILO Convention No. 107 shortcomings, the convention was renewed to Indigenous and Tribal Population Convention 1989 No. 169. The major revision in this convention was the recognition of self-determination of indigenous peoples within a nation state due to the rise of self-defence movement of threatened indigenous people in the early of 1970s (Bodley, 2011). This convention paved the way for the United Nations Declaration on the Rights of Indigenous Peoples. United Nations (UN) as an intergovernmental organization, is playing a ground-breaking role to include the indigenous right recognition in a nation-state through normative declaration. The UN Declaration on the Rights of Indigenous Peoples (UNDRIP) contains right and freedom as a solemn instrument where maximum compliance is expected. Indigenous peoples' notable rights regarding natural resource governance and a great deal of participation for resource extraction in their traditional territories are covered in article 26 of UNDRIP:

“Indigenous peoples have the right to own, develop, control and use the lands and territories, including the total environment of the lands, air, waters, coastal seas, sea-ice, flora and fauna and other resources which they traditionally owned or otherwise occupied or used. This includes the full recognition of their laws, traditions and customs, land-tenure systems and institutions for the development and management of resources, and the right to effective measures by **States** to prevent any interference with, alienation of or encroachment upon these rights”.

Even though UNDRIP has marked a revolution in the journey of indigenous rights recognition, many nation-states undermined the international convention regarding the recognition of indigenous rights (Capistrano and Charles, 2012). However, in some developing countries, they are not supporting and approving the draft declaration and convention of UNDRIP, because it has constraints forces and power hold by the state (Merlan et al., 2009). It is contradictory with the article 29 in UNDRIP, as the declaration requires the nation-state to take measures, uphold, and promote the rights of indigenous peoples relating to the lands, territories, and resources. Nevertheless, Carion et al., (2015) mentioned that legal recognition by states does not guarantee the full range of individual and collective rights of indigenous people. In fact, some countries are no different with the modern invader who incorporated



and turned indigenous peoples into internal colonies where their territories are open for development forces and resource exploitation (Bodley, 2011). The implication of human rights abuse in the nation states due to state ownership over indigenous resources has contributed to the contestation of normative applicability of global principles related to indigenous rights.

The control of the national state over indigenous land and resources are articulated through the establishment of protected area and conservation agencies by non-governmental organizations. The ignorance of some national state governments towards declaration and convention of UNRIP has positioned Western conservationist as the pioneer to promote improvements in national resource governance, especially in the realization of human right based approach to conservation. As stated by Cinner and Aswani (2007) international NGOs can play a critical role to foster cross-scale coordination in local government to fill the absence of national government. The practice of land or resource grabbing for the economy force of the national state is seen as an act of criminality conducted by the national state for the sake of reinforcement of collective identity as one nation. The establishment of protected is also dealing with socio-cultural-economy tensions between local or indigenous society and conservationist. The controversies surrounding it have caused academics and scientific debate regarding the best approach to conserve nature without compromising indigenous wellbeing (Colchester, 2004). The strategy to address indigenous rights has become the main issues in conservation discussion.

Vaccaro et al., (2013) have developed three conservations approach to summarize the established discussion in natural resource management, such as fortress, neoliberal, and co-management approach. These three approaches are the response on how different type of conservation policies have been developed to determine the appropriate approach for management of protected areas by Western conservationists. The following sentences are the definition of each conservation approach by Vacarro et al., (2013). Firstly, the main character of fortress conservation is exclusionary regulations (Vaccaro et al., 2013) or also be called as fences and fines strategy. It is associated with hard-edged strategy in conservation and colonial model of management with the exclusion of human in the territory to protect from anthropogenic destruction. It is also supported by Colchester (2004), the history of fortress conservation has been marked in **social exclusion and marginalization of indigenous peoples** within protected areas. As a result, environmental injustice possible to happen in this approach due to locals and / or indigenous limited access to natural resources.

Secondly, neoliberal approach refers to a strategy to accentuate economy sustainability and long-term viability for conservation policy (Vaccaro et al., 2013). The power of marketplace in natural resource management contribute to increasing income of all stakeholders, including the locals, from the commodification of natural resources or mode of production for human's economy (Robinson, 2011). It provides local or indigenous economic opportunity from the

commodification of nature. The example of neoliberalization of nature are payments for ecosystem services, tourism, conservation marketing, biodiversity/species banking as the solution for the financial crisis in conservation strategies (Arsel and Büscher, 2012). However, the neoliberal approach is considered problematic due to the asymmetrical relationship between conservation outcomes and economic target (Fletcher, 2010). MacDonald (2011) explained that it is related to market power possibly dominated and **eliminated indigenous authority** to use and control natural resource.

Thirdly, co-management approach refers to involvement strategy as the solution to accommodate environmental justice to indigenous rights over land and resources which was neglected by the authoritarian system in conservation (Vaccaro et al., 2013). Conservation in this approach has become one of the development approach to articulate the notion of sustainable development goals to empower non-Western actors in environmental conservation. Along with the declaration of UNDRIP, co-management emerges as a tool of right based approach in conservation to accept human (indigenous people) existence within a protected area (Vaccaro et al., 2013). As stated by Drew (2005), community supports emerges as the most critical factor in maintaining the long-term plan of nature conservation. In other words, the co-management approach offers a new strategy to tackle social implications from natural and resource protection activities.

The establishment of co-management approach or right based conservation approach by Western conservationists indicates indigenous rights has been considered as one of the important elements in conservation programs. Further discussion of ongoing literature in co-management by Western conservationists is explained in the following section.

## 2.2. Co-Management Approach in Conservation

Co-management as a modern paradigm in conservation approach become a breakthrough in natural resource management (Vaccaro et al., 2013). It is also called as community-based conservation or hybrid institutions of customary and modern management. Acceptance of human use within the protected areas is the prominent element in the co-management framework as the response to the exclusionary issues. Co-management has changed conservation paradigm to facilitate human relationships with nature and respect the cultural values within the locality. This approach ensures the rights, interests, and aspirations of indigenous peoples for their social and cultural survival (Colchester, 2004). The key point in this approach is a positive collaboration between conservation practitioner, indigenous peoples, and state government (Alcorn, 1993) to achieve agreement how to manage nature without harming wellbeing of indigenous people. In this approach, the recognition of communal property regime systems is integrated into conservation arrangements (Gadgil et al., 1993) to recognize traditional cultural practices (Robinson, 2011). The harmony of these

collaboration work to conserve nature relies on how Western conservationist respect ethical obligation and indigenous' human-nature relation.

Co-management has several positives outcomes for the indigenous community according to the supporter of the co-management approach as I summarized into two main points. First, the co-management approach has positioned the indigenous community with a **certain** degree of power and authority in decision maker. According to Vaccaro et al., (2013) indigenous people / local community manages the central authority of co-management conservation. It is supported by Stevens (1997), Holt (2005), Gadgil, et al., (1993) who agree that the involvement of indigenous peoples in resource management can make significant contributions to Western environmental conservation goals by sharing responsibility through collaborative work with indigenous peoples regarding ecological monitoring and stewardship. In other words, co-management approach has compliance with the indigenous right to **self-determination in which indigenous people have authority** to accept, disagree, or refuse the Western conservation strategies over their traditionally owned land and resources. Secondly, the co-management approach asserts **customary property rights**. Capistrano and Charles (2012) emphasized that the ethical foundation of co-management approach in conservation has worked together with indigenous rights such as support to a sustainable livelihood, secure access to natural resources for customary practices, and ensure local or indigenous customary ownership. Hence, the co-management approach has addressed international law and jurisprudence regarding social impacts of protected areas to achieve conservation objectives.

Despite its favour to eliminate human rights violation in nature conservation, co-management approach in conservation received critiques related to asymmetrical **power relations**. It is expressed by Lane and Corbett (2005), who stated that community-based environmental management has magnified inequality and affects community decision hinder democracy. The argument based on the study that reveals bottom-up governance is causing systemic marginalization of indigenous peoples due to the removal of institutional authority in decision making. Moreover, Cinner et al., (2012) pointed out that co-management is facing overwhelming failure if social inequity within local elites to manage and control natural resources is not anticipated. The idea of local/ community/ indigenous empowerment to govern their natural resources can cause control issues because it depends on society-wide responsibility (Blue and Blunden, 2010). It corresponds with internal conflict to decide who has the power to make a decision within localities. Berkes (2004:622) support this discussion by stating that the failure in the co-management approach is due to the devolution of authority and responsibility. Therefore, the conflict in the co-management approach denotes vertical and horizontal of power relations. Vertical hierarchy refers to the relationship between Western conservationist and indigenous people while horizontal hierarchy emerged within the indigenous community to represent the voice of whom.

Based on this, co-management approach offers us a romanticism of harmonized social needs and nature protection agenda. It casts out the moral issues such as eviction of indigenous peoples and local inhabitants caused by the strict environmental protection which usually cost indigenous rights violation. However, it is important to note that the power relations between the regulated subject and the holders of power are inevitable issues. Although the mechanism in co-management has empowered the voice of the voiceless in conservation, there is a hierarchy between Western conservationist and indigenous people in the implementation of co-management. Depart from the drawbacks of co-management in power relations, the study is questioning the legitimacy of the co-management approach to delivering its advantages. In that sense, the study analyses the implementation of the co-management approach to address critical perspective on power relations in the processes of reconciliation of natural resource management.

### 2.3. Politics of Knowledge in Conservation

One of the interesting points in the context of indigenous rights over natural resources is the ownership of intellectual property rights. The form of indigenous intellectual property rights is manifested in cultural expression, tradition, symbols, and traditional ecological knowledge (Johnston, 2000). It is also supported by Western and Wright (1994) who stated the indigenous community down the millennia have developed limit offtake levels, limit access to certain resources, and management in harvesting. These assets are their proof of human-nature relation that has been established over generations. Among these intellectual property rights; traditional ecological knowledge has similar objectives with western conservationists to 'conserve' the environment. Traditional ecological knowledge is indigenous people's understanding of complex ecological systems which transmitted from generations to generations (Gadgil et al., 1993). Drew (2005) emphasizes that traditional ecological knowledge provides intellectual antecedent to perform several regular activities in a traditional society such as hunting, medicinal collection, preparation for spiritual ceremonies, and maintenance of a household economy. Their interactions with nature from these activities contributed to the formalized customary ecological management practices in the social mechanism. Ramstad et al., (2007) stated that traditional ecological knowledge provides valuable ecological information for conservation as it shares a common goal for the community and to make the environment sustains for the future generations. Traditional ecological knowledge shapes indigenous norms and values in a way to treat the nature communally. The existence of traditional ecological knowledge is the proof that indigenous people and conservationists have the same objectives to conserve the land and biological wealth for the future of humankind.

Higgins and Lockie (2002) stipulated the co-management approach or 'hybrid governance' in rural natural resource management requires further attention on the creation of localized knowledge to address environmental degradation. Further, Plummer and Fitzgibbon (2004)

explained that the involvement of traditional ecological knowledge is strengthening indigenous authority in decision making. On the top of that, traditional ecological knowledge in modern conservation strategy enhances the equal power relations between indigenous people and Western conservationists. It is supported by Berkes (2004) who stated that knowledge is a source of power. The collaboration of western science and traditional ecological knowledge is the advantage point in to eliminate hierarchical relationship through co-management approach. The combination of western science and traditional ecological knowledge appears to be a promising conservation approach to accommodate the cultural differences of conserving nature. However, there is a tendency that the understanding of indigenous traditional ecological knowledge is a medium through which impose scientific knowledge explanation (Cinner and Aswani, 2007). It refers to the constitution of the new 'regime of truth'<sup>3</sup>.

“... the new ways of saying plausible things about other human beings and ourselves, the new dispensation of those who can speak the truth and those who are the subject to it, the new ways for thinking about what might be done to them and to us”. (Rose, 1990:4)

Referring to the above statement, the politics of knowledge in conservation conducted by Western conservationist impacted to non-indigenous understandings to interact with the protected area and resources. The discrepancies between indigenous and modern scientific knowledge to make sense of how the natural world work has led to a series of Western claim and standard to conserve nature. These claims have created a dominant paradigm and a certain degree of power towards Western conservationists in political ecology perspective. In the eye of Western conservationists, a complex set of beliefs and cultural standards practices is not conserving nature enough or ecologically wise (Berkes, 2000). As Western conservationists are questioning the existence of conservation ethic in the traditional resource management systems (Johannes, 2002). In the indigenous view, 'conservation' refers to as simple as preventing large-scale destruction in daily activities (Alcorn, 1993). In the context of understanding the natural world, Western conservationist and indigenous people are standing in very different perspectives in understanding the natural world.

The incompatibility of Western conservationist' perspectives with indigenous resource managing strategies is the baseline of this dissonance. As mentioned by Gadgil et al. (1993), indigenous knowledge to conserve nature based on intimate relationship and belief systems is the result of ethical ignorance by western ecology scientist and conservationist. Nadasdy (2005) considered the cultural pattern of traditional ecological knowledge as superstitious, primitive, and unevolved has shaped ambivalent relation between conservationists with indigenous. According to Robinson (2011), the ethical obligation in conservation is

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<sup>3</sup> Regime of truth is Foucault conception in 'power/knowledge' to understand the act of acceptance of knowledge. It relies on the social mechanism to enable someone to differentiate true and false statement.

acknowledging indigenous as inherently conservationist in their own way, own responsible to sustain their homeland, and hold tremendous right to access natural resources. It implies the disintegration and lack of social consideration are indisputable when environmental or ecological scientist 'borrow' indigenous' piece of land and/or resources for conservation. The rising conflicts related to the misunderstanding of culture between indigenous peoples and Western conservationists have positioned themselves in opposing sides for the sake of environmental struggles which sometimes caused racist vitriol and violence (Nadasdy, 2005). It is also supported by Nepal and Weber (1995), conflicts emerged not only as the impact of different perspectives and knowledge in natural resource management but also reactions of cultural and social interventions. For instance, a no-take zone strategy is established within a sacred area where fishing was not allowed in a section of Masoala Marine Park in Madagascar (Cinner and Aswani, 2007). Despite the objectives are aligned with the cultural values, the activities of marker buoys are considered has violated taboos and influenced negative spiritual energies towards the crop yields and fish catches. As a result, the local community blamed their livelihood struggle with the park officials and rejected to engage in conservation strategies. In that sense, differences between these two pieces of knowledge are due to inadequate cultural understanding. The collaboration of knowledge is possible to happen if the conservationist is not only co-operating with indigenous/ local people in natural resource management but also support their cultural survival.

Berkes et al., (2002) emphasize that Western science and traditional ecological knowledge are potentially complementary. The understanding of traditional ecological knowledge of a specific indigenous community can put the indigenous and conservationist/ environmental scientist equal. The cultural understanding in conservation approach is the compliance of Western conservationists in environmental ethics. Based on Berkes (2004), environmental ethics is the recognition and respect towards spiritual and traditional values related to human-environment relations. Moreover, Drew (2005) affirmed that acquisition and application of traditional ecological knowledge in modern conservation strategies offer a collaborative and respectful long-term relationship. The knowledge of Western science based on ecological and biological consideration is valuable for quantitative data to control resource use and impact, while traditional ecological knowledge is part of qualitative adaptive management based on historical experience (Berkes et al., 2002). Further, Berkes et al., (2002) argue that the social mechanism in indigenous daily practices is quite adaptive due to the condition of ecology that is always changing. Traditional ecological knowledge is developing from time to time to handle the nature's uncertainty and instability. In order to deal with ecological pressure, collaborating in knowledge in conservation management can bridge up the gap of differences. Simply put, the incorporation of traditional ecological knowledge and non-indigenous conservation strategies is a way to achieve shared common goals in nature conservation, sustainable natural resources.

## 2.4. Conceptual Framework

In the co-management approach, the authority is centralized within the indigenous community and conservationist acknowledge the co-existence of nature and people. However, as discussed in the section of 'Co-Management Approach in Conservation', co-management approach asserts a certain degree of influence into indigenous' actions which impacted to asymmetrical power relations between actors (Cinner, 2012; Lane and Corbett, 2005). Through the co-management approach, the indigenous people hold authority in the decision process. It correlated with the idea of co-management approach as empowerment that resembles the governance system in an advanced liberal way (Higgins and Lockie, 2002). This reflects on the objectives of co-management conservation is to achieve the shared common goals which incorporated two objectives from the partnership, conservation, and livelihood objectives. Conservation objectives are linked with ecological benefits for the Western conservationist while livelihood objectives refer to the economic resilience for indigenous people to support their wellbeing. The negotiation and reconciliation to achieve two objectives are achieved through sharing power and responsibility in co-management approach (Plummer and Fitzgibbon, 2004).

Moreover, Higgins and Lockie (2002) stipulated this 'hybrid governance' (on the co-management approach) in rural natural resource management require further attention to the creation of localized knowledge to address environmental degradation. Further, Plummer and Fitzgibbon (2004) explained that the involvement of non-scientific knowledge system is strengthening indigenous authority in decision making. In other words, traditional ecological knowledge in modern conservation strategy enhances the equal power relations between indigenous people and Western conservationists. It is supported by Berkes (2004) who stated that knowledge is a source of power. The collaboration of western science and traditional ecological knowledge is the advantage point to eliminate hierarchical relationship through co-management approach. The combination of western science and traditional ecological knowledge appears to be a breakthrough and a promising conservation approach to accommodate the cultural differences of conserving nature. However, there is a tendency that the collaboration of knowledge is a medium through which scientific knowledge is imposed (Cinner and Aswani, 2007). It refers to the constitution of the new 'regime of truth'<sup>4</sup>.

Based on this, I see the importance to discuss the connection of political power and knowledge collaboration in natural resource management to shape the subjectivity of indigenous people using 'Governing the Soul' theory by Rose (1990). In Rose (1990)'s argument, the conception of knowledge, subjectivity, and power are interrelated and unseparated to analyze regime of self. Depart from this, the analysis incorporating the exercise of power and Western or scientific knowledge to understand the creation of

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<sup>4</sup> Regime of truth is Foucault conception in 'power/knowledge' to understand the act of acceptance of knowledge. It relies on the social mechanism to enable someone to differentiate true and false statement.

indigenous' subjectivity to 'conserve' marine environment. It is supported by Read (2009) who claimed that power and knowledge are significant in the creation of 'subject'. In this case, subjectivity refers to the construction of neoliberal-capitalist that influence indigenous rationality or will to improve.

