

**COMMUNITY EMPOWERMENT IN COASTAL COMMUNITY:
CASE STUDY OF SOCIAL FORESTRY IN NORTH SUMATRA, INDONESIA**

THESIS

To fulfill the requirements of obtaining a master's degree



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MALANG**

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The Approval Statement

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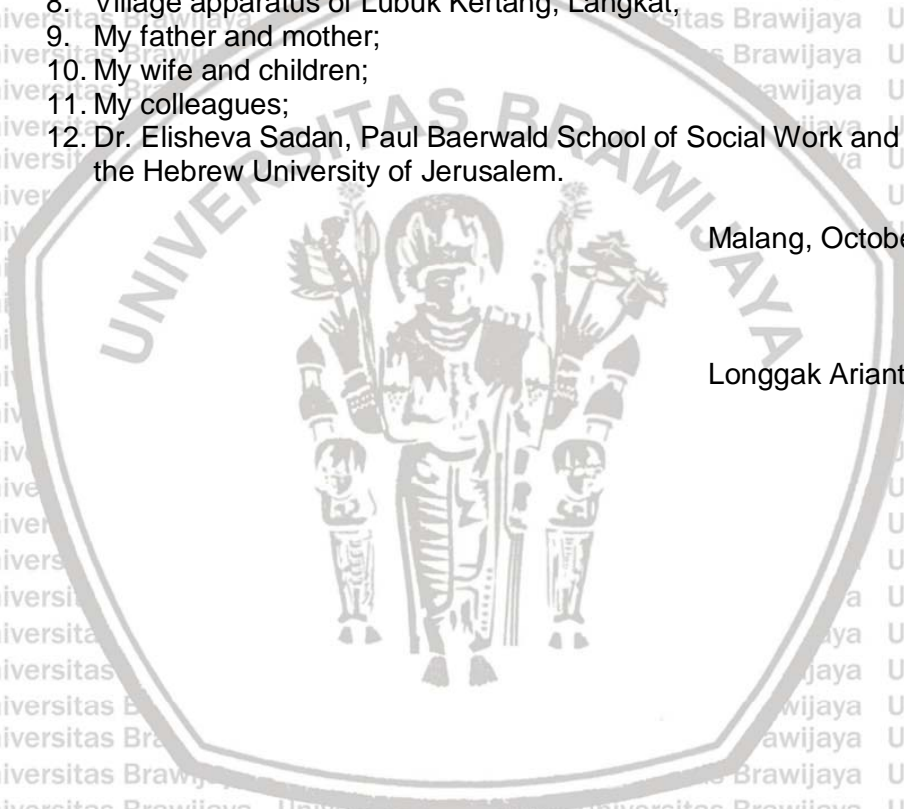
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ABSTRACT

Longgak Arianto Tampubolon, Master of Public Administration, Faculty of Administrative Science, Brawijaya University, Malang, "Community Empowerment in Coastal Community: Case Study of Social Forestry in North Sumatra, Indonesia". Supervisor: Dr. Hermawan, S.IP; M.Si; Co-supervisor: Dr. rer. pol. Romy Hermawan, S.Sos, M.AP

Coastal communities have to be empowered because of their low capacities and reliance on mangrove ecosystem. Empowerment through social forestry aims not only to lift up their capacities but also to delegate authority in managing mangrove. This inquiry tries to analyze the process of empowerment conducted by coastal community by using Sadan's theory (2004) and its constraints. None has used the framework, so it is claimed as a pioneer in social forestry.

According to Sadan (2004), the process of empowerment consists of powerlessness, support, wish, consciousness, confidence and empowered organization. The process is happened both in individual and collective level with influence from external organizations.

Case study (Yin, 2009) is employed in this research through documentation study, in-depth interviews and direct observations. Further, construct validity, external validity and reliability are used to validate the data. In addition, the data is analyzed through self-articulation, manipulating data and information, confirming findings and expert review (Yin, 2009; Hancock and Algozzine, 2006).

Prior to 2013, the group was not fully empowered. The group was established as a prerequisite in government projects. In addition to the projects, the group was inactive. Post 2013, the group is active and conducts regular activities. External interventions are considered to have significant impacts either on individual or group capabilities. However, two constraints are emerged from the process i.e. high dependency on economic incentive and the weak enforcement of rules and sanctions.

This research also suggests to modify Sadan's theory (2004). The finding reveals that the process of empowerment is implemented through powerlessness, wish, support, consciousness, confidence and empowered organization. It is argued that the group needs to raise its wish to reach the support. In other word, the wish is a prerequisite for the support.

Keywords: empowerment, Sadan, social forestry, coastal community

ABSTRAK

Longgak Arianto Tampubolon, Magister Administrasi Publik, Fakultas Ilmu Administrasi, Universitas Brawijaya, Malang, "Pemberdayaan Masyarakat pada Masyarakat Pesisir: Studi Kasus Perhutanan Sosial di Sumatera Utara, Indonesia". Pembimbing Utama: Dr. Hermawan, S.IP, M.Si; Pembimbing Kedua: Dr. rer. pol. Romy Hermawan, S.Sos, M.AP

Masyarakat pesisir harus diberdayakan karena mereka memiliki kapasitas yang rendah dan bergantung pada ekosistem mangrove. Pemberdayaan melalui perhutanan social bertujuan tidak hanya untuk mengangkat kapasitas mereka tapi juga untuk mendelegasikan wewenang dalam mengelola mangrove. Penelitian ini mencoba menganalisis proses pemberdayaan yang dilakukan masyarakat pesisir dengan menggunakan teori Sadan (2004) dan hambatan-hambatannya. Belum ada yang menggunakan kerangka ini, sehingga ini diklaim sebagai yang pertama dalam perhutanan sosial.

Menurut Sadan (2004), proses pemberdayaan terdiri dari ketidakberdayaan, dukungan, keinginan, kesadaran, kepercayaan and kelompok yang berdaya. Prosesnya berlangsung baik pada level individu maupun pada level kolektif dengan pengaruh dari organisasi luar.

Studi kasus (Yin, 2009) diaplikasikan pada penelitian ini melalui studi dokumentasi, wawancara mendalam dan pengamatan langsung. Lebih lanjut, validitas konstruk, validitas eksternal dan reliabilitas dipergunakan untuk memvalidasi data. Sebagai tambahan, data dianalisis dengan artikulasi sendiri, manipulasi data dan informasi, konfirmasi temuan dan ulasan pembimbing (Yin, 2009; Hancock and Algozzine, 2006).

Sebelum 2013, kelompok tidak sepenuhnya berdaya. Kelompok didirikan sebagai salah satu syarat dalam proyek pemerintah. Selain proyek, kelompok tidak aktif. Setelah 2013, kelompok aktif dan melaksanakan kegiatan rutin. Intervensi eksternal dianggap memiliki dampak penting terhadap kemampuan individu dan kelompok. Namun, dua hambatan muncul dari proses, seperti ketergantungan yang tinggi terhadap insentif ekonomi dan penerapan aturan dan sanksi yang lemah.

Penelitian ini juga menyarankan untuk memodifikasi teori Sadan (2004). Temuan mengungkapkan bahwa proses pemberdayaan terlaksana melalui ketidakberdayaan, keinginan, dukungan, kesadaran, kepercayaan dan kelompok yang berdaya. Hal ini karena kelompok perlu membangkitkan keinginan untuk mencapai dukungan. Dengan kata lain, keinginan adalah syarat bagi dukungan.

Keywords: pemberdayaan, Sadan, perhutanan sosial, masyarakat pesisir



PREFACE

By giving thanks to the Lord Jesus Christ, I would like to present this thesis entitled Community Empowerment in Coastal Community: Case Study of Social Forestry in North Sumatra, Indonesia. This thesis analyzes the process of empowerment conducted by a farmer group in Lubuk Kertang, Langkat through social forestry. Initially, local people are powerless because of their physical and social environment. Awareness and external intervention drive them to act individually and collectively. So that they can become empowered.

However, it is realized that this work still has many deficiencies linguistically and technically. Any suggestion is considered helpful to perfect this inquiry. In addition, deeper and wider research is still needed to enrich our comprehension relating social phenomena.

Malang, October , 2019

Longgak Arianto Tampubolon



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LIST OF ABBREVIATIONS

| | |
|-----------|--|
| AD | Anggaran Dasar (statute) |
| ART | Anggaran Rumah Tangga (ordinance) |
| BNI | Bank Negara Indonesia |
| BPDAS | Balai Pengelolaan Daerah Aliran Sungai (Watershed Management Agency) |
| BPHM | Balai Pengelolaan Hutan Mangrove (Mangrove Management Agency) |
| CF | Community forestry |
| CFM | Collaborative forest management |
| CSR | Corporate social responsibility |
| Dishutbun | Dinas Kehutanan dan Perkebunan (Regency's Service of Forestry and Plantation) |
| Dishutsu | Dinas Kehutanan Provinsi Sumatera Utara (Forestry Service of North Sumatra) |
| FUG | Forest users group |
| GNRHL | Gerakan Nasional Rehabilitasi Hutan dan Lahan (National Movement for Forest and Land Rehabilitation) |
| HD | Hutan Desa (Village forest) |
| HTR | Hutan Tanaman Rakyat (Community plantation forest) |
| IDR | Indonesian Rupiah |
| JFM | Joint forest management |
| KLHK | Kementerian Lingkungan Hidup dan Kehutanan (Ministry of Environment and Forestry) |
| KPH | Kesatuan Pengelolaan Hutan (Forest Management Unit) |
| KTP | Kartu Tanda Penduduk (Identity card) |
| Kulin | Pengakuan dan Perlindungan Kemitraan Kehutanan (Recognition and Protection for Forestry Partnership) |
| LPM | Lembaga Pemberdayaan Masyarakat (Community Empowerment Institute) |
| MPA | Mangrove Protection Area |
| MoU | Memorandum of Understanding |
| NGO | Non-governmental organization |
| NKK | Naskah Kerjasama Kemitraan (Manuscript of Partnership Cooperation) |
| NTFP | Non-timber forest product |
| PNS | PT Pelita Nusantara Sejahtera |
| RKT | Rencana Kerja Tahunan (Annual Work Plan) |
| SBB | PT Sari Bumi Bakau |
| VFPMC | Village Forest Protection and Management Committee |
| VLP | Village Land-use Plan |
| Yagasu | Yayasan Gajah Sumatera |



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CHAPTER 1

INTRODUCTION

1.1. Background

Empowerment has become a prominent issue worldwide since development relied on economic growth has been blamed to create inequality (Chambers, 1983; Peet and Hartwick, 2009). The conventional practice of development is not only creating inequality among population (Milanovic, 2016) characterized by a huge wealth gap between the rich and the poor (Chambers, 1983; Peet and Hartwick, 2009) but also in tune with the denial of local community existence. Further, Andersen and Siim (2004) argue that the politics of inclusion and empowerment, and the paradigms of inclusion/exclusion are to underline the close link between issues surrounding economic inequality and the recognition of cultural difference.

Echoing this issue, the notion of development needs to be enlarged (UNDP, 2010), but in specific context (Pieterse, 2010). It emphasizes people's freedom (UNDP, 2010). It also focuses on people as individual and community; uses human resources, social capital, local knowledge, and bottom-up approach; features equality; is based on participation, sustainability and democratization; is conducted through partnership and mutual obligation; is indicated by human development index (Pieterse, 2010). Focus on local circumstance is not negotiable because natural and social orders must be produced together, and nature and society are inseparable (Jasanoff, 2004).

Local involvement usually features greater access and representation applying to all social and economic groups (Goodsell, 2006). These include vulnerable groups in societies such as people which are prone to disasters (Mimaki et al,

2009), elderly population and women (Sodei, 1993), and natural-resource-dependent communities (Kusel, 2001). The latter communities such as coastal communities need to be prioritized and assisted because of their dangerous environments (Kusky, 2008), climatic change (Houghton et al, 1996; Watson et al, 1996), and low level of development (Hossain et al, 2006; Mondal et al, 2006).

Their participation is the most important element because those living in a given area know that area's problems and difficulties very well, and their involvement can lead to better and more effective decisions and initiatives (Argiolas et al, 2009).

Furthermore, the active participation of the entire community can promote long and lasting local development. This participation stimulates the distribution of responsibilities and resources among a plurality of people.

Many nations use empowerment approach in different ways. Developing countries which have abundant forest resources apply empowerment to devolve their discretion in forest management (Balooni and Inoue, 2007). Meanwhile developed countries, such as Japan, employ empowerment in order to strengthen their population in anticipating natural disasters (Mimaki et al, 2009) and to assist their vulnerable groups (Sodei, 1993). Japan is known for its vulnerability to disasters such as tropical cyclones, earthquakes, volcanoes and tsunamis. The government employs empowerment through organization establishment to improve community-based disaster preparedness (Mimaki et al, 2009).

Government assists local communities and groups through financial supports, trainings and sharing information. It is expected that it can promote residents' participation and contribute to building a resilient community.

In developing countries, community empowerment in forest management is considered as a shift in forestry regime from command and control approach to

collaborative governance (Balooni and Inoue, 2007). Previous state-centric mechanism focused on the production of wood and timber (Castañeda, 2000) and practiced unsustainable levels of exploitation of forest resources (FAO, 2016). It has been criticized because it failed to account for a wide range of economic, social and cultural benefits (Wang, 2004), benefited elites and stakeholders in governmental and industrial entities (Lebel et al, 2004), and led to deforestation (FAO, 2016). Furthermore, this has resulted in local community impoverishment (Lebel et al, 2004).

In India, indigenous recognition was not as part of forestry regime and local existence tended to be neglected (Corbridge and Jewitt, 1997), further, local protests directed at state monopoly over commercial extraction and restrictions on subsistence use of the forests become one of triggers in paradigm shift in forestry regime (Baumann, 1998). Indonesian policies on forestry development tend to utilize forest resources through large-scale companies and negate the community in and around forests (Soepijanto et al, 2013). For decades, Ghana's experiences have focused on timber industry and this has marginalized local communities in forest management (Akamani et al, 2015). The Nepalese exclusionary model of forest management has contributed to unregulated extraction, creating conflicts between local communities and government, and these further have led to forest degradation (Springate-Baginski et al, 2003). In addition, facing the depletion of natural forest and to create local-context development, Laos has developed community forestry (Hodgdon, 2010).

Many South and Southeast Asian countries translate shift on forest governance into national policies aiming to increase local livelihoods, and to restore and to protect forest. India adopts joint forest management (JFM) where government sets

forest management objectives while responsibilities and benefits are shared between government and local people (Balooni and Inoue, 2007). Community-based forest management is employed in Philippines in form of responsibilities transfer from government to local communities (Pomeroy and Carlos, 1997; Balooni and Inoue, 2007). Nepal handovers community forestry to forest user groups (FUGs) for their collective management and benefits (Balooni and Inoue, 2007). Laos introduces village forestry which gives villagers control over all aspects of forest management. However, this has evolved become participatory sustainable forest management where villagers are not allowed to sell logs freely to maximize the benefits sharing of revenues from timber sales (Hodgdon, 2010).

Indonesia has similar experience and it is applied in multi-level national regulations. Forestry Law No. 41 of 1999 explicitly states that forest management has to consider local communities and their traditions. Its derivative (Governmental Regulation No. 6 of 2007) also clearly mentions that community involvement can be applied through *hutan tanaman rakyat* (community plantation forest), *hutan desa* (village forest), *hutan kemasyarakatan* (community forest), and *kemitraan* (partnership). Each form has specific scope and mechanism, and is further regulated through ministerial regulations. Except *kemitraan*, all kinds of empowerment are held in no-permit areas and are intended to develop societal capacity and to give community access in managing forest area sustainably in order to create employment, to alleviate poverty, and to solve social matters. It aims to improve local community welfare by means of forest resource utilization optimally, fairly and sustainably while maintaining the sustainability of forest and environmental functions. Its location is considered as area from which local community depend on.

Many authors have revealed the practices of forest governance in developing countries. Agrawal and Yadama (1997) argue that India became the first nation practicing forest devolution in 1931. In 1988, forest policy recognized the importance of local people's involvement in forest management for improving local livelihood and the protection of forest resources (Behera and Engel, 2006). Further, in 1990, the guidelines of JFM were issued. It gives local people management rights. Behera (2009) finds that people awareness in JFM has increased. Realizing that forests have high economic value, local communities tend to protect the forests for collective present and future benefits. In addition, small-size groups are more likely to have better managed forests than the larger size, because smaller JFM communities are more likely to cooperate for collective management and protection of forests than larger communities, as free riding problems can more easily be overcome in small groups. However, JFM implementation faces some problems (Behera and Engel, 2006). First, local groups are very dependent on outsiders such as governmental officers and non-governmental organizations (NGOs). Second, they do not practice appropriate silviculture. Third, rule enforcements are barely applied. Fourth, information asymmetric and rent-seeking practices are existed.

Nepal started its community forestry (CF) in 1975 by giving limited incentive to local users. In 1982, change in policy prioritized people's participation in forest management to fulfil their subsistence needs. The concept of 'Forest User Groups' was introduced in 1987. Further, forests in the Middle hills handed over to FUGs in 1988, and government allocated 47% of investment to support CF. Each FUG is in charge in developing and executing management plans, including the use of forest resources and the level of products harvested (Springate-Baginski et al,

2003). Studies by Yadav et al (2003) and Dev et al (2003) show that FUGs have positive perception on CF. There is a general sense that forest product supply has improved and is more accessible, and that supply has been ensured for the future. In addition, there is also positive changes in the levels and security of forest products and benefit flows. Therefore, household livelihood/income generation gives more opportunities. Furthermore, human, social and physical capital of local people are increased. However, its implementation results in some problems such as marginalization of the poor, elite domination and poor exclusion in decision making, inequity of high royalty charges, disproportionate restrictions of forest use, and less support from government.

Study by Aheto et al (2016) in Ghana elucidate that in 1991, local people established a group to halt the unsustainable exploitation of mangrove and to improve mangrove ecosystem. This group was formally registered with 20 members. In 1992, the group initiated systematic mangrove rehabilitation. It conducted simple silvicultural technique such as collecting wild seedlings, and planting and weeding them. Internally, the group strengthened its capacities and this resulted in greater trust among leaders and members. The experiences have helped all members in gaining credibility in their community. Furthermore, the group reached a deal on benefit sharing between group, local government and land owners. The group has also built effective networks with other local institutions. Massive planting has increased mangrove extent as a result of the socio-economic benefits derived from the initial natural mangrove cover. This activity has also given additional income from mangrove exploitation. In addition, the credibility has created access to credit, loans and investment opportunities.

The rehabilitated mangrove also becomes good grounds for the continued supply

of fisheries resources including crabs, oysters, clams and tilapias. As of 2012, the group members became 43 villagers.

Research on community based mangrove management in Indonesia by Damastuti and de Groot (2017) show that each group has unique characteristic in applying community empowerment. An independent group stimulates self-empowerment in mangrove management. All activities are carried out independently using funds collected from membership dues. However, the activities are only temporary and depend on external funding. Groups assisted by external entities rely their activities on NGOs and government supports. Government assistances are usually in planting activity only, meanwhile NGOs assist local group in long term period including mangrove planting and monitoring, education and training, construction, and income diversification projects. However, some drawbacks are existed. First, community is very dependent on outsiders' help. Second, planting activities are exercised with inappropriate silviculture. Third, elite members still dominate in membership mechanism and project execution.

From many experiences, community empowerment is conducted collectively and needs active participation from all stakeholders. Self-empowerment cannot survive because of group limitations (Damastuti and de Groot, 2017). Outsiders' interventions are needed to strengthen local community capabilities (Agrawal and Yadama, 1997; Behera and Engel, 2006; Springate-Baginski et al, 2003; Damastuti and de Groot, 2017; Sadan, 2004). These interventions can be in the forms of funding, knowledge transfer and capacity building (Springate-Baginski et al, 2003; Damastuti and de Groot, 2017; McDougall et al, 2013). Empowerment results in better local ecosystem (Aheto et al, 2016; Damastuti and de Groot, 2017; Pénelon, 1994), increasing people's awareness (Behera, 2009), positive

perception on community forestry (Yadav et al, 2003; Dev et al, 2003), improving local livelihoods (Behera, 2009; Aheto et al, 2016; Damastuti and de Groot, 2017), increasing human, social and physical capital of local people (Yadav et al, 2003; Dev et al, 2003), and gaining credibility in community (Aheto et al, 2016).

However, the implementation also delivers some relative problems such as local dependency on outsiders, i.e. governments and NGOs, and inappropriate silvicultural practices (Behera and Engel, 2006; Damastuti and de Groot, 2017), elite domination (Yadav et al, 2003; Dev et al, 2003; Damastuti and de Groot, 2017; McDougall et al, 2013; Persson and Prowse, 2017), discriminative treatments (Yadav et al, 2003; Dev et al, 2003; Corbridge and Jewitt, 1997), low rule enforcements (Behera and Engel, 2006; Corbridge and Jewitt, 1997; Persson and Prowse, 2017), information asymmetric (Behera and Engel, 2006; Persson and Prowse, 2017) and rent-seeking practices (Behera and Engel, 2006). In some cases, local people are still timber-oriented (Pénelon, 1994).

Behera (2009) gives warn that promoting collective forest management in a degraded forest may not provide economic incentives for the local communities.

Therefore, people's sacrifice in rehabilitating degraded environment requires trade off especially in short term (Damastuti and de Groot, 2017; Corbridge and Jewitt, 1997). Any funded project is usually coupled with direct benefits to compensate local people works (Damastuti and de Groot, 2017). Persson and Prowse (2017) also stress that government should not restrict local opportunities for generating endogenous benefits, because it will trigger community to be depended on the external sources of funding. Therefore, fund-dependent attitude must be avoided.

Corbridge and Jewitt (1997) and Damastuti and de Groot (2017) suggest that local communities need assistances such loans or grants to set up small businesses.

As a part of coastal environment, mangrove ecosystem gets distinctive attention from many scholars and international institutions because of its unique ecosystems, functions, and existence. Mangrove is only found along sheltered coastlines, in deltas and river banks in the tropics and subtropics (FAO, 2006). Due to its location, mangrove formations are constantly influenced by marine and terrestrial factors which make them salt-tolerant forest ecosystems. This also governs to a great extent the local distribution of species and their succession.

Because of its unique characteristics, mangrove is very important to human populations (Lodhia, 2011; Nguyen et al, 2016). Mangrove ecosystem provides not only goods for fulfilling individuals' needs but also services for general functions.

Many coastal communities rely on mangrove ecosystem for goods and services (FAO, 1994, 2005, 2007, 2016; Ahsan, 2014; Basyuni et al, 2016; Hastuti and Yuliati, 2017; Malik et al, 2015). They utilize mangrove either directly or indirectly through the extraction of wood and non-wood forest products. Uddin et al (2013) report that the average annual revenue of the provisioning services of the Sundarbans mangrove in Bangladesh is estimated US\$744,000 annually. Among all products, revenue earning is highest from timber (US\$0.4 million), followed by fish (US\$0.2 million), thatching materials, fuelwood, crab, honey and wax. Further, the economic value of cultural services is estimated US\$42,000 annually. Study by Singh et al (2010) show that even though the percentages of non-timber forest product (NTFP) collectors are only between 6% and 9%, the contribution of NTFPs is enormous in the total annual household income (79%). In Brazil, as many as 83% of rural households are dependent on mangrove either for subsistence or for commercial mangrove production (Glaser, 2003).

Mangrove also plays an important role in providing habitats for animal species.

Study by Anneboina and Kumar (2017) shows that the percentage contribution of mangrove to marine fisheries is estimated 23 percent giving the monetary value as Rs. 68 billion in India in 2012-2013. Mangrove ecosystems are not only rich in biodiversity but they also serve as protection areas from natural disasters such as cyclones, erosion from sea level rise and tsunamis (FAO, 1994, 2005, 2007, 2016).

Despite its essential benefits, mangrove ecosystem faces many pressures from high population, mangrove conversion, overexploitation and pollution (FAO, 2006, 2007; Ilman et al, 2011; Maryantika and Lin, 2017; Barbier, 2016; Davie, 1997; Kustanti et al, 2014; Malik et al, 2015). Mangrove is losing its habitats (FAO, 1994) and this has resulted in declines in local fish catches (FAO, 2005). The continuing degradation and depletion of mangrove will reduce not only terrestrial and aquatic production and wildlife habitats, but more importantly, the environmental stability of coastal forests that afford protection to inland agricultural crops and villages will become seriously impaired (FAO, 1994).

Because of these situations, the existing mangrove needs to be maintained and the degraded mangrove needs to be restored. Mangrove conservation must involve various stakeholders such as government agencies, NGOs, local communities and scientists (Abdullah et al, 2014; Farley et al, 2010). Besides these stakeholders, Auladi (2013) adds that mangrove conservation through environmental education must also include educational institutions and enterprises. Further, Baral and Stern (2011) state that the success of conservation programmes is depended on marginalized people participation.

Many scholars have studied people empowerment in forest governance and conservation projects. However, it is claimed that these scientists give focus for certain parts such as shortfalls (Akamani et al, 2015; Persson and Prowse, 2017;

Corbridge and Jewitt, 1997), history (Corbridge and Jewitt, 1997; Damastuti and de Groot, 2017), individual level and researcher intervention (McDougall et al, 2013), economic outcome (Damastuti and de Groot, 2017), and participation in projects (Baral and Stern, 2011).

This inquiry tries to relatively comprehend these aspects by including rationales, history, individual and collective level, outsiders' intervention (governmental agencies, NGOs and enterprises), and relative outcomes. By connecting various aspects, its analysis is expected to be comprehensive and the findings can become reference for interested parties. However, it is realized that this inquiry faces some challenges. First, it uses relative outcomes. As Sadan (2004) argue, empowerment framed in social context is a dynamic process and there is no final outcome. Second, it does not consider economic outcomes through quantitative approach.

1.2. Research Questions

From propositions in sub-chapter 3.2. and literature review in chapter 2, research questions are constructed as follows:

- 1) How is the process of empowerment through social forestry implemented by coastal community?
- 2) What are the constraints in the process of empowerment through social forestry implemented by coastal community?

1.3. Research Objectives

Based on research questions and the examination of existing theories, this research tries to:

1) Analyze the empowerment process through social forestry implemented by coastal community.

2) Describe the constraints and possible solutions in the process of empowerment through social forestry implemented by coastal community.

1.4. Research Benefits

1.4.1. Academic Benefits

Some academic benefits derived from this research are:

(1) Researcher has searched the topic of research through Emerald Insight, ProQuest, ScienceDirect and JSTOR with no result. Researcher has used the words “empowerment”, “coastal”, “mangrove”, “forest”, “governance”, “Lubuk Kertang”, “Sadan” and their combinations. It is claimed that the topic has not been analyzed yet. Therefore, it tries to pioneer an inquiry by using Sadan’s theory (2004).