In Foucault's conception of government or 'the conduct of conduct', has incorporated government of others (subjectification) and government of one's self (subjectivation) (Hamann, 2009; Rose, 1990; Cotoi, 2011). The concept of subjectification is governing population while subjectivation refers to the individual level of analysis (Hamann, 2009). In this study, subjectivation is used as one of the main concepts to analyse the mechanism of co-management to make up the economic subject during the process of marine resource management. For governmentality scholars, the process of subjectivation or the production of subjectivity has a complex relationship with the structure and relations of power (Weidner, 2009). Hamman (2009) offers an alternative viewpoint to understand the transformation of an individual subject:

“Subjectivation can take either the form of self-objectification in accord with the process of subjectification or it can take the form of subjectivation of a true discourse produced through practices of freedom in resistance to prevailing apparatuses of power/knowledge” (Hamman, 2009:4)

In this sense, analysis of subjectivity is applying the concept of freedom that allowed the indigenous people to rationalize their activity by using self-reflexive ethical techniques. It constitutes neoliberal reforms in which indigenous people exercise their agency to exercise their agency in relation to resources development within their customary territories (Howlett et al., 2011). Neoliberal has emerged side by side with the notion of globalization to transform individual and our social life, including indigenous communities (Howlett et al., 2011). The main reason to connect neoliberalism and the production of subjectivity is referring to Read (2009)'s argument. According to Read (2009), neoliberalism plays a significant role in the production of subjectivity. Further Read (2009) contented that neoliberalism is an ideology that emerges from the quotidian experience of buying and selling commodities. The concept of neoliberal as a system is considered as the context in this study to unravel the political rationality of conserving their nature in the inevitable modernization exposure within the indigenous community. It is argued by Cotoi (2011) that the new forms of power and knowledge mean the transformation of the former disciplinary regimes due to the emergence of 'economy'. It refers to the rise of political economy in which market becomes the image of the society in which the practice of governing could be rationally established (Cotoi, 2011). Therefore, in this study case, the notion of economic subjectivity is used to understand the transformation of indigenous power / authority and knowledge changes as part of indigenous adaptability with neoliberalism brought by modernity. The conceptual framework in this study is presented as below.



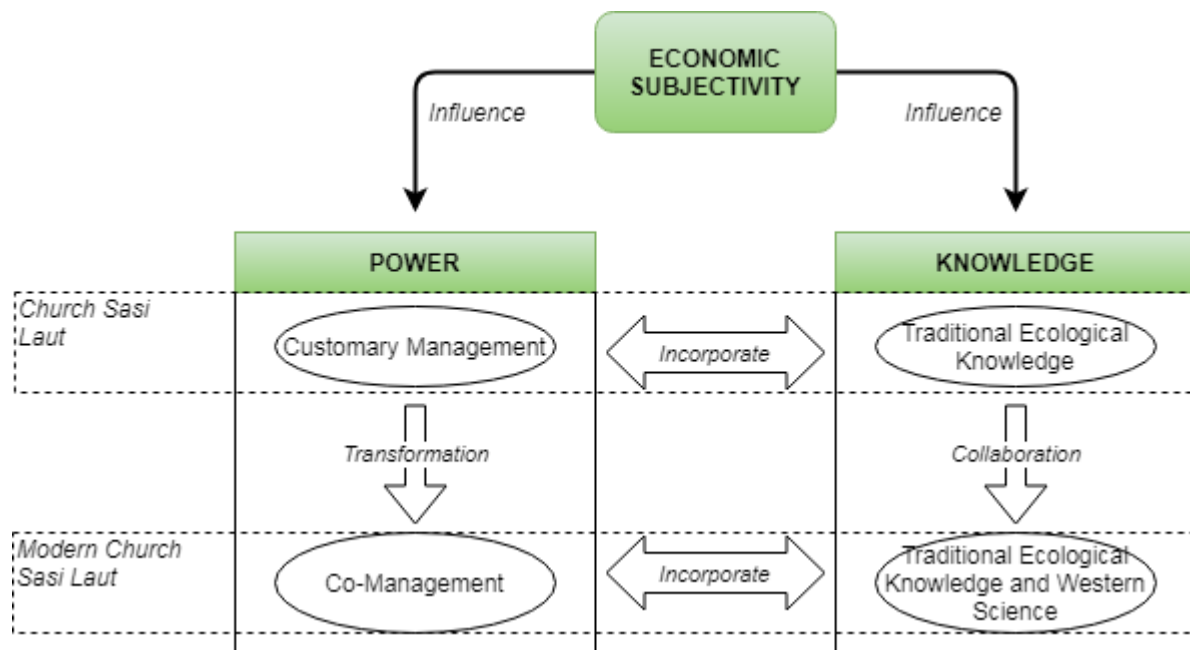


Figure 1. Conceptual Framework

In this study case, the production economic subjectivity of indigenous people is seen in two big concepts, power, and knowledge. Firstly, the proposed framework aims to analyse economic subjectivity influence the submission of power in customary management to co-management. Secondly, to analyse the implication of indigenous economic subjectivity in collaborating on traditional ecological knowledge and Western science. Hence, this conceptual framework is applied to understand the transformation of power relation and human-environmental relation (expressed through traditional ecological knowledge) caused by the establishment of the economic subject in the case study of *Sasi laut* of Matbat people in Folley village.

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## 3. METHODOLOGY



### *METHOD USED TO OBTAIN RELIABLE AND VALID DATA*

Picture description: some fish for Sunday.

Saturday is always the busiest day for Matbat people in Folley village. Saturday is the day when the women would spend their entire evening in the field to harvest vegetables, while the men would go fishing. The reason is because it is a taboo to work or to break a sweat even to cleave wood for the fire on Sunday. This become the social norms in Matbat society which was made by the church to create a day for praying, relaxing, and family.

### 3. Methodology

This chapter explains the contextual understanding of the research setting and the theoretical rationality to incorporate three methods in one study. Accordingly, contextualization part starts from the explanation of the study area and indigenous rights issues in Papua by explaining a brief history of Melanesian customary law recognition in Indonesia. The purpose of this contextualization is to give a grounded understanding of where and why the study is taking place in Folley village, Raja Ampat, West Papua. Then, it followed with research design, positionality, after field work, and field work reflection to explain the procedure during and after data collection stage.

#### 3.1. Study Area

Among main islands of Raja Ampat Regency, Misool island was chosen as the focus of the research setting. Administratively, Misool island is divided into four districts, Misool, South Misool, West Misool, and East Misool. The indigenous community in this study refers to Matbat ethnicity which is part of the **Melanesian race**. In Raja Ampat archipelago, indigenous Melanesia is distributed across the island and established diversity of ethnic groups. According to Mansoben (1995), there are six major ethnicities across Raja Ampat Islands such as Maya, Amber, Moi, Matbat, Efan, and Biak people. These six ethnicities are categorized under Maya ethnic group. The first five was the indigenous one, while Biak people are migrants that came from Biak Numfor islands before the fifteenth century. In general, most of the original settlement in Raja Ampat islands are Maya and Matbat tribes (Agostini et al., 2012). As part of indigenous Melanesia, Matbat people are categorized as coastal Melanesia Papua. According to Leinbach et al., (2018), the distribution of coastal Melanesian people is mainly taking place in West Papua Province, while bush Melanesian people are in The Bird's Head Peninsula, Papua Province. In general, a Melanesian way of living is heavily relying on the traditional way of resource extraction to support their livelihood. However, due to the influence of Christianization, Melanesia has been involved in the world economic system (Keesing and Kahn, 2014) and the bush people are relocated to the coastal areas with less engagement to fishing activities (Leinbach et al., 2018). The fieldwork was conducted in Folley Village in East Misool district as it is one of the villages where *Sasi laut* was successfully implemented through the collaboration of NGOs and Matbat people.

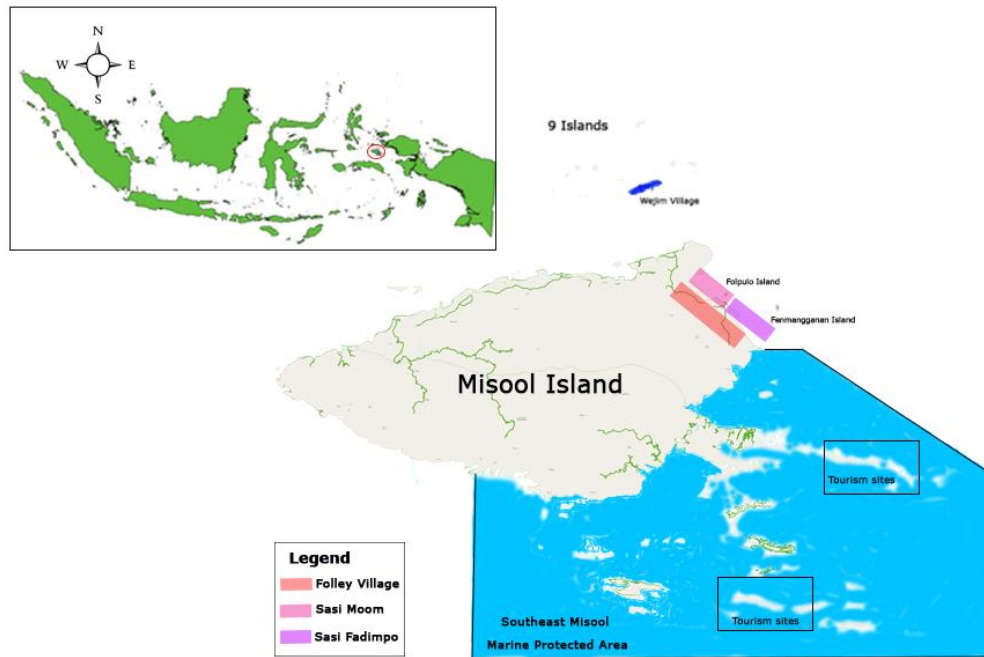


Figure 2. The Map of Study Area

Figure 2. shows the map of fieldwork area which covers the study location, Folley village, and the surroundings, i.e. two locations of *Sasi laut* in Folley village and tourism sites around Misool Islands. In Folley Village, the indigenous community consists of six family clans or *marga* such as Moom, Mjam, Mlui, Falon, Fadimpo, and Fam. As mentioned before, indigenous Melanesia holds kinship system to govern their rights over their land and resources (Keesing and Kahn, 2014). Based on this, each of family clan has a certain piece of land or marine area that is governed under customary property regime. In Folley village, there are two family clans or *marga* that hold two separated area for *Sasi laut*, Fadimpo and Moom. In total, the area for *Sasi laut* covers Vagita's beach until Waponta's headland. Beyond the traditional marine area, Folley village adjacents by one of MPA networks, namely Southeast Misool MPA. While across the Misool island, tourism sites are flourishing such as karsts, stingless jellyfish lakes, sacred caves, manta points, and diving points. These tourism sites can be reached 1 hour by speedboat from Folley village.

### 3.2. The Road to Melanesian Customary Law Recognition in Indonesia

The recognition of Melanesian identity was denied from Indonesian state government from 1963 to 2001 since the term of Melanesia is mistakenly associated as an expression of separatism which threatened the slogan '*Bhinneka Tunggal Ika*' or unity in diversity (Tebay, 2015). According to Wiratraman (2007), the denial of legal pluralism was implemented during the New Order regime (1966-1998) under the dictator Soeharto, the second president of Indonesia. As Indonesia has more than 300 ethnicities across the country, the Indonesian government was worried that classification of ethnicity would contribute to the rising of ethnic politics or political instability during the decentralization phase (Ananta et al., 2015).

Consequently, the multi-ethnicity in Indonesia has committed to the claim that Indonesia is a nation without indigenous people as all Indonesian are equally indigenous (Hadiprayitno, 2017). In accordance with Wiratraman (2007), this politic of uniformity has destructed plural social system including indigenous rights.

The amalgamation of Indonesia's state government over natural resources in the nation-state territory is written in Indonesian Constitution (*Undang-Undang Dasar 1945*) Article 33 paragraph 3 which stated:

'Earth, water, space, and the natural riches contained therein, shall be controlled by the state and used for the greatest welfare of the *people*.'

This law causes indigenous people and peasants lose access to land ownership. As a result, the deprivation of indigenous people was legal as the control of natural resources is managed for the sake of national interest for economic growth. According to Astiti et al., (2015), established that the control of Indonesia state government exercise through sanction against violation to the regulation, but it is failed to address the participation of indigenous people in governing and managing the traditional land and natural resources under customary law.

In respect to social justice in the frame of democracy, the reform of agrarian law was implemented to recognizes the exclusive ownership of land and marine area by the traditional owners in Agrarian Basic Law Act No. 5, 1960:

'The applicable law for land, water and air space are under *Adat*<sup>5</sup> Law, providing that it does not conflict with national interests or disrupt the unity of the nation. These community rights, therefore, should be consistent with national interests and in accordance with written laws and regulations.'

The recognition of indigenous peoples' land rights is called as *hak ulayat* or *beschikkingsrecht*. As quoted in the sentence, the recognition of *hak ulayat* is managed to prioritize national interest before the *adat* law as the cost of the economic growth across the county. As a result, natural resource access and unrecognized indigenous tenurial system of indigenous peoples are the sources of conflict across the indigenous community in Indonesia for the sake of development, investment, and securing the environment (Wiratraman, 2007).

Historically, the practices of natural resources exploitation in the land of Papua through oppressive action have taken away their sovereignty right and raised separatist movement for independence from Indonesia government (Trajano, 2010). The rise of separatist movement across the land of Papua by the indigenous peoples was resolved by the establishment of Indonesian Law No 21 in 2001. This law specifically stated to recognise the

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<sup>5</sup> *Adat* is an Indonesian term that refers to customary law and tradition of indigenous people.

Special Autonomy Law for the province of Papua and West Papua or *Daerah Otonomi Khusus Papua*. According to Anderson (2015), the impact of Special Autonomy Law reduces the presence of national state government to involve in every sector of development. Special Autonomy Law (Papua Law) has facilitated indigenous Papua and West Papua customary system of governance. As a special autonomy status, Papua Law protects the rights of Papuan to own their land and resources based on customary law. Supportive statement by Susetyo (2016) explained that the indigenous people of Papua recognise clan-based rights to land and natural resources along with responsibilities to take care of the environment. However, despite the positive objectives to develop Papua region in Indonesia though Special Autonomy Law, further sociological and economic analysis is still absent.

### 3.3. Research Design

This study employs qualitative methods with semi-structured in-depth interview and participant observation. Interview and observation constitute two ways of interaction to reach higher credibility of the study and analysis. In this case study, the combination of semi-structured in-depth interview, participant observation, and documentary data. It aims to overcome the biases that emerge from the single method and to obtain methodological triangulation. In other words, methodological triangulation is a mechanism to check and balance of answers. In this case, I argue that the chosen qualitative methods are sufficient enough to capture the social dynamics of Matbat people and conservation practices.

In total, the fieldwork was held from March - April 2018 with an overall 18 interviews in Bahasa Indonesia. Besides the indigenous people and NGO, the respondents also consist of three institutions or called *Tiga Tungku*<sup>6</sup>. For instance, in Papuan society, *Tiga Tungku* consists of local government, religion, and *adat* representatives. In total, the breakdown of interviews is divided as 11 Matbat people including the *adat leader* in Folley village, 4 members of NGOs (The Nature Conservation, Conservation International, *Himpunan Pramuwisata Indonesia* or Indonesian Tourist Guide Association), two local government representatives, and a religious leader. Meanwhile, the participant observation was conducted to focus on indigenous daily practices and *Sasi laut* arrangement. The rationality of the fieldwork period fitted well with the timeline of annual *Sasi laut* in Folley village. The opening of *Sasi laut* ceremony was held on the 22nd of April 2018 which is a month after my arrival in Folley Village. Therefore, during the fieldwork, I participated throughout *Sasi laut* series of which cover preparation, ceremony, and harvesting activities

#### 3.3.1. Sample and Procedures of Semi-Structured in Depth Interviews

According to Boije (2009), a semi-structured interview is an open interview in which researcher prepared a topic list before fieldwork. But the questions were asked based on the situation in the field. The participants of the research consisted of indigenous people in Folley

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<sup>6</sup> *Tiga tungku* in English refer to three furnaces

village and non-indigenous people who have the authority in marine resource governance of Raja Ampat regency and East Misool district. The **Indigenous people** refer to Matbat people who live in Folley village and rely on natural resources to support their livelihood. The indigenous peoples were recruited through purposive sampling strategy. The participants were categorised as indigenous people when they were one of the family clan from Matbat tribes who rely on natural resources around Folley Village. Meanwhile, the participants categorised as **non-indigenous people**, when they were the member of several governmental and non-governmental institutions that were operated by other ethnicities besides Matbat, such as district government, pastor as a church representative, and two international NGOs, Conservation International and The Nature Conservancy.

The recruitment process for non-indigenous people was using snowball sampling methodology. During fieldwork, I tried to establish a good relation with respondents, in order to make the study's progress easier, yet to get some references for the interview. Most of the time, after the interview was done, the respondents recommended several names who can explain some part of their story better. All interviews were conducted on average 70-90 minutes.

The informants or participants of the research for semi-structured in-depth interview were approached based on the codes of ethics of doing research. The code of ethics in this study incorporated the ethical principle of qualitative research, included as informed consent, anonymity, and confidentiality (Boeije, 2009). The practical implication of ethics in doing an interview is covered in the informed consent form that applies to all respondent. The researcher explained the purpose of the study, anonymity and confidentiality of the information, and record their approval/verbal informed consent to join the interview through the voice recorder. The proposed informed consent is presented in **Appendix 2**.

### **3.3.2. Participant Observation**

The second data collection method in this study was participant observation. The reason to choose participant observation was due to the scarcity of knowledge regarding the culture of Melanesia Papua. This observation was used to observe the everyday situation and get involved in the daily activities of Matbat people (Boije, 2009). The participant observations were done in several indigenous livelihood spots around Folley Village, such as at the harbour, *Sasi laut* area, pearl farms, tourism sites, field, and fishing ground. In order to address this, the researcher was living ethnographically with one of the indigenous families during the fieldwork. Another strategy has applied to understand the construction of rationality, by immersing with the community and becoming one of them. It provides an understanding point by experiencing their point of view while interacting with nature and the needs for collaboration of management and knowledge. Furthermore, participant observation also conducted in two *Sasi laut* arrangement meetings that were held by The Nature Conservation and indigenous community. The first meeting was held on 27th of March 2018 to agree upon

the date for the open of *Sasi laut* and monitoring plan. While the second meeting was held on 21th of April for technical discussion one day before the opening ceremony of *Sasi laut*.