(2) Regarding to the previous argument, it is also to enrich the existing literature.

1.4.2. Practical Benefits

Some practical benefits derived from this research are:

1) The findings will provide basic understanding on empowerment process.

Further, they can support governmental regulations and programs.

2) Constraints and possible solutions can assist local community to improve empowerment process.

CHAPTER 2

LITERATURE REVIEW

2.1. Public Administration

The earlier practices of public administration are characterized by loyalty to certain people instead of state. This usually results in corrupt practices or abuse of governmental means for individual interests. In nineteenth century, the administration of the United States is characterized by spoils system where politicians have a great influence in appointing every administrative job without considering any expertise. Britain has similar system where patronage becomes its main notion (Hughes, 2003).

Administrative reform in the United States is greatly influenced by Woodrow Wilson whereas Max Weber affects Europe. Wilson makes dichotomy between politics and administration. He argues that policy making is the domain of politicians, while administrative apparatus is responsible for its implementation. Administration is also presumed to be anonymous and neutral. Meanwhile, Weber formulates the theory of bureaucracy by introducing merit system. Weberian system emphasizes the importance of an organization and its rules. The idea of bureaucracy is mostly efficient form of organization applied to large organizations either private or public (Hughes, 2003).

The theory of bureaucracy is further influenced by Taylor's scientific management. It fits with the competencies of administrator, the assortment of manuals to deal with every possibility, the advancement of rationality, and impersonality. Mayo's theory of human relations gives influence to the management of public sector. Mayo considers that workers' interests is more

important in increasing productivity rather than economic incentives (Hughes, 2003). Further, Gulick (1937) introduces POSDCORB or Planning, Organizing, Staffing, Directing, Coordinating, Reporting, and Budgeting.

However, the traditional theory of public administration faces some challenges especially bureaucracy problem and criticism in public service (Hughes, 2003).

Two problems emerge from bureaucracy theory i.e. ambiguous link between bureaucracy and democracy, and bureaucracy is considered as an inefficient type of organization. On the other side, public choice proponents criticize the rigid form of bureaucracy. They argue that it is not efficient than market mechanisms. Public choice arguments are reducing public sector roles and emphasize market roles in providing public goods and services.

Traditional approach is considered as insufficient system of administration. The approach has shifted through inducing managerial approach. Two common terms are "public management" or "new public management" (Hughes, 2003). Since the early 1980s Britain and the United States have become two main countries transforming 'public administration' into 'public management' (Chandler, 2010).

The shift changes the traditional administrative model in few aspects. First, it gives greater attention on individual performance. Second, bureaucracy becomes more flexible. Third, the measurement of organizational and personal achievement is conducted through performance criteria. Fourth, higher-rank staff tends to be politically entrusted to government. Fifth, government functions are gradually replaced by private sector (Hughes, 2003).

However, managerialism is also criticized because it is opposed to the attitude of public service, contrary to service provision and not democratic. The capacities of public services are seemed to be disenchanting for several reasons. First, oil

crisis of the 1970s squeezed public service with less budget and fewer staff.

Second, in the 1980s, shift on the management of the public service dominantly derived from politicians, rather than government. Third, economic crisis demanded private sector to enhance competitiveness and management. Finally, the growth of government resulted in an intellectual atmosphere favorable for reducing government roles (Hughes, 2003).

The shift is still continuing along with its implementation. The previous reform characterized by cost efficiency and technical specialization has been replaced with new public management representing a shift of public sector and its connection with bureaucracy and community (Hughes, 2003).

Some perspectives on public management reforms have been phrased by scholars such as Hood (1991), Holmes and Shand (1995), and Pollit (2001). Hood (1991) terms the reform as new public management based on managerial programme. Adopting World Bank and OECD perspectives, Holmes and Shand (1995) regard new public management as a good managerial approach. Pollit (2001), Frederickson et al (2012) and Chandler (2010) argue that new model has some general elements such as focus on result, more measurement on performance, specialized and autonomous organizations, downsizing and decentralizing government's role through public-private partnership (hybrid organization), contractual hierarchical relationship, public service delivery through market mechanism, and efficiency and individualism.

Regardless, new public management has been challenged by some issues.

These issues include economic basis, incompatibility in applying private management, politicization, reduced accountability, and ethical and morale problems (Hughes, 2003). Critiques on new public management has raised debate

on governmental roles and functions. Government is regarded to have fundamental roles differently from private mechanism. It also redistributes income from the rich to the poor. Stiglitz (2001) in Frederickson et al (2012) argues that government also has special responsibility to create institutional infrastructure including adequate policies and authorized institutions to carry out the policies.

The incompatibility of private management induced to public sector has raised another mode of administration. Governance is viewed as general types of governing which are not merely formal government (Hughes, 2003). Governance has reached popularity in expanding the horizon of public administration either in practical field or theoretical field (Frederickson et al, 2012). Although the term of governance is defined and demonstrated in many different ways, it exhibits some generic characteristics. It recognizes the roles among stakeholders i.e. government and non-government (Krahmann, 2003) to promote joint partnership among them in order to improve the performance of the implementation of public programs as well as to reflect the diverse values of citizens and groups in making policies and solving social problems (Jun, 2006). For Peters and Pierre (1998), it is one way to govern society with less intervention from government.

Governance is a general concept, including a various aggregate of factors and a variety of stakeholders. It incorporates intricate activities and interrelations (World Bank, 2009). In Steurer's (2013) argument, governance becomes a general term for diverse types of governing by governmental and non-governmental entities at all geographical tiers and even across them. Moreover, Howlett and Ramesh (2014) and Kettl (2002) state that it is about creating and encouraging a certain form of relation between governmental and non-governmental stakeholders in governing mechanism and delivering public services. Its aim is government

guiding main stakeholders to execute wanted activities in achieving of collective purposes (Howlett and Ramesh, 2014).

Peters and Pierre (1998) indicate that governance is characterized by four basic aspects. First, the importance of networks. Public goods and services are produced by various actors having influence over them. Second, less control from state. Governments can still influence public policy in forms of negotiation in policy networks. Third, the mixture of public and private resources. Governmental and non-governmental entities can mutually complement each other in utilizing resources. Fourth, the application of numerous means. Instead of traditional approach such as command-and-control regulations, indirect instruments such as tax incentives can be employed to persuade behavior.

Governance reforms have become a central issue in policy debates in both industrial and non-industrial governments since the 1980s (Howlett and Ramesh, 2014). Most of these movements are indicated by less direct involvement of government (Treib et al, 2007).

In a simple way, many scholars conclude governance as collaboration (Fairholm, 2010). Governance needs the engagement of various actors in resulting joint decision (Ansell and Gash, 2007). In the recent public administration studies, collective management has become an important issue and the importance of public participation in public policy process has been revealed from their findings (Kumar et al, 2007). The need for collaboration escalates as knowledge is more specific and dispersed and as institutions are more intricate and coordinated (Ansell and Gash, 2007). As a consequence, this situation imposes governmental actors to collaborate with non-governmental actors by considering them as companions in the process of developmental activities (Kumar et al, 2007).

Collaborative governance is defined as an administrative arrangement between governmental actors and non-governmental actors in a collaborative process of decision making in order to create or carry out public policy or to administer public projects or resources (Ansell and Gash, 2007). Even though governments are usually the originators of collaborative governance, it needs cooperation by non-state actors. Collaboration also indicates that non-state entities possess actual obligation for policy results. Thus, it imposes that actors should be directly involved in decision making.

Bosselmann et al (2008) state that some good governance indicators are participation, openness, accountability, transparency and predictability. However, Frederickson et al (2012) argue that governance obviously deal with accountability and legitimacy dilemmas. This possible solution comes from Koliba et al (2011) who provide an accountability structure for governance arrangements in three distinct forms i.e. democratic, market, and administrative, and eight distinct accountability kinds. The structure is originated from an analysis of crisis management responses, and is considered as the most suitable procedure for preventing the blame game among governmental agencies and encouraging a common awareness of general concern. It is expected that all related stakeholders can coincide on primary image of accountability and legitimacy (Frederickson et al, 2012).

2.2. Development

Development is about how to make people life better and meaningful. It means meeting people essential demands such as food, residence, health, basic services, and respect (Peet and Hartwick, 2009). Development aims to make a far better

world for all. However, development conception has developed based on the work of international organizations such as the World Bank (Willis, 2005; Chandler, 2010). Economics becomes its main notion and it is mainly expressed in some wealthy standard such as Gross National Product (GNP), Gross Domestic Product (GDP) and Gross National Income (GNI) (Peet and Hartwick, 2009; Willis, 2005; Ammendola, 2011).

Development rooted in Western history was built in rationality approach.

Science and technology, democracy and social organization, rationalized ethics and values integrate into the sole altruistic project to deliberately and cooperatively create a preferable life for everyone (Peet and Hartwick, 2009). As an ideal concept, development comes from Enlightenment originated in western Europe. It roots on economic concepts influenced by philosophical belief of Western scientific rationalism which entails human emancipation. This emancipation includes scientific application on nature and self-emancipation.

Classical development is influenced by Adam Smith's thought. For Smith, economic growth depends on capital accumulation. Productivity and growth can be achieved through trade and markets and without state intervention. Market has its own mechanism so called "invisible hand". However, Smith's view is criticized by Jeremy Bentham, J. S. Mill and Friedrich List. Their critiques are related to ethical value and state's intervention (Peet and Hartwick, 2009).

Economics moved from social notion to scientific area. Marginalist neoclassical economists constructed the idea of marginal productivity to encompass the replacement of a productive resource for another one in rational production approach. Alfred Marshall's work resulted in an approach of efficiency based on the cost minimization of production. Neoclassical economics is characterized by

market competitiveness, and that market mechanisms generally create the best amount of production and distribution. Government has limited interventions in supplying sufficient education and promoting savings and investment. The theory directs development into capitalism system where economic development is influenced by production efficiencies by realistic producers and buyers meeting in free markets (Peet and Hartwick, 2009).

Keynesian system attacks neoclassical economics by accentuating real investment as crucial variable. An investment will result in multiplier effects and state can intervene the mechanism through monetary and fiscal interventions. In long run, this effort must also be accompanied with technological development. However, economic crisis and political shift cause stagnation in Keynesian economies. Some political actors blamed soft-hearted Keynesianism and preferred to turn back to a more traditional political-economic system (Peet and Hartwick, 2009).

Development economics emerges as a doubt towards the usability of neoclassical economics, with its premises of simply functioning markets, and saw government as being solution to the development progress. Big push theory or balanced growth introduced by Rosenstein-Rodan suggests that development can be achieved through industrialization supported by international investment (Peet and Hartwick, 2009). Some programs started concurrently in various industries may support markets for everyone. However, this approach is criticized by the theory of unbalanced growth. It is based on establishing conditions where citizens are imposed to create investment arrangements by intentionally unbalancing various fields of economy. Another notion of development economics is growth poles characterized by investments in propulsive industries in certain location. The

growth-pole strategy typically focused on investment at some certain locations to promote economic business and thereby increase levels of income and welfare within a region. Development economics is considered as a mixture of neoclassical economics and Keynesianism. Relating to periphery-center relationship, Prebisch (1972) in Peet and Hartwick (2009) suggests import substitution to support industrialization in Latin America. The strategy results in the impressive growth of industry. However, it also causes negative impacts such as expensive, inferior industrial goods and neglecting agriculture, and countries become very dependent on foreign capital.

Many oppositions are addressed to previous mainstreams because of their failures. Based on the hypothesis of rationality, neoliberalism considers market as the utmost factor of the direction of economic growth. Therefore, state intervention is not necessary needed. It is very clear when becoming standard in conventional international economic policy circles mainly Washington Consensus. Its policies could be outlined as reasonable macroeconomic approaches, apparent direction, and liberal market capitalism (Peet and Hartwick, 2009). Structural adjustment applied to high-debt nations by international financial institutions is criticized by Rodrik (2006) as a coercion against specific locality of the Third World. He further introduces three steps in economic development. First, diagnostic analysis of the critical restraints on economic development. Second, proper policy making targeted at the restraints. Third, institutionalizing two previous steps to guarantee that economic growth stays active.

However, development relied on economic growth has been blamed to create inequality. Milanovic (2016) argues that inequality occurs among individuals within a nation, among countries and among all citizens in the world. Peet and Hartwick

(2009) state that its basic ethical aspect does not happen as economic wealth belongs to a small number of people, making the rich richer and more income inequality for most people. In this case, basically economic growth functions to convey resources to the existing rich. In the latest approach, the revolutionary form of growth is basically distinct from the traditional economic development.

Regret with the conventional approach is a progressively general view (Pieterse, 2010). The key is not the national economy but citizen development. To enlarge the context of development, UNDP (2010) conceptualizes human development in 1990 "as a process of 'enlarging people's choices', emphasizing the freedom to be healthy, to be educated and to enjoy a decent standard of living."

Pieterse (2010) says that the alternative of development can be social transformation. Korten (1990) in Pieterse (2010) describes development as a shift against fairness, inclusiveness and sustainability. He further suggests to redefine development as a mechanism by which citizens expand their capacities to organize resources to generate continuous and fairly allocated enhancements in their daily life corresponding with their desires. Sustainability is important because it has to fulfill the rights of the existing without sacrificing the capability of next generations to fulfill their own rights (UNDP, 2010). Ammendola (2011) states that the interaction of ideas such as economic development, fairness, personal development, and the policies related to their enhancement is an aggregate portion of the course of development economics including poverty and institutions.

In contrasting development models, Pieterse (2010) argues that development through social transformation must be originated from local context. It focuses on people as individual and community; uses human resources, social capital, local knowledge, and bottom-up approach; features equality; is based on participation,

sustainability and democratization; is conducted through partnership and mutual obligation; is indicated by human development index. Further, UNDP (2010) states that the inherent elements of citizens' privilege to lead their lives are empowerment, equity, and sustainability. Moreover, empowerment and participation become central themes in development management (Pieterse, 2010).

2.3. Empowerment

2.3.1. Background

Demand for autonomy and independence are existed in human being, and that rights and obligations socially exist together in a specific equilibrium. Even though everyone does not have absolute freedom, individual has to be sovereign from restraints and situations of exploitation, discrimination and suppression.

Sometimes people are restricted to develop their ability so that they cannot be able to act completely. Individuals endure and are abused because of disrespect, apathy, oppression and discrimination. Marginalized people produce powerlessness enforcing their livelihood and destiny (Sadan, 2004). Communities feel tired with helplessness, unfairness and accusing the victim.

The idea of empowerment emerges as an effort to tackle harsh social issues which are hard to overcome (Sadan, 2004). It also appears frequently in governmental policies dealing with poverty reduction (Alsop et al, 2006). The poor has to be supported by fully engaging them in any programme for poverty reduction and local development, and making sure that the programme indicate their needs (Lister, 2004). Empowered activity means escaping from indifference, poverty and feel of irrelevancy that are many people have no influence over what influences them (Sadan, 2004).

The theory develops in social theories trying to link the person and the community, the micro and the macro (Sadan, 2004). From micro view, individual empowerment is a mode of expanding power and leaving the condition of powerlessness. From macro perspective, community empowerment is a common social process mainly aiming at attaining power over environment, and decision-making process in collective level or society. Empowering professional practice is the other significant aspect through which procedures are converted into a practical intervention.

2.3.2. Definition of Empowerment

Sadan (2004) defines empowerment as “power of attorney—authorization to act on behalf of society, a kind of delegation of authority on the social and personal sphere”. It is related with the enhancement of personal or collective ability to create intended preferences and to translate them into wanted activities and goals (Alsop et al, 2006). It is to increase people’s participation and power in decision making and can conceivably result in collective activities in an inclusive way (Andersen and Siim, 2004).

Empowerment process is defined as a shift from a situation of powerlessness to a condition of having power over livelihood and circumstance. Powerlessness can lead to self-confidence deficiency, to neglect towards and seclusion from the environment (Sadan, 2004), in addition to disability to conduct activity (Sadan, 2004; Alsop et al, 2005). Because powerlessness is existed in social systems, empowerment intends to intervene marginalized people and communal arrangement within constraints and opportunities (Sadan, 2004). It leads to the interplay between individuals and social structure and this can increase people

ability to create intended options (Alsop et al, 2005).

People who can control their livelihood and involve in decision making relating to their destiny and circumstance contribute to democratic community collectively (Sadan, 2004). It is expected that these changes can enhance the perceived and real capacity to control. Empowerment not only results in more authority over someone's life but also raises social capital. Empowerment, then, supplies a legalization to social changes on site level.

Empowerment aims to change three aspects of a social state, such as personal sense and abilities, community's life and professional activity. The changes are resulted from three connected practices: individual empowerment, which is related to personal change; community empowerment, which is related to social change; and empowering professional practice, which is related to organizational and practical shift driving the realization of both processes. Sadan (2004) argues that all aspects must be achieved so that people can increase control over their lives.

2.3.3. Individual Empowerment

Individual empowerment can take place in various situations independently separated from the other processes. However, if it is happened over viable participation in social processes it has a unique meaning not only for the individual but also for the environment (Sadan, 2004).

Alsop et al (2006) introduce psychological assets which are very important in empowerment process on individual level. These assets include education, information, mental sensibility, and resources. Experiences have revealed that they are associated with changes in traditional informal institutions. Further, the increase of an asset can simultaneously improve other assets. Consciousness is

the most important asset because it is a prerequisite in translating assets into choices. During empowerment process, an individual can develop critical consciousness. It will allow people to acquire a progressively better comprehension of socio-cultural circumstances that form their lives, and of the scope of their capability to manipulate the circumstances (Sadan, 2004; Zimmerman, 2000). Realization of consciousness will change the self-sense as a meaningless into a self-confident person. It will further result in abilities such as a critical consciousness in political field, a capability to work with other people, an ability to overcome disenchantments and to grapple for control over circumstance (Kieffer, 1984; Zimmerman, 2000).

As an active process, the process of empowerment is shaped by environments and occasions, and is centered on personal activities. The process leads to an assimilation of self-acceptance and self-assurance, socio-political comprehension, and a capability to undertake a prominent portion in decision making and in power over resources in circumstance. Individual empowerment is expressed in the personal level of a multi-stage activities exercised to institutions and public policy (Zimmerman and Rappaport, 1988).

Internal and external changes are two processes in empowerment. Internal change is individual's confidence in making decisions and solving problems. Meanwhile, external process is expressed by capability to do something and to apply practicable knowledge, information, expertise, and other resources (Parsons, 1989). For some authors, internal transformation can be said psychological empowerment and external transformation can be said political empowerment. While the first occurs on the tier of an individual's consciousness, the latter is related with an actual change enabling an individual to participate in

decision-making process that influence one's livelihood. People must understand their state and external coercions suppressing them. The outcome of empowerment depends on how people see themselves and comprehend the environment (Sadan, 2004; Zimmerman, 2000).

To some extent, people need to collaborate and to commit to common concern, and therefore to ignore individual interests. Empowerment is a political concept because it supports this view, and links people with communities and politics (Sadan, 2004). The process in individual level starts with one's self-confidence, moves to interactions with other people, and proceeds with common actions for social change. An intensive extent of individual action makes social relation more effective.

However, individual empowerment is not an exclusive aspect of empowerment because powerlessness is also social problem (Sadan, 2004). In addition, individuals are constrained by social structure (Alsop et al, 2006). Sometimes, people are not powerless because of themselves, but because they belong to a powerless group (Sadan, 2004). Alsop et al (2006) argue that local institutional contexts influence individuals in enabling their ability. Unconductive social structure may be blamed in creating and maintaining inequality and oppression (Sadan, 2004).

2.3.4. Community Empowerment

Individual empowerment can encourage community empowerment. In order to be actualized, it requires resources that come from two sources: individuals, who have interest in acting not only to achieve their own desires, and external agents participated in a social process and supporting in organizing a community and its

abilities to intervene environment (Sadan, 2004).

The process includes creating and organizing a community. It aims to increase people's control over consequences meaningful to their livelihood. A community suffering from prejudice needs abilities to deal with its circumstance and to alter its destiny. The process develops awareness, commitment, problem-solving skills, and political adequacy to improve their life condition.

Communal empowerment is characterized by more real authority of communal organizations so that they can manage their own affairs especially in decision making (Biegel, 1984). It is related to mutual knowledge of issues and their solutions, and abilities in presenting the issues, group leadership, and implementing strategies when residents accept their organization's agenda (Fawcett et al, 1984).

Collective action constructs personal will to mutually cooperate in the course of making decisions, solving issues and mobilizing resources for collective goal. Dynamic democracy, resident participation, recognition of people's right are the center premises of empowerment, and definitely emerge from senses of collective action (Sadan, 2004).

The fruitfulness of community empowerment is indicated by the more degree of empowerment conducting by a community and less interventions by outsiders.

Many scholars argue that this empowerment is articulated in communal capability to raise new humanistic values for people, as an option to malfunctional senses of capitalist system.

However, factors such as social structure, political regime, policy and resources give significant influence to social involvement and character and direction of the empowerment process, and are critical aspects for the possibility of its initiative

(Sadan, 2004). An attention must be considered on a negative effect of empowerment. It can be happened when people who do not participate in the process indeed receive important changes. Empowering people who has no connection with the empowerment approach have to be avoided. Therefore, the empowerment should not focus on final outcomes only, but must pay attention to the process.

For an empowered community, an organizational network is important to respond menaces or to initiate attempts to improve its quality (Sadan, 2004). In addition, institutional networks, heterogeneous leadership and citizens' participatory abilities are the characteristics of an empowered community (Zimmerman, 2000). However, these conditions are rarely attained in most processes. Therefore, we cannot disregard the importance of initial steps in empowerment such as developing people's control over circumstance and creating a community (Sadan, 2004).

When defending its empowered status, it is essential for empowered community to deal with external hazards threatening it. To survive, a community has to act effectively and efficiently (Sadan, 2004). Communal empowerment emanates from the enormous value of attainment coming from securing community's presence, ensuring people's lives, and the struggle itself (Couto, 1989; O'Sullivan et al, 1984).

2.3.5. Organizational Empowerment

An organization is a group of people tied by similar interest to attain some goals (Alsop et al, 2005). Involvement in communal organization is the element of empowerment definition either in individual or collective level (Sadan, 2004). This

combination is twofold, i.e. the individual contribution to the organization and the individual benefit from the organization. Organizations are considered as a channel to empower people and society, and are not the objectives of empowerment.

Community is empowered via organizations, and this can be characterized and recognized by them. Empowered community can be indicated by the establishment of communal organizations (Couto, 1989). It can be also characterized by the refinement of the organization and the extent of its member's coherence. It is argued that organizations made by individuals rather than by external stakeholders have better development such as more stable community, the emergence of a sense of togetherness, and ability for problem solving (Florin, 1989 in Sadan, 2004). Further, Kirst-Ashman (2007) argues that social groups can be used to empower group members internally and to enhance their strength for altering the external environment. This is because communication can expand members' understanding on certain issues, members who have overcome aspects of powerlessness can inspire and motivate others, consciousness among members can be raised, and it can provide mutual support among members and increase communication and cooperation concerning the macro change process.

In framing individual involvement in an organization, Wandersman and Florin (2000) link individual characteristics with environmental characteristics. This connection further emerges a question "when and why do people participate?" Its answer depends on how effective the organization is. Simon (1990) argues that organizations can create empowering environments by providing atmosphere, connections, resources and managerial medium which facilitate their members to manage their lives. These can be further translated into processes such as participation opportunities in making decisions, mutual responsibility and mutual

leadership (Wandersman and Florin, 2000). Leadership also becomes valuable organizational resource and has direct link to affect organization effectiveness.

Leadership skills include facilitation of organizational processes, data collection and evaluation, and execution of organizational activities.

The success of an organization can be analyzed through managerial arrangement, abilities and adaptation (Alsop et al, 2005). Furthermore, beside the organization's success such as effectiveness, networks, and policy influence (Zimmerman, 2000), the presence of communal institutions also becomes an implication of empowerment process (Rappaport, 1984). Both organizational advancement and evolution are fundamentally influenced by the institutional framework (North, 1990).

2.3.6. Some Issues of Community Empowerment

a. Resistance

Community empowerment is developed in unfair circumstances by struggle against the abusive conditions, the alienation and the inadequacy of cooperation on the part of the governmental agencies. Because of indifference and absence of interest happening in the community, people can make a specific degree of group and empowering effort (Sadan, 2004). The process of empowerment may be developed regardless of enmity in a certain mixture of environments and aspects. However, some situations and environments may cause disempowerment.

b. Conflict

Conflict is part of the phenomenon in which community is organized. Any separation between participants and non-participants in community may form a

very frigid framework. Conflicts can emerge if there is indirect but systematic violence toward marginalized people. Violence may manifest in the diverse forms especially when important resources such as knowledge and information are inaccessible for people (Sadan, 2004). Kelly et al (2000) also argue that role design and mechanism may result in conflict if they are not set properly and deliberately. However, for participated individuals, stronger senses of political potency can be resulted from conflicts. Losing friends resulted from the conflicts can encourage them to develop new friendships (Zimmerman, 2000). Therefore, a decision to face or to avoid conflict needs a critical awareness.

c. Awareness

According to Couto (1989), awareness is important for community empowerment. It is considered as a process of how community discovers its weakness. Empowerment is more than activities; it also includes reflection. Realizing external sources of problems is also important for people's comprehension against pressures on enhancing their circumstance and empowerment. Awareness is about how community evaluates its power and asset and of how to positively employ these. Critical awareness may also help individuals to deal with conflict, and to recognize and manage resources required to attain intended purposes (Zimmerman, 2000).

d. Organizing Community

One of empowerment principles is self-managing among people over typical similarities. Because its context is coping with hard reality of seclusion and indifference, it can only be exercised in a steady and continuous relations with

other people (Sadan, 2004). An organizing activity transforms a group into a community, while a group is made up of citizens with similarities such as age, gender, race, occupation, etc. The absence of organization can limit individuals' strengths and understandings of reality. Organizing a community is an initial stage to provide a tangible arena for its members.

e. Outcome and Product

Empowerment is expected to change marginalized people into more capable ones. Citizens having a common goal or experience turn into a community with advanced abilities and impacts of which disperse outside its location. Empowerment is an active mechanism, and thus has no final or absolute outcome. It is an ongoing process that encourages the ability to successfully act in adjusting environments. The process can be differentiated from the outcome where the former encompasses a sense of power and skill to successfully act, and the latter is considered as actual skills to effectively act (Staples, 1990).

The process of empowerment has a close relation with its outcome (Sadan, 2004; Alsop et al, 2006). The success of empowerment at certain time can be determined through outcomes of its process. The outcomes are the existence of common actions, the effectiveness of decision making, the degree of its purposiveness, the organizational standard of common actions, and the utility of this standard to communal concerns (Sadan, 2004). Further, Matton and Salem (1995) add that qualified leadership encourages members to adopt and to commit to organizational principles. It can also develop organizational needs, keep organization harmony, and counter dynamic circumstances.