The reason to make use of participant observation as one of the methods in this study because it gathers information regarding institutionalised knowledge of environment that may leave unspoken during the interview. It is supported by Lemke (2017), political knowledge is embodied in routine action. In this sense, the participant observation incorporates the everydayness of indigenous people within conservation areas that may be considered as common thing for them. Thus, through participating in their habitual activities, I can grasp the application of environmental knowledge and the difficulties during the collaboration of management.

The participant observation was done daily throughout the fieldwork. Based on this, I used fieldwork observational notes to track down my activities, and to find the interesting findings that I saw and experienced during the fieldwork. I also included non-verbal behaviours in the descriptions part to assess respondent's gesture and expression. The information of nonverbal behaviours provides justification of statements. The use of correct punctuation is important to capture velocity of speech which is also significant in analysing the data.

### **3.3.3. Documentary Data**

As the thesis is developed to compare the socio-economical changes before and after the establishment of co-management of *Sasi laut*, I used the third method to enrich and support the findings and document analysis. According to O'Donoghue & Punch (2003), there are two types of documentary data sources to arrange an interview guide and to support the analysis phase. O'Donoghue & Punch (2003) categorised the type of documentary data into macro, intermediate, and micro levels of trajectory documents. In this study, the documentary data incorporated these three sources of documents as mentioned by O'Donoghue & Punch (2003). The macro level document analysis refers to the marine conservation policy by the national and local government of Raja Ampat. Intermediate level document analysis refers to portfolios document of coral health status in Raja Ampat released by the collaboration work of NGOs and scientists. While micro level document analysis refers to the newspaper articles as actual resources to dive into the social dynamics caused by the arrangement of marine conservation in Raja Ampat. The aim of three layers documentary analysis was to differentiate a particular version of reality shaped and created of perspectives among the national/local government, NGOs, and indigenous people in such a clear timeline.

### **3.4. Positionality**

Usually the study about indigenous people is seen from a Western perspective, however, in this research, I offered a two-sided perspective, i.e. western and native perspective. It aimed to see the collaboration between traditional and western ecological knowledge. On one hand, I incorporated Western theory in the research to establish my point of view. On the other



hand, I used my Indonesian perspective to understand the struggle of Indigenous people in my country. Before I started my fieldwork, I have always been interested in the case of indigenous rights violation especially the issues and conflicts that happened in Papua. This thesis gave me an opportunity to have a counter-balanced argument regarding what caused the environmental destruction and indigenous role in it. The understanding of asymmetrical development between Western and Eastern part of Indonesia has helped me to interpret the Matbat's people point of view. However, I cannot repulse the bias that might emerge from cultural differences. In fact, in the first two weeks of my fieldwork, the Matbat people were calling me *Mbak Jawa*<sup>8</sup> which I believe as the result of a post-colonial dogma where Java as the centre of the development and modernisation in Indonesia. Therefore to tackle this gap, I tried my best to take some time to gain their trust by immersing in their daily activities and become part of the family. As Narayan (1993) stated that in the writing narratives and analysis, enacting hybridity of researcher identity is important to reduce the distance in anthropology study. On the top of that, I attempted to position myself in the middle by contrasting Western theory and the Eastern way of life. Therefore, my positionality in research provides balance and critical perspectives in analyzing and presenting the implementation of conservation project within the indigenous land.

### **3.5. After Fieldwork**

The results of semi-structured interviews and non-participant observation provide unstructured information from voice recorder and observational notes. To anticipate data's trouble and lost, daily storing the in laptop and an external hard disk was performed. It was saved in separate folders according to dates and participant's name as project management strategy. After the fieldwork is done, interviews result from voice recorder and fieldwork notes is transcribed. In the transcription stage, the interviews were transcribed manually by listened to the recordings one by one. Furthermore, to categorise the result of the interview according to the theme or key concepts, software ATLAS.ti was used. Finally, only sentences that are included in the report will be translated into English since all of the interviews were conducted in Bahasa Indonesia.

In order to attain practical and theoretical truth, data analysis and interpretation are vital in a qualitative study. In constructing theories, the researcher is required to assemble data into holistic and coherent explication. All transformed data was interpreted using conventional social science techniques which are segmenting and reassembling. First, data was segmented per topic. In this process, data were classified into different codes. Then, each code was grouped into the relevance of the topic. Hence, the structure in the codebook arranged and organised from general to specific code. Second, the assembling process, only the most relevant data from the codebook and fieldwork/ observational notes will be selected to support research questions.

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<sup>8</sup> *Mbak Jawa* in English is 'a girl from Java'

The thesis report was analysed through several theoretical adjustments in the research proposal. My encounter experience with Matbat people daily life and their struggle in the marine realm has shaped my understanding of power and social control through conservation notion. The interaction that emerged from two different of worldviews, science, and culture, are evolving along with the consequences of modernisation. The analysis is presented through a close read of Foucauldian discourse analysis to understand how conservation rationality is socially constructed through language and practices.

### 3.6. Fieldwork Reflection

The fieldwork was conducted during March - April 2018 with a total of six weeks to obtain the data. There were bitter and sweet experiences during the fieldwork that I considered as valuable life experiences. One of the difficult decisions that I took during the fieldwork was when I have to change the location of the study. I stayed in Fafanlap village for three days before realising that the communities are not indigenous tribes of Raja Ampat, yet the collaboration of *Sasi laut* arrangement was not successfully implemented. It took me a while to understand this because I was thinking that I would conduct an in-depth interview a week after my arrival. It was an interesting case as people in Fafanlap village claimed to be the indigenous people or *masyarakat adat* since they have lived there for over generations.

My decision to consider the community in Fafanlap village were not the indigenous people of Raja Ampat is based on a book that discussed the tribes in Raja Ampat. I re-read and analysed the mobilisation and brief history of Raja Ampat from Mansoben (1995) book, *Traditional Politic System in Papua*. My suspicion was based on the physical traits which differ with the common Papuan people and the story about their ancestor from Seram island. Qualitative research is indeed an art, there is a dynamic relationship between researcher documents and the researcher (Collins, 1992). The realities and difficulties in the field are uncaptured in the construction of theory. I need to refer back to the very basic of information to keep in the right direction. According to Mansoben (1995), Matlol people are originally from Seram island and asked by Ternate Sultanate to occupy the land of Raja Ampat island. Unfortunately, the year of their migration was not mentioned. The fact that I was living with Matlol people in Fafanlap village has driven me to find out other alternatives. After several brief discussions with the elderly in Fafanlap village, I collected some information regarding the location of Matbat people distribution in several villages across Misool island, such as Tomolol, Folley, Limalas, Atkari, Salafen, Adewei, Kapatcol, and Magei. Based on these options, I asked the opinion of one member of The Nature Conservation (TNC) who lives in Fafanlap village. He gave me brief information regarding *Sasi laut* arrangement between the indigenous community and TNC in that Matbat village. Living without internet and limited electricity has cornered me to move the fieldwork area based on a local's variety of information and intuition to decide. Those limitations took me to my new family in Folley village.

Throughout the fieldwork in Folley Village, I experienced acceptance and sincere kindness when living with the Matbat people. I ethnographically lived with one of the clan family. Unlike in Fafanlap village who has the majority of people works in *perusahaan*<sup>9</sup>, the indigenous community in Folley Village is highly depending on the forest and the sea. In the first week of my stay, I did not conduct my interview yet. Instead of, I focused on participant observation such as fishing, farming, making friends, and helping Mama Sila in the kitchen while trying to understand the social structure in this traditional way of life. In the second week of fieldwork, I conducted my interviews with the help of the youngster in the village to accompany me to meet *adat* leader and village government representative. Based on this, I can argue that its crucial to build the trust and increase the quality of data to be accepted as part of the family. Furthermore, as I studied a region that belongs to Indonesia country where we shared the same mother language, it makes the adaptation and interview process easier. However, I also considered the differences in culture and ethic that I have by immersing in their daily activities. It is supported by DeVault (1995), race and ethnicity understanding are significant to produce complete and accurate data.

During the fieldwork, there were two gatekeepers which I cooperated with before going to the field and during the fieldwork. First, the pre-fieldwork gatekeeper in this study played an important role to inform general demography and a brief condition of the different village in Raja Ampat before the study was conducted. He is a member of The Nature Conservancy which helps me to coordinate with his team to get the access to an internal meeting of *Sasi laut* arrangement. Second, during-fieldwork gatekeepers were the member of the family that I lived with. They are the youngster of Moom and Fadimpo family clan who introduced me to the *adat leader* and the indigenous communities in Folley village. This strategy has helped me a lot to adjust to the new environment and enjoyed the fieldwork process.

The technical challenges that I encountered during fieldwork were weather and difficulties to get a historical understanding about Matbat people. The fieldwork was conducted in the middle of the rainy season which caused several unproductive days to interview respondents. However, it gave me more time to spend some time with the family and talk about their everydayness through light conversation. I also had difficult times when I interviewed several *adat leaders* from a different clan family. History is indeed a matter of subjectivity. Sometimes similar stories can be told differently, and I interpreted them in a different perspective. As stated by DeVault (1995), qualitative research requires not only active attention but also interpretive competencies to understand the meaning. By using qualitative research in this study, I can be more flexible to obtain the most interesting topic that I want to get deep into. However, the lack of publication and documentation of Matbat history has contributed to the

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<sup>9</sup> *Perusahaan* in English means 'the company'. *Perusahaan* in Raja Ampat society refers to pearl farms company from China as it is the only company that operated across the islands.

dependency of my research on their oral history. The ongoing political conflicts<sup>10</sup> have been the reason for the limited literature about Papua Indonesia. It was a big challenge to get saturated data regarding the history of Matbat People. In this thesis report, I included several histories of Matbat people to enrich my findings related to *Sasi laut*. I hope I delivered their story in the same way as they meant to.

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<sup>10</sup> During the *new order regime*, the dynasty of president Soeharto in the period 1965-1998 forbid press access and researcher to Papua. The controversial PEPERA (The Act of Free Choice) in 1969 has often been referred as Act of No Choice as the military invasion took in charge in the voting process. Instead, in 1961 the Kingdom of the Netherlands has granted Papua independency. As a result, Melanesia separatist grassroots movement in Papua Indonesia (*Organisasi Papua Merdeka* or Free Papua Movement) is still fighting for their independency until the moment this thesis was made.

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## 4. RESULTS AND ANALYSIS



### *BUILDING THE STORIES BASED ON FINDINGS TO ANSWER THE RESEARCH QUESTIONS*

Picture descriptions: the sea cucumbers are almost ready.

The picture was taken during the first day of two weeks open Sasi laut period. The process to dry sea cucumbers are quite long. Sea cucumbers are being boiled twice to make the skin soft. After two times of boiling, they are mixed with papaya leaves to peel it easier. Then, they are roasted for a day to get them dry and ready to sell..

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## 4. Result & Analysis

The result is presented to understand the Matbat people social structure and their rationality in conserving their traditional ecological knowledge. The main argument here in this study is that the economic benefit is the cornerstone of indigenous engagement with conservation notion. In order to get the sense of that, the story from Folley village is arranged before-during-post co-management of *Sasi laut*. The result section addresses the economic subjectivity before co-management (in the period 1970s until 2000s) and after co-management of *Sasi laut* (in the period 2010s-now). In subchapter 4.1., the result of fieldwork is talking about the changes in the institutionalization of *Sasi (darat and laut)*<sup>12</sup> from **customary law to church** (power) to mark the first wave of modernization. Then continued with its implication to traditional *Sasi* ritual practices (knowledge) and the embeddedness of Matbat people towards economy improvement to acquiesce power/knowledge intervention by the church. The aim is to investigate the establishment of the economic subjectivity of Matbat people has occurred from the commodification of land and marine resources. In subchapter 4.2., the explanation of the second wave of modernization brought up by the international NGOs to co-manage *Sasi laut*. The changes in the institutionalization of *Sasi laut* are analysed through power/knowledge nexus. The submission of power from **Adat and Church to NGO** and the application of Western or scientific knowledge in *Sasi* Modern Church *Sasi laut*. In this part, the result is highlighting the influence of an international NGO, The Nature Conservation (TNC) to incorporate the value of economic subjectivity in modern marine conservation approach. In subchapter 4.3., the analysis of findings is presented.

### 4.1. Matbat People in Folley Village: Before Co-Management of *Sasi laut*

#### 4.1.1. Power: The Transition from Adat to Religion Institution in Church *Sasi*

##### **A Brief Introduction to Matbat People and *Sasi***

Matbat<sup>13</sup> according to Raja Ampat language means ‘people of the land’, which connotes to the owner of the land. Matbat people in Raja Ampat are located in eight villages in Misool islands such as Tomolol, Folley, Lemalas, Atkari, Salafen, Adewei, Kapatcol, and Magei. These villages are categorized as the original settlement of Matbat people. In their everyday life, Matbat people express their ethnic identity through language and family clan. In terms of language, the majority of Matbat people speaks three languages such as Matbat, Raja Ampat, and Indonesian language. Matbat language as their native language is mainly used by the elderly while the young generation is hardly understood it. Meanwhile, Matbat people use Raja Ampat language as their everyday language. Then, Bahasa Indonesia for formal communication, which is being taught at school. Unfortunately, as the cause of Indonesia’s

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<sup>12</sup> *Sasi* regulation can be applied in *the land (darat)* and in the sea (*laut*) with the same aim to protect the harvest from thieves

<sup>13</sup> Matbat is the combination of two words, *mat* means land and *bat* means people. The term to address their dependency towards field and forest.

dominion to uphold the national language, the Matbat language is endangered. Matbat language is associated as a primitive language which causes lack of pride to use it among Matbat people. In Folley village, only some elderly and middle-aged Matbat speak Matbat language. It marks a threat to overall Matbat cultural values, ritual, and tradition in the future because mostly expressed through Matbat language, including in *Sasi* ritual.

The elderly in Folley village mentioned that their ancestors were nomad forest people who lived in a group according to their family clan. The family clan is significant to mark their kinship ties. In the reign of a tribal chief, Matbat people are classified into six castes, Moom (as the oldest), Fadimpo, Mjam, Mlui, Falon, and Faam. These castes constitute family names of current Matbat society who adheres to Christian Protestant. Islam is the first religion that came to the West part of Papua from the influence of Moluccas Sultanate in the 13<sup>th</sup> century and followed with the Christianity in the 19<sup>th</sup> century. Despite that, Christianity adherents are the majority of indigenous Papua in the coastal area of Raja Ampat and contributed to significant changes in Matbat people social structure. The missionaries who came from the Moluccas<sup>14</sup> had changed Matbat people from nomad forest people to settle around the coast, in Vagita beach. The coast is associated as an enlighten and clean place to live, rather than forest which resembles backwardness.

The mobilization of Matbat people in Misool island happened twice. After having quite settled in Vagita beach as directed by the missionaries, Matbat people moved to Fulpulo island. The elderly narrated that because there was a mystical snake that pushed them to leave the Misool island to Fulpulo island. **Unfortunately, during the interview, not even a single Matbat elderly could provide the precise year or period regarding mobilization of Matbat people from the forest to Vagita beach and to Fulpulo island.** The only information regarding the time period was the mobilization from Fulpulo Island to Folley village. In the 1970s<sup>15</sup>, the Matbat people decided to leave Fulpulo island because the growing population required them to come back to the main island and developed a new village, Folley village, that situated 5-kilo meters away from Vagita beach.

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<sup>14</sup> This statement was obtained through semi structured in depth interview

<sup>15</sup> The year of 1970s when Matbat people moved to Folley village is confirmed by all elderly people and *petuanans* during interview. The reason is because some of them were born in Fulpulo island but the generations before that who lived in Vagita beach have passed away.



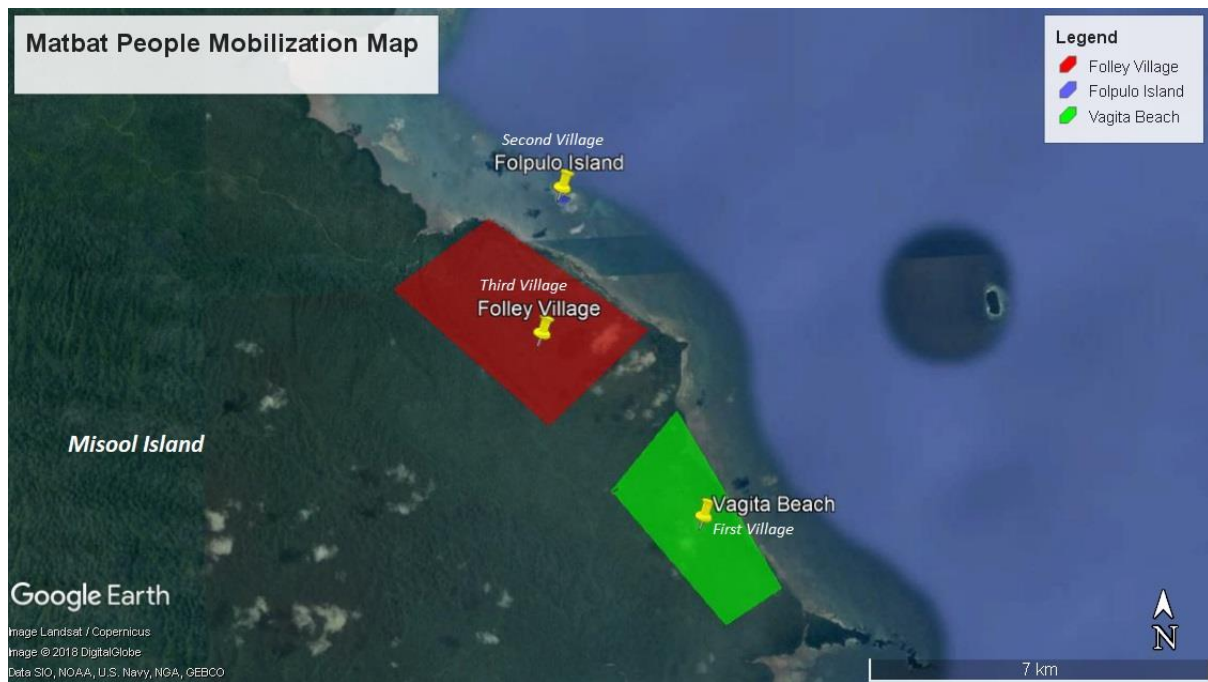


Figure 3. Matbat People Mobilization Map

The attachment of Matbat people over their customary territories is manifested through traditional *Sasi darat*<sup>16</sup> practice. The practice of traditional *Sasi darat* was established originally to manage common land-based resource management. Traditional *Sasi darat* before Folley village denoted **ecological meaning** to give a chance for cultivated plants to grow and to produce more crops in the next harvest in the common customary land. During their settlement in Vagita beach and Folpulo island, Matbat people did not recognize the concept of private property. As they re-settled in the main island, Adat leader divided the customary territory into **common** and **private** customary land. The land tenure reform was managed by Adat leader through customary law and recognized as *hak ulayat*<sup>17</sup> (*beschikkingsrecht*) by the national government. In other words, some part of the land is divided into six family clans under private customary land arrangement while the rest of the land is used for the communal use. The reason is to develop the vast area of Folley village for each family clan to cultivate the land for cash agriculture. This impact on the shift of the meaning of Traditional *sasi darat*. Traditional *Sasi darat* was established to reduce thievery from the cultivated land that is governed under private property. The emergence of traditional *Sasi darat* in Folley village was the response of the 'Adat institution' (see below) to reduce thievery practices over private-customary land. Based on this, each family clan owns legally a certain piece of land, approximately around 5-7 hectares to support their well-being according to customary law. Meanwhile, in the marine tenurial arrangement, Moom and Fadimpo family clans have the

<sup>16</sup> *Darat* in English refer to the land.

<sup>17</sup> The recognition of indigenous peoples' customary land rights is called as *hak ulayat* by the government of Indonesia under Agrarian Basic Law No. 5 1960. This law is the baseline of the establishment of Indonesian Law No 21 of the year 2001 to recognize the Special Autonomy Law for the province of Papua and West Papua or *Daerah Otonomi Khusus Papua*. It is the Indonesian government strategy to reduce separatist movement by the indigenous peoples of Papua.



privilege to own Folpulo and Fenmangganan island respectively including the marine area between the Misool island and each island. The reason is that these family clans are the highest caste in Matbat people social system who own marine tenurial rights or *petuanan*<sup>18</sup>.

### **Adat's Glory in the Past and Its Downfall**

*Adat* holds a crucial role in the traditional *Sasi darat* arrangement during their settlement in Vagita beach and Folpulo Island. *Adat* provides a mechanism to protect natural resources and to shape the behaviours of Matbat people before religion and national government intervention; to prioritize the collective values in the society. By limiting certain access to the cultivated land, it resembles mode of governing to discipline Matbat people to respect the mother nature. Violating *Adat* provision is considered as taboo which caused irrational percussion. The institutionalization of *Adat* is arranged by the elderly Matbat people from each family clan to arrange the regulation related to traditional *Sasi darat*. Elderly people in Folley village is respected as they can communicate with their ancestor spirits by using primitive Matbat language. As the respected elderly and representative of each family clan, they have a certain degree of power to govern, to make, and to put sanction toward the violator of traditional *Sasi darat*. Through the arrangement of traditional *Sasi darat*, it reduced the possibility of thievery incidents and educate Matbat people to respect the kinship relation (with the living and non-living ones) they have.

The conception of *Adat* is strongly related to animism belief to shape Matbat people relation with nature or their environment. The respect towards *Adat* denotes the respect towards their ancestor who presents in their surroundings. The connection of *Adat* with ancestor spirits to support their well-being had shaped a social norm; respecting nature equals respecting ancestor spirits as the vanguard of their customary land. It influences *Adat* provision as something sacred, including the traditional *Sasi darat* arrangement.

“Traditional *sasi darat* was in an era when the community did not recognize the existence of God, we were still heathen. If we steal someone’s crop arranged in traditional *sasi darat*, we will get the punishment right away like bitten by a snake or attached by a stingray in the sea. It was a time when people still believe in *Adat*<sup>15</sup>.” (Yefta Mjam, *Adat* Leader).

However, the respect towards *Adat* was fading when Matbat people acknowledge cash agriculture from private customary land in Folley village. The majority of the private customary land that belongs to each Matbat family clan is planted with coconut (process to copra and coconut oil) and cocoa farming. The plantation of coconut and cocoa farming has reduced the size of the crop farming which impacts to Matbat collective value; to share natural resources as one family. Even though the cause of commercial cultivation did not reduce their daily

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<sup>18</sup> *Petuanan* comes from Indonesian word, *tuan*, which refer to owner with associations of power with a set of rules managed by them in traditional marine territories. *Petuanans* refers to the plural form in English writting.

support for food, however, it impacted the socio-cultural of Matbat people. The plantation of cash agriculture has strengthened individual ownership over private-customary land which is supposed to be nourishing the whole village.

"Matbat people valued kinship relation to share everything as a big family. However, since they recognise the value of money, **conflict emerged** between family clans related to the land and resources ownership." (John Matubongs, Member of TNC).

"People used to afraid of *Adat* but recent generation is not obeying *Adat* anymore. Sometimes they (Matbat people) said '*Ah, it is just Adat, what worst possibility could happen to me? Nothing!*'. " (Karel Burdam, Pastor)

"The world has changed, people take other's crops under *Sasi* without further consideration to social relation impact. It is because *Adat* is ignored. It used not to be like that." (Yoel Moom, *Adat* Leader)

In Vagita beach and F olupulo island, the lands are commonly shared without exclusive rights over any-piece of land, the yields or harvests are collectively shared. They planted a different type of crops such as vegetables and fruits to support their daily consumption. It became a tradition to share the harvests with their neighbours as a gratitude expression for the mother nature. Since their settlement in Folley village in the 1970s, cash crop agriculture limits the area for staple crops which reduces the frequency to share their staple harvests with others. It changes the social structure of Matbat people from the collective (kinship ties) oriented to private household-oriented.

In their settlement in Folley village, Matbat people are not only exposed to modernity through established relationships with the coconut and cocoa merchants but also through Christianity. The Christian faith shares education and gospel simultaneously. The government of Indonesia cooperated with missionaries<sup>19</sup> to approach Matbat people by developing education facilities in order to govern them under Indonesian law and constitutions. It aimed to ensure the presence of the Indonesian government in remote areas through the establishment of educational facilities and local government in Folley village.

"Indonesian government worked together with missionaries to establish school facilities in Folley village. The first missionarist who came to Folley village was Mr. Yacob Pakiai, he is Ambonese from the Moluccas who can teach and share the gospel. He was appointed by the Indonesian government to educate Matbat people and to introduce government structure in Folley village." (Karel Burdam, Pastor)

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<sup>19</sup> After Indonesian independency, the national government of Indonesia recognized six religions to be registered as Indonesian citizen such as Islam, Catholicism, Protestantism, Buddhism, Hinduism, and Confucianism. It has discriminated indigenous faith as backwardness and violated the principle of religious freedom. As a result, all indigenous people is insisted to be believers of one of the official recognized religion in order to get national identity card.

The external intervention from the missionaries and national government has recognized a new term to incorporate three different kinds of power in Matbat society, *Tiga Tungku* or three furnaces. *Tiga Tungku* represents three institutions that are respected to govern Matbat people; government, religion, and *Adat*. The government refers to the local and state government that constitutes the authority to impose regulation. Religion refers to the church and holy bible as the fundamental norms in their life. While *Adat* refers to cultural idea consisting of cultural values, norms, customs, institutions, and customary law commonly practised in a traditional society. Although *Tiga Tungku* denotes the equal distribution of power from each institution, religion is playing the biggest role in influencing Matbat people's life.

### **The Church Took Over Traditional *Sasi darat***

At the end of 1970s, the influence of church was dominating the social structure of Matbat people in Folley village. The church was playing a significant role to shape Matbat people in social life. The role of *Adat* as the standard social norms was gradually eroding and being replaced with biblical norms. However, it does not mean the Church limited the practice of cultural tradition and created massive changes in *Adat* authoritatively, the Church implemented its power by shaping Christian identity by a conscience. Borrowing a term of governmentality by Michel Foucault, the conduct of Matbat people was mainly influenced by religion institution as the baseline to govern themselves according to self-knowledge as Christian devotees. It is manifested in the intervention of the Church in *Adat* realm to govern traditional *Sasi darat*. This intervention was asked by Matbat people in Folley village to revitalize traditional *Sasi darat* which was no longer capable to secure their private-customary land.

“Church *Sasi darat* is relatively new, it was established around the 1970s, before that we still use traditional *Sasi darat*. The church took over traditional *Sasi* arrangement because people were not afraid of *Adat* anymore. Maybe some people were dealing with economic pressure, so they stole other's people belonging (staple crops). They were not attached with *Adat*, so the church created Church *Sasi* as the community requested. We hoped those people afraid of the God presence, so they would not steal anymore.” (Yefta Mjam, *Adat* Leader)

The transfer of power from *Adat* to the Church denotes the replacement of ancestor spirits to the God in punishment mechanism. However, church *Sasi* does not change the ritual practices of traditional *Sasi darat*. It is worth noticing that the church did not eliminate the presence of ancestor spirits in the ritual of Church *Sasi*. Instead, ancestor spirits are treated as part of cultural traditions and positioned them in a horizontal relationship with human while the God is a vertical relationship. The horizontal relationship represents an equal power between human and ancestor spirits in which respect and honour tie up the kinship relation. While the

vertical relationship represents God as the source of power to give punishment to those who violate the rules and to help those who have the faith and obey the rules.

In other words, religion (Christianity) had become the new political structure that overshadows Adat institution of Matbat people in Folley village in the period of 1970s. It is the most significant intervention of the Church in governing Matbat people's socio-economy aspects. In the social aspect, the Church replaced animism practices with the oneness of God. Meanwhile, in the economic aspect, the Church provided protection mechanism of private-customary land from thievery practice.

#### 4.1.2. Knowledge: The Application of Church *Sasi*

##### **The Changes in Traditional *Sasi darat* Practices**

There are several changes in the application of traditional *Sasi darat* after the intervention of the Church. These changes are related with the replacement of ancestral spirits with the God throughout the ritual of Church *Sasi*. First, instead of asking a blessing from ancestors spirits, *petuanans* asked for permission to conduct *Sasi* ritual and asked for the blessing of God. In Church *Sasi*, ancestor spirits were respected instead of worshipped. Second, symbolic changed was implemented to indicate Church *Sasi*, from cross sign to board written '*Sasi Gereja*'<sup>20</sup>. Third, the board was being taken to the church on Saturday afternoon to be submitted to the church. On Sunday morning Pastor expressed gratitude to the God during Sunday praying in the morning before harvesting the plants in the afternoon. In traditional *Sasi darat*, harvest can be conducted in any day and the ritual was held independently in Matbat language to communicate with the ancestral spirits. Fourth, the social meaning in collective value from *Sasi* was replaced with donations to the church for every *Sasi* praying ritual. The money gathered from *Sasi* praying is allocated for the church development. Fifth, the beliefs in supernatural enforcement sanctions from traditional *Sasi darat* violation is replaced with the sin and punishment from God. Matbat people do believe that the church *Sasi darat* violators would get sickness and death as the redemption of their behaviour, which is similar with traditional *Sasi darat*. The changes from traditional to church *Sasi darat* are summarised in the table below.

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<sup>20</sup> *Sasi Gereja* in English means Church *Sasi*. Church *Sasi* sign aims to raise awareness of the consequences from the thievery in the *Sasi* area are accounted in the present and after life.

Table 3. The Differences of Traditional and Church *Sasi darat*  
The information was derived from interviews with Adat leaders

|  | <b>Traditional <i>Sasi darat</i></b>   | <b>Church <i>Sasi darat</i></b>  |
|--|--|--|
| <b>Close &amp; Open <i>Sasi</i> Period</b>   | Decided by the owner of the area and depends on harvesting period  | Based on Traditional <i>Sasi</i>   |
| <b>Close &amp; Open <i>Sasi</i> Offering</b> | 7 pieces of traditional cigarettes, 7 areca nuts, and clam powder for the ancestor spirit hang in a decorated tree | Based on Traditional <i>Sasi</i>   |
| <b>Close <i>Sasi</i> Ritual</b>              | Asking <b>blissing</b> from the ancestor spirits in Matbat language  | Asking <b>permission</b> from the ancestor spirits in Matbat language                |
|  |  | Asking <b>blissing</b> from the God through prayer in the Church                     |
| <b>Marking <i>Sasi</i> Area</b>              | Cross board in the <i>Sasi</i> area during close <i>Sasi</i> period  | ' <i>Sasi gereja</i> ' board in the <i>Sasi</i> area during close <i>Sasi</i> period |
| <b>Open <i>Sasi</i> Ritual</b>               | Harvested in any day (after the ritual is done)  | Harvested after Sunday praying in the church   |
|  | Gratitude to ancestor spirits in Matbat language in <i>Sasi</i> location in Matbat language                        | Gratitude to the God through praying in the church                                   |
| <b>Rules During Close <i>Sasi</i></b>        | Not allowed to touch the crops before harvest  | Based on Traditional <i>Sasi</i>   |
| <b>Rules During Open <i>Sasi</i></b>         | Share the harvest for the neighbours or relatives  | Voluntary donations for the church   |
| <b><i>Sasi</i> Sanctions</b>                 | Punishment from the ancestor   | Sin and punishment from the God  |
|  | Myth: sickness and bad luck  | Myth: sickness to death  |

The changes in the practice of traditional *Sasi darat* indicate the knowledge reinvention according to the new institutionalized power, the church. The practical understanding of traditional *Sasi darat* was changing as the objective is to secure private-customary land rather than to maintain collective values. The use of this new knowledge is changing human-environment relations of Matbat people. The baseline of human-environment relation from traditional *Sasi darat* was to respect the existence of their ancestor as the vanguard of their commonly shared customary land. In other words, the bond between Matbat people and their customary land is built upon the ties of filiation with the living beings and the non-living ones (their ancestors). Church *Sasi darat* practice has altered this underlying motive of Matbat people-environment relation. The foundation of traditional ecological knowledge of Church

*Sasi darat* was based on religious belief which detached from indigenous animism belief. Through Church *Sasi darat*, the baseline of Matbat's human-environment relation referred to a new self-identity as a modern self with religious understanding and economy rationality towards their private-customary land.

### **The Need of Church *Sasi* in the Sea**

In their settlement in Folley village around the 1970s, the livelihood of the Matbat people is not only relying on land, also the sea has supported their needs by providing marine resources for daily consumption and commercial purposes. Marine resources for daily consumption refer to pelagic fish, while commercial purposes are trading of processed sea cucumbers (*Holothuria spp.*). Sea cucumber has never been a part of Matbat people diet. However, they recognized the economic value from sea cucumbers as they interacted with a seafaring tribe from Sulawesi, the Buginese people<sup>21</sup>. Matbat people established a partnership with Buginese people to supply sea cucumbers in their settlement in Folley village. Within several years since Matbat people settlement in Folley village, they were facing sea cucumbers crisis due to unsustainable harvest management. They associated the disappearance of sea cucumbers with the practice of gleaning (harvesting by hands) which cause rapid degradation of sea cucumbers. Even though harvesting activities of sea cucumbers were conducted without clear regulation in Folley village, Matbat people believe in myth and taboo in sea cucumbers harvesting method. Due to this, the practice of hookah diving introduced by Buginese people was not adopted in Folley village.

“Sea cucumbers are not allowed to be touched by hands (gleaning) during harvest, they will disappear if we do so. It happened here, sea cucumbers disappeared for five years because Butonese people gleaned sea cucumbers on the seashore. That was real! We do believe that we cannot harvest them by hands, that is why we use the spear to harvest sea cucumbers in the middle of the night during low tides.” (Yefta Mjam, Adat Leader)

Matbat people in Folley village has been collecting sea cucumbers in around Folley village waters that belong to *petuanan*. In Folley village, there are two *petuanans* from two Matbat family clans, Fadimpo and Moom. Fadimpo's marine tenurial area covers the Vagita's beach until the dock which covers Fenmangganan island. Meanwhile, Moom's marine tenurial area starts from the dock until Waponta's headland which covers Folpulo island. The area of

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<sup>21</sup> The history of sea cucumbers trading in Indonesia is well documented by Choo (2008). The following sentences is quoting from Choo (2008)'s journal to support background history of sea cucumbers trading in Folley village. Indonesian has been known as the world's highest producer of sea cucumbers. A seafaring community from Sulawesi, Buginese people, relied their livelihood from sea cucumbers gathering throughout Eastern Indonesia until the northern part of Australia since 16<sup>th</sup> centuries. Buginese people played role as middlemen to cooperate with local people to collect sea cucumbers and then sell them in Singapore. They introduced this commercial important species across coastal eastern Indonesia. It did not take a long time for sea cucumbers became a mean of livelihood for coastal poor. In 1970s, they utilized hookah diving in which maximize the sea cucumbers gleaning. Ten years after, it caused depleted sea cucumbers population as the harvest was not sustainably managed. In 1980s, they shifted to shark fishing as the response of lack of supply of sea cucumbers.

*petuanans* covers all the seashore area inside administrative area of Folley village. Even though *petuanan* system resembles private-customary ownership, access towards the sea is jointly owned as collective ownership. This collective ownership represents Matbat people human-environment relation to treating the marine space as the property of the common. It implies no limited access to the sea to conduct livelihood activities if they do not harm or destruct the marine space. The role of *petuanans* is to make any decision and regulation when the marine customary area is dealing with external parties. Sea cucumbers exploitation in the 1970s has caused the depleted stock of sea cucumbers from Folley marine area. Unregulated and unsustainable harvests were the cause of this phenomena. Looking at the success of Church *Sasi darat*, Church *Sasi laut*<sup>22</sup> was proposed by the *petuanans* to govern the certain area of marine customary land for sea cucumbers gathering.

Church *Sasi laut* tradition refers to prohibition to harvest certain type of fish in a period and regulation regarding the allowed fishing tools within *petuanan's* marine area by using the church *Sasi* rituals. The area for Church *Sasi laut* referred to the common location where sea cucumbers often appeared. The establishment of Church *Sasi laut* aimed to regulate harvesting procedure to reduce the overexploitation of sea cucumbers.