Community empowerment depends on context, environment, behaviors and

circumstances. Its study intends to analyze some aspects such as personal interests and characters in empowerment, professional activities, and organizational system. The specific contents of empowerment can be varied, nevertheless they must cover activities either contributing to the development of people and collectives, or having a positive contribution on circumstance (Hegar & Hunzeker, 1988).

2.3.7. Empowerment as a Professional Practice

As a concept, empowerment was emerged in the situation of professional discussion on societal disputes. Empowering professional practice is systematized intervention aiming at strengthening empowerment processes in individual and communal level (Sadan, 2004). It is also to encourage people so that they can have better control over their lives and environment (Sadan, 2004; Zimmerman, 2000).

Professional activities through learning process also try to develop people's ability either to deal with common disputes or to develop common resources.

Training may improve people's abilities and knowledge in order to have control over their lives (Zimmerman, 2000). It advances intervention ways so that citizens can enforce adjustments in their livelihood (Sadan, 2004). Empowerment educates people on how to take part on social life, to employ social abilities, to utilize relational impacts, to build commitments, to have responsibilities and to get political abilities.

Even though empowerment can be carried out without practitioner's input, theoretically, the discourse of empowerment is mixture between practical and theoretical approach. Many people have insufficient ability and need outsider

intervention in order to free them from weaknesses (Sadan, 2004). Damastuti and de Groot (2017) prove that self-empowerment cannot survive because of group limitations.

The process of empowerment creates a synergy developing its maintenance and reproduction (Katz, 1984). When it runs, professional activity is applied, and it can result in effectiveness and legitimation from the system. However, the process also limits the professional practice based on the need for its services. For empowered community, professional intervention is no longer needed.

2.3.8. Empowerment Process

In developing the theory of empowerment, Sadan (2004) adopted structuration theory (Giddens, 1984). She argues that his theory is critical and comprehensive, directly connects to theory of power, and ties micro and macro events in an analysis. In addition, Ritzer (2011) argues that its strength is it integrates micro and macro levels of inquiry very well.

The basis of duality of structure is applicable for both empowerment levels (Sadan, 2004). It underlines a crucial facet of the process of empowerment i.e. empowerment may exist in the terms of either individuals' abilities or social structure. Giddens (1984) links social structure with citizens where empowerment in community level can reinforce individual level. Therefore, empowerment is considered as a continuous process of social change by which people's abilities and common resources can be activated.

Communication is very vital in empowerment. Both individuals and organizations must create effective communication and avoid misunderstandings.

Two barriers that must be avoided through meaningful communication are lying

and distortion (Kirst-Ashman, 2007). The quality of communication depends on how information is transferred. It also gives empowered individuals ability to comprehend their situation and relationship with other people (Sadan, 2004). Normatively, people also learn to regard newly certain social norms affecting them by taking part in ethical communication and adjusting it.

This situation explains how individuals' ability affect some changes in social structure. However, one cannot express his own power without connecting it to the current structures. Individual potency ties its energy from structural shapes of control entrenched in social systems (Clegg, 1989). Even though, the process of empowerment relies upon the existing state of community, its realization is defined by alterations on individual level, collective level, and social systems. Further, Alsop et al (2005) argue that people can be effectively empowered through equitable rules and expanded entitlements so that they are allowed to translate their resources into effective abilities.

Community empowerment relies highly upon allocative resources and authoritative resources. The former is material resources such as raw materials, technologies, and products resulted from the mixture of previous resources. The latter is organizational resources consisted of the organization of daily social life, human beings in mutual association, and life chances (Giddens, 1984).

Access to these capitals will determine one's capability to act and to influence. Empowerment shapes dynamics in personal behavior and in the social structure.

According to Maton and Rappaport (1984), individual and community empowerment can have a mutual reinforcement.

Theoretically, using expected outputs in each step, the process of empowerment is as follows (Sadan, 2004):

1. A sense of frustration originated from an unbridgeable gap between hope and chances to realize it triggers the empowerment process in most cases. People discover that effort to actualize their hopes relies on their capabilities and unreachable resources (Kieffer, 1984).

2. At first, this feeling must be espoused by initial capability and resources to facilitate arranged action, and social support to allow the action (Sadan, 2004).

Cislaghi et al (2016) mention this phase as community enabling conditions i.e. support from family, friends, community leader and community as a whole.

3. Empowerment commences when people have an intention to acquire means and resources to expand capability in achieving something in their livelihood.

Mobilizing provision and wish is considered as the initial output of empowerment (Sadan, 2004). It is also community enabling conditions in term of desire for better knowledge and life, and aspiration to work together (Cislaghi et al, 2016).

4. The acknowledgement of people's right in expressing their hopes and people's ability in defining them is considered as a result of the development of a critical consciousness in the current state (Freire, 1985 in Sadan, 2004).

5. People feel confident about their ability to seize results (Bandura, 1997). This can be considered as an attainment concerning a meaning of personal competence to deal with daily life. Individual potency can result in mutual potency if it is transformed into collective practical ability to arrange itself for a common action to attain goal in circumstance. This can result in unsettling experiences (Cislaghi et al, 2016). However, people will expand their aspirations and visions, experience voice equality, see oneself in new ways, and increase self-understanding.

6. The process continues through resources mobilization by individuals, including establishing and arranging communal institutions. These can be considered as outputs of empowerment process (Mann, 1986). This becomes an evidence that individuals can securely apply their continuous skills to attain results such as controlling their livelihoods, participating in making decision, and influencing circumstance. In this stage, Cislaghi et al (2016) argue that there is a consonance of values and practices. Individuals and collective will transfer their abilities to daily activities. In the longer term, outsiders will see the community as changed and this will further strengthen collective efficacy.

Since empowerment is situated in social context, the arrangement is hypothetical and can be different depending on the process of empowerment. Any change happened in the process depends on the initial situations.

2.4. Forest Management

2.4.1. Forest Management

Many scholars and institutions define forest in many ways. Lanly (1995) defines forests as "all vegetation types in which the trees constitute the dominant woody element, with the crowns covering more than 10% of the ground". Forests are viewed as primary product of great economic importance (Young and Giese, 2003). Many countries utilize their forests aiming to supply local demand and to fulfill external market.

Guldin and Guldin (2003) give a short definition of forest management as a way to organize a certain area of forest in order to produce forest products. In broader term, Buongiorno and Gilless (2003) and Gene (2007) add other activities such as

the utilization and preservation of forests and their products.

Practically, management of a forest area integrates silvicultural activities and economic considerations to attain some desired goals (Bettinger et al, 2009).

Silvicultural techniques can be site preparation, nursery activities, tree regeneration, weeding, climber control, liberation operations, improvement, salvage, control of tree growth (Fujimori, 2001). Meanwhile economic aspects include the need to make a profit (Bettinger et al, 2009).

Most governments make guidelines on forest management through policy instruments. These regulations are usually mandatory for permit holders and voluntary for private landowners (Bettinger et al, 2009). In Indonesian sphere, Law No. 41 of 1999 concerning Forestry describes that forest management consists of forest arrangement and planning, forest utilization, forest rehabilitation and reclamation, and forest preservation and conservation. Forest arrangement is conducted by dividing forest into blocks and compartments in order to manage the forest intensively, optimally and sustainably. This division further become basis on forest planning for certain period. Then forest is utilized through appropriate mechanism. Forest utilization includes wood, non-wood forest products and ecological services. Meanwhile forest rehabilitation and reclamation aim to recover its ecological condition. In addition, preservation and conservation are intended to preserve some certain types of forest.

According to Indonesian Constitution, all forests are controlled by state and government is authorized for administering them. Under the New Order regime, government managed 143 million ha of forest (Barr, 1998). Local governments had almost no role in forest administration (Barr et al, 2006). The commercialization era of forest resources began in 1960s when government introduced system of forest

concessions (Chandrasekharan, 2005). In the next decades, the number of concessions always increased annually. This was followed by the increase in wood processing industries. This uncontrolled growth drove overexploitation and overutilization of forest products. Further, current practices of forest management by private companies has resulted in rampant illegal logging (ITTO, 2001). ITTO (2001) reports that production of logs from illegal sources is between 30 and 50 million m³ per annum, meanwhile the production of legal wood is approximately 20 million m³. Moreover, from demand-supply perspective, annual industry capacity is 74 million m³, meanwhile the production is only 23 million m³. This shortage is suspected to come from unclear sources (Wardojo et al, 2001).

Most forest concessionaires did not manage their areas properly and failed to comply the prevailing regulations. This situation has triggered government to rearrange its policies and practices by conducting performance appraisal of concessions. However, the results were very disappointed. Most concessions were not technically and financially feasible (Chandrasekharan, 2005).

Decentralization in 1999 changed regime direction in forest management. District governments received significant discretion in forest management (Chandrasekharan, 2005; Barr et al, 2006). However, this shift did not run well because they were not technically and institutionally ready (Chandrasekharan, 2005). To counter this situation, Ministry of Forestry tried to redesign forest decentralization by recalling district's authority in forest management (Barr et al, 2006).

2.4.2. Mangrove Management

Mangrove ecosystem is characterized by coastal plant compositions (FAO,

1994). Mangroves are salt-tolerant forest ecosystems and have a well adaptation to tidal environments (FAO, 2006). They only exist on tropical and subtropical coastlines (FAO, 1994, 2006).

Globally, in 2010, the area of mangrove ecosystems is approximately 15.6 million ha, compared to 18.8 million ha in 1980. Most mangrove ecosystems exist in Indonesia, Brazil, Nigeria, Australia and Mexico (FAO, 2006, 2010). In the 1980s, 185.000 ha of mangrove vanished annually (-1.03%) and the area still decreased 105.000 ha per annum (-0.67%) during the 2000–2005 period (FAO, 2005).

Summarizing the existing references, Ilman et al (2011) states that area of mangrove in Indonesia varies between 2,930,000 ha and 7,758,410 ha. Revising FAO's (2007) calculations, Rahman and Asmawi (2016) states that Indonesia had 3,062,300 ha of mangrove and during 2000-2005, the annual change was -1.6%. North Sumatra itself had 103,425 ha in 1977, but it remained 41,700 ha in 2006, a loss of about 59.68% (Onrizal, 2010).

Mangroves have a great function in providing suitable habitats for coastal species. These ecosystems are known as rich-biodiversity sites and can mitigate impacts of natural disasters (FAO, 1994, 2005, 2007, 2016). People also utilize mangrove landscapes for educational, scientific and recreational purposes (FAO, 1994, 2016).

The uses and values of the products obtainable from mangroves are many and important (FAO, 1994). Most people in coastal area highly depend on mangroves for daily needs (FAO, 1994; Ahsan, 2014; Basyuni et al, 2016; Hastuti and Yuliati, 2017; Malik et al, 2015). They utilize mangroves either directly or indirectly through harvesting timber and non-timber forest products (FAO, 1994, 2005, 2007).

Even though mangrove provides various essential benefits, mangrove

conversion is unavoidable due to pressure from population in coastal areas (FAO, 2006, 2007; Ilman et al, 2011; Maryantika and Lin, 2017). Overexploitation and pollution have fragmented and degraded mangrove area (FAO, 2006; Barbier, 2016; Davie, 1997; Ilman et al, 2011; Kustanti et al, 2014; Malik et al, 2015). Further, mangrove area is gradually decreased. This reduction becomes a serious cause of environmental and economic issues to developing nations. Consequently, the ecological resistance of coastal environment that provides protection to inland agriculture and dwelling will become critically damaged (FAO, 1994).

Mangroves are practically easier to manage compared to other types of forest. However, there is a need to adopt an integrated approach in their management. Mangrove utilization must consider ecological and social aspects. In particular, mangrove management should consider the existence and need of local people (FAO, 1994).

FAO (1994) describes that mangrove management must at least include five activities such as planning, silviculture, harvesting and extraction, conservation, and monitoring and evaluation. Planning consists of three levels according to its periods. First, long-term planning focusing on land use. It includes activities and information such as mapping, surveys, land-use, legal and institutional issues. Second, medium term describing forest management. It includes activities and information such as mapping, surveys and forest inventories, silviculture, and utilization. Third, annual planning detailing operational activities. It includes activities and considerations such as forest inventory, silviculture, harvesting, marketing, conservation, human resources, construction and maintenance of infrastructure.

Silviculture is applied in term of the choice of silvicultural system, the choice of

species, regeneration, weed control, disease and pest control, thinning and the choice of rotation. Meanwhile harvesting is related to the felling plan and the selection of harvesting system. Conservation and protection mean maintaining biodiversity, controlling erosion, maintaining natural reserve for avifauna, fishery and other wildlife, and allocating area for recreational and educational value. Furthermore, some activities in monitoring and evaluation are making activity/technical and financial report, archiving plan and implementation, supervision, and plan evaluation and revision.

Management of mangrove in Malaysia has been conducted by Chandrasekharan (2005). Mangrove forest is managed by Perak State Forestry Department. It covers a total area of 40,151 ha. Its management has considered comprehensive aspects and is arranged continuously. The main goal is continual production of mangrove, with provision for preservation of the ecosystem.

Besides wood, non-wood products are also limitedly harvested. Mangrove ecosystem also supports fishery such as capture fisheries, aquaculture, and traditional fishermen. Moreover, ecotourism also emerges as an alternative business.

The tenable utilization of mangroves has contributed not only to government income but also local entity revenue. Mangroves have supported government income of US\$ 425,300 annually. Meanwhile the direct tangible economic value is estimated US\$ 42 million. The succeed of sustainable management of mangrove ecosystem in Matang is supported by contributing factors such as a strong policy and legal framework; high quality of planning, implementation, supervision and monitoring; strong and continuing political commitment; regular revision of management plans; clear objectives of management; long-term security of

concession tenure; support for local educational and research organizations; adequate staffing; and the goodwill of the local community.

2.5. Social Forestry

From the view of economic, forests provide many tangible and intangible benefits that support socioeconomic livelihoods (FAO, 2014). However, this ideal does not reach people who should be entitled. Historically, the core of forest management was frequently on sustaining timber production (Castañeda, 2000; Chazdon et al, 2016), it was centralized (Datta and Varalakshmi, 1999) and it neglected local communities (Datta and Varalakshmi, 1999; Sabogal et al, 2013). Forest administration has marginalized local people (Mohammed and Inoue, 2014). This conventional practice has been challenged because it fails to consider various forest functions (Castañeda, 2000). Wang (2004) argues that there should be more to managing forests than just timber extraction.

Jasanoff (2006) argues that we cannot separate natural system from social system and vice versa. Many poor people in rural areas are very depended on forests (FAO, 2014). Many scholars argue that rural families depend on forest products to meet their subsistence including food, firewood and/or medicinal plants (Byron and Arnold, 1997; Shanley, et al, 2008; Aigbokhaevbo, 2013; Hamade, 2016; Rai et al, 2017; Matiku et al, 2013; Sabogal et al, 2013). Furthermore, they also generate income from selling forest products. Byron and Arnold (1997) state that forest product extractions can become an important additional source of income especially when villagers experience crop failure. Forests can become an economic safeguard for forest-adjacent people.

In explaining the relationship between forests and indigenous people, Kusel (2001) introduces forest-dependent communities as people living near forests and having a high dependency on forest resources. Their dependence relates to not only timber but also non-timber, such as amusement and ecotourism (Power, 2006). Because of their dependency on and intimate relationship with forests, indigenous communities must be considered in managing forests. In this circumstance, local people and their environment are arranged along similar economic channel (Aicher, 2014) and their reliance indicates an obvious link between their livelihoods and forest resources (Matiku et al, 2013).

Out of political shift, devolution in forest administration is usually based on severe local socioeconomic conditions. Akamani et al (2015) argue that local communities experienced poverty due to farmland degradation, less income and employment and inadequate basic infrastructure. They also lacked institutional competency and had no chance to participate in forest management. They were legally excluded from generating benefits from the adjacent forest. Even though government legally controls forests, it is argued that government fails to effectively manage forests. Forests become open access and may be exploited by everyone (Rai et al, 2017).

Datta and Varalakshmi (1999) argue that the absence of customary rights recognition of and the lack of emphasis on the subsistence functions of local dependent populations have contributed to the massive destruction of forests.

Further, Baumann (1998) argues that local riots addressed to government monopoly over commercial utilization and prohibition on traditional use of forests become one of triggers in paradigm shift in forestry regime. Forest needs to be governed by people, stakeholder groups, and institutions through acquiring and

exercising right in managing forest resources in order to maintain and to enhance the degree of life for those whose livelihood rely upon forests (World Bank, 2008).

Echoing World Bank, FAO (2012) explains that this relates to how local people assure access to, manage, conserve and benefits from forests.

Local involvement in forest management is important because communities living in certain part of forest know the area characteristics sufficiently, and their participation can lead to more effective management (Argiolas et al, 2009).

Furthermore, the active support of community can promote long and lasting local development. This participation prompts the dispersion of responsibilities and resources among local people. In contrast, Tolo (2013) argues that the abandonment of the public participation in forest governance can lead to the failure of forestry decentralization.

Participatory governance in the course of forest management has been studied by many scholars and its practices have varied terms such as collaborative forest management (Mohammed and Inoue, 2014; Rai et al, 2017; Akamani et al, 2015; Akamani and Hall, 2015), participatory forest management (Worah, 2008; Matiku et al, 2011 and 2013; Obiri and Lawes, 2002; Mongbo, 2008; Mohammed and Inoue, 2013; Purnomo et al, 2017; Lund et al, 2009), joint forest management (Obiri and Lawes, 2002; Corbridge and Jewitt, 1997; Appiah, 2002; Pradhan and Patra, 2013; Behera and Engels, 2006; Behera, 2009; Desai and Sidhu, 2017; Djamhuri, 2012; Datta and Varalakshmi, 1999; Matta and Kerr, 2006), community forestry (McDougall et al, 2013; Robinson, 2010; Vernon, 2007; Oyono et al, 2012; Pacheco, 2012; Paudel et al, 2012; Lyman et al, 2013; Poudel et al, 2014; Stapp et al, 2016; Sikor, 2006; Dressler et al, 2010; Persson and Prowse, 2017; Glasmeier and Farrigan, 2005; Beukeboom et al, 2010; Lawler and Bullock, 2017),

community-based forest management (Kumar et al, 2007; Nelson et al, 2008; Brown and Lassoie, 2010; Matose and Watt, 2010; Ribot et al, 2010; Sakurai et al, 2004; Adhikari, 2005; Soltani et al, 2014; Ianni et al, 2010; Saunders et al, 2008; Takahashi and Todo, 2012; Wakjira et al, 2013; Chomba et al, 2015; Porter-Bolland et al, 2012; Lee et al, 2017; Cheng and Sturtevant, 2012), co-management (Folke et al, 2005; Berkes, 2010; Kubo, 2008; Kimdung et al, 2013; Matose, 2006), community-based co-management (Ting et al, 2012; Chen et al, 2012), and social forestry (Maier and Abrams, 2018; Djamhuri, 2012).

Many authors agree that various stakeholders are involved in forest governance practice i.e. governmental agencies, local people, and NGOs. The former usually devolves authority on forest management to local community and the latter assists local people in exercising their discretion. The degree of devolution is varied from fully authorized to least authorized (Mohammed and Inoue, 2014).

Besides to improve local livelihoods, the underlying principle of community forest is people's willingness in preserving forest that is adjacent to them (Rai et al, 2017). Generally, indigenous people are organized into groups or cooperatives (Mohammed and Inoue, 2014; Rai et al, 2017; Akamani et al, 2015; Matiku et al, 2013) and through this collective, government delegates authority to local community in forest management by means of agreement signed by both parties (Mohammed and Inoue, 2014).

NGOs play major and dominant role in these processes. Their roles are happened in almost all activities such as establishing group (Akamani et al, 2015) and facilitating community in courses and livelihood exercises (Mohammed and Inoue, 2014). Prior to management practices, it must be started with management

plan (Mohammed and Inoue, 2014; Rai et al, 2017). In some cases, government and NGOs assist local people in developing forest management plans (Mohammed and Inoue, 2014). Groups and its members are also assisted on how to undertake management activities (Mohammed and Inoue, 2014; Rai et al, 2017). They also establish norms relating rights and obligations among participants (Akamani et al, 2015).

In practicing social forestry, local communities employ accountability practices either internally or externally (Mohammed and Inoue, 2014). For its internal environment, members and leaders apply mutual accountability. The former is accountable to the latter, who are authorized to impose rules and penalize rule breakers. Contrarily, the latter is accountable to the former through regular election. In addition, the accountability of groups to government is based on the agreement signed between them. Government can recall the permit if the forest is improperly managed.

In certain conditions, groups are given a leeway by authorized agencies to harvest and to sell forest products. Decisions to do these are based on specific regulations. However, groups sometimes need written permission in term of income generation from selling certain forest products (Mohammed and Inoue, 2014).

It is argued that local empowerment through community forest enhance human capital of groups and their members. Devolution improves access to important forest resources and allows community to sell them in order to increase income. Local people are also allowed to utilize logs for housing (Mohammed and Inoue, 2014). In addition, since they have rights in managing and protecting forest, threat from illegal logging has been decreased.

However, these benefits are also accompanied with negative situation and impact. Mohammed and Inoue (2014) and Rai et al (2017) report that the unequal distribution of benefit between the poor and the rich, and between gender is still existed. In addition, elite capture is a common phenomenon in some cases (Cinner et al, 2007). Rai et al (2017) further warn that the exclusion of the poor users from the benefits of collaborative governance may create a social conflict in the long-run.

Furthermore, local population pressure on forest threatens environmental outcomes. It is mainly because overutilization of forest (Mohammed and Inoue, 2014). A dilemma also occurs in tradeoffs between economic and ecological outcomes in social forestry. For specific case where villagers can only make income from timber plantation and are burdened to conserve the remaining natural forest, the increasing sales will frustrate environmental outcomes. The continuous harvesting of planted woods will drain the plantation and will have less incentives to conserve natural forest.

The other factor affecting income generation is local susceptibility and socio-economic situations such as average farm holding, household size and less-productive farmland. If these conditions exist improperly, forest existence will be threatened because this will force villagers to seek any chance that guarantees their livelihoods (Mohammed and Inoue, 2014).

2.6. Coastal Community

In the simple meaning, coast is where land and ocean meet (Kay and Alder, 1999; Charlier and Charlier, 1995). This "meeting" cannot be clearly defined because the natural processes are highly dynamic in forming coast (Kay and Alder,

1999; Kusky, 2008; Charlier and Charlier, 1995; Lodhia, 2011). The dynamics is usually influenced by the rise and fall of tides and passing of storms (Kay and Alder, 1999; Charlier and Charlier, 1995). Therefore, coastal regions are very fragile (Lodhia, 2011). Some parts of the coastal environment have strong interactions between land, sea and atmosphere (Kusky, 2008) such as beaches, coastal marshes, mangroves and coral reefs (Kay and Alder, 1999; Kusky, 2008).

Because of its unique characteristics, coast produces diverse and productive ecosystems which are very important to human populations (Kay and Alder, 1999; Lodhia, 2011; Nguyen et al, 2016). Coastal uses are resource exploitation, infrastructure, tourism and recreation, and biodiversity conservation (Kay and Alder, 1999; Gowing et al, 2006; Lodhia, 2011). Local resource-dependent livelihoods are very depended on agriculture, shrimp farming, fishing and mangrove (Gowing et al, 2006). Coastal villagers usually cultivate low-yielding crops because of local varieties, soil salinity, and lack agricultural infrastructure (Mondal et al, 2006).

Low agricultural result and the tempting economic value of shrimp make shrimp farming became very interesting in this area (Mondal et al, 2006). Many local people convert mangrove to ponds (Barbier and Sathirathai, 2004; Kay and Alder, 1999; Charlier and Charlier, 1995; Adger, 1999). Some households operate small-scale shrimp farms in traditional way, with little or no scientific assistance and limited access to credit (Vandergeest et al, 1999). The poor usually hire their lands to the rich (Majid and Gupta, 1997). They are also economically susceptible on fisheries resources for subsistence and income generation (Kay and Alder, 1999).

Coastal forestry focusing on the commercial and subsistence exploitation of mangrove stands has resulted in rapid loss of mangrove coverage (Kay and Alder,

1999; Gowing et al, 2006). Further, the conversion of land to ponds has also contributed to mangrove loss (Kay and Alder, 1999; Barbier and Sathirathai, 2004; Charlier and Charlier, 1995). This loss can adversely affect shoreline stability and local livelihood (Kay and Alder, 1999). In addition, inland practices, such as forestry and agriculture, can have indirect impacts such as increased sedimentation due to soil loss and herbicides and pesticides.

As population increases, people's interests also grow. Consequently, the competing uses of coast engender the intense and long-standing pressure on coastal resources (Kay and Alder, 1999; Goldberg, 1994; Gowing et al, 2006; Mondal et al, 2006; Charlier and Charlier, 1995). Population pressures, land conversions, exploitative utilizations and the indirect impacts of inland practices have resulted in environmental and human problems (Gowing et al, 2006). Environmental problems can be in form of mangrove and aquatic habitat destruction, water pollution, land salinization and acidification, spread of aquatic animal diseases, negative effects on biodiversity, and negative impact on vegetation cover and terrestrial livestock. Meanwhile human problems are in term of restricted access, loss of land, reduced employment opportunities, loss of subsistence fishery, increased vulnerability, health and social impacts, and increased inequity and social unrest.

Kusky (2008) argues that as a home for almost half of global population, coastal area is considered to be one of the most dangerous environments, being the site of most of the global deadliest disasters. Coastal environments and communities are threatened by climate change (Houghton et al, 1996). Coastal areas may face primary impacts as a result of a change in the risk of storm impacts, changes in ocean temperatures or rising sea level alongside secondary effects as changes in

economic performance and human well-being (Watson et al, 1996).

Many current studies suggest that sea level is always increasing and affecting some of the most dramatic and costly environmental changes (Kusky, 2008).

Malaysian study by Alam et al (2017) show that climate change can severely affect household food security. These disasters make coastal communities characterised by less development (Hossain et al, 2006; Mondal et al, 2006) with high population density (Rawlani et al, 2011), lower incomes (Alam et al, 2017; Christensen et al, 2007) and income inequality (Adger, 1999) become more vulnerable (Cuevas, 2011; Mustelin et al, 2010; Bindoff et al, 2007; Wong et al, 2014; Bigano et al, 2008; Nguyen et al, 2016; van Putten et al, 2014; Rawlani and Sovacool, 2011; Lodhia, 2011). Susceptibility of coastal people and their response to these disasters may also be affected by anthropogenic disruptions (Ellison and Strickland, 2015).

2.7. Previous Studies

(a) Collaborative Forest Management in Ghana (Akamani et al, 2015)

Ghana adopted collaborative forest management (CFM) in 1994. It was partially shaped by international issues on sustainable development and forestry. Under the CFM program local people are arranged into collectives and these groups are further involved in agroforestry and other forestry projects. Its common characteristic is the sharing of benefits and responsibilities among concerned stakeholders.