Table 4. The Application of Church *Sasi darat* in the Sea  
The information was derived from interviews with Adat leaders

|                                   | Church <i>Sasi darat</i>   | Church <i>Sasi laut</i>  |
|-----------------------------------|--|--|
| Close & Open <i>Sasi</i> Period   | Decided by the owner of the area and depends on harvesting period  | Decided by <i>petuanans</i> , usually every 4-6 months to open Church <i>Sasi laut</i> |
|                                   |  | <i>Bacolo</i> period calculation   |
| Close & Open <i>Sasi</i> Offering | 7 pieces of traditional cigarettes, 7 areca nuts, and clam powder for the ancestor spirit hang in a decorated tree | Based on Church <i>Sasi darat</i>  |
| Close <i>Sasi</i> Ritual          | Asking <b>permission</b> from the ancestor spirits in Matbat language  | Based on Church <i>Sasi darat</i>  |
|                                   | Asking <b>blessing</b> from the God through prayer in the Church   |  |
| Marking <i>Sasi</i>               | ' <i>Sasi gereja</i> ' board in the <i>Sasi</i> area during close <i>Sasi</i> period                               | Based on Church <i>Sasi darat</i>  |

<sup>22</sup> *Laut* in English refer to the sea.

|                                |  |   |
|--------------------------------|--|---|
| <b>Open Sasi Ritual</b>        | Harvested after Sunday praying in the church       | Based on Church <i>Sasi darat</i>   |
|                                | Gratitude to the God through praying in the church |   |
| <b>Rules During Close Sasi</b> | Not allowed to touch the crops before harvest      | Not allowed to harvest/touch the sea cucumbers with bare hands during close <i>sasi laut</i> period but other sea animals are allowed to take |
| <b>Rules During Open Sasi</b>  | Voluntary donations for the church                 | <i>Petuanans</i> decided the fee for every boat that goes hunting sea cucumbers during Open <i>Sasi</i> period                                |
|                                |  | On the boat and obligatory to use the spear to collect sea cucumbers. Gleaning is not allowed   |
| <b>Sasi Sanctions</b>          | Sin and punishment from the God                    | Based on Church <i>Sasi darat</i>   |
|                                | Myth: sickness to death                            |   |

The practice of Church *Sasi laut* was adopting the regulation of Church *Sasi darat* with some adjustments. In summary, there are three provisions added to regulate Church *Sasi darat* for sea cucumbers. First, close and open *Sasi laut* period were decided by the *petuanans* based on open discussion with Matbat people in Folley village. Usually, the sea cucumber harvest under Church *Sasi laut* is conducted every 2-3 times a year. The consideration of Open *Sasi laut* refers to the Matbat's traditional calculation of Bacolo period— the 14th month of the Matbat calendar. Bacolo means 'when the moon is soaking on the sea water'. It refers to the condition when the gravitation of the moon pulls the ocean water level up while in other parts of the earth drains away to fill the bulge. The moment when the ocean drains away is what called as the Bacolo period. During Bacolo period, it is believed all animals are coming out of their nest/hiding place. This knowledge was adopted to Church *Sasi laut* from their experience dealing with forest animals. Secondly, the area for Church *Sasi laut* is specifically addressed the regulation towards sea cucumbers, while fishing other sea animals are allowed in *Sasi laut* area as long as it does not make physical contact with sea cucumbers. Thirdly, during the open Church *Sasi laut* period, sea cucumbers are not allowed to be gleaned or touched by hands before it raises to the surface or. In order to anticipate that, sea cucumber hunting is conducted on the boat and the only fishing gear allowed is a spear. Beside voluntary donation for the church. Matbat people need to pay a fee for participation in open Church *Sasi laut* to



the owner of the marine customary land, *petuanans*. *Petuanans* have the right to charge for money for any extractive activities that are conducted within their area. It resembles taxation in a modern economic system where the national state demands contribution for any revenues within a country territory. In *petuanan's* system, the concept of taxation is implemented as well. *Petuanans* decide a certain amount of money for every boat that participates in open Church *Sasi laut*.

The implementation of Church *Sasi laut* does not address the differences of trees with sea cucumber cultivation. The estimation of the harvest of a cultivated tree can be predicted and monitor with the naked eye while the population growth of sea cucumbers in the marine area is difficult to be measured. The use of same knowledge from church *Sasi darat* has caused insignificant impact to save sea cucumbers from extinction. In the church *Sasi darat*, there is no single knowledge to perform the right treatment of sea cucumbers culture. Church *Sasi darat* indeed has addressed the ecological and social consideration to regulate commodification of sea cucumbers. However, it cannot help the scarcity rate of sea cucumbers in Folley waters.

The scarcity of sea cucumbers in Folley village was accelerated with marine life destruction in the sea of Papua in the beginning 1990s. Illegal, unreported, and unregulated (IUU) fishing and destructive fishing methods have caused depleted fish stocks across the island of Raja Ampat in which the highest fish supplier in the region of West Papua. In Folley village, the practice of IUU and destructive fishing was conducted by Wejim people who live in Sembilan islands in the north side of Misool island. The Wejim people are known for their destructive fishing methods such as blasting, cyanide, and compressor diving. These destructive fishing methods are used to harvest marine resources that live around the coral reefs such as lobster, abalone, crab, and sea cucumbers. Among many of the destructive fishing methods conducted by Wejim people, compressor diving is the deadly and risky fishing methods. Compressor diving is using an oxygen tank that air is pumped through flimsy plastic hosepipes to divers under the surface. This kind of compressor is usually used for pumping tire. The serious injuries and death are all too common because the type of oxygen pumped to the lung is a kind of toxic in the blood. By using a compressor, it prolongs the time for the fisher to harvest the sea cucumbers by hands (gleaning) which violated the tradition of Matbat as well. Matbat people linked the phenomena of many Wejim casualties occurred in their marine customary area as the impact of violation towards church *Sasi laut*. However, they do not link it with the danger of using tire compressor for diving.

"We as the inhabitant of Folley village, as far as I know, never violated Church *Sasi laut*. The people from Wejim village came to our *Sasi laut* area, pulled out the board to show how disrespect they are with our custom, our *Adat*. I heard many Wejim people died because they stole our sea cucumbers." (Gerardus Moom, Adat Leader)

"Folley people obey the Church *Sasi laut*, however, our neighbours from Sembilan Islands (Wejim people) do not. If they want to use compressor we do not mind as long as it is not in our marine customary territory. It is not fair when we gather sea cucumbers with a spear from the surface of the sea while they dive into the deep sea to glean cucumbers easily." (Hugo Moom, Farmer)

Church *Sasi laut* was the only sea cucumbers protection mechanism from scarcity and thievery threats. However, Church *Sasi laut* arrangement did not manage to recover the sea cucumbers populations. The increasing incidents of causality did not prevent violation of Church *Sasi laut* by Wejim people. Massive exploitation before and during Church *Sasi laut* continued, and as a result, the practice of **Church *Sasi laut*** was not implemented in Folley village since the beginning of the 1990s. During this period, Matbat people implemented shark fishing as their livelihood reliance on marine resources.

#### 4.1.3. Subjectivity: Church *Sasi* for Economic Resilience

##### **Church *Sasi darat* for Economic Resilience**

Matbat people livelihood reliance towards land has been transcending to generations. History plays a crucial role to understand the human-environment relation between Matbat with their customary land. Matbat people in Folley is an independent community where they grow their household needs such as *sirih* (*Piper betel*, Linn) & *pinang* (*Areca catechu*)<sup>23</sup>, sago (*Metroxylon sagu*), taro (*Colocasia esculenta*), cassava (*Manihot esculenta*), banana (*Musa acuminata*), and sugarcane (*Saccharum officinarum* Liin). These staple plants are part of a daily diet to fulfil vegetable proteins which they do not need to buy. They harvest these vegetables in a small amount from their private-customary land. Selling their staple crops to their neighbours in Folley village is uncommon, referring to the collective values upheld by Adat. If they have excessive staple harvest, they will sell it to the neighbour village and pearl company workers next to their village. But it is not so often, because they need to calculate the gasoline cost for the boat to deliver it. Beside staple plants, crops agriculture or commercial plants also required church *Sasi darat* to secure its harvest. Even though the price of copra is unstable<sup>23</sup> due to the increasing production Crude Palm Oil (CPO), Matbat people in Folley Village keep producing copra and selling it to Malaysia merchants. Meanwhile, they stopped farming cocoa as pest attack has reduced their productivity since 1994. In that case, there are few options they have to collect money from their resources on the land, hence they are still making copra as a way to support their living from land resources.

The practice of church *Sasi darat* is still implemented until now to secure their private-customary land for both staple and commercial plants. The incidents of thievery have become part of Matbat people challenge in their livelihood struggle in the land. The shifting culture

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<sup>23</sup> The latest price of copra in April 2018, was crushing down from Rp. 6000/kg to Rp. 3000/kg

from collective to individualistic oriented due to cash crops agriculture has become the trigger of the increasing rate of thievery. The staple plants need protection because they need to harvest sufficiently to support their daily groceries. The thievery action will harm the pattern of staple crops production and cause food crises in the long term. Meanwhile, commercial plant refers to the coconut, Matbat people use coconut oil for medication and cooking proposes. The use of coconut for household needs overlap with copra production. The cause of thievery of coconut for household needs affects to the lower capacity of production for copra. In that case, church *Sasi darat* is needed to protect coconut trees.

“In 2005, I arrived in Folley village and I was shocked. I received a list of Church *Sasi darat* request by the Matbat people along with the *Sasi* board to pray for on Sunday praying. Then I asked church council why the practice of church *Sasi darat* is still existing in Folley village, they said if the land is not protected with church *Sasi*, they will get nothing from their private-customary land during harvesting season. So, I realized that in Folley village, people steal other’s crop because they do not cultivate their private-customary land for staple needs.” (Karel Burdam, Pastor)

The high demand for church *sasi darat* indicates the need for protection of Matbat people’s land resources to support their livelihood. Based on the interview quotes above, the practice of church *Sasi darat* is uncommon for the modern community in Raja Ampat. The cause of cash crop cultivation has impacted the less intensive staple farming. As Matbat people focus on cash crop cultivation from coconut, it has reduced the area for staple farming. The limited area for small farming impacted to the small scale of harvest for staple crops. In other words, cash agriculture is the catalyst for the high incidents of thievery in Folley village.

In Folley village, the role of church *Sasi darat* is crucial to ensure the food security and profit from their private-customary land. The secure food and cash crop production are important to the economic resilience of Matbat people where the job openings are not accessible for them. The increasing capacity of crops for both staple and commercial plants contribute to the cash flow of Matbat people as an independent and prosperous community. The needs for money is expressed from the willingness to send their children to the bigger city for higher education. In their everydayness living in Folley village, money is not significant for them as the land is supporting their needs for food. However, the future of their children is coming slowly but surely. Therefore, the security of their staple and commercial plants from church *Sasi darat* affect not only their present life but also the future of their children for a better living.

### **Church *Sasi laut* for Economic Resilience**

Meanwhile, the sea has its own mighty power. One day it can be so kind while on another day it can be so miser. The Matbat people in Folley village is also dealing with the unpredictable waves and wind while fishing. The traditional fishing tools have proven their interaction

towards the sea is not established for so long. For fishing, they use traditional yet not destructive fishing such as *bacigi*<sup>24</sup>, *balobe*<sup>25</sup>, *bemeti*<sup>26</sup>, and *molo*<sup>27</sup>. These methods contributed to the zero destruction of the sea. The lack of understanding to set a sail has contributed to the creation of these traditional fishing tools to catch fish and marine resources in the seashore, not in the deep sea. It is important to note that these artisanal fishing are still implemented until now in Folley village without further development. By using these artisanal fishing practices, they gather fish and marine resources to fulfil their household daily needs as the catching capacity is quite limited. As a result, their catches are enough to fulfil their daily needs, but not so much to sell. There were days when the heavy rain pouring constantly, it means the men cannot fishing and rely on vegetables from their farm to eat. While on another day, the Matbat fishers in Folley village catch more than their consumption and they just gave them away to the neighbour. The reason is that the lack of electricity makes it impossible to store the fish in days. The lack of electricity means freezer or ice cubes are not available. It is also the reason they cannot distribute their catches to the capital city of West Papua province, Sorong, where the selling prices are almost tripled.

In order to support their livelihood, some of Matbat people in Folley village participated in shark fishing. Due to the scarcity of sea cucumbers, the high demand of shark fin has exposed Matbat people with economic rationality from hunting sharks. In fact, the price of shark fin worth from Rp. 900.000 up to Rp. 1.500.000 per kilogram which is as much as a kilogram of sea cucumbers. The practice of shark fishing is the legacy of Buginese people since 1980s when they realised sea cucumbers were facing extinction<sup>28</sup> so they switched to shark fins trading in 1990s. The practice of shark hunting is aimed to cover unexpected expenses. It is important to note that, Matbat people are not hunting for shark on weekly basis, instead they do it only in several times in a few months. The reason to shark hunting is correlated with the way they manage their finance. As they rely on artisanal fishing and small-scale crop harvesting, they earn a small amount of money on daily basis<sup>29</sup> to cover daily needs. So, the majority of Matbat people in Folley village do not have long-term saving in their house or bank in Sorong. The way they manage their finance has contributed to their dependency on marine resources (shark hunting) as their piggy bank for any emergency needs.

However, Matbat people is not the only shark hunter in Raja Ampat waters. Many commercial fishers from outside Raja Ampat Regency such as Sorong, Seram island, Halmahera, Maluku, and Sulawesi came to Folley waters as it is categorised as open access<sup>30</sup> where fishing is

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<sup>24</sup> *Bacigi* refers to a fishing method that make use of a piece of bamboo or rattan with nylon string and a hook attached without bait.

<sup>25</sup> *Balobe* refers to a tradition to look for sea shore animals (usually intervertebrate) including fish, at the middle of the night with a traditional spearhead with three blades that also called Kalawai.

<sup>26</sup> *Bameti* refers to a tradition to gather sea shore animal (usually intervertebrate) including fish during low tide period.

<sup>27</sup> *Molo* refers to a tradition to catch fish by breath-hold diving equipped with wooden arrow.

<sup>28</sup> This statement claimed by Choo (2008)

<sup>29</sup> In Folley village, the price of fish around Rp. 20.000 per kg while in Sorong Rp 100.000 per kg.

<sup>30</sup> Folley village is located in buffer zone which is the end tip of Southeast Misool MPA. Southeast Misool MPA is the largest MPA in 366.000 hectares which covers cluster of ancient limestone rocks and saltwater lakes that provide home of

allowed if they obtain the permission by the provincial government<sup>31</sup>. These commercial fishers are not only targeting pelagic fish but also sharks. It causes quick depletion of fish stock that impacts to the critical marine ecosystem in general and trouble to coastal's livelihood surrounding Raja Ampat islands. Because of this, the local government of Raja Ampat regency issued an enactment in *Perda Kabupaten Raja Ampat* No. 9 the year of **2012** regarding the ban of shark fishing and other protected marine animals. The shark enactment impacted several Matbat fishers to quit shark hunting, while others are still relying their livelihood on sharks although the practices are less frequent. It is due to due to the low surveillance and lack of law enforcement of the regulation from the government.

“The local communities are not well informed about the shark regulation sanctuary. When the violation happens, the consequence never occurs. I never saw as such.” (Karel Burdam, Pastor)

“Folley people is never get caught when we hunted sharks during the patrol by the water police or NGOs. I think the regulation is only snarling on us.” (Eskol Moom, Village Youth)

After the issuance of *Perda Kabupaten Raja Ampat* No. 9 in 2012, it impacted to Matbat people to give up the practice of shark hunting slowly and back to sea cucumber trading without *Sasi laut* arrangement. The reason Church *Sasi laut* was not implemented because the harvest of sea cucumbers with and without *Sasi laut* arrangement was not different. Within this period, several international non-governmental organizations interfered marine conservation in Raja Ampat. These NGOs established Marine Protected Area (MPA) network all round Raja Ampat waters and the reinvention of Modern Church *Sasi laut*. Through the power and scientific knowledge that NGOs have to influence the national/local government in the creation of the MPA network, religion leader in Folley village initiated the cooperation in Church *Sasi laut* arrangement. The detailed story of NGOs intervention in church *Sasi laut* arrangement is explained in the next section '4.2.1. Power: Co-management of Modern Church *Sasi laut*.'

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thousands stingless jellyfish. As a buffer location, local and indigenous communities in Folley village are not dealing with zoning strategies of MPA in their fishing grounds.

<sup>31</sup> The migrant fishers obtain this permit by paying certain amount of money to the local government either legally or illegally without quota regulation.

## 4.2. Matbat People in Folley Village: After Co-Management of *Sasi laut*

### 4.2.1. Power: Co-Management of Modern Church *Sasi laut*

#### **The intervention of TNC in Marine Conservation in Raja Ampat**

According to Matbat people in Folley village, The Nature Conservancy (TNC) is the holder of the authority in the Southern part of Raja Ampat islands since MPA network was established in 2006. TNC is an international non-governmental organization that has the commitment to protect mother nature and foster the people of current and future generations. In Indonesia, TNC works mainly in East Indonesia for forest and marine conservations. In a positive way, TNC has been intervening the role of national government to regulate marine resources and optimize its potencies. It affects to the image of TNC, as perceived by coastal indigenous people, that has equal power with the government to govern marine ecosystems in Raja Ampat. TNC's indirect power control is supported with scientific information related to the social-ecological conditions in Raja Ampat. This scientific information is the result of co-operation between TNC, local, and international scientists to create marine conservation strategies.

“In the beginning, TNC organized a meeting with the communities in Folley village. They explained their intention in Raja Ampat to protect marine spaces. We are pleased with their presence because they **(TNC) rule** southern part of Raja Ampat. There was one time, fishers from Seram stole our fish (fishing without permission) with destructive tools in Misool region. TNC caught them with water police. Before TNC came to Raja Ampat, fishers from Seram depleted our fish stocks with blast and dynamite fishing.” (Gerardus Moom, Adat Leader)

Since 2006, TNC involved in the various marine research to gather spatial information in Raja Ampat. Based on this data, TNC established a partnership with the local government of Raja Ampat in law drafting regarding conservation (including *Perda Kabupaten Raja Ampat* No. 9/2012), so that marine conservation activities are supported by legal instruments. As a result, it gave power to TNC to arrest the subject of marine destruction to proceed in the court.

“Before TNC came, there was no single conservation activities in the marine area in Raja Ampat. If we did not get the support from foreign countries (Western countries), conservation is never going to happen here. Our government did not have the budget to fund conservation activities. We are very grateful the many international NGOs concern with our marine condition. Otherwise, Indonesia's marine territories would be damaged.” (Lukas Rumetna, Member of TNC)

“Fisheries and tourism department of Raja Ampat government is our main partner. If they need data related to marine resources or coral status in Raja Ampat we will help

according to our capacity. We have governance and policy team to create policy draft to help the local government establish regulation.” (Nugroho Prabowo, Member of TNC)

The establishment of MPA network in 2006 which was collaboration work between NGOs (The Nature Conservation, Conservation International, and World Wide Fund for Nature), local government of Raja Ampat, and indigenous people of Raja Ampat. In 2012, TNC developed zoning division of MPA such as no-take zone, sustainable extractive use zone, and cultivation zone. No-take zone indicates zone for protection in which prohibit any marine resource harvest activities to optimize tourism, conservation, and research development. Sustainable extractive zone refers to the common fishing ground for indigenous people of Raja Ampat with traditional fishing gears. In this zone, commercial fishers from outside Raja Ampat have to arrange a fishing permit in provincial government to get access. And the last is the cultivation zone which enacted to pearl company with no access for the local/indigenous people to fishing. In return, pearl companies provide them job vacancies for them to work as contract employees.