Local communities have an obligation to protect forests from fire and illicit activities. Consequently, they can plant agricultural species in the first few years of plantation creation. In sharing the benefits, villagers get all incomes from their food

yield, and 40% of incomes from planting trees. Meanwhile government's responsibilities are supplying seeds, organizing course and extension activities, and providing funding for the program. NGOs have important role in establishing groups and empowering them.

However, the implementation of CFM faces several shortfalls i.e. inadequacy of political support, inadequate incentives, deficiency of opportunities, and less capacity. Government lacks interest and political will in establishing local collectives and sharing authority with these organizations. It also lacks financial support, as well as less interplays with the groups, causing a diminished commitment and ability of local people to guard forest area.

Government projects comprise limited financial and non-financial incentives. In terms of financial incentives, most villagers perceive the arrangement on share of benefits and responsibilities in the program to be discriminatory. State orders local communities to restore forests without sufficient support. The impacts of less financial incentives are also amalgamated by poor non-financial incentives due to the weakening of traditional social institutions.

Community involvement gives them slight chance for bargaining and cooperation in preparing and formulating the program. They dissatisfy with the existing contract on rights and obligations, some villagers lack commitment to collaborate and have exercised various opportunistic behaviors. Indigenous community also does not have impartial connection to related information and chance for cooperation.

Poor attention was given to developing the capability of local people to collaborate in the project. The deficiency of financial, social, and physical capital limits the ability of villagers to engage in the program. Furthermore, the ability of

villagers to collectively act to express their collective interests also appears to have been diminished resulting from the deterioration of local institutions and social values.

(b) Community Forestry in Cambodia (Persson and Prowse, 2017)

The concept of Cambodian community forest (CF) was finalized in 2006 based on a complicated regulatory scheme. It is characterized by institutionalizing deliberate process of decision-making and devolving authorities over forest resources to indigenous people. It is also considered as a political support to native population.

However, CF development often experiences some ample resistances. CF sites face disputes from illegal logging, conversion for farmland, and insufficient governance ability. It is also challenged by poor partnership between villagers and stakeholders, and non-responsive governmental officers.

Incentives for participation in collective actions are limited for some reasons.

First, conforming the norms of CF encompasses considerable costs. Second, the applicable regulations contain very complex mechanisms for the utilization of timber and non-timber forest products (NTFPs). Third, the policies restrict local people in generating endogenous income, further this can make local people are very depended on external funding.

The formalization mechanism allows CF to accomplish some minimal requirements in organizational creation. Local people create organizational documents and area map, formalize managerial settings, and conduct some internal meetings. However, the previous activities do not necessarily support collective action to emerge.

The lack of relationship between CF and local authorities will discourage local people in conducting forest management activities. Further, patronage phenomenon remains a main challenge and frustrates the ability of existing formal organizations to counter governance problems. In spite of its certain autonomy, focus on protecting the forest from criminals has burdened CF because it becomes very depended on outsiders for funding and facilitations.

(c) Joint Forest Management in India (Corbridge and Jewitt, 1997)

India introduced joint forest management (JFM) in order to recognize the existence and right of indigenous communities. The preliminary requirement for joining JFM is the creation of Village Forest Protection and Management Committee (VFPMC). Further, this establishment needs formalization from Forest Department. In this scheme, each VFPMC must acknowledge the state's authorities by paying a certain amount of money. Also, it is given both rights and responsibilities in managing forest.

However, experiences show that JFM aimed primarily at degraded forests requires local people to invest much time and effort in replanting the areas. In addition, local effort is less supported by local government. Forest Department is also less responsive to the violation conducted either by insiders or by outsiders. Consequently, local communities become less motivated in participating in JFM.

Because forestry project consumes much time, it is argued that local people need direct incentives to act. For short term, it can be done by providing them limited seasonal employment in tree-planting activities at an attractive rate. Further, they need assistances such as agricultural means or low-rate loans to initiate small enterprises.

(d) Community Forest in Nepal (McDougall et al, 2013)

External intervention has encouraged local people to take a learning process to community forestry in Nepal by considering each step as an opportunity to improve forest governance.

Local capacity was empowered through activities such as courses, experience, reflection and networking. Technical abilities and knowledge improved through participation in collective level, such as for generating income, constructing infrastructure and managing conflict. Regular capacity-strengthening activities, coordinated by outsiders, likely also contributed to technical skills, knowledge, and confidence.

With the shift to collaborative governance, local people modified their plans to become more informative and inclusive. The new norms embraced activities such as shared reflection, self-evaluation, formulation of visions and priorities, and, in some cases, conflict management or executive committee election. In terms of decision-making arrangements, they shifted from centralized towards more inclusive and deliberative.

They also became more involved in higher connections and more active in exchanging information and cooperation with NGOs and other stakeholders. The development of network also included regularly asking governmental officers or researchers to involve in group processes as observers or facilitators.

The governance process made issues such as information exchange, cooperation, and transparency unequivocal and held them in public sphere, thereby providing accountability. The deliberate decision-making processes also encouraged poor people by prompting information exchange and changing the condition of decision making.

These improvements demonstrate that the awareness of marginalized people have been increased toward their position. Awareness also improved through interplay with outsiders. The improvement of awareness and knowledge has increased marginalized members' confidence to pressure the functionaries to recognize their rights and opinions.

However, it was also argued that female members increasingly experienced power inequality either as individuals or as collective. In this case, women made an opposition to the current leadership. In other cases, marginalized members' claim of rights emerged tensions or conflicts. This is because elite members sometimes did not want to shift power.

(e) Community-Based Mangrove Management in Indonesia (Damastuti and de Groot, 2017)

Study on Community Based Mangrove Management in Demak District by Damastuti and de Groot (2017) show that numerous restoration attempts have been conducted by various stakeholders such as local people, governmental agencies and non-governmental actors. The rehabilitated mangroves can support local livelihoods characterized by the increase of local income.

Either funded or self-effort, community established group prior to rehabilitation. There are two kinds of membership system, i.e. representativeness and nepotism.

The latter means membership is determined by elites based on individual relations and political relationships. This practice resulted in communal refusal, conflict, and support withdrawal. Even though awareness and leadership can encourage local involvement, people are dependent on the direct incentives.

In conducting projects, government usually gets in touch with groups without

involving communities and local authority. Furthermore, there is no post-project activities. Therefore, activities are only limited to the project. In contrast, NGO conducted long-term project such as plantation, training, and income generation activities. Decision making process were made in partnership with NGO assistance. However, activities are constrained by NGO's financial and program.

Other group independently conducted mangrove restoration and management by using internal funds. Unfortunately, these are only short-termed activities and rely upon outsider funding. Member participation is frequently decreased after leadership transition.

In conducting rehabilitation, communities apply common silvicultural practices. However, it is done without any prior observation relating site and planting schedule is mainly based on projects constraints rather than climate. Consequently, this results in high mortality rate. Local people rarely conduct monitoring and maintenance after planting activity. Only one group conducts regular monitoring. Regarding the maintenance, only NGO-aided project conducts regular maintenance. Site selection depends on decision made by associations and funding institutions. Meanwhile for project funded by government, the choice is decided by government. Some groups integrate income diversification into their management practices. However, this effort is unsuccessful due to insufficient capital. Local communities also formalize the management of mangrove and coastal area through village regulations.

In sum, mangrove rehabilitation contributes not only in providing protection service but also supporting local income. However, in rehabilitation activity, local people rely heavily on external funding.

Table 1. Summary of Previous Studies

| Title/Authors/Journal | Research Method | Findings | Limitations | Link to current research |
|---|--|---|---|--|
| Barriers to Collaborative Forest Management and Implications for Building the Resilience of Forest-Dependent Communities in the Ashanti Region of Ghana K. Akamani, P. I. Wilson and T. E. Hall (2015) <i>Journal of Environmental Management</i> 151:11-21 | <ul style="list-style-type: none"> - Employing qualitative approach with purposively selected sites and informants - Using various sources of data i.e. interview and official document | Some barriers in collaborative forest management are the lack of political will on the part of government representatives to share power and responsibilities with local resource users; inadequate economic incentives; marginalization and weakening of informal institutions; unequal access to information and opportunities for participation; and inadequate attention to building the capacity of communities. | It focuses only on barriers that inhibit community resilience to policy change. | Barriers in applying collaborative forest management |
| Collective Action on Forest Governance: An Institutional Analysis of the Cambodian Community Forest System J. Persson and M. Prowse (2017) <i>Forest Policy and Economics</i> 83:70-79 | <ul style="list-style-type: none"> - Employing quantitative and qualitative methods with purposively selected sites and informants - Using interview and questionnaire - Descriptive, univariate analyses, logistic regression and OLS models | Community forestry is characterised by the exclusion of younger and poorer households from formal meetings, high costs and limited benefits for members, informal information channels where women and poorer households are excluded, low levels of formalisation, high enforcement costs and massive external pressures. | It focus on challenges facing local forest users to organize community forest. | Challenges in applying community forest |
| Joint Forest Management in India S. Corbridge and S. Jewitt (1997) <i>Environment and Planning</i> 29:2145-2164 | <ul style="list-style-type: none"> - Employing fieldwork method with qualitative approach and reviewing previous literature - Using various sources of data i.e. previous study, interview, observation and regulatory document | The practice of joint forest management is flawed in five key respects. First, indifference toward local knowledge. Second, less support from government. Third, insufficient implementation of rule enforcement. Fourth, low leadership capability. Fifth, lack of tangible incentive | It does not describe specific empowerment process. | <ul style="list-style-type: none"> - Theoretical conception of joint forest management - Constraints in applying joint forest management |

| | | | | |
|--|--|--|---|--|
| <p>Engaging Women and the Poor: Adaptive Collaborative Governance of Community Forests in Nepal C. L. McDougall, C. Leeuwis, T. Bhattarai, M. R. Maharjan and J. Jiggins (2013) <i>Agriculture and Human Values</i> 30:569-585</p> | <ul style="list-style-type: none"> - Employing qualitative and quantitative approach with multi-year case studies and participatory action research. - Using various sources of data i.e. previous study, interview, observation, focus group discussion and organizational document. | <ul style="list-style-type: none"> - Researchers interventions encourage groups and their member capacity i.e. practical and technical ability, knowledge, confidence, more participation - Women and the poor are more recognized - Discrimination and elite domination are still existed. | <p>It focuses on individual.</p> | <ul style="list-style-type: none"> - Outsiders' intervention on individual empowerment - Marginalized stakeholder participation in decision-making process |
| <p>Effectiveness of Community-Based Mangrove Management for Sustainable Resource Use and Livelihood Support: A Case Study of Four Villages in Central Java, Indonesia E. Damastuti and R. de Groot (2017) <i>Journal of Environmental Management</i> 203:510-521</p> | <ul style="list-style-type: none"> - Employing qualitative and quantitative approach with multi case studies and participatory resource mapping. - Using various sources of data i.e. documentation, archival record, semi-structured interviews, questionnaire-based interviews field observation and literature review | <ul style="list-style-type: none"> - Self-empowerment cannot sustain. - NGO-initiated empowerment is more successful than government initiative. - Local people lack practical knowledge. - Rehabilitated ecosystem gives positive effects on local livelihood. | <p>It focuses on empowerment outcome regarding socio-economic conditions.</p> | <ul style="list-style-type: none"> - Historical review of empowerment - Village regulation effect on community-based mangrove management - Silvicultural practice |

CHAPTER 3 RESEARCH FRAMEWORK

3.1. Conceptual Framework

Empowerment emerges as an effort to resolve social and environmental issues relating to marginalized people (Balooni and Inoue, 2007; Behera and Engel, 2006; Damastuti and de Groot, 2017; Aheto et al, 2016; Springate-Baginski et al, 2003; Yadav et al, 2003; Dev et al, 2003). It attempts to link individuals with their collective (or community), and to connect human agency with their environment (Sadan, 2004). Empowering professional practice is the other significant aspect through which theory is converted into a practical manner of intervention.

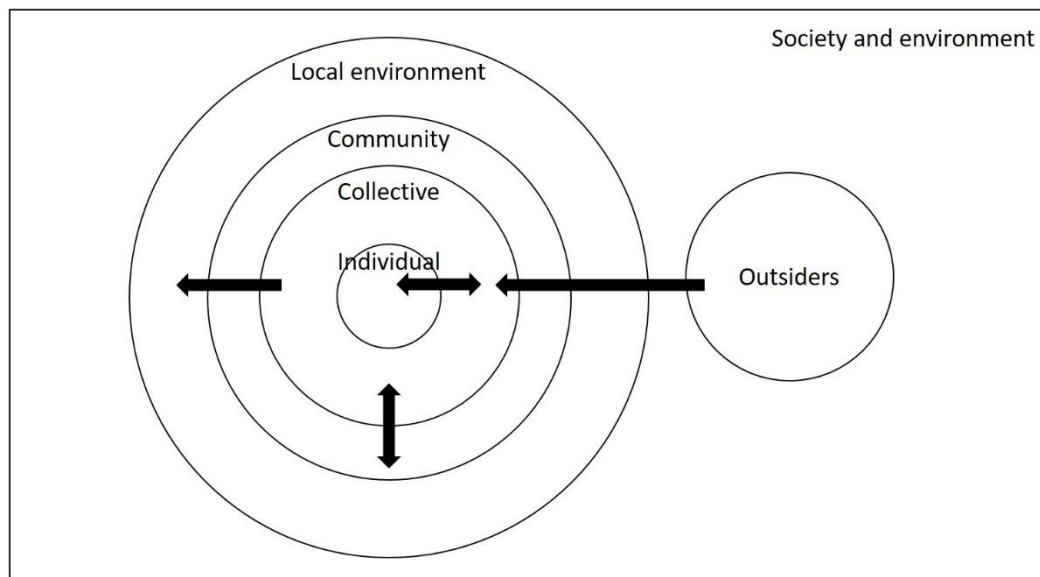


Figure 1. Theory of empowerment

In natural resource management, empowering local population means that their existence must be recognized (Corbridge and Jewitt, 1997; Behera and Engel, 2006). It includes involving them in the practices (Corbridge and Jewitt, 1997;

Behera and Engel, 2006; Pomeroy and Carlos, 1997; Hodgdon, 2010; Springate-Baginski et al, 2003; Damastuti and de Groot, 2017; Yadav et al, 2003; Dev et al, 2003). In many cases, local involvement can be applied in short term or in long term. Temporary empowerment is usually conducted in form of small-scale project such as forest replanting (Damastuti and de Groot, 2017). However, this activity can exist in the longer time when it becomes forest rehabilitation (not only planting, but also maintenance and monitoring) (Damastuti and de Groot, 2017; Aheto et al, 2016). In contrast, long-term empowerment is usually accompanied by giving local group right to manage forest ecosystem independently. Permit granting aims to give group not only right but also responsible (Balooni and Inoue, 2007; Pomeroy and Carlos, 1997; Hodgdon, 2010; Behera and Engel, 2006; Springate-Baginski et al, 2003).

Management right is only starting point in empowerment process. Marginalized people need to be empowered through professional practices to create their confidence and to develop their human capital individually and collectively (Damastuti and de Groot, 2017; Behera and Engel, 2006). NGOs, governments and academicians are usually very concerned with local livelihoods (Agrawal and Yadama, 1997; Damastuti and de Groot, 2017; Behera and Engel, 2006; Springate-Baginski et al, 2003; Yadav et al, 2003; Dev et al, 2003; Aheto et al, 2016). In addition, enterprises play role too through their corporate social responsibility programs (Damastuti and de Groot, 2017). Outsiders' interventions are mostly in the forms of funding, capacity building, organizational development, and forest governance (Damastuti and de Groot, 2017; Behera and Engel, 2006; Springate-Baginski et al, 2003; McDougall et al, 2013).

As the process runs, some issues may emerge and threat the existence of

organization. These issues are resistance, conflict, awareness, organizing community, and outcome and product (Sadan, 2004; Behera and Engel, 2006; Dev et al, 2003; Yadav et al, 2003). Resistance usually happens when indifference and the absence of interest exist (Damastuti and de Groot, 2017). Dichotomy of member and non-member, and active member and inactive member may cause dispute. The indirect but systematic violence against weak people is an excuse for the rise of conflicts (Yadav et al, 2003; Dev et al, 2003). Awareness relates to the individuals' and collective's evaluation of their strengths and weaknesses and how to employ these positively (Behera, 2009; Yadav et al, 2003; Dev et al, 2003; Damastuti and de Groot, 2017; Pénelon, 1994). Organizing individuals sets in interpersonal relationship (Behera, 2009; Yadav et al, 2003; Dev et al, 2003; Aheto et al, 2016). It is argued that a steady and continuous relations with others can improve empowerment process. It is possible to determine the success of empowerment at certain time based on process outcomes, such as the existence of community activity (Aheto et al, 2016), the quality of its decision-making (Yadav et al, 2003; Dev et al, 2003; Aheto et al, 2016), the degree of its purposiveness (Yadav et al, 2003; Dev et al, 2003; Aheto et al, 2016), the standard of organization of community activity (Behera and Engel, 2006), and the usefulness of the latter to the community's interests (Behera and Engel, 2006).

Based on expected outputs in each step, the process of empowerment is as follows (Sadan, 2004):

1. Initial situation makes people powerless. They cannot actualize their hopes because of the lack of abilities and resources.
2. Supports must be given to leverage people's will to facilitate arranged action.
3. People wish to expand their capabilities by acquiring means and resources.

4. A critical consciousness is developed as people acknowledge their rights and abilities.

5. Confidence to deal with daily life emerges among people.

6. The process continues through resources mobilization by individuals.

Individuals and collective will transfer their abilities to daily activities.

3.2. Propositions

Many third-world governments utilize their natural resources to boost national growth (Gomide et al, 2012). However, previous regime on forest administration has only focused on timber exploitation (Castañeda, 2000; Corbridge and Jewitt, 1997; Soepijanto et al, 2013; Akamani et al, 2015) and tended to indifference forest-border communities (Corbridge and Jewitt, 1997; Soepijanto et al, 2013). This practice has marginalized them (Lebel et al, 2004; Akamani et al, 2015) and local struggles have been directed at state monopoly over commercialization on forests (Baumann, 1998). Shift on forest governance has led to collaborative approach (Balooni and Inoue, 2007; Pomeroy and Carlos, 1997; Hodgdon, 2010) where local communities become one of the main player in forest management (Fujimori, 2001; Bellefontaine et al, 2000; Buongiorno and Gilles, 2003).

Local people need to be empowered because of their powerlessness and poverty (Sadan, 2004; Alsop et al, 2006) and their high dependency on forest resources (Ahsan, 2014; Basyuni et al, 2016; Hastuti and Yuliaty, 2017; Malik et al, 2015). These vulnerable groups, especially coastal communities, become more fragile because of exogenous aspects such as climate change and natural disasters (Kusky, 2008; Houghton et al, 1996; Watson et al, 1996; Alam et al, 2017; Lodhia, 2011; Ellison and Strickland, 2015; Cuevas, 2011; Franck, 2009;

Preston et al, 2006; Rawlani and Sovacool, 2011; Shaffril et al, 2017; Scheraga and Grambsch, 1998; Mustelin et al, 2010; Bindoff et al, 2007; Wong et al, 2014; Bigano et al, 2008; Nguyen et al, 2016; van Putten et al, 2014).

Empowering communities aims to lift up their abilities and economies (Damastuti and de Groot, 2017), and to improve forest ecosystem (Damastuti and de Groot, 2017; Ellison, 2000). In short term, funded empowerment may give local people trade off to fulfil their subsistence (Damastuti and de Groot, 2017; Indrawan et al, 2014). For longer period, empowerment may increase local ability, and, together with recovered ecosystems, improve community income (Damastuti and de Groot, 2017). Empowered communities are characterized by high confidence and increased ability in terms of positive perception (Yadav et al, 2003; Dev et al, 2003), increased participation (McDougall et al, 2013), mutual trust among members and leaders (Aheto et al, 2016), increased awareness (Behera, 2009) and credibility in community (Aheto et al, 2016).

However, community empowerment framed in social context is characterized by the dynamics and the complexity of social processes. These situations can be related to access, capital, institution, legal framework and contextual environment (Damastuti and de Groot, 2017; Clifton, 2013; Hastuti and Yulianti, 2017; Page et al, 2009; Rahman and Asmawi, 2016; Alsop et al, 2006). Many scholars argue that shortfalls emerge from the process of empowerment such as dependency on outsiders (Behera and Engel, 2006; Damastuti and de Groot, 2017), low rule enforcement (Behera and Engel, 2006; Corbridge and Jewitt, 1997), discriminative treatments (Dev et al, 2003; Yadav et al, 2003; Corbridge and Jewitt, 1997; Damastuti and de Groot, 2017; Akamani and Wilson, 2015; Persson and Prowse, 2017; McDougall et al, 2013), elite domination (Yadav et al, 2003; Dev et al, 2003;

Damastuti and de Groot, 2017; McDougall et al, 2013; Persson and Prowse, 2017), and information asymmetric (Behera and Engel, 2006; Persson and Prowse, 2017).

The process of empowerment is also linked with human agency, both as individual and as collective, ability to conduct empowerment, constraints and possible solutions, and process dynamics (Damastuti and de Groot, 2017; Clifton, 2013; Hastuti and Yuliati, 2017). In addition, outsiders' intervention can affect empowerment process (McDougall et al, 2013; Sangchumngong, 2018; Damastuti and de Groot, 2017). The last one which is important enough to be considered is about the relative outcome. Even though this part only gets less attention, as Sadan (2004) and Alsop et al (2006) argue, it will be useful to connect the process with it. It is possible to determine the success of empowerment at certain time based on process outcomes (Sadan, 2004).

3.3. Definitions of Operational Terms

Several terms are often used to explain a certain situation or meaning by different people and this can be confusing. To avoid this, the terminology used throughout this study is defined below and then used consistently.

(a) Empowerment

Empowerment relates to power and authority. It is an active process through which authority on social sphere is delegated (Sadan, 2004). In defining empowerment, Alsop et al (2006) and Andersen and Siim (2004) give emphasize on process and outcomes. Process relates to enhancing individual or collective awareness and capacity. Meanwhile outcomes can be seen from the level of

participation and the power in decision making. Therefore, empowerment can be defined as a kind of delegation of authority on social sphere in an active process through enhancing individual or collective's awareness and capacity in order to increase the level of participation and the power in decision making. According to Sadan (2004), empowerment exists both in individual level and in collective level.

(b) Professional practice

Professional practice is considered as a learning process aiming to educate people either to deal with problems or to increase capacity. Trainings provide people with skills and knowledge important to act and to achieve individual and common goals (Sadan, 2004; Zimmerman, 2000; Parsons, 1989). Professional practice is carried out by outsiders and is considered as intervention in empowerment process (Sadan, 2004).

(c) Empowerment outcomes

Individually and collectively, outcomes can be in forms of awareness or consciousness, capacity, collective actions, the quality of decision-making process, mutual trust and relations, organizational means, organization existence, qualified leadership, responsiveness and adaptability, social legitimation (Sadan, 2004; Alsop et al, 2005; Couto, 1989; Simon, 1990; Matton and Salem, 1995; Wandersman and Florin, 2000; Rappaport, 1984; Behera, 2009; Yadav et al, 2003; Dev et al, 2003; Aheto et al, 2016; Damastuti and de Groot, 2017). Meanwhile ecologically, outcome relates to improved mangrove ecosystem (Aheto et al, 2016; Damastuti and de Groot, 2017; Pénelon, 1994).

(d) Outsiders' interventions

Outside stakeholders are government, non-governmental organization and enterprise. Outsiders' interventions can be in form of funding, knowledge transfer and capacity building (Springate-Baginski et al, 2003; Damastuti and de Groot, 2017; McDougall et al, 2013).

(e) Coastal community

In the simple meaning, coast is where land and ocean meet (Kay and Alder, 1999; Charlier and Charlier, 1995). In tropical and subtropical regions, coastal environment is usually characterized by mangrove ecosystem (FAO, 1994, 2006; Kay and Alder, 1999; Kusky, 2008). Therefore, coastal community is people who live close to mangrove ecosystem. The community is characterized by high dependency on agriculture, shrimp farming, fishing and mangrove to fulfil their subsistence and livelihood (Gowing et al, 2006; FAO, 1994; Ahsan, 2014; Basyuni et al, 2016; Hastuti and Yuliati, 2017; Malik et al, 2015). Specifically, mangrove is utilized in forms of timber and non-timber products, and recreational use (FAO, 1994, 2005, 2007).

(f) Social forestry

Social forestry is a generic term in forest governance. It involves the delegation of authority to local community in managing forest by means of agreement signed by both government and community (Mohammed and Inoue, 2014). It is a kind of sharing of benefits and responsibilities among stakeholders (Akamani et al, 2015; Persson and Prowse, 2017; Corbridge and Jewitt, 1997).

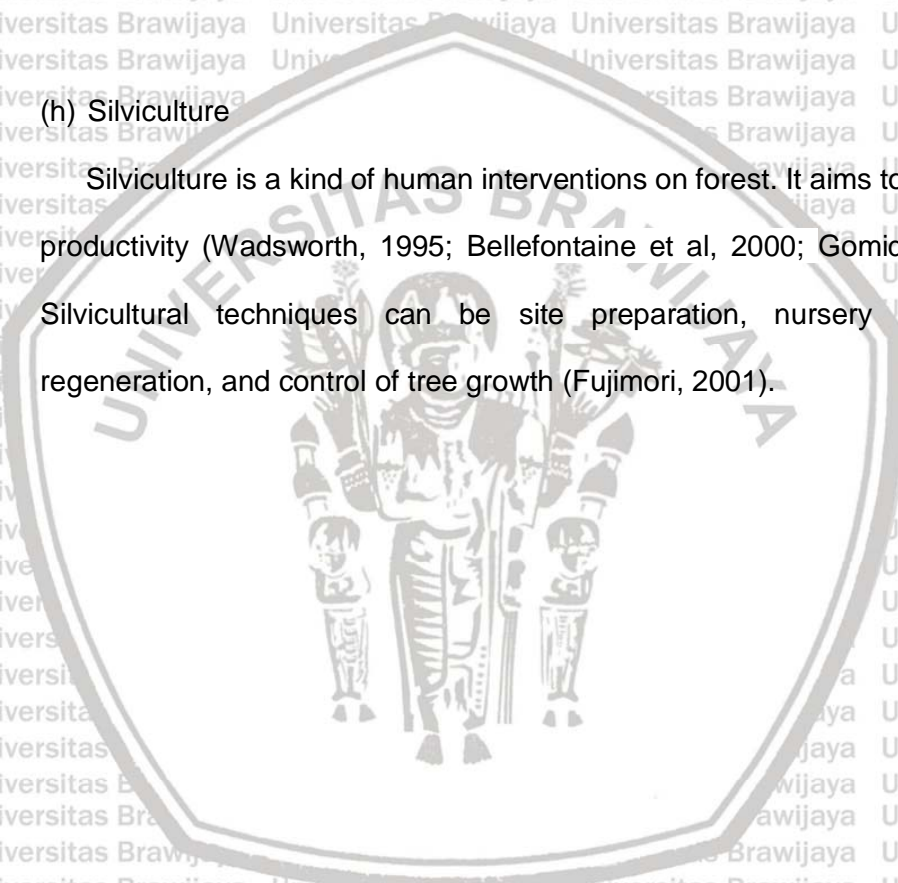
(g) Forest management

Forest management is a way to organize a certain area of forest in order to produce forest products (Guldin and Guldin, 2003). It involves the integration of silvicultural activities and economic considerations to attain some desired goals (Bettinger et al, 2009). Its activities are planning, silviculture, utilization and protection.