“In the establishment of MPA network in Raja Ampat, we approached Adat institution from each village. Negotiation for MPA network establishment was taking so much time because of customary land and marine ownership. We need to give them time for each family clan to consider the pros and cons of the MPA network. Then, if they disagree we change our approach, strategies, and how we explain the objectives of marine conservation in Raja Ampat.” (Lukas Rumatna, Member of TNC)

One of TNC strategies to change the negative perception of conservation was to include the long-term economic benefit from conservation. In 2012, TNC rephrases no-take zone as a fish saving zone to introduce this concept to the local/indigenous people in Raja Ampat. It implies to the crucial area for fish to breed within the highest concentrated coral and reef area. It is one of TNC campaign to educate and to inform Raja Ampat community by using colloquial language to persuade modern conservation practices. It is stated as below in many leaflet and billboard in every island in Raja Ampat,

“We (all the local community in Raja Ampat) need to protect fish saving areas for our grandchildren by fishing in the sustainable extractive zone.”<sup>32</sup>

The meaning of fish savings refers to the economic awareness by using analogy fish as the source of economic stability of the present and the future. The establishment of no-take zone or fish savings area is accompanied with localized education related with law enactment in marine conservation such as protected marine animals and prohibited fishing gears as stated

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<sup>32</sup> This sentence is translated from Indonesian language in Papuan dialect “*Kitorang jaga daerah tabungan ikan untuk anak cucu dengan menangkap ikan di daerah penangkapan tradisional masyarakat*”.

in *Perda Kabupaten Raja Ampat* No. 9/2012. This educational activity was conducted in indigenous villages across Raja Ampat. In this opportunity, TNC explained the economy benefits from marine conservation such as the increasing of marine resource and tourism development. It is in line with TNC milestones to shape economy rationality from conservation as expressed by one of TNC member as below:

“TNC milestone is to prove to the indigenous/local community to get economy benefit from marine conservation through ecotourism and local empowerment.”

(Nugroho Prabowo, Member of TNC)

Therefore, modern conservation applied by TNC has offered economy rationality as a tool to persuade indigenous people participation in conservation strategies. TNC aims to save Raja Ampat from further destruction with the involvement of indigenous people in conservation to improve their livelihood. Conservation is not a matter of prohibiting, it regulates natural resource management from overexploitation and marine destruction threats (Illegal, Unreported and Unregulated and destructive fishing) to sustain local's economy in the future.

### **The intervention of TNC in Church *Sasi laut* of Matbat People**

Natural resource management intervention of *Sasi laut* conducted by TNC was not only aimed to tackle external threats for the preservation of marine spaces but also to improve customary management of marine resources. TNC maintains the practice of Church *Sasi laut* within MPA network since it fits well with small conservation strategy. In fact, the practice of traditional marine resource management, Church *Sasi laut*, has potential to support marine conservation objectives<sup>33</sup>. Church *Sasi laut* is considered as conservation practice as it resembles no-take zone. The element of Church *Sasi laut* incorporated with spatial restrictions, temporal restrictions, gear restrictions, species restrictions, and sanction enforcement which fit into modern conservation. Supported with a socio-economy understanding of Raja Ampat, TNC developed a program to reinvent Church *Sasi laut* based on TNC guideline. This program was proposed to all villages in Misool islands around 2011-2012, including Folley village.

“Actually, the reinvention of *Sasi laut* is part of small conservancy strategy in Raja Ampat with the expectation to larger the area to get a bigger impact. We have our pilot project in Folley and Kapatcol village to develop effective *Sasi laut* arrangement. Later, we will use this success story to other villages to give them proof that these two villages are more sustain economically with better food security compared with villages without *Sasi laut*.” (Awaludinnoer, Member of TNC)

The involvement of TNC in the reinvention Church *Sasi laut* is due to improper management of sea cucumbers culture. Concern towards Church *Sasi laut* was also expressed by Awaludinnoer as TNC member as below.

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<sup>33</sup> As mentioned in McLeod et al., (2009) and Boli et al., (2014)



“Traditions of *Sasi* has been established from a long time ago as part of assimilation of Maluku and Papua culture. However, the knowledge to manage effective *Sasi* did not exist yet. So, we collaborated our knowledge, combining science, and culture. We tried to understand why Traditional *Sasi laut* was not effective, then we tried to encourage them to understand the ecological meaning of *Sasi* to obtain the economy benefit from it.” (Awaludinnoer, Member of TNC)

The management of sea cucumber harvest is considered as obsolete and unorganized by TNC. The harvesting system was exhausting sea cucumbers stock. The sea cucumbers were being taken from the smallest to the biggest size that reduces the chance for them to grow and breed. Moreover, the implementation of traditional *Sasi laut* was referring to the same areas arranged by customary law from generation to generation. Instead, based on monitoring by TNC, those areas are not productive anymore for sea cucumbers cultivation in *Sasi laut*. Therefore, the management of pre and post-harvest of traditional *Sasi laut* need improvements. Based on this, TNC created conservation understandings in reinventing the ‘Modern Church *Sasi laut*’ through Co-management with Adat and Church institutions in Folley village.

‘Modern Church *Sasi laut*’ is the name created by Matbat people in Folley village in applying *Sasi laut* provision established by TNC. The involvement of church and *adat* in co-management of Modern Church *Sasi laut* constitutes the collaboration work of **science, religion, and tradition** in the notion of marine resource management. Church representative, the pastor, was the key actor for TNC to get in touch with the communities in Folley village. The year of 2011 is the mark of TNC involvement in Folley village. At that time, TNC received tremendous support from the fellowship of the church in Folley village to conserve the marine environment by inviting TNC in the church social activities. The church was also playing a significant role to communicate and encourage Matbat people in Folley village to participate in TNC programs such as education seminar in marine conservation and Modern Church *Sasi laut* counselling<sup>34</sup>.

Besides the Church, TNC also deal with *petuanans* as part of Adat representative to reach out their approval of ‘intervention’. Although the traditional marine territories in Matbat village is held by Fadimpo and Moom to make the decisions, other family clans were included in the discussion. The voice of *petuanans* is powerful in the decision making to accept, to approve, to hand over a certain area to *Sasi laut*. In this traditional society, Matbat people treat *petuanans* as the holder of the authority to govern their marine customary area higher than local government (district level).

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<sup>34</sup> Modern Church *Sasi laut* refers to *Sasi laut* arrangement imposed by TNC with cooperation with Adat and Church institutions.

“Matbat people here (Folley village) understand that the authority to open and close *Sasi* is held by TNC. Although we want to open *Sasi* soon if TNC has not done their pre-harvest monitoring, we will not do anything with our *Sasi laut*. We want TNC to accompany us in open and close *Sasi laut*. We trust in TNC to govern our *Sasi laut* so we can expect more harvest this year.” (Rico Moom, Matbat People & TNC Patrol Ranger)

In the establishment of Modern Church *Sasi laut*, although *petuanans* have the power to govern their customary marine area, Matbat people rely on TNC to make the decisions. It refers to the domination and subordination between TNC and Matbat people in Modern Church *Sasi laut* arrangement. The influence of TNC to enforce marine conservation in Raja Ampat has contributed to hinder power and authority in Modern Church *Sasi laut* arrangement.

#### 4.2.2. Knowledge: The Application of Modern Church *Sasi laut*

##### The Changes in Church *Sasi laut* Practices

In 2015, TNC proposal to have a *Sasi laut* in a certain area within the traditional marine territory in Folley village was approved by *petuanan* Fadimpo. It marked the collaboration in terms of management and knowledge. The practice of Modern Church *Sasi laut* maintains the cultural tradition with negotiated adjustment to improve the harvest. The implementation of Modern Church *Sasi laut* incorporates scientific (western) knowledge to measure and predict the feasibility of the area for sea cucumbers cultivation. TNC incorporated scientific (western) knowledge to regulate harvesting mechanism of sea cucumbers without changing the series of cultural values in Church *Sasi laut*. Through their determined approach, TNC received positive response and support by *petuanan* of Fadimpo to ‘conserve’ a piece of the traditional marine area. There are several changes in church *Sasi laut* arrangement under the governance of TNC as summarized in the table below.

Table 5. The Differences of Church *Sasi* and Modern Church *Sasi laut*  
The information was derived from interviews with Adat leaders and TNC

|  | Church <i>Sasi laut</i>  | Modern Church <i>Sasi laut</i>                   |
|--|--|--|
| <b>Close &amp; Open <i>Sasi</i> Period</b>   | Decided by <i>petuanans</i> , usually every 4-6 months to open Church <i>Sasi laut</i><br><i>Bacolo</i> period calculation | Based on TNC monitoring before and after harvest |
| <b>Close &amp; Open <i>Sasi</i> Offering</b> | 7 pieces of traditional cigarettes, 7 areca nuts, and clam powder for the ancestor spirit hang in a decorated tree         | Based on Church <i>Sasi laut</i>                 |

|                                |   |  |
|--------------------------------|---|--|
| <b>Close Sasi Ritual</b>       | Asking <b>permission</b> from the ancestor spirits in Matbat language<br>Asking <b>blessing</b> from the God through prayer in the Church     | Based on Church <i>Sasi laut</i>   |
|                                | Asking <b>blessing</b> from the God through prayer in the Church  | Based on Church <i>Sasi laut</i>   |
| <b>Marking Sasi Area</b>       | ' <i>Sasi gereja</i> ' board in the <i>Sasi</i> area during close <i>Sasi</i> period  | Based on Church <i>Sasi laut</i>   |
| <b>Open Sasi Ritual</b>        | Harvested after Sunday praying in the church<br>Gratitude to the God through praying in the church  | Based on Church <i>Sasi laut</i>   |
|                                | Gratitude to the God through praying in the church  | TNC and Matbat people pre-harvest meeting 1 month before open <i>Sasi laut</i> |
|                                | Not allowed to harvest/touch the sea cucumbers with bare hands during close <i>sasi laut</i> period but other sea animals are allowed to take | Matbat people presents traditional dances, <i>Wala and Setan Gamutu</i>        |
| <b>Rules During Close Sasi</b> | <i>Petuanans</i> decided the fee for every boat that goes hunting sea cucumbers during Open <i>Sasi</i> period                                | Based on Church <i>Sasi laut</i>   |
| <b>Rules During Open Sasi</b>  | On the boat and obligatory to use the spear to collect sea cucumbers. Gleaning is not allowed   | Based on Church <i>Sasi laut</i>   |
|                                | Decided by <i>petuanans</i> , usually every 4-6 months to open Church <i>Sasi laut</i>  | The size of sea cucumbers harvest is minimum 15 cm, maximum 30 cm              |
| <b>Sasi Sanctions</b>          | Sin and punishment from the God   | Based on Church <i>Sasi laut</i>   |
|                                | Myth: sickness to death   |  |

In the management of Modern Church *Sasi laut*, there are three substantial changes implemented by TNC. First, the close and open *Sasi* period are based on TNC monitoring result. TNC monitoring of *Sasi laut* is held in three phases, monitoring to **check the feasibility of the area, pre-harvest monitoring, and harvesting monitoring**. The first phase is monitoring to check the feasibility of the area. It was started from the beginning of Modern *Sasi laut* establishment to determine the possible location of sea cucumbers cultivation. This activity aims to determine the best location for sea cucumbers cultivation. It changed the location of *Sasi laut* area according to the observation result which incorporated three kilometres wide for Modern Church *Sasi laut* Fadimpo and four kilometres wide for Modern Church *Sasi laut* Moom.

The changes in the location of Modern Church *Sasi laut* constitute the need to upgrade traditional ecological knowledge. Traditional ecological knowledge is deeply rooted in their ancestor practice to provide social and ecological justice from the human-environment relation. However, the ocean is changing and dealing with rapid destruction due to climate change and human activities. As a result, the practice of traditional ecological knowledge, *Sasi laut*, needs some adjustments.

“Yes, TNC change the location of *Sasi laut*. Matbat people knowledge is based on the ancestor practices and passed through generations to harvest in the same location. However, when I did the monitoring with TNC, the sea cucumbers were only a few. I think that is one thing that we need to think about. Maybe it used to be the perfect location for *Sasi*, so the harvest was promising. But not anymore, due to marine destruction the harvest is decreasing.” (Balief Wainsaf, Non-Matbat People, TNC Patrol Ranger)

The second phase is pre-harvest monitoring. It is conducted one month before open Modern Church *Sasi laut* period. Harvesting is held once a year according to the agreement between *petuanans* and TNC in April until May. The reason is to extend the recovery period of sea cucumbers from scarcity. The practice of pre-harvest monitoring is held in the middle of the night during low tide seawater with the naked eye and flashlight over the boat<sup>35</sup>. Right after the meeting, TNC invited Matbat people to inspect the location of Modern Church *Sasi laut*. In this pre-harvest monitoring, TNC pays attention to the size and amount of sea cucumbers around the Modern Church *Sasi laut* area. This monitoring scheme is to make sure the feasibility of the sea cucumbers for harvesting as the proposed date by *petuanans*. If the pre-harvest monitoring shows a positive result, TNC will agree with the proposed date, otherwise, the harvest will be postponed.

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<sup>35</sup> According to Matbat people in Folley village the area of *Sasi laut* and its sea cucumbers are sacred. It is not allowed to touch sea cucumbers in that location during the close *Sasi* period. Otherwise, the sea cucumbers will disappear and never return to Folley waters.



Figure 4. Pre-Harvest Monitoring  
Picture was taken on 19<sup>th</sup> of March 2018 in Folley Village

The third phase is monitoring of quantity of harvest to keep on track year by year quantity of sea cucumbers harvest and community income from Modern Church *Sasi laut*. It is related with the achievement of sea cucumber harvest quantity and the possibility of changing the location of Modern Church *Sasi laut* to ensure a sustainable livelihood for Matbat people from sea cucumbers cultivation.

Second, the breakthrough that TNC did in Modern Church *Sasi laut* management is **pre-harvest meeting** and **organising Matbat traditional dances**, Wala and Setan Gamutu<sup>36</sup>, for open Modern Church *Sasi laut* ceremony. Pre-harvest meeting is held around March between TNC, *petuanans*, and Adat leader to decide the exact date for open *Sasi* period. In this pre-harvest meeting, *petuanans* suggest the date for open *Sasi* period according to Bacolo calculation. Based on observational data, TNC tried to combine pre-harvest monitoring result with Bacolo calculation. However, the final decision is according to TNC decision eventually. The decision to open *Sasi laut* date this year was shifted one week late from 22 April to 6 Mei 2018. The reason was that TNC invited BBC reporters to make a documentary series regarding traditional resistance to response climate changing in the world. The idea was agreed by the *petuanan* Fadimpo, however, *petuanan* Moom was not fully agreed as it has passed Bacolo period in 15 April 2018. However, *petuanan* Moom does not have the power to reject the agreement then half-hearted agreed on the date.

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<sup>36</sup> Wala and Setan Gamutu are traditional Matbat dance to celebrate religion and traditional festivities. They implied the origin history of Matbat people. Wala dance is performed by both female and male with combination of pounding and singing, without musical instruments. The lyric of the song expresses a brief history of Matbat people from the forest to the sea. Setan Gamutu is an attraction performed by male wearing fiber and mask made of Gamutu trees. This dance is performed to protect *Adat* rituals.

“Even though the Matbat community in Folley village wanted to open *Sasi laut* earlier and TNC has not come yet to pre-harvest monitoring, we will not open *Sasi laut*. Because for us, TNC needs to guide us in an open and close *Sasi* period. We trust TNC to manage our *Sasi laut* and supports their decision.” (Rico Moom, Matbat People, TNC Patrol Ranger)



Figure 5. Pre-Harvest Meeting

Pictures was taken on 19<sup>th</sup> of March 2018 in Folley Village

TNC also created a breakthrough to include **cultural tourism opportunities** in *Sasi laut* rituals. Traditional dances of Matbat tribes such as *Wala* and *Setan Gamutu* became part of the opening ceremony of open *Sasi laut* arrangement. TNC idea to exhibit Matbat dances aimed to preserve cultural tradition and create open *Sasi* ceremony as annual folk's party in Folley village. Matbat dances have never been a part of open *Sasi* ceremony in traditional and church *Sasi laut*, however, the Matbat community agreed to present their cultural dance to attract tourists to come to their village.

“According to our Adat, the traditional dances are not part of *Sasi* ceremony. *Wala* dance is only practised if the provincial government visit Folley village while *Setan Gamutu* is practised for new year celebration. We have them now in open *Sasi* ceremony because TNC invited the government and tourist to come.” (Gerardus Moom, Adat Leader)

“We discussed our idea with the local government in Raja Ampat whether *Sasi* can take part in cultural tourism. We want Folley to be the first district that offers something different besides marine tourism. We discussed cultural tourism idea in Folley village with Matbat people community and they agreed to perform traditional dances during open *Sasi* ceremony”. (Awaludinnoer, Member of TNC)



Figure 6. Wala and Setan Gamutu Dances During Open *Sasi* Ceremony  
 Pictures were taken on 22<sup>nd</sup> of April 2018

Thirdly, TNC included modern conservation practices in Open Modern Church *Sasi laut* provision regarding harvesting system. It regulates the size of sea cucumbers harvest to prevent over-exploitation of sea cucumbers during open Modern Church *Sasi laut*. The practice of harvest before Modern Church *Sasi laut* did not regulate the size of sea cucumbers for harvest. Matbat people used to take all sea cucumbers they can find in the sea from the 10 cm to more than 30 cm. It caused depleted or scarcity of sea cucumbers as the broodstock and the 'seed' of sea cucumbers were all taken. Referring to that, TNC set the limits of sea cucumbers that can be harvested, from 15 cm to 30 cm. In applying this provision, TNC linked this with the economy benefit from the size of sea cucumbers. Sea cucumbers below 15cm do not have a high selling price compared to those around 20cm. Sea cucumbers above 30cm have promising selling price, sometimes twice than the average sea cucumbers. But it is difficult to find and rarely achieve 1kg. As result, sea cucumbers above 30cm is downgraded and sold with the average size price. In ecological reason, sea cucumbers above 30cm need to be maintained for breeding purposes to enhance sea cucumbers population.