(h) Silviculture

Silviculture is a kind of human interventions on forest. It aims to improve forest productivity (Wadsworth, 1995; Bellefontaine et al, 2000; Gomide et al, 2012).

Silvicultural techniques can be site preparation, nursery activities, tree regeneration, and control of tree growth (Fujimori, 2001).



CHAPTER 4

RESEARCH METHOD

4.1. Type of Research

This research employed case study approach and focused on single case. The data collected and its analysis are in qualitative form. Case study is used for some arguments (Yin, 2009). First, it is suitable to examine a decision, a program, or a policy of any organization. Its focus can be individuals, collectives, organizations, processes, and institutions. It tries to reveal why and how a program is implemented, and to some extent, it also relates with the result. Second, study on community is usually free from researcher's control and intervention. Third, it deeply scrutinizes a recent event in real-life context, especially when the boundaries between them are not clear.

However, this kind of inquiry faces some limitations too. First, many scholars argue that researcher tends to be careless, not to follow systematic procedures, or to allow vague evidence or biased views to influence the direction of the findings and conclusions. To overcome this negativity, researcher will evaluate daily activities based on scientific procedure, and make comparison among proofs.

Second, the findings cannot provide enough basis for analytic generalization. However, it is argued that case study is generalizable to theoretical propositions.

Third, a complaint is that it is take too long and results in massive documents. Duration can be challenged by taking data source variations and combining them in order for validation. Enormous data is relative and avoiding unnecessary data can be conducted by collecting only relevant data. In addition, any deficit can be complemented through indirect data collection such as internet and telephone.

Single case is chosen for some reasons. First, it represents the critical case in challenging an existing theory. The theory has specified a clear set of propositions as well as the circumstances within which the propositions are believed to be true. A single case can confirm, challenge, or extend the theory. Second, the case represents a unique and typical case. Mangrove ecosystem is unique among other forests concerning its characteristics and functions. It also represents only a small part of world or national forests. Moreover, its uniqueness affects local livelihoods in wider social context in the course of land and marine life. Third, the excellence of single case is related to accessibility. It is preferred when researcher has wide access on unit analysis. Another access is related to outside parties influencing unit analysis.

Case study method tries to obtain evidences from various sources. Some evidences can be generated from documentations, archival records, interviews and direct observations. In collecting data and information, researcher resided in community as near as possible. In addition, sometimes, case study plan can change as a result of the initial data collection, and researcher is encouraged to consider this flexibility to be an advantage of this method. However, it must be conducted properly and without bias (Yin, 2009).

4.2. Focus of Research

In this research, unit analysis is collective level so-called the group of Mekar. This research focuses on the process of empowerment through social forestry implemented by the group of Mekar and constraints in empowerment process.

4.2.1. Empowerment Process

The process of empowerment consists of six steps and each step can be termed as follows:

- (1) Powerlessness. People feel frustrated because they cannot actualize their aspirations.
- (2) Support. Community needs a minimal support to organize itself. Supports can come from fellows or government.
- (3) Wish. People want to expand their ability to actualize these aspirations.
- (4) Consciousness. People acknowledge their right to express these aspirations and their ability to define them.
- (5) Confidence. Community is confidence to organize itself in order to achieve common goals.
- (6) Empowered community. People keep mobilizing resources and translate their abilities to daily activities.

4.2.2. Constraints

Constraints are considered as anything inhibiting the process of empowerment implemented by the group of Mekar.

4.3. Site of Research

The group of Mekar received a management right to manage state forest in the form of *Kemitraan Kehutanan* (Kemitraan-Forestry Partnership) with *Kesatuan Pengelolaan Hutan Wilayah I Stabat* (KPH-Forest Management Unit Region I Stabat). This cooperation is manifested through *Naskah Kerjasama Kemitraan* (NKK-Manuscript of Partnership Cooperation) No. 074/984 (first party number) and

33/Km.M/VII/LBK/2017 (second party number). This agreement further got *Pengakuan dan Perlindungan Kemitraan Kehutanan* (Kulin-Recognition and Protection of Forestry Partnership) from Minister of Environment and Forestry through decree No. SK.1671/MENLHK-PSKL/PKPS/PSL.0/4/2018. This group is given a concession of 60 ha of production forest. This concession lies in Lubuk Kertang Village, Brandan Barat District, Langkat Regency, North Sumatra.

The area of Lubuk Kertang is 3,026 hectare and its distance to capital of Brandan Barat District is 13 km. It comprises five sub-villages i.e. Janggus, Paluh Tabuhan, Tepi Gandu, Alur Lebah, and Kelapa Enam. Its population is 3,063 people or 753 households. Most villagers work as farmers and traditional fishermen (BPS Kabupaten Langkat, 2017).

Study by Basyuni et al (2016) reveal that Lubuk Kertang Village has 638.47 ha of mangrove. According to another author, it has 1,200 ha (Hafni, 2006). Ten mangrove species exist in this village such as *Avicennia marina*, *A. lanata*, *Bruguiera sexangula*, *Rhizophora apiculata*, *Ceriops tagal*, *Xylocarpus granatum*, *Lumnizera racemosa*, *Sonneratia caseolaris*, *Excoearia agallocha* and *Acanthus ilicifolius* (Basyuni et al, 2016). As many as 48.17% villagers utilize mangrove to fulfil subsistence, meanwhile other 35.58% respondents use it for recreational activity, and commercial utilization is the least motive. In addition, some 13.8% community do not recognize mangrove ecosystem. Employing SWOT analysis, they conclude that some weaknesses in mangrove utilization are low perception of community and visitors, insufficient support from local government, and lack of information on ecotourism. Meanwhile the threats are negative impacts of ecotourism and conflict of interests. Hafni (2006) argues that land-use changes into palm oil plantation and pond driven environmental damage in this area and as

many as 740 hectare of mangrove are heavily damaged. She further explains that the damage results in income decreasing of traditional fisherman. Fishermen's income declines as many as 75%.

4.4. Technique of Data Collection

4.4.1. Technique of Data Collection

Sources of data consist of informants, phenomena and documents. Meanwhile data collection technique was done through interviews, observations and documentation study. Sources of data and data collection technique are explained below. Using various sources of data is very useful because they can complement each other (Yin, 2009). Data collection was conducted for approximately 30 days (4 June 2018 to 13 July 2018, Saturdays and Sundays were excluded).

(1) Documentation study

Documentation study was employed toward documents and archival records.

Documents consist of group statute, contracts, meeting notes, group proposals, group records, previous studies, and news and articles in the mass media.

Meanwhile archival records consist of statistical data, governmental regulations and policies, and spatial data concerning geographical characteristics of location.

Group statute, contracts, meeting notes, group proposals and group records were obtained from the group. Previous studies are in the forms of national and international scholarly journals obtained from internet and libraries. Institutional reports were obtained from governmental agencies, enterprises and NGOs. News and articles were obtained from either printed or online mass media. Statistical data was obtained from statistic office and the village government. Governmental

regulations and policies were obtained from official websites and related offices.

Spatial data concerning geographical characteristics of location was obtained from governmental agencies.

(2) Interviews

The interviews used semi-structured conversations rather than structured queries. However, actual questions were likely to be fluid rather than rigid. In-depth interviews were employed in order to ask informants about facts and their opinion about events. In certain situations, interviewees were encouraged to propose their personal statements into certain occurrences and used such statements as a basis for further examination. Therefore, interviews took place over an uncertain duration. Some interviewees also suggested other people for researcher to interview, as well as other sources of evidence.

During interviews, the conversations were recorded with recorder. Furthermore, after interviews, informants were asked to clarify their statements. Interviews were around stakeholders' perception, behavior and attitudes; organizational aspects of group; vulnerable aspects of local community, mangrove condition and its management (history and current practices); empowerment process (history and current practices); local wisdoms and regulations; and external interventions (assistance and supervision).

In total, informants were 19 people (see Appendix 2). Purposive sampling was applied to choose informants based on their involvement and interest in the process of empowerment. The informants consist of six group's members, three group functionaries, two village authorities of Lubuk Kertang (village head and a member of *Lembaga Pemberdayaan Masyarakat* (LPM-Community

Empowerment Institute)), three governmental officers (*Dinas Kehutanan Provinsi Sumatera Utara* (Dishutsu-the Forestry Service of North Sumatra), Agency for Social Forestry and Environmental Partnership, and KPH), two staff members of non-governmental organizations (Yayasan Gajah Sumatera and Keluarga Bahari), a staff member of PT. Pertamina EP Aset 1 (Pertamina), a retired staff member of Provincial Forestry Service and an ex staff member of PT. Sari Bumi Bakau.

(3) Observations

To obtain specific and comprehensive understandings about empowerment process, researcher conducted observation. Some observed activities were mangrove management and ecotourism.

4.4.2. Principles

Some principles in collecting data are utilizing various sources of data, establishing a database and keeping a set of evidence. These principles are useful to ward challenges addressed to case study method, mainly validity and reliability (Yin, 2009).

4.4.3. Ethics

In conducting data collection, some ethical practices were given enough consideration (Yin, 2009). These were done trough:

a. Letter of introduction

It was intended to inform any subject about the study. This was done prior to field works and data collection. This letter was issued by the university.

b. Requesting approval

Permission was needed from any subject, especially formal institutions. It was written and verbal. Prior to interview, letter of information (appendix 1) was read to give interviewee comprehension concerning this research. Further, he/she gave his/her approval.

c. Protecting human subjects

Protecting subjects means treating their privacy confidentially. This aims to avoid any potential harm to them.

4.5. Technique of Data Validation

To improve the quality of case study, the design needs to be maximized through some critical conditions such as construct validity, external validity and reliability (Yin, 2009).

4.5.1. Construct Validity

It was done by identifying proper operational terms, defining them in local context and relating them to the original objectives of this study. Some related activities were utilizing various sources of data, creating chain of evidence, and asking key informants to confirm their statements. These were done through data collection and preliminary report composition.

The utilization of various sources of data is considered as a process of triangulation and corroboration. Therefore, any finding or conclusion is likely to be more satisfying and precise.

4.5.2. External Validity

Case study was intended not to generalize statistical findings but to generalize theory. Therefore, its activity was employing theory in single-case studies through research design.

4.5.3. Reliability

It aims to reduce biases and errors in an inquiry. Some related activities were employing case study design and developing case study database. These were done through data collection.

4.6. Technique of Data Analysis

Data was analyzed through preliminary and general analytic approach. Four strategies were employed such as self-articulation, manipulating data and information, confirming findings, and expert review (Yin, 2009; Hancock and Algozzine, 2006).

4.6.1. Self-articulation

Researcher's articulation of personal biases is needed to avoid the potential impacts of those biases (Hancock and Algozzine, 2006). Self-articulation is based on researcher's knowledge and experiences. Furthermore, this strategy was combined with reviews from supervisors.

4.6.2. Manipulating Data and Information

Data manipulation relates with its arrangements and was done by simplifying, combining, integrating and summarizing data, and cross-checking among data

(Yin, 2009; Hancock and Algozzine, 2006). This resulted in “better” data and was further processed into data displays. According to Miles et al (2014), data can be displayed in the forms of matrix, table, flowchart and graphic.

4.6.3. Confirming Findings

This was done by relying on theoretical propositions (Yin, 2009) and examining rival explanations (Yin, 2009; Hancock and Algozzine, 2006). According to Yin (2009), theoretical propositions are useful to guide research. Meanwhile rival explanation was employed rival theory as a part of real-life rivals. It aims to compare findings with existing theory (Yin, 2009). It is also to gain feedback from the theory so that the findings can be confirmed (Hancock and Algozzine, 2006).

4.6.4. Expert Review

Data and findings were scrutinized by supervisors and any relevant suggestion will be useful for accuracy, clarity and meaningfulness (Hancock and Algozzine, 2006).

4.7. Case Study Model

Case study method has six steps such as planning, designing, preparing, collecting, analyzing, and sharing (Yin, 2009). Research planning is the first step in case study. It has three sub-steps such as identifying research question or other reason for conducting a case study, deciding to use the case study instead of other method, and understanding the strengths and weaknesses.

Second step is research design consisting of defining the unit of analysis, developing theory and propositions, identifying case study design (single or

multiple), and defining procedures to maintain case study quality. The quality relies on critical conditions such as validity and reliability. A research design is the logic that connects the data to be collected to the initial research question.

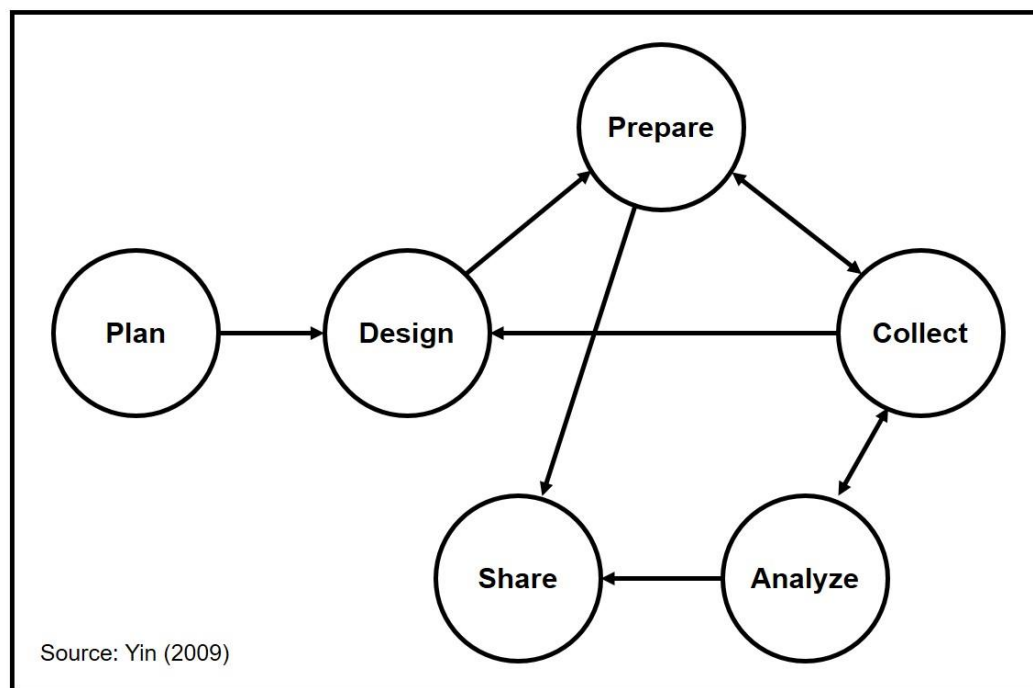


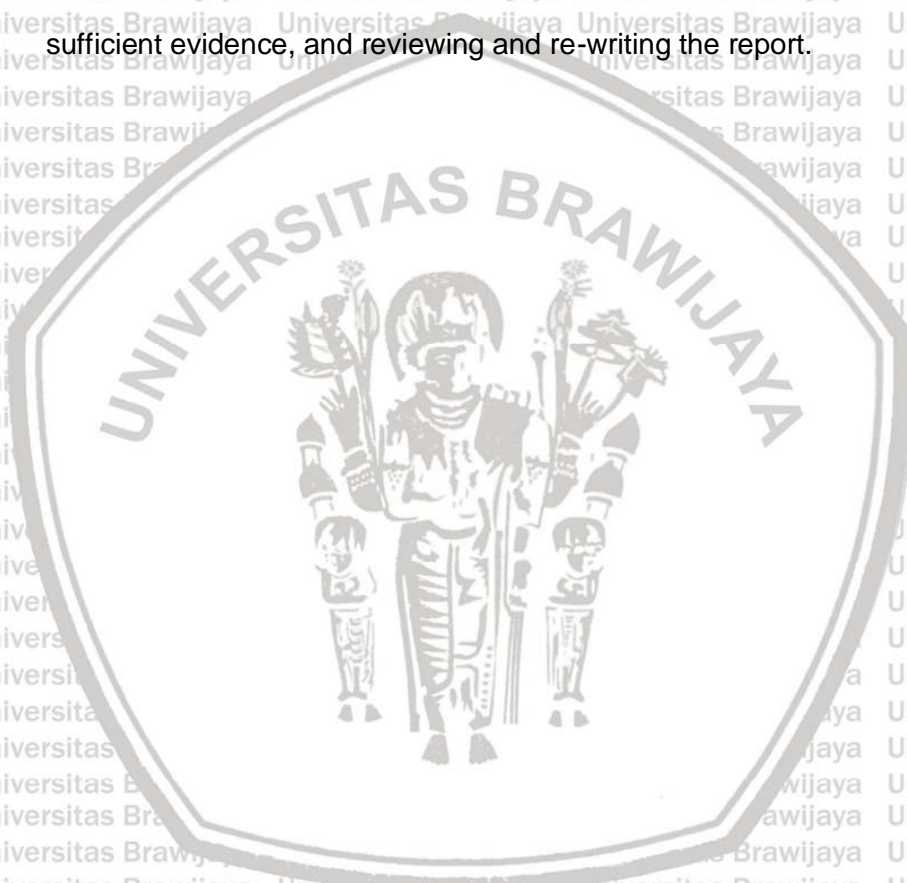
Figure 2. Model of case study

Research preparation becomes the next step. It consists of developing case study protocol and gaining approval for human subjects protection. This step also considers researcher skills in case study method. Researcher must recognize and develop his/her abilities such as asking good questions, good listener, adaptability and flexibility, the mastery of the issues being studied and knowing how to avoid bias. This step is very important because it extremely affects not only data collection but also result sharing and report writing.

The step continues with data collection. It must follow case study protocol, use various sources of data, establish case study database and maintain chain of

evidence. Data collection has a reciprocal relation with the previous step and the step afterward, and appropriate sources of data and technique of data collection will determine and will be determined by these steps.

Then the data is analyzed based on theoretical prepositions, is explored with rival explanation, and is displayed apart from interpretations. Finally, the data and results are shared in terms of composing textual and visual materials, displaying sufficient evidence, and reviewing and re-writing the report.



CHAPTER 5

RESULT AND DISCUSSION

5.1. Result

5.1.1. The History of Mangrove

At the beginning of the 1980s, government promoted the *empang paluh* (fish pond) program in coastal areas. To succeed the program, the fishermen in the coastal area of Langkat Regency formed groups incorporated in *Himpunan Nelayan Seluruh Indonesia* (Indonesian Fishermen Association). These groups were maintaining mangrove stands in order to succeed the *empang paluh* program. Thus, mangrove had survived for more than fifteen years and were safe from illegal logging threat.

Since 1996, illegal loggers from outside had entered Lubuk Kertang Village (hereinafter referred to as Lubuk Kertang). They cut down mangrove trees as raw material for charcoal. Regarding illegal logging, an informant said, "I (fisherman) saw the illegal loggers were cutting down mangroves every day and were bringing them to their village. However, I can only see and cannot prohibit them" (R10).

Further, another informant confirmed,

"They (illegal loggers) cut not only the trunk but the whole stand" (R2).

As a result, charcoal factories had spread everywhere including in Lubuk Kertang. Those illegal loggers worked individually. *Hutan tanaman industri* (industrial plantation forest) concession of PT Sari Bumi Bakau (SBB) was issued in 1999, it covered the coast of Langkat Regency covering an area of 20,100 ha with mangroves as a main plant. Its concession also covered the area of Mekar group (Mekar). Encroachments in the mangrove forests

were still spreading out, but the area of SBB was relatively safe because it conducted cooperation with the Navy in securing mangrove.

In 2000 and 2001, SBB drawn up *Rencana Kerja Tahunan* (RKT-Annual Work Plan). According to these RKTs, SBB conducted mangrove exploitation and planting activities including in Lubuk Kertang. In 2001, the North Sumatra House of Representative suspended the operational activities of SBB, because it was indicated that the company abused the document use for log transport and monopolized charcoal production. Encroachment then occurred in the SBB area.

Mangrove encroachments continued and resulted in the conversion of mangroves into ponds and palm oil plantations around 2002. Inactive ponds had also switched into palm oil plantations. These land use changes were done by individuals and companies. Because it was not active, the permit of SBB was revoked in 2005. Then the former area of SBB was redesigned by the Ministry of Forestry for *hutan tanaman rakyat* (HTR-community plantation forest). Of the 20,100 ha, 3,050 ha was reserved for HTR. As a result of revocation, the former area of SBB became open access and there was massive land clearing for palm oil plantations, including in Lubuk Kertang. According to an informant, "Until 2004, the conversion of mangroves to oil palm plantations reached 800 ha" (R9).

In 2006, *Dinas Kehutanan dan Perkebunan Kabupaten Langkat* (Dishutbun Langkat-Langkat's Service of Forestry and Plantation) launched *Gerakan Nasional Rehabilitasi Hutan dan Lahan* (GNRHL-National Movement for Forest and Land Rehabilitation) project in two locations involving two groups, namely Mekar and Kertang II, each project was 25 ha. Over time, the area of Mekar survives from encroachment, while Kertang II area had been converted into palm oil plantation.

During plantation, Dishutbun Langkat monitored the work conducted by the groups.

Around 2007, the conversion of mangroves to palm oil plantations also occurred in other areas, outside 800 ha in 2004, and reached 400 ha. If added up, the conversions in 2004 and 2007 was 1,200 ha. This figure was confirmed by other informant who said,

“Mangrove forests were damaged due to the conversions occurred in the entire area” (R1).

Other confirmations were obtained from several informants who said,

“In order to plant mangroves, I sought seeds from outside the village” (R1).

“Amat Ali¹ searched seeds from outside the village” (R2).

The conversion process carried out by an oil palm plantation company was inseparable from the change of the provincial forest area since the issuance of the Minister of Forestry's Decree No. SK.44/Menhut-II/2005 concerning the Appointment of North Sumatra Forest Areas. An informant said,

“Part of the mangrove forest area in Lubuk Kertang had changed from production forest to area for other purposes. Besides converting some part of this area for other purposes into oil palm plantations, the company had also penetrated production forest” (R18).

There are two versions of the conversion of mangroves into palm oil plantations. The first said that the initiative came from the community, while the second said the initiative came from entrepreneurs. The first version said that some villagers of Lubuk Kertang offering land to outsiders i.e. entrepreneurs and palm oil plantation companies, such as PT Pelita Nusantara Sejahtera (PNS) and businessman Akam. These villagers plotted 2-ha parcels and offered local community these parcels. Relating to this plotting, local community did not understand the process. Those land sellers just gave villagers the parcels without

¹ Amat Ali is a member of Mekar. Previously, he was the secretary of Mekar. Now, he is the vice chairman of Mekar.

payment and they asked the villagers to sign a letter with a stamp. In addition, the villagers were also asked to hand their copy of identity card (KTP) and Family Register. The parcels were given freely because those land sellers were convinced that the villagers were unable to manage the parcels and would sell the parcels back to them. The parcels were unmanageable because the area had been deforested and they did not have capital to manage the parcels, for example for ponds. So the villagers resold the parcels to the land sellers, they further sold the parcels to the entrepreneurs.

The second version said that the entrepreneurs from Medan, such as PNS and Akam, lured villagers with money as compensation for the purchase of their ponds and made the transactions in receipts. The price was IDR 2,500,000 per person for a parcel of two ha. In this case, the entrepreneur was represented by the coordinator, then the coordinator visited the villagers.

Regarding this compensation, the villagers acknowledged that the land is state forests. This compensation also created pros and cons in society. The pro-compensation people were very happy and accepted the money, while the contra-compensation were not happy and rejected the money. Those who refused realized that they did not have land in the forest, after all they are generally fishermen who have a living from the mangrove. They argued that if the mangroves were converted, their livelihood would be threatened.

Since then the entrepreneurs stemmed the area so that sea water cannot enter the land and the tidal process become disturbed (Figure 3). The fortification was carried out at 30 meter up to 50 meter from the coast. In preparing the land, they used heavy equipment such as excavators.



Figure 3. Area fortification (courtesy of Azhar Kasim)

Because sea water cannot enter the land, sea water inundated the settlements of Lubuk Kertang's neighbors such as Perlis Village and Kelantan Village. Then, this also impacted traditional fishermen of ambai. Ambai which requires a tidal process cannot be optimal anymore because the land was dammed. So that their income dropped. With this situation, people felt that their livelihoods were threatened, many fishermen changed over their profession or moved to other places. Small fishermen also felt the effects such as difficulty in finding crabs, shrimps and fish, so that their income dropped dramatically. An informant said, "Fishermen can earn more than IDR 150,000 per day previously, but it dropped to IDR 20,000 per day" (R4).

Recognizing the negative impacts of mangrove conversion, a number of people were worried. They met Tajruddin Hasibuan and Azhar Kasim and made a complaint. Together with non-governmental organizations (NGOs) such as *Kesatuan Nelayan Tradisional Indonesia (KNTI)*, *Koalisi Rakyat untuk Keadilan Perikanan (KIARA)* and *Wahana Lingkungan Hidup (WALHI)*, they advocated the community. Then they analyzed the existing situation from legal perspective.

Finally, they concluded to destroy the embankments. Tajruddin Hasibuan, Azhar Kasim and the community from Brandan Barat Subdistrict, Perlis Village, Kelantan Village, Sei Bilah Village, and several other places destroyed some embankments in 2009. Whereas only a few people from Lubuk Kertang joined. The destruction of the embankments was repeated, because when the embankments were demolished, the entrepreneurs fixed them again at night. After several times, when the embankments were destroyed, the mass guarded the locations for two days so that the embankments were not fixed again, even though there had been physical clashes with entrepreneur's thugs. For this incident, the villagers were prosecuted to the Langkat Police on charges of crop damage and had been examined by the police, but none was detained by the police, because the land is state forest. The destructions of embankments were done with makeshift tools, such as hoes, lumps and pumping machines. The latter was used to spray the embankments with water so that the soil can be easily hoed. In conducting the destructions, the villagers were only assisted by the NGOs. Based on informant's acknowledgment, "The embankments that were destroyed covered an area of 462 ha" (R9).