"No, TNC is not changing our culture in *Sasi laut*. They regulated the size of sea cucumbers from 15 to 30cm to improve the harvest. I notice our sea cucumbers is improving, different with harvest before TNC. I realize before TNC came to Folley village, our management of harvest for sea cucumbers has destroyed the population of sea cucumbers, we have deteriorated sea cucumbers. We did not know the right way of sea cucumbers cultivation, so we harvested them all. Actually, if we harvest sea cucumbers with suitable size, they do not shrink much. So, it can improve the selling price." (Yoel Moom, Adat Leader and *Petuanan*)

### **The Implication of Modern Church *Sasi laut* to Matbat's Understanding in Conservation**

The sense of conservation is created through Modern Church *Sasi laut* is the manifestation of knowledge collaboration of Western science adopted by TNC and traditional ecological knowledge in sea cucumbers cultivation. *Sasi laut* is used as a model of sustainable natural resource management. The principal of scientific / western knowledge is needed to upgrade traditional ecological knowledge in the Anthropocene era where current environmental challenges are different in the past.

However, conservation in a customary land without incorporating traditional ecological knowledge will be a challenge to be implemented. Sea cucumbers cultivation through modern approach will not get support from Matbat people if the practice is not in accordance with cultural values and cause conflict with their livelihood. It refers to shark enactment by the local government of Raja Ampat. *Perda Kabupaten* Raja Ampat No. 9/2012 denotes prohibition for all shark species in Raja Ampat waters. As mentioned before in 'Subjectivity: Church *Sasi* for Economy Resilience', shark hunting is not part of Matbat people culture. Their ancestors were not hunting marine resources in the deep ocean. Shark hunting was the influence of economic pressure and environmental degradation that insist current generation of Matbat people to exploit other sea biotas with high economic values. Shark enactment is not considered as a regulation that Matbat people need to adjust with. The practice of shark hunting is still implemented by Matbat people in Folley village occasionally. Although imprisonment and fine are part of the sanction, they stand up for shark hunting as the source of their livelihood support.

"We agree if TNC wants to interfere our sea cucumbers management in *Sasi laut*. But they cannot prevent us to hunt sharks. They (TNC) have caught me a few times when I was shark hunting, I asked them once '*if I release my catch, you have to give me one-month living allowance. What do you say?*' Then they always release me ever since."  
(Manase Moom, Fisherman)

"Yesterday I went to the sea for shark hunting. We took the sharks for their fins. I hunted sharks around Folley area because that is our area. I do not dare to steal sharks in other villages area." (Yoel Moom, Adat Leader and *Petuanan*)

Meanwhile, Matbat people responded differently with sea turtle enactment. Sea turtle for Matbat people has cultural values but does not have economy values. Unlike, sea cucumbers and sharks, sea turtle in Raja Ampat are not traded but consumed for its meat and eggs in traditional and religious feast days. Sea turtle is part of Matbat people diet as it can be easily found in the coastal area and caught unintentionally in fisherman nets. This traditional habit contradicts with *Perda Kabupaten* Raja Ampat No. 9/2012 as it is stated that sea turtle is part of protected animals.





Figure 7. Sea Turtle in Folley Village<sup>37</sup>  
The picture was taken on 23<sup>rd</sup> of April 2018

Conservational approaches by TNC regarding sea turtle are different with shark and sea cucumbers as it is part of the cultural and traditions of Matbat people. TNC creates an understanding that the existence of sea turtle is threatened and conservation for sea turtle needs to sustain Adat rituals of Matbat's future generations. It was approved by Matbat people and they supported this idea by decreasing the amount of sea turtle consumption and less frequent. Even, they proactively remind their relatives and families of the importance of sea turtle preservation.

"For me, the shark is our livelihood, but I regretted that I hunted sea turtles. I spoke to one of my family members when he was stabbing sea turtle and I said *'you are lucky that I am the one who caught you if TNC knew you can be dragged into jail with fines. You better release it.'*" (Gerardus Moom, Adat Leader)

'I always remind the people that the child that you are carrying now feels what you are eating if today we do not reduce sea turtle consumption, the sea turtle will be gone forever. One day your child will demand it too because, he/she had eaten it in the childhood. Then, when they grow up they will find out what their parents eat during the traditional or religious ceremony. Do not let our children know sea turtles from the picture due to our greediness.' (Mikha Fadimpo, Matbat People, Member of TNC Patrol Ranger)

Based on strong traditional practice and kinship ties, the threats of sea turtle extinction are significant to shape the mentality and rationality of Matbat people to conserve sea turtles. The conservation of sea turtles is indeed contradicting with Matbat's cultural traditions. However, sustaining it for the future generation to keep the traditions alive is the key to agree with conservation ideas for sea turtles. Matbat people rationality regarding conservation is

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<sup>37</sup> This picture was taken during my observation while hunting sea cucumbers from the boat in the first night of open Modern Church *Sasi laut* period. Sea turtles are easily found around Folley village area.

explained by John Matubong who has worked in marine conservation in Raja Ampat for around fifteen years.

“Conservation is a matter of feeding the hungry stomach. As long as the locals/indigenous does not earn economy benefits, they will go against it. If their livelihood is secured, they will feel safe and participate in conservation.” (John Matubongs, Member of TNC)

Based on this, there is an interesting causality relation from the comparison of Matbat people attitude in the marine resource management of sea cucumbers, sharks, and sea turtles. *Sasi laut* practice in Folley village has recognized sea cucumbers cultivation to control overexploitation, however, this knowledge cannot be applied to other marine species with the urgent need of conservation. Conservation is translated as prohibition while natural resource management is to regulate or to manage the harvesting system. Conservation for sharks is difficult to get Matbat people to support as it limits Matbat people livelihood practice. However, it does not apply to sea turtles. Sea turtles do not have economic value but part of cultural traditions, Matbat people are willing to change their unsustainable behaviour.

These attitudes imply two meanings. First, Matbat people understand that traditional ecological knowledge will extinct if it does not adapt to the current socio-economy challenges. Second, Western science in nature conservation cannot be accepted if it does not contribute to the preservation of cultural traditions, including traditional ecological knowledge. In other words, the human-environment relationship as part of indigenous everyday knowledge in livelihood practice is contributing significantly to their position to support or reject conservation programs.

#### 4.2.3. Subjectivity: Modern Church *Sasi laut* for Economy Resilience

##### **Economy Implication of Modern Church *Sasi laut***

The increasing of sea cucumbers harvest in the last two years, from 2016-2018, becomes a pride of Matbat people in Folley village from co-management of Modern Church *Sasi laut*. Modern Church *Sasi laut* has offered a solution to preserve cultural tradition and to maintain sustainable sea cucumbers harvest. It is a mark of Matbat people adaptation with new social challenges that are shaped by economy or money oriented. The promising harvest of Modern Church *Sasi laut* gave Matbat people chance to improve livelihood while conserving their traditional ecological knowledge, *Sasi laut*.

“Oh, our life is changing. Before Modern Church *Sasi laut*, we hunted 1kg sea cucumbers in one or two nights. Now we can get 5kgs in one night. This has helped our life a lot.” (Yefta Mjam, Adat Leader)

“For me it is amazing. Before Modern Church *Sasi laut*, I got twenty sea cucumbers in one night. After Modern Church *Sasi laut*, at least I got fifty sea cucumbers. It has proven what TNC always tell us from conserving marine resources ‘*when we protect, organize, and surveillance marine resources, we can get increasing harvest*’.” (Caleb Fadimpo, Local Government Representative)

Modern Church *Sasi laut* does not only have an impact on the increasing harvest quota but also the increasing size of sea cucumbers. As a result, the selling price is increasing. Folley village becomes well-known for its sea cucumbers and invites local and international buyer or merchant to buy at the end period of open *Sasi* period. Modern Church *Sasi laut* has encouraged Matbat people to keep in touch with international trading when commodities (coconut and copra) from the land are having difficult times.

“There are many buyers that have bargained our sea cucumbers harvest from Modern Church *Sasi laut* way before open *Sasi* period. Yesterday, a buyer came to me to buy sea cucumbers with Rp. 1.100.000 per kg. I said I do not agree because last year buyers came from China and Surabaya to Folley village and the highest price from the auction was Rp. 1.500.000 per kg.” (Mikha Fadimpo, Matbat People, TNC Patrol Ranger)

After years of struggling due to sea cucumbers scarcity and economy pressure, Matbat people recover their economy and improve their standard of living for education, households need, and savings. Hence, due to the implementation of Modern Church *Sasi laut*, Matbat people become economic independence from sustainable marine resource management of sea cucumbers.



Figure 8. Sea cucumbers harvest from day 1 of open *Sasi laut*  
Pictures were taken on 24<sup>th</sup> of April 2018

In TNC perspective, the result of Modern Church *Sasi laut* is contributing to the food security of Matbat People in Folley village. The village that no longer implements *Sasi laut* such as

Fafanlap village, has high incident rates of infant mortality due to malnutrition<sup>38</sup>. Meanwhile, in Folley village, the children are healthy and children mortality hardly ever happens.

“Food security is about to take care of the people from famine and there is a certainty that they have something to eat. From Modern Church *Sasi laut*, they have estimated, in April they will good amount of money from open *Sasi laut*. They usually arrange the plan how would they spend the money. Sometimes, they know how to maintain it for savings or daily consumptions. (Awaludinnoer, Member of TNC)

Therefore, the reinvention of *Sasi laut* has saved the future of Matbat people in terms of financial sustainability and socio-cultural protection. It gave domino effects from improved income for children’s higher education and a better standard of living.

### **Potential Economy Implication of Modern Church *Sasi laut***

The implementation of Modern Church *Sasi laut* has supported tourism development in Folley village. Unlike other Raja Ampat village that offers underwater tourism, *Sasi laut* offers cultural tourism opportunity. Open *Sasi laut* ritual in 2018 has attracted local and international tourists to attend the ceremony in Folley village. It is due to the corporation between TNC and accommodation providers in Raja Ampat such as the owner of the cottage and resorts to inviting their guest to Folley village during a trip in Raja Ampat. It motivates Matbat people to show their cultural traditions through the series of an event of *Sasi laut*.

“It motivates us to protect our nature and culture from open *Sasi* ceremony. I hope more tourists would come to Folley village to see next year.” (Diego Moom, Village Youth)

“Open *Sasi* with Matbat dances is only in Folley village. It is a tourism opportunity to attract tourist for in this annual folk party. We planned to include it in our ecotourism package in Southeast Misool district because it conserves the nature and also the culture. So, technically Matbat people in Folley village is aware that *Sasi laut* ceremony has the potential for tourism development.” (Jabir Soltif – Member of *Himpunan Pramuwisata Indonesia* or Indonesian Tourist Guide Association)

Although the tourism development in Folley village is still very limited, facilities and infrastructure to support Folley village as a tourist destination have been started. It can be seen from the establishment of the main port of South Raja Ampat in Folley village and the development of the local airport in Limalas village which is located around 20 km from Folley village. It has opened access for tourist and local people to reach Folley village. Moreover, the distance from Folley village to the iconic tourism sites in the South Raja Ampat such as a sacred

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<sup>38</sup> I obtained this information during my observation in Fafanlap village in the first week of fieldwork. At that time, there was a young boy around five years old passed away due to malnutrition. It is due to lack of economy security to fulfil child nutrition. It is a shame as they live in the coastal area, the difficulties to get fish to support their daily consumption is not possible due to marine destruction.

cave, the peak of Harfat hill, stingless jellyfish lakes, and dozens of snorkelling spots can be reached in one hour with speedboat from Folley village. It contributed to value added of Folley village as a destination in a strategic region for tourism development both for marine and cultural tourism.



Figure 9. Tourism sites near Folley village<sup>39</sup>  
Pictures were taken on 24<sup>th</sup> of April 2018

“Because we need to conserve the nature before we start tourism development. That is why I told my relatives who built homestay, *‘your homestay is the result of conservation, without conservation in Raja Ampat, you will never run your business.’* Since people know this is a conservation area, tourist will think this area is worth to visit.” (Balief Wainsaf, Non-Matbat People, TNC Patrol Ranger)

Modern Church *Sasi laut* has created tourism business rationality from marine conservation. It is not only impacted to the increased quota of sea cucumbers harvest but also create cultural tourism development from *Sasi laut* series of event. Hence, marine resource management in Modern Church *Sasi laut* creates other livelihood opportunities. The awareness to take care of marine spaces is growing from sustainable marine resource management that provides economic benefit for Matbat people.

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<sup>39</sup> The left picture is the sacred cave while the right picture is the view of the peak of Harfat hill.



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## 5. DISCUSSION



### *THE RELATION OF RESULT AND LITERATURE REVIEW*

Picture descriptions: Semang boat in Folpulo island.

It was in the last few days of my thesis fieldwork, I asked my gatekeepers to accompany me to Folpulo island. Folpulo island has important values in Matbat history as their second village. In this island, I found several tombstones of Matbat ancestors and traces of their settlements from decades ago. I went to this island by Semang boat, a traditional boat of Matbat people without an engine to find sea cucumbers. Unfortunately, this boat is almost extinct, only two Semang boats left in Folley village. The distance from Folley village to Folpulo island was a half an hour paddling, or 10 minutes by speedboat.

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## 5. Discussion

In the discussion part, I compared the findings with the literature that I used as the guideline of the study. The aim is to evaluate whether the findings are supporting or contrasting with the previous academia that conducts the research on the similar topic. It followed with strengths and limitation of this research referring to self-reflection as a researcher for the future research. Then, recommendations for further studies and practical changes that applicable to related actors/stakeholders in the conservation program.

### 5.1. Findings in the Light of Other Research

#### **Reflection on Economic Subjectivity Based on Knowledge Collaboration**

The integration of traditional ecological knowledge in modern conservation is positively improved equity and efficiency in decision making regarding natural resources as proposed by Plummer and Fitzgibbon (2004). The corporation of traditional ecological knowledge in conservation strategies contributes to the increasing participation of indigenous people. As mentioned before in the section 'Politics of Knowledge in Conservation' the main issues of conservation is the ignorance of Western conservationists towards ethical respect indigenous people as a rightful conservationist (Robinson, 2011). Reflecting the study case of Modern Church *Sasi laut* arrangement, TNC has succeeded in using traditional ecological knowledge to impose modern conservation in natural resource management. It supports Cinner and Aswani (2007) statement that hybrid management escalates indigenous participatory which is critical to understand local knowledge and explain scientific knowledge. The modern conservation understanding in Modern Church *Sasi laut* imposed by TNC refers to the sustainable harvest for sustainable livelihood. Modern conservation values have promoted the awareness that marine resources in the sea are interconnected as one marine ecosystem. It means the treatment towards a sea biota will impact to the whole food chain of marine sources. However, modern conservation understanding cannot be applied if it contrasts with the cultural and livelihood practices of indigenous people. It can be seen from the differences in their treatment towards sea cucumbers, shark, and sea turtles. Based on this, it has unravelled the underlying rationale of Matbat people to conserve their marine environment based on Western science/knowledge, to improve their economy. Neoliberal notions articulate themselves in the practice of commercialization-consumption pattern of marine resources that have different economic values.

#### **Reflection on Economic Subjectivity Based on the Shifting of Power**

The impact of the formation of economic subjectivity among indigenous people is the shifting of power in customary management. Rationality of indigenous people towards the economy as their underlying driver in their actions is the main argument in this study. The phenomena that Matbat people have exerted power to the new institutions (Adat - Church - TNC), implies the changes of mechanism to defend their traditional ecological knowledge, *Sasi*. The changes

in the management of *Sasi laut* has shown the economic challenges are main motivations to alter the constitution of power in *Sasi laut*. The main cause of this was the privatization of their customary land and exploitation of their marine area for trading activities (copra and sea cucumbers). The privatization of customary land for cash crop economy has shaped commodity fetishism amongst Matbat society since their settlement in Folley village. Due to privatization of the cash crop economy, collective values from customary land have changed into individual well-being. It supported what Popke and Torres (2013) denote as 'neoliberal dreams of market rationality and ethical individualism'. This finding fits well with Cotoi (2011) argument that stated market power create government process based on the economy in which people governed based by and through their own interest, economy improvement. Further, Cotoi (2011) adds, market power is the intimate reason for modification of knowledge, government (power), and subjectivities. Associated with this concept, the orientation to achieve individual economy improvement or profit from private-customary land become hegemony within the indigenous community, Matbat people in Folley village.

Therefore, this study confirms the critical outcomes of neoliberalism within the indigenous economy in which transform their socio-economy structure. In the practice of Traditional *Sasi* was a cultural expression to connect with their ancestor spirits in order to maintain harmony with their customary land from any extractive activities. The relation of human-environment of Matbat people was expressed through the series of open-close traditional *Sasi* ritual. The practice of Church and Modern Church *Sasi laut* have changed the old principal of traditional *Sasi* although the rituals are still taking part. This dynamic provides a good illustration of the way neoliberal transform indigenous human-environmental relationship. The opportunities from natural resources exploitation supported with private property rights result in a re-working of indigenous people and the non-human system being relate (Howlett et al., 2011).

### **Reflection on Co-management Approach and Indigenous Rights**

The study incorporated co-management approach in natural resource management to understand its sociological implication to indigenous rights. It shows that co-management of *Sasi laut* respects indigenous **customary property rights but partially with the rights to self-determination**. In Folley village, TNC respects and immerse with marine tenurial customary law held by *petuanans* and Adat institution of Matbat people. The notion of co-management in Modern Church *Sasi laut* does not violate the customary management in which positioned Matbat people as the owner and executor of Modern Church *Sasi laut* arrangement. It aligned with some academia who supports co-management recognized the customary ownership of indigenous people. Vaccaro et al., (2013) consider the acceptance of human use and habitation within protected area occurred simultaneously with the recognition of indigenous customary land. Colchester (2002) also in accord with the previous statement by concluding that indigenous rights recognition in co-management has a bridge up the gap between sustainability and secure land tenure of indigenous people. However, the mechanism of co-management is overpowering the decision-making process in Adat institution. There is a



tendency of Matbat people to unconsciously feel inferior to make a decision or disagree in Modern Church *Sasi laut* arrangement. Matbat people' submission of power and authority to TNC was obvious when they overlook disagreement occurred between *petuanans*. It refers to what Lane and Corbett (2005) statement that co-management is hindering democracy. As a result, their decision or right to make decisions depends on TNC recommendation. It implies that right to self-determination is shallow in the implementation of the co-management approach.