Another informant said,

"The area was around 400 ha" (R4).

After the destructions of the embankments, the villagers assisted by the NGOs planted around 80,000 mangrove seedlings in an irregular pattern. At that time the entrepreneurs were still resisting by damaging crops and flushing the seedlings with diesel fuel. The entrepreneurs also tried to divisive the villagers by giving a certain amount of money to certain people (related to the people who receive money, R9 was not willing to name).



Figure 4. Palm oil plant conditions: Left: Pre-embankment destruction; Right: Post-embankment destruction (courtesy of Azhar Kasim)

Further, complaints emerged from the community supported by the NGOs and these complaints were heard by *Balai Pengelolaan Hutan Mangrove Wilayah II* (BPHM-II-Mangrove Forest Management Agency Region II). Then BPHM-II made a 25-ha mangrove rehabilitation model in Lubuk Kertang. This model was to support the community involved in the destructions of the embankments. The implementation of this model also involved Dishutbun Langkat.

In addition to plantation by BPHM-II, *Yayasan Gajah Sumatera* (Yagasu-Sumatran Elephant Foundation) also planted mangrove in 2011 and 2013, as well as insertion at the GNRHL area of Mekar in 2012. In 2012, *Dinas Lingkungan Hidup Kabupaten Langkat* (the Environmental Agency of Langkat) planted 25 ha of mangrove. PT. Pertamina EP Aset 1 (Pertamina) also planted around 29,040 mangrove seedlings between 2012 and 2014. In 2013, Dishutbun Langkat planted 25 ha of mangrove. Meanwhile planting by *Balai Pengelolaan Daerah Aliran Sungai (BPDAS) Wampu Sei Ular* (Watershed Management Agency) was carried out on an area of 305 ha. Around 2015, Dompot Dhuafa planted mangrove on an area of 8 ha and Kompas on an area of 1 ha. These planting activities always involved local community. An informant said,

"I participated in planting between 2012 and 2015" (R5).

Seeing the massive conversion of forest areas into non-forest areas, at the direction of the Governor of North Sumatra, *Dinas Kehutanan Provinsi Sumatera Utara* (Dishutsu-the Forestry Service of North Sumatra) carried out the Operation of Restoring the Function of Forest Areas in Langkat District in 2015 with a target of aquaculture and oil palm plantations with an area of \pm 609.28 ha in Lubuk Kertang. This operation involved various institutions, such as Dishutsu, regional offices of Ministry of Environment and Forestry, *Tentara Nasional Indonesia* (TNI-the Indonesian National Army), *Kepolisian Republik Indonesia* (Polri-the National Police), *kejaksaan* (the Attorney Office of North Sumatra and the Attorney Office of Langkat), *Biro Hukum Sekretariat Daerah Sumatera Utara* (the Provincial Bureau of Law), *Sekretariat Daerah Kabupaten Langkat* (the Regional Secretariat of Langkat), Dishutbun Langkat, and *Camat Brandan Barat* (District Head of Brandan Barat) and his staff. This operation aimed to reduce the rate of forest destruction, to carry out the execution of forest area, to destroy aquaculture and to fell palm oil trees inside the forest area. As a result, the team succeeded to execute an area of 105.79 ha contained palm oil plantations and ponds from several people. The land execution was carried out with the acquisition of land, the destruction of embankments, the felling of palm oil trees, the installment of 20 ban signs and socialization to local community regarding the operation and its follow-up. Based on the statement of an informant,

"There are currently around 800 ha of palm oil plantations controlled by the enterprises" (R9).

5.1.2. The History of Mekar

Mekar was established in 2005 prior to GNRHE project in Lubuk Kertang. At

the time of group formation, the chairman was Abdul Jalil and the secretary was Amat Ali with a total of 13 members. Dishutbun Langkat conducted the project in 2006 where Mekar was one of the groups involved in the project on an area of 25 ha in Lubuk Kertang. Another group that also participated in the project was Kertang II chaired by Sahbudin.

In 2008, Mekar carried out maintenance activity for 80 ha of mangrove rehabilitation plants in Lubuk Kertang. This activity was monitored by Dishutbun Langkat. At the same time, the group requested Dishutbun Langkat to be given a mandate to maintain the rehabilitated area of the group. Dishutbun Langkat gave a positive response, and issued a letter in 2010. The letter gives the group a mandate to protect, to guard and to maintain the GNRHL plant independently.

In 2013, Mekar experienced a leadership transfer from Abdul Jalil to Hadyan Jamili Batubara (hereinafter referred to as Dian or chairman). This transition was decided through a meeting held on 10 June 2013. Since Dian's leadership, the group became active.

In line with Yagasu's focus, in 2014, it conducted projects in Lubuk Kertang relating to mangrove protection. Mangrove protection area was established and Mekar was appointed as its manager. In the same year, the group set its second organizational rules i.e. *Anggaran Dasar* (AD-statuta) and *Anggaran Rumah Tangga* (ART-ordinance).

The group initiated ecotourism in the early 2016 by building jungle track. In April 2016, the group opened ecotourism for the first time and conducted voluntary donation collection. This practice experienced turmoil because of journalist's protest and *Lembaga Pemberdayaan Masyarakat Desa Lubuk Kertang* (LPM-Community Empowerment Institution) involvement in ticketing. However, the group

continued to collect donations voluntarily.

Over time the ecotourism has developed and this further made the group arranged ecotourism. Besides independently, the group also has received many assistances from outsiders such as Pertamina, Yagasu, Dishutbun Langkat, KPH and the Village Government. The group also has built working system relating to ecotourism. Since ecotourism was initiated, the group has organized itself but with weak rule enforcement.

5.1.3. Empowerment Process

The process of empowerment can be divided into two periods i.e. prior to 2013 and 2013 afterwards. 2013 becomes a milestone for the group because in this year the group experienced leadership transition. Further, the group has different mission. For the first empowerment, the group focuses on planting, maintenance and guard. Meanwhile in the latter period, the group focus on ecotourism.

5.1.3.1. Powerlessness

Illegal logging in and encroachment of mangrove forests in Lubuk Kertang had led to the conversion of mangrove into ponds and palm oil plantations. The massive land clearing for these two illegal activities had resulted in natural landscape changes in coastal area. Embankments carried out by irresponsible parties had resulted in significant negative impacts for the coastal community of Lubuk Kertang and its neighborhoods. The primary impact is the disruption of tidal process. While the subsequent impacts are the inundation of residential area, decreasing environmental quality in the form of damage to the natural habitat of coastal flora and fauna, decreasing the income of coastal fishermen who depend on mangrove

ecosystems and losing job as a fisherman.

Realizing the massive conversion of forest areas into non-forest areas and recognizing the negative impacts of mangrove conversion, Abdul Jalil and his fellows were worried that this situation had threatened their livelihoods. However, their awareness cannot be continued into actions because they had no power because the entrepreneurs had controlled the area and local community had been splitted into two opposites.

Between 2005 and 2013, the group was only active when there were projects from government. Members' inactivity complicated collective action to conduct further activities. The individual efforts of Amat Ali were threatened by rampant illegal logging and encroachment.

5.1.3.2. Support

The group has received many supports either internally or externally. Internal supports come from fellow members, meanwhile external supports come from outsiders' interventions. Internal support came from Abdul Jalil who let Amat Ali planting mangrove. Dian²'s advice also became an impetus to Amat Ali who further gathered the previous members and recruited new members. Dian's inspiration along with other outsiders' aids further encouraged the group to start ecotourism.

Since its establishment, the group has been assisted by various institutions. These institutions are Dishutbun Langkat, Yagasu, PT. Elnusa, Pertamina, the village government of Lubuk Kertang and KPH. Aids are given in the forms of fund,

² The history of Mekar is inseparable from the figure of Dian. As a newcomer, Dian first came to Lubuk Kertang in 2011. Dian quickly adapted and socialized with local community, and acquainted with Amat Ali in 2012. Then familiarity intertwined quickly through intense communication between them. Their discussion directed to the state of Mekar, the group had members but was inactive. Further, Dian gave Amat Ali an inspiration to establish an ecotourism attempt.

material and equipment, infrastructures, training, coaching and comparative studies. In their realization, the group has implemented them either individually or collectively.

5.1.3.2.1. Dishutbun Langkat

GNRHL project from Dishutbun Langkat gave Abdul Jalil and his fellows strength in order to restore the mangrove. Prior the execution of the project, they gathered several other villagers who had similar awareness and commitment.

Then they formed farmer group under the name of Mekar in 2005. At the time of the formation, the group was chaired by Abdul Jalil and Amat Ali was secretary with a total of 13 members. The formation of the group which was a community initiative was needed as a prerequisite for participating in the project.

Regent Decree of Langkat No. 522.4-16.a/SK/2006 of 3 April 2006 concerning Executing and Working Farmers Groups for Activities of the National Movement for Forest and Land Rehabilitation (GN-RHL/GERHAN³) 2005 DIPA-L 2006 appointed Mekar and other twenty farmer groups as work partners in GNRHL projects in 2006.

In accordance with the project mechanism, the designated planting area was determined by Dishutbun Langkat. At that time, the designated-GNRHL area of Mekar also experienced encroachment and fortification, but had not been planted

³ The funding provider for GNRHL project was Ministry of Forestry delegated to BPDAS Wampu Sei Ular. It coordinated with Dishutbun Langkat in order to determine the farmer's area and group. The determination of the intended group can be in the form of an existing group or the formation of a new group. In determining or forming groups, Dishutbun Langkat was looking for people who had will to rehabilitate forests and land. Procurement of seeds was carried out by the third party winning the tender and the seedlings were handed over to the farmer group for planting. In planting, farmer groups were given wages. By planting by local farmer groups, it was expected that a sense of ownership will arise and they will maintain and care the plants.

with palm oil plants. In this regard, an informant said,

“The founder of Mekar (Abdul Jalil) maintained Mekar area and insisted on planting” (R6).

So there was no further action from the entrepreneurs. During this time, problems arose between local community and the founder due to the rampant giving of money by the entrepreneurs to local community as compensation for the land. Both Abdul Jalil and the group were pressured not only by the entrepreneurs, but also by fellow villagers. The magnitude of the influence of entrepreneurs made some people supported the entrepreneur's business.

Two year after the planting project, the group became active again. Mekar was appointed by Dishutbun Langkat to conduct maintenance of rehabilitated mangrove in Lubuk Kertang in accordance with the Cooperation Agreement No. 522.4-03/SPKS/GN-RHL/2008, with a contract of IDR 10,125,000. Further, Dishutbun Langkat had also issued a mandate letter to support the group to guard and to maintain the GNRHL plants independently. However, this support was not accompanied with resources.

In addition to planting and maintenance activities, Dishutbun Langkat still supported the group through coaching. According to an informant, “Dishutbun Langkat held coaching activities to farmer groups every year” (R18).

These farmer groups were invited to Dishutbun Langkat office and were given briefings and directions. Communication was still being established because it was considered that these groups were the spearhead of Dishutbun Langkat. In addition, it also provided opportunities for farmer groups for comparative study.

The comparative study followed by the functionaries of Mekar was to Pernalang, Yogyakarta and Banyuwangi.

In 2016, Dishutbun Langkat budgeted certain funds from *Dana Alokasi Khusus* (special allocation funds) to develop ecotourism by building several facilities such as a watchtower, a guard post, a 90-m track and an entrance gate. Dishutbun Langkat has made a master plan for ecotourism development. In the master plan, the facilities to be built were the extension of track, dock, cottage and others. But this development plan was not exposed and published, besides Dishutbun Langkat had limited funds to fulfill the needed facilities.

5.1.3.2.2. Yagasu

Yagasu was formed in 2002. Until 2005, Yagasu focused on conserving elephant ecosystems. Since 2006 (after the 2004 tsunami), Yagasu has focused on preserving mangroves. The big project that Yagasu has done was Carbon Corridor funded by USAID (2011-2015), while Carbon Credit with Livelihood funding runs from 2010 to the present. Relating to the latter, Yagasu has signed a long term (20 years) land-use carbon credit contract with the Livelihoods Fund, a consortium of eight multinational companies from Europe (Yagasu, 2013)

In determining the location of the project, the criteria are mangrove-possessed villages that can still be maintained. Of the many villages, Lubuk Kertang is one of them. Yagasu's focus on preserving mangroves appears clearly from projects aided by USAID. The project was to form village regulations regarding the Village Land-use Plan (VLP), Mangrove Protection Area (MPA) and MPA manager. The VLP project helped communities making participatory mapping in planning the land-use of Lubuk Kertang. The direction of land use was focused on the agricultural, plantation, fishery and tourism by maintaining the sustainability of the mangrove ecosystem (Yagasu, 2014).

Village regulation on Mangrove Protection regulates mangrove management and utilization, community involvement, and rules and sanctions. Even though the title is mangrove protection, it gets less attention in its description. Whereas the MPA project includes the determination of the MPA and the appointment of its manager. Determination of the MPA is regulated in the Village Head Regulation Number 1 of 2014, while the appointment of Mekar as a MPA Manager is determined through a Village Head Decree No. 141.01/1162/LBK/IX/2014. The area of MPA is set as 19.13 ha consisting of 3.86 ha of core zone, 1.44 ha of buffer zone, and 13.83 ha of utilization zone.

The appointment of Mekar as MPA manager resulted in consequences in the form of responsibility in "protecting" mangroves. This decree regulates not only right but also obligations. However, their proportion is disproportionate. From four main items, it only regulates one right i.e. managing MPA based on its allotment. The term "managing" is not explained further. Meanwhile Mekar's obligations are supervising and preventing environmental damage caused either by natural forces or by anthropogenic activities; giving oral or written warnings to parties that have the potential to do damage; and informing village apparatus or related institutions concerning environmental damages conducted by these parties.

The project target for the formation of the two regulations is Lubuk Kertang, not Mekar. However, the Village Head appointed Mekar as the MPA manager based on Decree No. 141.01/1162/LBK/IX/2014.

These regulations have been launched in an audience in Regent's Office of Langkat in 2015. Based on the informant's explanation,

"In this year (2015) also Yagasu initiated the village to propose the Village Forest scheme, due to the formation of these village regulations to support the submission of Village Forest" (R13).

However, this process cannot be continued because the group is considered immature. Yagasu claimed,

“The group (Mekar) did not attend the meetings held by the village. The meeting aimed to introduce the management of group to all parties” (R13).

In accordance with the focus of the project, community empowerment is carried out through planting and maintaining mangroves, and assisting the community with its economic activities. However, economic development is a secondary activity.

Regarding Mekar, Yagasu admitted,

“Yagasu conducted less activities on ecotourism” (R13).

Analysis of Yagasu's intervention on Mekar can not be done specifically because it does not provide specific report of each activity. Yagasu makes periodic report based on the program i.e. quarterly and annually. Based on the letter of working agreement for the construction of information hall No. 061/ADM/YGS-MDN/IX/2014 of 26 September 2014 between Yagasu and a representative of Mekar, Yagasu give the group some money to build an information hall in Mekar area. This construction employed 12 people within 25 days. Further, this hall was used to conduct group meetings. However, lately it is used for praying room.

The concept of ecotourism⁴ was originated from Amat Ali's thoughts during a discussion with Yagasu in early 2015. He wanted Mekar to get income from mangrove. On this basis, and several other considerations, Yagasu wanted to give him the opportunity to realize his idea of ecotourism. In the same year, Yagasu conducted a comparative study of mangrove management for economic development. Yagasu engaged Amat Ali in as a representative from Lubuk

⁴ Even though Yagasu assumes that this idea came from Amat Ali, the researcher argues that this came from Dian.

Kertang. In this study, Amat Ali visited Yogyakarta, Klaten, Solo, Malang, Surabaya and Situbondo for six days. It was hoped that by observing mangrove management in these places, it could change Amat Ali's mindset about mangrove management so he might be motivated to do the same in Mekar.

Relating to the appointment of Amat Ali for comparative studies considered as a conflict by the chairman of Mekar, Yagasu did not know this. Yagasu argued, "The appointment of personnel was Yagasu's right with the consideration that the personnel was highly dedicated figure in preserving mangroves" (R13).

Yagasu further argued,

"This comparative study was to provide an opportunity for Amat Ali to realize his idea concerning ecotourism. In addition, the appointment of Amat Ali was personal, so it did not represent the group. Dian was not appointed because of being young and as a migrant" (R13).

Regarding the appointment of Amat Ali, Yagasu did not coordinate with the group leader, but coordinated with the village head.

Regarding this conflict, Yagasu thought,

"This might be related to giving fund to the group through Amat Ali and treasurer (Rasmianto)⁵ to make bamboo-made tracks in 2015. The handover of funds was witnessed by Yagasu's stakeholder i.e. Darwis and proved with a receipt" (R13).

The chairman argued,

"The fund should be known by the chairman because he is the leader of the group" (R15).

Other claim filed by the chairperson about Yagasu's intransparency was also denied by Yagasu. Regarding this, Yagasu argued,

"There is no need to be transparent to the group because Yagasu has its own rule, besides Yagasu is responsible to donor for the use of money" (R13).

⁵ The chairman said that Armansyah (head of Subvillage V) accompanied Amat Ali.

Regarding the clarification of this conflict, Yagasu claimed,

“When Yagasu conducted activities in Lubuk Kertang, the chairman never wanted to meet” (R13).

In carrying out community empowerment programs, Yagasu always coordinated with the village head, but there was no coordination with the forestry agency⁶. Coordination⁷ with the village head is considered important because of three things. First, the approval of the village head will smooth the course of the program. Second, the village head plays an important role in conveying Yagasu's programs to the community. Third, in planning assistance, Yagasu is also based on the *Rencana Pembangunan Jangka Mengengah Desa* (Village Mid-Term Development Plan). The assistances given to the group included funding for the construction of track, clean water facilities, educational activities for local community on ecotourism, planting and nursery.

Regarding coordination with interested parties, Yagasu has fulfilled the invitation from Pertamina to present what had been done and what would be done.

This coordination is important to do in order to synergize empowerment towards the group and to reduce the potential of claim each other.

In ensuring the program works well, Yagasu uses an emotional approach through meetings with groups and not with the audit system. Evaluation of the success of the program is carried out by donors by going directly to the village through direct observation of the results of the work and asking the community.

⁶ This statement was raised by R16

⁷ The researcher wonders if Yagasu realized the importance of coordination with institution leaders, but why Yagasu did not coordinate with the chairman when appointing Amat Ali for comparative study.

5.1.3.2.3. PT Elnusa

In the early 2016, PT Elnusa (Pertamina's subsidiary) conducted seismic activity in Lubuk Kertang. To support its activity, PT Elnusa built temporary dock and its connecting track. Because this enterprise used Mekar area, both parties had an agreement regulating the use of a small part of Mekar area for PT Elnusa's activities and the utilization of some PT Elnusa's wood by Mekar. This wood was used to establish other tracks connecting Yagasu-made track and enterprise-made track, and the group also expanded the existing tracks.

5.1.3.2.4. Pertamina

Pertamina's policy on community empowerment is divided into four kinds, namely infrastructure, charity, capacity building and community empowerment. These four kinds include programs such as education, health, economics and the environment. Assistances are in the form of corporate social responsibility (CSR)

Before 2015, CSR programs have been given in the form of infrastructure and charity such as schools, mosques, roads, and others. For Pertamina, CSRs like these have no continuation and after being built it will be left. However, since 2015 there has been a change in the CSR trend focusing on capacity building and community empowerment of the communities around the company's location. This trend is caused by Pertamina's efforts to participate in the award by Ministry of Environment and Forestry in environmental management such as *Proper*.

To provide CSR, Pertamina approaches the potential groups. Pertamina wants the program benefiting both parties. If the target group has been obtained, Pertamina will do group recognition. This means that this the target group must already have activities. Then Pertamina drives the group in developing its activities.

In implementing CSR, Pertamina issues a program for a certain duration.

Pertamina's environmental program on Mekar is called the *Pengembangan Kawasan Ekowisata Mangrove* (Mangrove Ecotourism Development). The program lasts for five 5 years from 2016 to 2020. The program-related objectives are to rehabilitate critical areas of mangrove forests, develop mangrove ecotourism and create environmental-based community economic enterprises (Pertamina, 2018). Prior to this program, in 2015, Pertamina invited the chairman and vice chairman to do a comparative study to Deli Serdang. This comparative study to observe mangrove management by one group.

Activities that have been carried out are mangrove planting and maintenance (2016 - 2018), track construction and maintenance (total 800 meters) (2016 - 2018), group assistance, such as optimization of social media (facebook, youtube) as a means to promote tourism and group management (2016 - 2018), *siswa cinta bakau* programs (2016 - 2018), signboard making and maintenance (2017 - 2018) (Figure 5), mangrove nurseries (2017), entry access improvement (2018), mangrove area spatial improvement (2018) and financial literacy training (2018).

In addition, Pertamina also monitors and evaluates annually on the development of these activities (Pertamina EP Aset 1, 2018).



Figure 5. Signboard: (a) At entrance gate; (b) At site

Assistance is given directly to the group after notifying the village government.

In providing assistance for physical development, Pertamina only provides materials, while labor wages are not given. Through the Community Development Officer, Pertamina supervises the work. This is to ensure that the work runs smoothly. Based on Pertamina's evaluation, so far the realization of physical activities is in line with the target. The implementation of Pertamina's CSR programs such as the Siswa Cinta Bakau invited several related parties, such as KPH, District Head, Village Head, and Yagasu.

Based on evaluation, Pertamina (2018) claims that group members' income increases at least 35% of their initial income as fishermen. This revenue increase also reaches IDR 1,000,000 per month⁸. In addition to economic benefits, other positive impacts are an increase in the number of beneficiaries, positive perceptions of local community, ecotourism of Lubuk Kertang as a new icon of tourism destinations in Langkat District and as a research destination.

Regarding with parties who provide assistance to groups, Pertamina has coordinated with other institutions in 2018. This coordination aims to synergize assistances among institutions so they are not overlapping and redundant. Coordination is carried out during joint meetings, not in written term.

5.1.3.2.5. Village Government

Village government supports ecotourism in the form of village head frequent visits. These visits are usually accompanied with official visits of various institutions. Village support has also shown by endorsing the organizational structure of group. This endorsement aims to strengthen the functionaries to

⁸ This is consistent with the result of this research.

manage the group.

Even though regulations concerning MPA and MPA manager were dominantly set by Yagasu, village government had a role in issuing these regulations. Village government also has a role in acknowledging partnership by signing NKK. This role is regulated in related governmental regulations such as Regulation of Ministry of Environment and Forestry and Regulation of Director General of Social Forestry and Environmental Partnership.

Village government has allocated a number of funds to assist farmer groups in Lubuk Kertang based on their proposals. From many proposals, village government agreed to build a dock in ecotourism site in 2017. This facility is functioned to support boat tour and as entrance gate from sea. Other proposals cannot be realized yet because the village has limited fund

5.1.3.2.6. KPH

The role of KPH in empowering the group has been carried out since it submitted a partnership proposal. The preparation and discussion of NKK were carried out together. Then KPH assisted the group in making a proposal for ecotourism development. Even though it was compiled by KPH, all ideas came from the group. KPH only helped in its preparation because of the limitations of group human resources. This plan regulates the needs of the group to support ecotourism. It is hoped that this plan can be a reference for outsiders so that the assistances provided do not overlap and there is no claim each other. KPH also plays a role in helping groups to develop 10-year work plan and the first annual work plan. Regarding Mekar's limitations in making proposals, KPH realized, "KPH is not yet intensive in assisting the group to increase the group capacity. Mentoring is still limited to the functionaries" (R12).

Since the establishment of KPH, outsiders who want to carry out community empowerment activities must coordinate with KPH. Coordination built with Pertamina has been outlined in the form of a Memorandum of Understanding (MoU). The implication is that in planning and executing the program, Pertamina must coordinate with KPH. So that it is expected that Mekar does not walk alone and KPH knows group activities. The MoU with Yagasu has not yet been made because Yagasu has no activity in the group. In spite of no activity, Yagasu continues to coordinate with KPH.

Other outsiders planning to make CSR activities are Bank Negara Indonesia (BNI) and PT. Indonesia Power. Communication with these institutions has been built. But the progress for PT Indonesia Power does not yet exist. While BNI has coordinated with KPH and Pertamina regarding its CSR. BNI will provide CSR in the form of physical building, namely the construction of 10 stalls.

Because it was newly formed, KPH has less budget and facilities. So that this will make it difficult for KPH to empower the group. However, KPH will continue to empower the group on a non-budgetary basis. In budgetary terms, for 2018, KPH has a budget for community empowerment aimed at the group. In the near future, KPH will develop beekeeping at ecotourism sites. This assistance is expected to stimulate the development of group productive businesses.

To monitor group activities, KPH only conducts informal visits and communication and are done intensely. Group monitoring and evaluation has not been carried out because NKK was signed at the end of 2017, while these activities will be carried out at the end of 2018.

In its long-term plan, KPH plans to develop ecotourism at a budget of IDR 2.4 billion (KPH Wilayah I, 2018). This budget is planned to come from the state

budget, provincial budget and non-binding funds.

5.1.3.3. Wish

Before the implementation of planting activities, Dishutbun Langkat organized a one-day training for group functionaries and members. The training aimed to provide technical knowledge about planting mangroves to the group. Based on the statement of an informant,

“At that time, representatives of Mekar who attended the training were four people, namely the chairman, the secretary and two members” (R1).

Dishutbun Langkat had also conducted coaching to the group. However, the representatives of the group were invited. In the coaching, Dishutbun Langkat gave them practical knowledge, such as planting mechanism, plant maintenance and group cooperation. Dishutbun Langkat only invited group representatives because of the number of groups invited and the budget limitation. Even though only a few members taken part in the training and the coaching, it was hoped that they could pass on the knowledge to the others.

When Dishutbun Langkat monitored and evaluated maintenance activity in 2008, the group asked the team to be given a mangrove guarding letter/mandate to maintain the rehabilitated area. The group's rationales at that time were threats from illegal conversion and pressure from various parties. Then the group's proposal was submitted to the Head of Dishutbun Langkat. Regarding this proposal, Dishutbun Langkat responded positively, however the process of letter's issuance was very slow. The intended letter was issued 1.5 years later. The Head of Dishutbun Langkat issued a letter No. 522.4-1594/HUTBUN/2010 of 17 June 2010 concerning Protection, Pacification, Surveillance and Maintenance of GNRHL Plant on State Forest Areas. The letter covers two important matters, first,

assignment for Mekar to protect, safeguard, guard and maintain the GNRHL plant independently, and second, assertion that the GNRHL plant and the plants planted independently by the group are forest areas controlled by the state.

Besides this mandate, Amat Ali conducted independent mangrove planting, maintenance and protection during group inactivity. Relating to this, he said, "I routine planted (mangrove) independently because of (my) concern, so that erosion is not prolonged, marine biota still exists and survives" (R1).

Even though Amat Ali's efforts were still threatened by rampant illegal logging and encroachment, he did not stop. He kept maintaining his will and effort instead of surrender. However, due to the turmoil of dismantling the embankments by local people in 2009, illegal logging activities stopped.

Dian's inspiration to open ecotourism made Amat Ali enthusiastic to reactivate the group and started gathering members. He approached local people personally and persuaded them to join the group to guard and to utilize the well-established mangrove. Some members gathered by Amat Ali were different from previous.

Amat Ali embraced the Subvillage V villagers to become a member. At that time, the number of members gathered was 23 people.

Support from Yagasu was in line with group's mission in managing mangrove. Mekar was involved in the preparation of village regulations directing mangrove management. Assistanes from Yagasu had commenced the group to expand its vision by accepting these aids and further implemented them either individually or collectively.

5.1.3.4. Consciousness

By participating in the project, group members acknowledged their right to conduct mangrove planting and maintenance. Further, practical knowledge

obtained from the training become a new asset for the members so that they planted mangrove based on the contract. For maintenance project in 2008, planting experience in 2006 became additional knowledge for the group in conducting plant maintenance. The mandate letter from Dishutbun Langkat became basis for the group to guard and to maintain the GNRHL plants independently. However, this letter did not provide any resource for the group.

Prior to leadership transition, Dian's inspiration and support as well as Amat Ali's vision made the members enthusiastic to reactivate the group. The members gathered and discussed the development of the group. Two main attempts agreed by the members were a leadership transition and an ecotourism attempt.

Yagasu's projects regarding local regulations on mangrove were one of means to express group vision on mangrove management. Further, external assistances also strengthened the group in expressing its aspirations and realizing these aspirations.

5.1.3.5. Confidence

In Lubuk Kertang, Mekar participated in mangrove planting project on an area of 25 ha. Another group that also participated in the project was Kertang II chaired by Sahbudin. Over time, Mekar's area survives from encroachment, while Kertang II's area turned into a palm oil plantation. Mekar's area was relatively safe because of plants guard by the group especially Amat Ali.

Dishubun Langkat monitored directly the work done by the groups. This monitoring aimed to ensure that the work carried out by the groups was in accordance with technical instructions and directions. In accordance with the prevailing regulations, after planting activities, the groups were obliged to make a

report on planting implementation to Dishutbun Langkat and it further would be held an accountability both administratively and physically in the field.

In 2008, the group carried out maintenance activity for 80 ha of rehabilitated mangrove in Lubuk Kertang. The result of this activity was examined by the Monitoring and Evaluation Team of Dishutbun Langkat and contained in the Official Record of Work Examination No. 522.4-/HUTBUN-V/2008 of 11 December 2008.

In the Official Record, the team concluded that the plant maintenance work was carried out properly.

In the same year, Dishutbun Langkat gave assignment to Mekar to protect and to maintenance planted mangrove. However, this was not accompanied by any assistance. As a result, only few members involved where Amat Ali was the most active member in conducting mangrove protection and maintenance. The letter did not provide information about the extent of the area, but an informant said,

“The area was 80 ha (R1).

Furthermore, he said,

“A part of the 80 ha area was in the converted area and had an embankment, but palm oil plantation did not exist yet. This area was successfully recaptured for planting activities. (R1).

Amat Ali acknowledges that he had conducted planting from 2007 to 2014.

Amat Ali himself planted and guarded the plants without any help and without the involvement of any members. In conducting independent planting, Amat Ali took an initiative to find seeds outside Lubuk Kertang because at that time, the mangrove in Lubuk Kertang were disappeared and no tree could be used as a source of seeds. Every year, about 20,000 seeds had been planted. The types of mangrove planted were *cronata* (long fruit) and *apiculata*. In planting, Amat Ali preferred planting seeds rather than seedlings. Amat Ali reasoned that seedlings

will be stressed when moved to the area and had a lower survival rate, while seeds will grow faster with survival rate up to 75%. Amat Ali used a 3 meter x 1 meter spacing. Each seed planted marked with a stake, so it was safe from fishermen steps. Furthermore, the plants were maintained and cared for, because the planted seeds might be uprooted or dead, if there were dead or uprooted plants, they will be enriched. Amat Ali did planting independently according to the training he has participated in.

In 2013, individuals' vision towards group development had triggered the others' vision to make a change in organizational structure and a plan in organizational activities. Collective vision had been realized through a leadership transition and an ecotourism attempt.

Collectively, Mekar was involved in the preparation of village regulations directing mangrove management. Village regulations concerning mangrove had increased group's confidence in managing mangrove. Through these regulations, local community acknowledged Mekar's role in protecting and managing mangrove. In addition, Yagasu gave the group some assistances conducted either individually or collectively. Aid directed to a certain member also aimed to develop group capacity.

5.1.3.6. Empowered Group

In the first period, individual such as Amat Ali had a main and dominant role in planting and securing mangrove continuously. In this first process, the group was not fully empowered. The group was only active when there were projects from government. As stated by an informant,

"...there was no activity...only planting, (activities were) limited to projects" (R1).

In 2013, Mekar experienced a leadership transfer. This transition was decided through a meeting held on 10 June 2013. The meeting was attended by all group members (23 people) and at the meeting, Abdul Jalil made an Official Record of Resignation from the Management of Mekar as a form of written statement of resignation as the chairman of Mekar. An informant confirmed, "Abdul Jalil was old and maybe he was unable to run the group" (R2).

The Official Record also explained that it was made to get approval from the Village Head of Lubuk Kertang. Abdul Jalil had served as chairman since the formation of the group, thus he had served for about 8 years.

For almost two years (2013 and 2014), Mekar was involved in the preparation of village regulations concerning Village Land-Use Plan (VLP), Mangrove Protection, Mangrove Protection Area (MPA) and MPA Manager facilitated by Yagasu. Even though this Yagasu's project targeted Lubuk Kertang, the Village Head appointed Mekar as the MPA Manager based on Decree No. 141.01/1162/LBK/IX/2014. The group created its second organizational rules⁹ in September 2014. However, these rules were not enforced properly because it still adopted a kinship mode in leadership.

In September 2014 Mekar constructed an information hall in the site from Yagasu's fund. This construction employed 12 people within 25 days. In October 2015, Amat Ali represented Lubuk Kertang to take a comparative study about mangrove management for economic development facilitated by Yagasu. This appointment further caused conflict with the chairman.

In the late 2015, the group built a bamboo-made track from Yagasu's fund. In

⁹ Regarding to the rules, the current chairman said that previously the group has set the rules. However, none knew their existence, even the previous chairman himself.

the early 2016, the group established other tracks connecting Yagasu-made track and PT Elnusa's track, and also expanded the existing tracks. The latter activity was done by utilizing some enterprise's woods.

With the limited existing facilities and resources, the group opened ecotourism for the first time in April 2016 by collecting visitors' donations. The ecotourism attempt has been challenged not only internally but also externally. In managing ecotourism, the group has established working system, financial management and meeting mechanism. The group also has legalized its tenure right and looks for aids from outsiders to support ecotourism.

5.1.3.6.1. Licensing Process

Considering the increasingly advanced ecotourism, and this further also made the potential of the village more developed, the village government wanted to participate in ecotourism. A discussion between the village government, Mekar and Bakau Mas¹⁰ resulted in an idea for managing mangrove ecotourism under the village authority. The administrative process of *Hutan Desa* (HD-Village Forest) began around June 2016. However, the process conducted by the village government run very slowly. The long process made Mekar skeptical to complete the concept of ecotourism. The long duration of the administrative process in the village government was due to the very limited village budget.

Fortunately, KPH informed the group concerning training on Natural Resources and Environmental Management for Community Leaders held in Pematang Siantar from 14 to 23 February 2017. Based on this information, the group assigned the

¹⁰ At that time, Mekar became a pilot group in managing mangrove ecotourism. So Mekar became a source of learning for Bakau Mas. Bakau Mas itself is located in Lubuk Kertang.

chairman to attend the training. In this training, the chairman obtained information about social forestry. After completing the training, the result was delivered to the group. Then the group discussed and formulated licensing towards Kemitraan.

On 18 April 2017, the proposal of Kemitraan was submitted to KPH. In the process of preparing the application letter, the group was facilitated by facilitators, namely Ilham Iskandar Zein and Aramico. KPH strongly supported the group proposal in ecotourism and assisted in the administrative process in Dishutsu and *Kementerian Lingkungan Hidup dan Kehutanan* (KLHK-Ministry of Environment and Forestry). After receiving the group proposal, KPH conducted administrative and field verification. In carrying out field verification, KPH team inspected the ecotourism area managed by the group. Then KPH and the group formulated and discussed the NKK together. When the agreement regarding the draft of NKK was reached, KPH sent the proposal and draft of NKK to KLHK on 28 April 2017.

Then, the KLHK team verified the proposal by conducting an inspection to the ecotourism site. This aimed to ensure the ecotourism carried out by the group.

Then, the draft of NKK was discussed by KPH, the group and KLHK team and was agreed on 26 July 2017. Discussion on the draft of NKK related to binding articles that must be obeyed and agreed by both parties. After signing the NKK, KPH continued the licensing process by submitting Kulin proposal to KLHK. The Decree of Minister of Environment and Forestry on Kulin was issued on 10 April 2018. In the decree, the number of members is 33 people.

5.1.3.6.2. Rules and Sanctions

1) Rules

As discussed earlier, the group was only established to participate in GNRHL

projects. At that time the group had organizational rules. However, none knew their existence, even the previous chairman himself. For a year since leadership transition, the group *has not* had rule yet. It can be said that during this time the new functionaries have tried to adapt with group characteristics especially for the chairman. Prior to rules endorsement, the chairman himself created the rules adapted from other organizational rules. These rules were not drafted or discussed with other functionaries or members. Finally, AD and ART were endorsed on 3 September 2014 by the Village Head. The group has only AD and ART that regulate the organization. There is no other regulation governing the rules of the game and sanctions such as group regulation, chairman regulation, chairman decree and chairman directive.

AD contains principle and purpose; organization structure; mission and function of organization, and organizational work arrangements; and meetings. Meanwhile ART contains the election and appointment of functionaries; member's rights and obligations; job description of advisors and functionaries; working procedures; meetings; financial administration; and sanctions. However, their enforcement is "applied" after ecotourism and their implementation is carried out in a familial mode and group wisdom. There are still many wisdoms and no sanction enforcement.

ART regulates the obligations and the rights of members. Their obligations are complying organizational rules, paying dues such as basic fee, mandatory fee and voluntary fee, and participating in organizational activities. Meanwhile the rights are choosing functionaries and chosen to be functionaries, getting help from group facilities, getting information and counseling, and expressing opinions for group advancement.

In the implementation, members know and understand these obligations and

sanctions, but they do not recognize their rights. ART does not regulate the right of receiving wage when conducting daily activities. But an informant said,

“Members who actively participate in group activities will earn income” (R1)

The same informant further added,

“Rights such as expressing opinions, attending meetings and obtaining information are unregulated” (R1).

Another informant said,

“Member rights, I don't understand” (R5)

Meanwhile another one said,

“The written rules of the group are not existed” (R6).

Members recognize their obligations in daily life of organization. The implementation of obligations is as follows:

- Members must participate in daily activities (Figure 7). Each member has been placed in certain section. In conducting their works, the members are considered understand their job description and responsibilities because the work system has been discussed and approved in the meeting. Members have certain reasons when not participated in the activities, for example because of certain personal activities and earning a living outside.

- Members must participate in mutual cooperation (Figure 6). Each mutual cooperation has been discussed and agreed in the meeting. So that appointed personnel must conduct it together. Members have certain reasons when not participated in the mutual cooperation, for example because of certain personal activities and earning a living outside.

- Members must pay monthly due. Either active or inactive, members have to pay monthly due. This due has been agreed in the meeting. It aims to increase group capital. But its implementation was only carried out around 2013/2014.

After its one-year implementation, members agreed to suspend its application related to the economic problems of the members. But the group want to reactivate this due after 2018 Eid.

- Members must comply with group rules and functionary's directives.

- Concerning the group finance, the chairman entrusts fully the secretary and members on its management including its daily and monthly records. The mechanism of group finance is not explicitly written. It is formed in the daily activities of group. However, deviations in collecting donations or utilizing money are still potential. These can be happened by slipping money or marking up procurement.

- The salary difference between members and non-members is also regulated.

The non-members get 60% from the member income. A half-day salary is also applied.

Relating to these obligations, an informant said that:

"All members have to be responsible and must coordinate with each other because the prospect of ecotourism depends on member's compliance with the rules" (R10).

2) Sanctions

According to ART, if members violate the obligations, they will be given a reprimand, and/or dismissed based on meeting. Generally, members who do not comply these rules will be reprimanded through a personal approach. If this approach does not succeed, he/she will be dismissed verbally in a daily conversation at a coffee shop or ecotourism site or through meetings. Sometimes

social sanctions are also applied to inactive members, for example, mentioning the absence in mutual cooperation. It is hoped that this will create an embarrassing effect on inactive members, so that they may participate in the next events. Other sanction is position deactivation. However, this sanction is not regulated in any regulation. All these sanctions are decided in group consensus.



Figure 6. Mutual cooperation in building a hut



Figure 7. Daily activities: (a) Entrance gate, (b) Cleanliness section

There is no written standard in imposing sanctions. In organizational daily activities, terms in imposing sanctions develop naturally. Warning is imposed when members did their works improperly or did not do the works at all. The attitude of the member still obeys and realizes the fault. To overcome the absence of

members in sections, there must be a replacement by other members. Meanwhile, dismissal is imposed when members did not participate in mutual cooperation between three times and six times or member did not pay due for three months.

Position deactivation is imposed when members misuse group's money.

However, the dismissal sanction is not applied yet because the functionaries still regard kinship approach. According to sanction imposition, members' reactions are varied. Some members accept the sanction, meanwhile the others ignore it.

Member who accepted the sanction did not protest because they realized their fault. Although members disobey the rules, they can still be directed.

The group is planning to establish the new arrangement of rules and sanctions.

This arrangement will be discussed in meeting. It is expected that this can be conducted after management transition. In the future, the group will plan to impose sanctions on inactive members. The imposition of sanctions must be carried out and emphasized so that members do not repeat it and each member really does his job and is always responsible so that no member will undermine his duties.

5.1.3.6.3. Membership

According to ART, a person that can be a member of group is the villager of Lubuk Kertang, but priority is given to the villagers of Subvillage V because mangrove exists in Subvillage V. However, only a few villagers of Subvillage V concern about the mangrove, so there is recruitment from other subvillages. In the initial recruitment, the members who joined the group had awareness to improve the forest. At that time, ban was imposed on non-Lubuk Kertang villagers. An informant said,

"It is pure from my consciousness. Because I earn a living from this forest" (R5).

At present there are three members from outside the Subvillage V, they are recruited by the chairman. This recruitment was requested by the chairman during the member meeting. The recruitment process is not regulated, but requirements for becoming a member only submit a copy of KTP and have willingness to work together. The majority of members still have kinship. This is understandable because they want to stay in the group. Member registration is very open. The fluctuation of membership occurs because of member inactivity. However, the group has no member database and management. The process of dismissal is done verbally, meanwhile by giving KTP a villager can become a member.

The group has issued some verbal policies relating membership. First, for members who migrate or are not active can still be acceptable after hearing their confessions. During their inactivity, the members are still called a member. Second, the number is limited to 40 people, the reason for this is that from the existing members there are still inactive members, so the group does not open the recruitment. Each member is equipped with a badge name. According to ART, the number of members has been decided as many as 30 people. But this number can be added after being agreed by the group.

In judging his members, the chairman said that the strength of this group is members' awareness. As many as 80% of the members are very aware of protecting the forest because they have a dark history related to the mangrove conversions. The members are also increasingly aware that the forest provides a living. Even so, the members are less motivated in managing mangrove. To increase their motivation, the chairman often persuades and motivates members related to mangrove management. Relating to motivation, members are still money-oriented, members think that every act must have money. Similar to

motivation, members' capacity is also low. Many members do not understand administrative and financial affairs, and technical knowledge about mangrove.

Some members are still young and they are rarely involved in meetings. Some efforts conducted by the chairman and the vice chairman are giving comprehension regarding this knowledge. Even though members have limited knowledge, they have high creativity and enough adaptation in daily activities.

In general, the activity of members is quite good. It can be said that members are very active during weekends or many visits, but are less active when weekdays or less visits. Some inactive members usually make a living outside. There are even members who only come during Eid.

5.1.3.6.4. Working System

1) Working System

After forming a new management with a different member composition than before, the fishermen who are members of the group supervised the mangrove area. Supervision was carried out when these fishermen go to the sea to catch fish and when returning home after catching fish (travel from home to the sea through the mangrove area and vice versa). However, safekeeping cannot be done at any time. At that time there were still illegal logging carried out by people outside Lubuk Kertang. These illegal loggers operated in groups at night and morning and armed with machetes and axes. The illegal loggers were thought to have charcoal factory.

Although they have been forbidden by group members, they still continued to carry out logging furtively and often gave resistance. Regarding illegal logging, an informant said,

"We cannot blame them, because that (charcoal) was their income" (R3).

As group are active, illegal logging is no longer happening. An informant stated, "The last case of illegal logging in Mekar occurred in 2015" (R3).

In September 2014 Yagasu gave the group some money to build an information hall in Mekar area. This construction employed 12 members within 25 days.

Further, this hall was used to conduct group meetings. In the late 2015, Yagasu gave the group a number of fund through Amat Ali and Armansyah (Head of

Subvillage V) to make bamboo-made track. In the early 2016, PT. Elnusa gave wood to the group to support group activities in tracking. Although the track was

made from leftover and rough wood, the construction run smoothly. At that time, the activities carried out by the group were not assisted by anyone. All expenses

for eating, drinking and cigarette come from themselves. Construction of tracking facilities was estimated about three months. During the first one and a half months

the active members were eight people, but the next one and a half months, because they received support from the local community, the other members

become active. The group opened ecotourism for the first time in April 2016 by collecting visitors' donations. Mangrove was becoming more widely known for the

villagers' curiosity regarding group activities and Pertamina employee posts through online social media when seismic activities. At that time, the group set

donation for entry rate of IDR 2,000 and provided a carton box for visitors' donations and asked them to donate voluntarily. The value of donations was

determined through group meetings. The increase of the number of visitors and donations' collection by group

members attracted village apparatus. Then LPM involved in ecotourism through ticketing. It set and provided the ticket, meanwhile the group bought it from LPM.

LPM wrote down entrance rate of IDR 2,000 and each ticket was stamped by LPM

stamp. In this ticketing, LPM cooperated with the village government. The group continued collecting donations with LPM-made tickets. A journalist protested this ticketing practice and asked group permit to collect ticket. However, the group presented its arguments and the village government supported the group. Further, the group continued to collect donations voluntarily.

This ticketing raised anxiety among members. Then the chairman consulted with a Dishutsu senior officer and asked about donation collection in the mangrove area managed by the group. This officer suggested LPM to stop this practice and if the group used the term of donation, it could be continued because it was voluntary and non-binding. This ticketing practice was only run for three months. After being stopped, the group continued to collect donations. The group applied the words of environmental donation in collecting levy.

. The group still uses the term donation without having to "mention" the entry rate. In collecting, group members persuade visitors to give donation of IDR 2,000.



(a)

(b)

Figure 8. (a) Ticket making; (b) Ticket design

The increase of the number of visitors and donations made members more excited and came up with the idea of arranging collection mechanism. The

collection arrangement was done by applying a "ticket". Ticketing is done manually by members (Figure 8). In the ticket, the entry rate is not written. The group only writes date, Mekar, and the sign of the entrance gate coordinator. Along with the development of ecotourism, group creativity raised new ideas such as cottages, parking arrangement, toilets, clean water facilities, stalls and tour boats. These ideas were discussed in group meetings and some of these were realized based on member agreement.

To support the group in maintaining mangroves and improving ecotourism, several outsiders have participated in providing assistances. These assistances include funding, physical buildings, planting activities, group capacity building and comparative studies. These outsiders are Pertamina, Yagasu, Dushutbun Langkat and the village government.

Based on group agreement, the group's routine activities are mutual cooperation held once a week. Because the mutual cooperation is voluntary, not all members participate. Members who cannot participate are due to outside activities, such as earning a living. In general, the number of members participating in mutual cooperation is at least ten people, but when the activities are quite many, around 70% – 75% of the members participate in weekly mutual cooperation. This is related to the group's daily activities. The activities carried out are road cleaning, tree branch cutting, and making and repairing facilities such as tracks and huts. Mutual cooperation is not carried out on a certain day, but sometimes considering the condition of facilities and infrastructures and the need to add facilities. If needed, mutual cooperation can be carried out to add or improve facilities and infrastructure. In this case, the activities will be discussed in group meeting and activities can run if the materials and equipment are available or purchased. An

informant said,

“The improvement of facilities depends on available funds” (R1).

For daily activities, the average number of active members on weekdays is 7 – 12 people, while on Sundays or holidays, the number of members involved reaches around 30 people or more. This huge variation is caused by the number of visitors.

On weekdays the number of visitors is few, so the income is little or even minus.

When this happens, some members look for work. For certain cases such as fasting, there are very few visitors and no income. For certain periods, sometimes members just sit around because there is no visitor and mutual cooperation.

In leading the group, the chairman and the vice chairman share tasks and roles.

The chairman has a greater role in external affairs, while the vice chairman in internal affairs. According to the chairman,

“This is an agreement between them” (R15).

However, in carrying out daily tasks the chairman sometimes handles internal affairs as well. Related to this external function, the chairman builds the image of mangrove ecotourism through relationships with other organizations and by social media. In addition, this function also aims to find support or assistance. In doing his external affairs, commonly the chairman does it by himself. However, the chairman always persuades other functionaries or members to accompany him on external affairs. Other administrators or members rarely want to take part in the affairs because of not being able to leave internal affairs (vice chairman) or cost efficiency. For affairs conducted around the village, the chairman always attends it

with others. But when the chairman gets an invitation to attend an event or comparative study out of town, the chairman goes alone. When the chairman carries out his duties externally, he always announces it to the group and the group

facilitates his traveling expenses. Demand for traveling expenses was started to be applied when ecotourism has been running for a year. Whereas previously the chairman always used personal money. All traveling expense requests are recorded by secretary. Upon returning from an external assignment, the chairman informs the group about the results of the external duties.

The vice chairman has more role in overseeing member's activities, hearing member's complaints and checking infrastructure condition. In addition, sometimes he conducts seed collecting, planting or plant maintenance (Figure 9).



Figure 9. The vice chairman is collecting mangrove seeds

The secretary plays roles in presenting the meeting plan to members and preparing daily financial administration. Besides these duties, the secretary is supposed to assist the works at entrance gate, but because the secretary supervises internal work such as at toilet, she has more role in internal affairs.

The treasurer along with the secretary has the role of preparing financial bookkeeping. At the monthly meeting, he presents financial administration. In addition, the treasurer also helps the works at entrance gate replacing the secretary role.

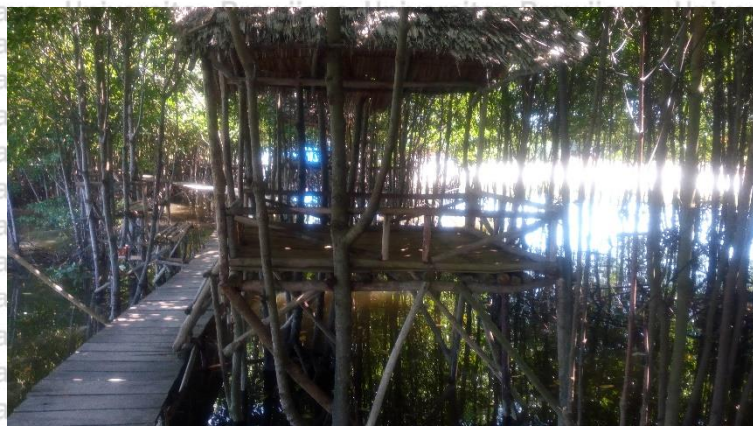


Figure 10. Some ecotourism facilities: Track and hut

To support ecotourism businesses and carry out daily activities, the group forms work teams in the form of sections. These sections consist of entrance gate, parking, hut and stall levies, cleanliness, helmet storage, boat tours and sea lane entrance, and toilets (Figure 10). In determining the sections, the group adopts the concept of tourism. Determination of sections, assignment of personnel and description of duties and responsibilities of members and coordinators are discussed in group meetings. However, these appointments have not been stated in written form such as decree, but only group agreements. The mechanism for determining personnel is one's initiative, appointed by the coordinator and determined through deliberation. For the coordinator of each sections, the functionaries appoint directly and asks for their willingness, if they are willing, they will be appointed. In carrying out sections' tasks, although the coordinators are not present, there must be members' presence.

For certain conditions, the group can ask non-member villagers to be involved in ecotourism. This is commonly happened during holidays where visitors are crowded. Usually they already know when they are needed, so that when needed, they just inform the functionaries and then the functionaries will decide their

positions. Except for cleanliness section, groups set tariff for each section. This tariff is determined based on group agreement in the meeting.



Figure 11. Visitor entry by sea

Since 2018 Eid, entrance donation and boat tour levy have been adjusted.

According to the chairman, this adjustment was due to greater responsibility, increased assets, longer track, more huts, more diverse photo spot and better facilities. Entrance donation is IDR 3,000/person, while boat tour levies are IDR 10,000/adult and IDR 6,000/children (see Table 2). Before 2018 Eid, boat travel levy was only for adults. Because the boat does not belong to the group, the distribution of levy is IDR 6,000 for boat owners, IDR 2,000 for groups, IDR 2,000 for officers (group members). Boat tours have been implemented since mid-2016.

If visitors take a tour boat in group, they sometimes ask for discounts. The discount is free of charge for one person. Boat ride is about 25 minutes going along the creek. Parking fee is paid in conjunction with the donation in the entrance gate, this is done to simplify the collection, so it does not bother visitors by paying twice. The rate of hut usage does not depend on usage time, it means the rate is fixed no matter how long the usage. The stall levy applies not only to vendors who used the

hut but also to mobile vendors. Sometimes visitors do not enter ecotourism through entrance gate, but by sea. They come by boat and are generally Perlis villagers and Kelantan villagers (Figure 11). The collection of donations is also applied to them at IDR 3,000 per person. However, they sometimes ask for discounts. For example, they come with 15 people, the donation should be IDR 30,000 (still using the old tariff), then they ask for discounts so they only pay IDR 25,000 or IDR 20,000.