## 5.2. Strengths and Limitations

This study aimed to understand the influence of economic subjectivity of Matbat people to conserve their traditional ecological knowledge, *Sasi laut*. Reflecting the implication and applicability of the study, I summarized three good points of this study regarding theoretical contribution and the strength in regard to the methodology. First, the study incorporates Foucauldian study by applying the power/knowledge nexus to see the implication of economic subjectivity to their culture and traditions. There are not many existing kinds of literature utilize this approach to understand the implication of economic subjectivity towards the structure of customary or traditional power and the adjustment of indigenous knowledge. Through the application of power/knowledge nexus, the story of Matbat people offers a systematical understanding regarding the cause and effect from the establishment of the economic subjectivity of indigenous people to conserve their traditional ecological knowledge and the marine area in general. Based on this, this study contributed to the discussion of the rising prominence of neoliberalism within indigenous people rationality as the underlying driver of their motivation to participate in the collaboration work with external parties, such as NGOs and the national/local government. Second, the study considers indigenous rights to understand the application co-management as right based approach in conservation. The findings have suggested that the cultural understanding in co-management plays a significant role in management and knowledge collaboration. Cultural understanding which constitutes customary traditions and customary law influence co-management approach to the compliance of customary property rights. Thirdly, this study was conducted within the perfect period of preparation and open ritual of annual *Sasi laut* in Folley village. In methodological wise, my study presents in-depth information about behaviour and cognitive thinking of Matbat people in the whole process of Modern Church *Sasi laut* in two months of fieldwork.

Beside strengths, there are several limitations in this study that I have had when conducting the fieldwork and analyzing the data. During the fieldwork, I felt two months were not enough to establish a cultural understanding of specific phenomena that I realized after fieldwork. Phone signal is not available in Folley village that made the island isolated for the communication network. As a result, some information needs to be gathered from reliable publications on the internet to support the findings. I also feel that the data that I gathered

during fieldwork need further exploration to obtain deep understanding, especially in regard to the history of Matbat people. However, I feel for the sake of this thesis, the information from in-depth semi-structure interview, participant observation, and document analysis, is enough to be presented in this thesis report. Moreover, I am aware that my research is not deep diving into the poststructuralist or governmentality approach in analysing this case study. Instead, I only focus on the consequences of political-economic thinking towards political ecology to conserve marine area. As a fan of Foucault's works myself, I wish I could deliver more critical arguments as good as academia in Foucauldian studies.

### 5.3. Recommendations

Reflecting back to the whole research process of this thesis, I suggested **methodological**, **academia**, and **practical** recommendations. In terms of methodology that I applied, I learned that studying indigenous historical background should be accompanied with local academia to confirm and enrich the data. This is due to the complexity of oral history which is very subjective and sometimes is different from one respondent with another. Moreover, a limited publication regarding Matbat people has caused me a one-week delay for data collection. This is due to limited understanding of their history. I suggest in studying indigenous people, the historical understanding needs to be included as pre-fieldwork preparation.

In accord with academia recommendation, further studies could evaluate the power relation (for instance through actor-network theory) between actors who involved in marine conservations in Raja Ampat to map out the influence of governmentality to conserve marine environment. I do believe that the investigation of hierarchical power relation in the establishment of Raja Ampat MPA network is an interesting study case to be explored. I would be happy to share the phone/email of TNC and local government in Raja Ampat.

The practical implication of this research addresses the importance of traditional ecological knowledge in a modern conservation program, or in this case, co-management. The study of *Sasi laut* shows that economic improvement is the underlying driver of their current human-marine relationship. Hence, conservation programs promoted by NGOs and/or the government should state clearly regarding the economy rationality and benefits that the indigenous people can earn from it. Moreover, the practice of traditional ecological knowledge has a positive correlation with cultural tourism development. The potency of Raja Ampat is enormous in marine tourism, however, their cultural tourism is another aspect that needs to be encouraged and facilitated.

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## 6. CONCLUSION



### *THE SUMMARY OF FINDINGS*

Picture descriptions: lantern to light up the sea.

A fisherman from Folley village was preparing his lantern for the sea cucumber hunting. The tradition to harvest sea cucumbers are conducted in the middle of the night during the low tides. He brought lantern, a spearhead, and a flashlight as the gear. The customary law regarding sea cucumber harvest such as not allowed to pick up them by hands and get off the boat while hunting are respected very well by the Matbat people in Folley village. During open Sasi period, the quiet sea was shimmering with lantern from dozens of boat.

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## 6. Conclusion

The foundation work of this thesis is to address economic subjectivity and it is influenced to the shifting of power relation and human-environmental relation (traditional ecological knowledge) of indigenous people. Based on that, the analysis provides a different perspective in natural resource management realm: rethinking the relationship between indigenous people and neoliberalism. Comparing *Sasi laut* arrangement before and after TNC intervention is contributed to the understanding of three institutions of power (Adat – Church – TNC) in Matbat society, knowledge changes, and the creation of economic subject. Hence, in this conclusion section, each of the sub-research questions is answered to tackle the main research question.

**Sub-Research Question 1:** What are the implications of the economic subjectivity of Matbat people to the power/knowledge nexus in conserving **Church *Sasi laut***?

The first transformation is from Adat to religion institution to govern the practice of traditional *Sasi* in the 1970s. During this period, Matbat people have left behind their animism belief and adhered to Christianity. The pastoral power impacted to the lessening respect towards Adat as the underlying authority to regulate and govern their human-environment relation. As a result, animism ritual in traditional *sasi laut* was being replaced with religious activities. It implies Matbat community was adapting with epochal challenges in natural resource management. The epochal challenges were related to their exposure in economic activities from the private-customary land arrangement. The changes from collective values in traditional society (community-sharing oriented and no currency involved) to the individual has caused profound effects: the influence of market (from trading of copra, cocoa, and sea cucumbers) has established an entrepreneurial way of thinking of Matbat people from the private-customary land and marine territories. Money economy from trading of natural resources gated Matbat people about security and safety of the harvest of sea cucumbers from *Sasi laut* and their customary marine territory in general. In this case, the thievery threat is the fundamental influence on power shifting and knowledge changing in their social structure from the customary institution (Adat) to a religious institution (church).

**Sub-Research Question 2:** What are the implications of the economic subjectivity of Matbat people to the power/knowledge nexus in conserving **Modern Church *Sasi laut***?

The second transformation was the handover of management and authority of *Sasi laut* arrangement to TNC at the beginning of the 2010s. The submission of power to TNC was initiated by the church due to the marine destruction that caused depleted sea cucumbers. The church was proactively initiated cooperation with TNC to avoid weakening institutionalization of the Church as what happened to Adat in traditional *Sasi laut* arrangement. The violation of church *Sasi laut* by non-Matbat people has become a threat for

the church as an institution that gives imaginary security for Matbat people livelihood for *Sasi laut*. The submission of power and authority from Adat and Church to TNC has impacted to the changes regimes of sovereign authority. Even though in *de facto* *petuanans* have the power to make the decision for open and close *Sasi* period, the submission of power to TNC to regulate the arrangement in *Sasi laut* was explicit.

The establishment of Modern Church *Sasi laut* by TNC has impacted to economic improvement from sustainable marine resource management of sea cucumbers. It denotes win-win solutions in terms of power for three institutions that involve in *Sasi laut* arrangements such as Adat, Church, and TNC. The reinvention of Modern Church *Sasi laut* has helped Adat to conserve traditional ecological knowledge as part of cultural traditions that almost extinct. For the Church, modernization of *Sasi laut* has restored reliability and trustworthy of Church *Sasi* as sacred practice with a strong connection with the God presents. Meanwhile, for TNC, co-management of *Sasi laut* is a form of governmentality strategy to support marine conservation. The collaboration of knowledge in Modern Church *Sasi laut* arrangement has supported TNC to impose the benefits and values of marine conservation to economic improvement. In TNC co-management strategy, traditional ecological knowledge is the medium of two different worlds, indigenous people and conservationist, to co-manage *sasi laut* arrangement. The influence of Western knowledge in this co-management approach has improved Matbat people' understanding on marine conservation and their human-environment relation.

In the neoliberal era, the commodification of natural resources from customary land has changed Matbat people underlying motives in the practice of traditional ecological knowledge. The ecological meaning from traditional ecological knowledge has been replaced to a protection mechanism to secure their livelihood. As a result, before co-management, the practice of traditional ecological knowledge was dying due to unsustainable harvest practices. In order to tackle this challenge, external intervention is needed to conserve traditional ecological practice based on scientific knowledge. Reflecting the case study of Matbat people in Folley village, the practice of co-management and collaboration of knowledge in *Sasi laut* arrangement was a success story to incorporate economic subjectivity in natural resource management. It provides a basic understanding that indigenous people support modern conservation program as long as it acknowledges cultural values and secure livelihood.

**Main Research Question:** How does economic subjectivity transform power/knowledge nexus in conserving traditional ecological knowledge?

The transformation of *Sasi laut* arrangement has taught us that indigenous people adjust their power/knowledge relation for the sake of economy resilience from natural resource management in their customary land. Their customary land or resources has become a capital or mode of production for not only their cultural survival but also economy survival. It is worth

to note that the understanding of conservation given by external actors (the NGOS) is applicable if it does not contradict with cultural and economic values. By having said that, in the development / conservation projects which empower indigenous people as productive subjects to support and take part in the strategy should incorporate with long-term economic benefits and the application of local knowledge. The reason is that economic subjectivity is grounded within indigenous people due to the notion of modernity.

The practical application of the result is that conservation strategy or marine resource governance by the external parties should comply with a neoliberal way of thinking. Conservation should demonstrate short and long-term material benefits from conservation or hybrid natural resource management. Conservation and indigenous livelihood have symbiosis mutualism. Conservation can provide indigenous people livelihood security while indigenous people can be the vanguard of the conservation program.

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# Appendices

## Appendix 1. Interview Guide

### 1.1. Interview Guide for Matbat People

#### Instruction for Introduction

*“Good morning/afternoon/evening, my name is \_\_\_\_\_, I am a student of Leisure, Tourism and Environment master program. Currently, I am conducting a research about “Co-management of Sasi laut arrangement.” The identity of the respondent will be anonymously named. This research will take around 60 minutes, do you want to participate in this research?”*

If the respondent is answering **Yes**, make sure the following things before starting the interview!

1. Make sure the respondents fit in the criteria and before conducting the interview through screening questions about ethnicity and occupation.
2. Make sure the voice recorder is ready and turned on, then start interviewing
3. Explain about the code of ethics in this study such as anonymity, verbal informed consent, and confidentiality

#### Opening Questions

1. What is your ethnicity?
2. What is your occupation?

#### Main Questions

##### **Topic 1. Current Livelihood Practice**

Socio-economic status

The use of marine resources in livelihood strategies

##### **Topic 2. Non-Indigenous Marine Conservation Reinforcement**

Participation in marine conservation

Education regarding marine conservation

Opinion regarding marine conservation: MPA network, no-take zone, patrolling ranger

##### **Topic 3. Traditional Ecological Knowledge**

Understanding about *Sasi laut*

History of *Sasi laut*

The benefit of *Sasi laut*

How *Sasi laut* is passed through generations

Customary rules to implement, sanction and social punishment for *Sasi laut* violation

#### **Topic 4. Livelihood Strategies**

Livelihood practices based on marine conservation rules

Livelihood alternatives option

#### **Topic 5. Fishing Practices (specific for fisherman)**

IUU fisheries practices

Rules and sanction from IUU fisheries by customary law and conservation strategy

Migrant and illegal fishing practices in Raja Ampat marine territories

#### **Topic 6. Impact of MPA network in General**

*Sasi* revitalization

Fish and reef improvement

Tourism development

New practices to conserve and access marine resources

New regulation to conserve and access marine resources

#### **Topic 7. Customary Law of Papuan**

Customary law to marine territories

Rights to access contrast with a conservation strategy

Unwritten rules and sanction regarding illegal fishing

Unwritten rules and sanction regarding *Sasi laut* violation

#### **Topic 8. Social Identity**

Identity as part of Matbat People to access marine natural resources

Identity as part of Matbat People to implement *Sasi laut* and *Sasi laut* auction

#### Instruction for Closing

*"Thank you very much for your participation, I really appreciate your help!"*

### **1.2. Interview Guide for Non-Matbat People**

#### Instruction for Introduction

*"Good morning/afternoon/evening, my name is \_\_\_\_\_, I am a student of Leisure, Tourism and Environment master program. Currently, I am conducting a research about "Co-management in Sasi laut arrangement." The identity of the respondent will be anonymously named. This research will take around 60 minutes, do you want to participate in this research?"*

If the respondent is answering **Yes**, make sure the following things before starting the interview!

1. Make sure the respondents fit in the criteria and before conducting the interview through screening questions about ethnicity and occupation.
2. Make sure the voice recorder is ready and turned on, then start interviewing
3. Explain about the code of ethics in this study such as anonymity, informed consent form, and confidentiality

#### Opening Questions

1. What is your ethnicity?
2. What is your occupation?

#### Main Questions

##### **Topic 1. Non-indigenous Conservation Establishment**

The history of non-indigenous conservation strategies in Raja Ampat

##### **Topic 2. Conservation Policy and Strategies**

Rules and sanction from IUU fisheries in conservation strategy

*Sasi* in the conservation policy

Incorporation of customary law in marine conservation strategies

Incorporation of traditional ecological knowledge in marine conservation strategies

Incorporation of indigenous rights to access natural resources

##### **Topic 3. Cooperation with Other Stakeholders**

Cooperation with national or local government

Cooperation with indigenous leader religious leader

Participation and decision making of indigenous people in marine conservation strategies

##### **Topic 4. Marine Conservation Education**

Education about sustainability practices to indigenous people and local/migrant

Education about livelihood practices to indigenous people and local/migrant

Education about marine biodiversity to indigenous people and local/migrant

Education about sustainable fishing to indigenous people and local/migrant

##### **Topic 5. Challenge in Marine Conservation Strategies**

The unsustainable behaviour of indigenous and migrant

The challenges to collaborate with indigenous people and migrant in conservation

##### **Topic 6. Conservation Contributed to Livelihood of Indigenous People**

The improvement to marine life due to conservation strategies

The benefit of conservation; tourism and fisheries

#### Instruction for Closing

*“This is the end of the interview, do you have other references for the staff of conservation practitioner that we can interview for this research? Do you mind to give his/her contact? Thank you very much for your participation, I really appreciate your help! See you.”*

## Appendix 2. Informed Consent - English Version

Date of Interview: \_\_\_\_\_

Name : \_\_\_\_\_

Age : \_\_\_\_\_

Occupancy : \_\_\_\_\_

I, the undersigned, confirm that (please tick box as appropriate):

|     |   |  |
|-----|---|--|
| 1.  | I have read and understood the information about the project, as provided in the Information Sheet.   | <input type="checkbox"/>                                 |
| 2.  | I have been given the opportunity to ask questions about the project and my participation.  | <input type="checkbox"/>                                 |
| 3.  | I voluntarily agree to participate in the project.  | <input type="checkbox"/>                                 |
| 4.  | I understand I can withdraw at any time without giving reasons and that I will not be penalised for withdrawing nor will I be questioned on why I have withdrawn.   | <input type="checkbox"/>                                 |
| 5.  | The procedures regarding confidentiality have been clearly explained (e.g. use of names, pseudonyms, anonymisation of data, etc.) to me.  | <input type="checkbox"/>                                 |
| 6.  | If applicable, separate terms of consent for interviews, audio, video or other forms of data collection have been explained and provided to me.   | <input type="checkbox"/>                                 |
| 7.  | The use of the data in research, publications, sharing and archiving has been explained to me.  | <input type="checkbox"/>                                 |
| 8.  | I understand that other researchers will have access to this data only if they agree to preserve the confidentiality of the data and if they agree to the terms I have specified in this form.  | <input type="checkbox"/>                                 |
| 9.  | Select only one of the followings:<br><b>I would like my name used</b> and understand what I have said or written as part of this study will be used in reports, publications and other research output so that anything I have contributed to this project can be recognised.<br><br>I do not want my name used in this project. | <input type="checkbox"/><br><br><input type="checkbox"/> |
| 10. | I, along with the Researcher, agree to sign and date this informed consent form.  | <input type="checkbox"/>                                 |

**Participant:**

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**Researcher:**

\_\_\_\_\_  
Name of Researcher

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

### Appendix 3. List of Participants

All the participants were agreed to include their name in this report without disguise based one oral and/or written consent before the interview.

| Number of Interviews | Name of Participant             | Occupation  | Tribe      |
|----------------------|---------------------------------|---|------------|
| 1                    | Nugroho Prabowo & Lukas Rumatna | Member of The Nature Conservancy  | Non-Matbat |
| 2                    | John Matubongs                  | Member of The Nature Conservancy  | Non-Matbat |
| 3                    | Awaludinnoer                    | Member of The Nature Conservancy  | Non-Matbat |
| 4                    | Eskol Fadimpo                   | Village Youth   | Matbat     |
| 5                    | Latief Macap                    | Local Government Representative   | Non-Matbat |
| 6                    | Hugo Moom                       | Farmer  | Matbat     |
| 7                    | Yefta Mjam                      | Adat Leader   | Matbat     |
| 8                    | Mikha Fadimpo                   | TNC Patrol Ranger   | Matbat     |
| 9                    | Jabri Soltief                   | Member of <i>Himpunan Pramuwisata Indonesia</i> or Indonesian Tourist Guide Association | Non-Matbat |
| 10                   | Karel Burdam                    | Religious Leader (Pastor)   | Non-Matbat |
| 11                   | Gerardus Moom & Yunus Moom      | Adat Leader   | Matbat     |
| 12                   | Kristian Thebu                  | Member of Conservation International  | Non-Matbat |
| 13                   | Rico Moom                       | TNC Patrol Ranger   | Matbat     |
| 14                   | Manase Moom                     | Fisherman   | Matbat     |
| 15                   | Balief Wainsaf                  | TNC Patrol Ranger   | Non-Matbat |
| 16                   | Caleb Fadimpo                   | Local Government Representative   | Matbat     |
| 17                   | Yohanes Fadimpo                 | Adat Leader & <i>Petuanan</i>   | Matbat     |
| 18                   | Yoel Moom                       | Adat Leader & <i>Petuanan</i>   | Matbat     |