Table 2. Tariff for Each Section (in IDR)

| No. | Section | Before 2018 Eid | After 2018 Eid | Note |
|-----|----------------|---|-----------------------------|-----------------------------|
| 1. | Entrance gate | 2,000/person | 3,000/person | Children are free of charge |
| 2. | Parking | 2,000/motorcycle 5,000/car 10,000/bus | | |
| 3. | Hut and stall | | 15,000/hut 10,000/stall | |
| 4. | Boat tour | 8,000/person | 10,000/adult 6,000/child | |
| 5. | Toilet | 2,000/usage | | |
| 6. | Helmet storage | | | Has not run yet |

Regarding the entry rate, the group applies a different treatment between visitors from Lubuk Kertang and outside Lubuk Kertang. The latter is obliged to pay the donation, while Lubuk Kertang villagers is voluntary. For official or personal visits by governmental officials and the purpose of education (students and researchers), the group does not collect entrance donation and parking fee.

2) Working Time

Since February 2018, the group has arranged the working hours of the members. Prior to this, working hours has not been regulated, it means anyone can come anytime. The deadline for working hours is 10 am, whereas if there is a

priority activity, it is set at 9 am. Meanwhile, working hour ends at 6 pm. If a member comes at 1 pm and above, then it is considered as a half-day work and the wage is 50%. When coming to work, each member must fill in the list of attendees on the entrance gate. The application of this working time was driven by protests launched by several members. In the case of internal activities, the vice chairman always coordinates with the chairman if there are members who deceive the work.

5.1.3.6.5. Financial Management

1) Cash Flow

The money collected in each section flows to the secretary, this flow is clearly recorded, both in each section and in the secretary (Figure 12). This flow has been agreed upon group agreement. Another informant said, "The money is collected at the treasurer (R4).

Note that the daily income of each section will be signed by the secretary to ensure that the numbers do not change. So if questioned by members, the number is same. Then the total of daily income will be reduced by treasury cash, operational costs (eating, drinking, and cigarette) and members' salaries. In addition to these costs, an informant adds another component of costs such as functionaries traveling expenses, guest visits (local government, forestry) and endowment to the village (IDR 300,000 per month) (R3). Operational costs are inversely proportional to the salaries, meaning that the more cost incurred for activities, the smaller members' salaries. There is no standard for operational costs that are allowed to be used, treasury cash and salaries, and proportions for these allocations.

However, according to the previous chairman's statement, the priority order of income deduction is operational costs, treasury cash and salaries. Another version

said that the total income collected at the secretary is reduced by 20% of treasury cash and the 80% of wages (R2, R5 and R6). Regarding operational cost, an informant said,

“It uses personal money” (R5).

But the treasurer said,

“The operational costs are taken from daily total income” (R10).



Figure 12. Money counting at entrance gate

Regarding to operational needs, the group determines them in one stall. Another version said that the first deduction of income is the salary, then the remainder becomes treasury cash (R4). While the treasurer said that the order of income deduction is operational costs, salaries and treasury cash (R10). Regarding cash flow and its usage, the chairman fully entrusts the secretary and members. He only receives information on accumulation cash in the secretary and complaints from members who object to the distribution and usage. Although the chairperson entrusts the secretary and members, many members also question whether the chairman knows about the daily income and its allocation.

To anticipate members who question income and salary, the group has

installed a notice board containing the information. Detailed records of cash flow are also listed in the group cash book and this book can be accessed by all members. However, some members are still questioning and suspecting. In addition, members can also question this in group meetings.

2) Payroll System

Payroll system is applied daily. The amount of salary a member receives depends on the number of visitors and the number of members who works. The daily system is applied at the request of members for economic reasons. According to an informant,

"Members are paid off IDR 20,000 – IDR 30,000 when weekdays, while on Sundays or holidays it can reach IDR 75,000 – IDR 100,000" (R1).

Regarding this salary, there was no difference between functionaries and members. In certain conditions, members are not paid when visitors are few.

During holidays or crowded visitors, there is usually non-member involvement in ecotourism. For them their income is 60% of the members. The interesting thing about payroll is the provision of salaries for Efendi¹¹ who serves as the entrance gate coordinator. At certain times, Efendi obtains a salary, while other members (who also works) do not get a salary (the group's daily record proves this).

Regarding this, he argued,

"I am indeed fully responsible in work related to working hours and responsibilities" (R2).

The analogy of salary calculation is as follows:

On a certain day the money collected is IDR 1 million, while the number of member who work are 10 people and the expenditure is IDR 500,000, then the remaining

¹¹ Efendi is the section coordinator of entrance gate.

is IDR 500,000. Of the remainder, for example the vice-chairman makes a decision, 20% goes into treasury (this determination based on agreement, not by rule), which is IDR 100,000. The remaining IDR 400,000 then is divided by 10, making it IDR 40,000 per person. If there is a member who worked for half a day, the wage will be IDR 20,000, the remaining IDR 20,000 will go to treasury. The determination of 20% depends on the situation and are not regulated. It could be 10%. This is to avoid member objections.

3) Treasury Cash

Cash management is the treasurer's responsibility. Treasury cash is generally used to finance priority activities, especially those related to ecotourism facilities.

A different version is made by the vice chairman. He said,

"The income collected at the secretary is used to repair or build facilities. This activity is conducted almost every day so that it must be available to finance these activities. However, there is a notification to the treasurer regarding the cash usage. If there is a surplus in cash balance at secretary, then the money goes to the treasurer" (R1).

Regarding cash flow, an informant said,

"I do not know the usage (of treasury cash) because I am not a functionary" (R6).

4) Income and Expense

In a year, the group can earn IDR 288,536,000 consisting of IDR 220,296,000 (76.3%) of entry donation, IDR 41,339,000 (14.3%) of hut levy, IDR 14,507,000 (5.0%) of boat levy, IDR 6,590,000 (2.3%) of toilet fee, IDR 5,544,000 (1.9%) of stall levy, and IDR 260,000 (0.1%) of other incomes. Meanwhile expenses are IDR 276,703,000 consisting of IDR 162,296,000 of wages, IDR 44,285,000 of food and drink, IDR 32,346,000 of other expenses, IDR 31,619,000 of materials and equipment, and IDR 6,157,000 of cigarettes. Therefore, the revenue is IDR

11,833,000 (Table 3). In a month, the group profit can reach almost IDR 1 million.

Meanwhile weekly profit is IDR 227,558 and daily profit is IDR 32,419.

Table 3. Income and Expense in Total Basis (in IDR)

| No. | Descriptions | Income | Expense | % |
|-----|------------------------|-------------|-------------|------|
| 1 | Stall levy | 5,544,000 | | 1.9 |
| 2 | Entry donation | 220,296,000 | | 76.3 |
| 3 | Hut levy | 41,339,000 | | 14.3 |
| 4 | Toilet fee | 6,590,000 | | 2.3 |
| 5 | Boat levy | 14,507,000 | | 5.0 |
| 6 | Other income | 260,000 | | 0.1 |
| 7 | Material and equipment | | 31,619,000 | 11.4 |
| 8 | Food and drink | | 44,285,000 | 16.0 |
| 9 | Cigarette | | 6,157,000 | 2.2 |
| 10 | Wage | | 162,296,000 | 58.7 |
| 11 | Other expense | | 32,346,000 | 11.7 |
| | Sum | 288,536,000 | 276,703,000 | |

The group earns maximum income in June 2018 (IDR 61,752,000), meanwhile the lowest is in October 2017 (IDR 10,874,000) (Table 4). Maximum income is parallel with Eid and this further caused by many public day offs in June 2018. The group spends maximum expense in January 2018 (IDR 48,316,000), meanwhile the lowest is in November 2017 (IDR 10,089,500). January 2018 gives maximum expense because the group organizes live music to entertain visitors. Live music is organized few times and many members are involved in daily activities in this month. As many as five months the group has positive balance, meanwhile the group sustains negative balance in the rest months. The group receives the biggest net income in June 2018 (IDR 18,677,000), meanwhile in October 2017 the group receives the biggest net expense (IDR -5,326,500).

Table 4. Monthly Income and Expense (in IDR)

| No. | Month | Income | Expense | Balance |
|-----|---------|-------------|-------------|------------|
| 1 | Jul-17 | 23,985,000 | 25,466,000 | -1,481,000 |
| 2 | Aug-17 | 13,800,000 | 16,563,500 | -2,763,500 |
| 3 | Sep-17 | 25,554,000 | 18,575,500 | 6,978,500 |
| 4 | Oct-17 | 10,874,000 | 16,200,500 | -5,326,500 |
| 5 | Nov-17 | 11,214,000 | 10,089,500 | 1,124,500 |
| 6 | Dec-17 | 16,947,000 | 19,321,000 | -2,374,000 |
| 7 | Jan-18 | 49,278,000 | 48,316,000 | 962,000 |
| 8 | Feb-18 | 23,020,000 | 22,924,000 | 96,000 |
| 9 | Mar-18 | 20,147,000 | 23,967,000 | -3,820,000 |
| 10 | Apr-18 | 18,740,000 | 18,916,000 | -176,000 |
| 11 | May-18 | 13,225,000 | 13,289,000 | -64,000 |
| 12 | Jun-18 | 61,752,000 | 43,075,000 | 18,677,000 |
| | Sum | 288,536,000 | 276,703,000 | 11,833,000 |
| | Average | 24,044,667 | 23,058,583 | 986,083 |

Table 5. Accumulative Daily Income and Expense (in IDR)

| No. | Day | Income | Expense | Balance |
|-----|-----------|-------------|-------------|------------|
| 1 | Monday | 33,842,000 | 31,807,000 | 2,035,000 |
| 2 | Tuesday | 23,937,000 | 33,766,000 | -9,829,000 |
| 3 | Wednesday | 21,169,000 | 25,305,000 | -4,136,000 |
| 4 | Thursday | 20,684,000 | 30,531,000 | -9,847,000 |
| 5 | Friday | 27,179,000 | 25,048,000 | 2,131,000 |
| 6 | Saturday | 30,456,000 | 27,491,000 | 2,965,000 |
| 7 | Sunday | 131,269,000 | 102,755,000 | 28,514,000 |
| | Sum | 288,536,000 | 276,703,000 | 11,833,000 |

In daily basis, Sundays contribute the largest income (IDR 131,269,000) and expense (IDR 102,755,000), meanwhile Thursdays contribute the lowest income (IDR 20,684,000) and Fridays contribute the lowest expense (IDR 25,048,000) (Table 5). Even though Sundays contribute the largest income and expense, they also contribute the highest earnings (IDR 28,514,000), meanwhile Thursdays contribute the lowest balance (IDR -9,847,000). From this figures, it can be concluded that visitors conduct many visits in day offs i.e. Sundays, and this parallel with group activities which are commonly conducted.

5.1.3.6.6. Meetings

Mekar was established aiming to take part in the GNRHL project in 2006. Group activities were only for planting and plant maintenance relating to projects, and never held any group meeting. But after the transition of the functionaries, the group have conducted many meetings. The process of the transition of functionaries itself was done through a meeting.

1) Kinds of Meeting

Based on AD, there are four types of meeting, namely monthly meetings, annual meetings, accountability meetings and extraordinary meetings. Whereas ART mentions that there are five types of meetings, namely meetings covered in AD and quarterly meetings. In their implementations, meetings that have been held are quarterly meetings in 2017 and monthly or bimonthly meetings in 2018.

Extraordinary meetings are held if there are important and urgent matters regarding proposals from members, for example an infrastructure damage. This damage must be anticipated quickly so that visitors are not wretched when using it. Important thing like this must be discussed first in the meeting so that the result is satisfying and no one is blaming each other. The last monthly meeting held by the group was before fasting. While the next monthly meeting has not been held because of Eid.

2) Meeting Invitations

The functionaries communicate a meeting invitation to the members through verbal notification. They also inform the topic of meeting to be discussed. The notification is intended to direct members so that the discussion will not widen.

3) Meeting Locations

The meeting location depends on the member's agreement and always moves.

The locations that have been used for meetings were Amat Ali's house, Efendi's house, ecotourism site and Rasmianto's house.

4) Attended Members

In general, the number of members attended the meeting was between 20 people and 30 people. Members cannot attend meetings due to wander and certain activities. Members who also rarely attend meetings are youth members.

5) Meeting Topics

Generally, issues that are often discussed by the group include financial administration, ecotourism infrastructure, task division and membership issues. To absorb the aspirations and opinions of members, in addition to meeting, the chairman also does it through conversations in the coffee shop. Some issues that have been discussed by the group are as follows:

- Income and expenses and finance (treasury cash)
- Physical work related to construction and renovation, especially tracks and huts (ecotourism development)
- Directives of functionaries regarding mangrove sustainability
- Division of tasks, appointment of members and rules of the game
- Application of sanctions regarding the obligation to pay contributions
- Entrance donation
- Pertamina's CSR plan
- Determination of mutual cooperation related to day, works and members

- Membership issues such as complaints from section coordinators and how to overcome them

- Salary allocation

- Sometimes, functionaries also give warnings to inactive members

6) Meeting Mechanism

The implementations of meeting have adopted the concept of general meetings, where in each meeting there are a meeting chairman, a meeting minutes and an attendance list.

Meetings are held openly. Each member has the same opportunity to voice opinions, objections and proposals. The meeting has a certain agenda that has been set before, however the discussion can be widened and out of context. On several occasions, members always ask for income and expenditure. The meeting provides a discussion session and invites the meeting participants to debate. However, the majority of members have less experience and knowledge about mangroves so they are passive. Some passive members express their opinions or protests via other members or express them outside the meeting. When the functionaries want to transfer information, the member usually does not understand. Even though members have less knowledge and only follow the functionaries' instructions, they have also given a number of proposals, such as making swimming pools, prayer rooms, cottages and permanent tracks. The coordinators of each section are also welcomed to submit complaints in their sections, especially those relating to the condition of physical buildings that have begun to decay. In attaining a consensus, the forum always takes one of the best opinions/suggestions from the many opinions. Members whose proposals cannot

be fulfilled understand that the group has limited resources. Sometimes, inactive members do not understand about this and feel disappointed, because they never see the situation and conditions of the group.

On several occasions, the functionaries emphasize the importance of mangroves and persuade members to always conserve mangroves. The functionaries also motivate members to make ecotourism better in the future.

7) Meeting Follow-ups

When consensus is attained, its follow-up requires a soft approach. Thus, the management's wisdom is needed in responding to it. If the meeting produces a physical work plan, there is a grace period for preparation, including the determination of personnel and the provision of materials. Not every work plan is carried out by members, because the character of most of the members are not work-bound. An informant stated,
 "Even though the meeting results in a decision, there is no realization" (R6).

5.1.3.6.7. External Relations

1) Other Groups

The relation between Mekar and Lestari Mangrove is not harmonious. The reason for this disharmony is Lestari Mangrove's jealousy towards Mekar. Lestari Mangrove is jealous for four reason. First, many stakeholders assist Mekar in term of infrastructure building and capacity building. These stakeholders are Pertamina, Yagasu, Dishutbun Langkat, KPH and the village government. Pertamina itself has a 5-year empowerment program to Mekar, meanwhile Pertamina has no assistance to Lestari Mangrove. Relating to these assistances, the chairman of Mekar said,

“External parties see the independence of group before providing assistance. Mekar itself is a good example in developing its potential. According to him, other groups were unable to foster independence” (R15).

Second, Mekar is an active group. It has daily activities and its members have active participation. Local community sees this as a positive effort to empower community. Third, Mekar has generate income from ecotourism. Its income almost continues in daily basis. This income attracts its members to participate in group activities. Relating to income, an informant said,

“...jealousy must be existed because ecotourism business generates income” (R3).

Fourth, Mekar become famous because of its ecotourism. Many visitors admire Mekar because it can manage ecotourism very well. Its reputation has also lifted Lubuk Kertang so Lubuk Kertang is widely known not only in Indonesia but also overseas. The village head said,

“This disharmony relation makes conflict between them. However, this conflict can still be controlled” (R14).

However, in general, Mekar relationships with others has no problem. Mekar has given opportunity to local villagers (both members and non-members) to be involved in ecotourism, for example by giving the opportunity to local community to become vendor in ecotourism or to other groups to promote and market their featured products.

However, some members have an opposite opinion. They said both groups have good relationship. In some cases, there is cooperation in guarding forest, both invite each other if there is an event. An informant said,
 “There was no social gap and envy between both” (R5).

2) Village Government

Mekar has a good relationship with the village government. It supports ecotourism in the forms of village head frequent visits, intense communication and coordination, assistance in the form of dock from village funds.

A different opinion is conveyed by the chairman. He often heard from outside, "...that there is no coordination with the village government and no good relationship" (R15).

The village head also implicitly confirmed,

"The coordination is not fully happened because of their respective activities" (R14).

Relating to this disharmony, it can be said that it is caused by two factors. First, the kind of social forestry. The village head argued,

"...in the beginning of licensing process, the group and village have agreed to propose village forest" (R14).

He further reasoned,

"Village forest can be controlled by village" (R14).

However, the group then proposed partnership. In this license, the group is under KPH. Second, one-door policy. This policy is applied by the village head to control outsiders' assistance to the village. Further village will allocate this assistance according to village's needs.

Relating to this, the village head wants a synergy between mangrove management with village development. This synergy will be built in the near future.

However, the chairman argued,

"This is only personal¹²" (R15).

¹² The chairman is a migrant and in the election of the village head in 2006, the chairman had become a candidate for the village head. Thus, the chairman was the elected village head's rival.

The chairman does not want to bother relating this disharmony, he still intertwines relationship with the village. Further, the chairman argued,

“Mekar only wants to lift up Lubuk Kertang through good management of ecotourism” (R15).

The relations with the village government was also established when the group and the village government wanted to make the area of Mekar as a HD. However, the administrative process in the village was so slow, so the group proposed the Kemitraan scheme.

3) Forestry Institution

At its formation, the group participated in the GNRHL project in 2006. At that time the communication between the group and Dishutbun Langkat was well established. Dishutbun Langkat also conducted group coaching. In addition, Dishutbun Langkat had provided assistance in the form of infrastructures such as a watchtower, a guard post, a 90-m track and an entrance gate.

Relation with KPH goes very well. Before submitting an application for Kemitraan, KPH conveyed information about training in Pematang Siantar. This information was welcomed by the group, so the group leader attended training in Pematang Siantar on the basis of KPH Head assignment letter. Good relation is also established when the group proposed Kemitraan. At that time, KPH guided the group in the licensing process. If KPH visits ecotourism or if the group have affairs in KPH, KPH always gives direction. It also continues to build regular communication with the groups related to group development. The group also has an obligation to report its activities and developments to KPH. So far the report is still verbal, but later it will be made in written form. This good relationship must be maintained because with the issuance of Kemitraan, the group is a KPH's partner.

Ecotourism development in the future also requires cooperation with KPH.

Relationship with BPSKL also works well. The chairman occasionally coordinates with *Balai Perhutanan Sosial dan Kemitraan Lingkungan* (BPSKL-Agency for Social Forestry and Environmental Partnership) about social forestry.

4) Pertamina

The mangrove area of Mekar is included in the core area of the concession of Pertamina. So that Mekar is a Pertamina priority in the community empowerment program in Lubuk Kertang. The relationship with Pertamina is well established through the implementation of the company's CSR. Pertamina's CSR will continue until 2022, so that relations with Pertamina will be maintained until 2022. Pertamina also establishes intense communication with the group through its CSR staff who always come to ecotourism. In addition, Pertamina also carries out coaching to the group.

5) Yagasu

Generally, relation with Yagasu is well established. Yagasu provided assistances to the group. However, an informant said, "Even though Yagasu provided assistance to the group, but there was a claim from Yagasu regarding mangrove plants" (R16).

A similar statement is also made by the chairperson. He argued,

"Yagasu did not provide openness in their projects" (R15).

This is related to Yagasu's program and the use of budget. Even so, the chairman is still open with Yagasu in conducting activities in Mekar.

5.1.3.6.8. Conflicts

Many conflicts have been existed in the group. They are happened in the forms of inter-member conflicts, conflicts between functionaries and members, and inter-functionary conflicts. Externally, conflicts are happened with other group, Yagasu and village government.

1) Internal Conflicts

a) Inter-member conflicts

Some inter-member conflicts are as follows:

- The frequent happened conflicts are dissents and misunderstandings. These kinds of conflict often occur among members during group meetings, but the conflicts never continue for long time.
- Conflict between members also occurs related to members' placement in sections. For example, the section members of cleanliness was jealous with the section members of entrance gate about money. The former said that the latter slipped money in their pocket.
- Conflict is also occurred when the section members of parking interfered the work of the section of hut and stall. This made the latter felt disturbed in carrying out its work. Then the latter complained this problem to the functionaries.
- Conflict between male member and female member was happened when the male wanted to hit the female. This conflict was caused by something related to organizational work.
- Conflicts between members, where these members still have a family relationship, of different sections have also occurred. Both wanted to fight because of something.

b) Conflicts between functionaries and members

Some conflicts between functionaries and members are as follows:

- As a functionary who has responsible to oversee members' activities, the vice chairman usually gives a reprimand to members that work arbitrarily. However, these members sometimes do not accept this reprimand.

- In the beginning of the donation collection, conflict between the chairman and members have occurred. At that time the members asked the chairman group's stamp to stamp entrance ticket, but the chairman disallowed their request. In this case, members assumed that by stamping the tickets, donation collection would be easier. Meanwhile the chairman thought that it was illegal because there was no legal basis, because the group did not have a management permit. At that time the chairman received a vote of no confidence from most members and those members blew up an issue to bring down the chairman.

c) Inter-functionary conflict

Conflict between the chairman and the vice chairman existed when Yagasu sent the vice chairman for comparative studies. Yagasu claimed that the appointment of the vice chairman was personally and was not related to the group.

The chairman argued that this treatment could not be accepted. Personally, the chairman considered that there was no problem and the chairman be had gracefully towards this treatment. But when it was linked to the group, some members questioned the vice chairman leaving and the vice chairman went on whose behalf. Related to this, the chairman was confused getting different explanations from the vice chairman and Yagasu's stakeholder (Darwis). In the end, the chairman did not want to exaggerate the problem and let the vice chairman

left. From this, the chairman was able to give an assessment of Yagasu.

d) Prolonged Conflict

Prolonged conflict that is occurred is related to financial administration. The form of conflict is mutual suspicion and recrimination regarding money. In this case, the chairman emphasized that financial management must be transparent so that there is no jealousy. Sometimes conflicts about finance are also triggered by members who rarely enter. To overcome this, members who did not enter were told to enter, to find out the conditions.

e) Conflict resolution

In resolving conflicts, a greater role is held by the chairman. The chairman usually tries to gather information prior to conflict resolution. For the first step the chairman will summon the members involved in the conflicts. Then they will be asked to give their statements. Next, the chairman gives explanations that are easy to be understood by them. In the end, the chairman reminds them not to repeat it again. Most of conflict can be resolved in this step.

If the conflict is not resolved in the first step, the chairman will bring the conflict to a member meeting. Conflicting members will be met and be given the opportunity to give their explanations. If the majority of the meeting participant accepted one of explanations, then he is the right one and the conflict is considered resolved. If there are still members who do not accept the resolution, then the final decision is in the chairman.

2) External Conflicts

a) Lestari Mangrove

The disharmony between Mekar and Lestari Mangrove is rooted mainly because Lestari Mangrove envies towards Mekar's liveliness and assistances addressed to Mekar. The village head said,

"This disharmony relation makes them in conflict. Further, this conflict makes the village atmosphere less conducive because it breaks relationships between groups and among community members. However, this conflict can still be controlled" (R14).

To solve this conflict, an approach has been carried out through communication between the functionaries when they met at the village event. Mekar has also offered Lestari Mangrove to market its featured products in ecotourism. The village head has also directed the group leader many times to self-introspect and to learn mutually. However, the village government has to strive hard bridging both sides in a mediation so that the conflict is not prolonged.

b) Yagasu

Conflict^{13 14} originates from the appointment of Amat Ali for comparative studies, fund channeling through other functionaries and the intransparency¹⁵ of Yagasu's program and the use of budget. These events were affected the relationship between them. After the appointment of Amat Ali, the chairman was reluctant to receive fund from Yagasu. To clarify this conflict, Yagasu claims that

¹³ Even though Yagasu "does not" consider it as a conflict, researcher regards this as a conflict. The reason is Yagasu still has an interest in the existence of mangrove in Lubuk Kertang, especially in Mekar.

¹⁴ For the chairman, this conflict seems personally because he is still open with Yagasu in conducting activities in Mekar.

¹⁵ The intransparency of Yagasu may also be connected with Yagasu's claim on mangrove planting in Lubuk Kertang (Analisa newspaper of 26 January 2013, "Untuk lindungi hutan mangrove di dua kabupaten (*Langkat and Deli Serdang*): Unit patroli ekosistem hutan mangrove pantai timur dibentuk").

when it conducted activities in Lubuk Kertang, the chairman never wanted to meet.

c) Village Government

Disharmony with village government just results in conflict potential. This is happened because of the kind of social forestry and the implementation of one-door policy. Previously, village government and the group agreed to propose village forest scheme, but the group then proposed partnership with KPH.

Meanwhile assistance from Pertamina are given directly to the group. The village head is intended to allocate these assistances according to village's needs.

However, village government still supports the group activities in ecotourism.

Further, the village head will conduct a synergy between mangrove management with village development in the near future.

5.1.4. Constraints in Empowerment Process

The process of empowerment has run passably. However, two main constraints are emerged. These constraints are members' activeness relating to economic incentive and the weak enforcement of rules and sanctions. Members are more active on weekends and day offs, but less active on weekdays. In the former situation, high group's income attracts members to participate in organizational activities. Meanwhile the group earns less income on weekdays.

The first constraint also links with the second constraint. In daily activities, the functionaries still regard the kinship approach. It can be said that there is no leadership firmness in enforcing rules and sanctions. Therefore, the management becomes dysfunctional internally. Written standard in imposing sanctions is also not existed. Sanction imposition develops naturally and is enforced verbally.

5.2. Discussion

5.2.1. Empowerment Process

5.2.1.1. Powerlessness

The conversion of mangrove resulted in significant negative impacts for the coastal community of Lubuk Kertang and its neighborhoods. These impacts have raised public awareness about the importance of mangrove ecosystem towards people livelihoods. Aheto et al (2016) argue that due to the significant environmental damage, most coastal people lost their livelihoods i.e. fishing and farming. In this situation, they shifted to commercial harvesting of mangrove wood as an alternative livelihood strategy.

Being aware towards the current situation, Abdul Jalil and his fellows can do nothing, given that local community did not have power and most of the area had been illegally controlled by the entrepreneur. In this case, people are powerless and awareness is not enough to act either individually or collectively (Sadan, 2004).

Compensations given by the entrepreneurs made local community was divided into two sides between the pros and the cons. Then, there was a split among the cons-people because they have been contested by the entrepreneurs. Furthermore, the illegal practice of buying and selling land under the pretext of providing compensation can make the entrepreneurs easily control the land, because compensation awarding was accompanied by written evidence. As a result, local people cannot unite their strength to fight the entrepreneurs.

Other than the projects, the group had no activity. It is understandable because the group was established to participate in the projects. In this case, Mongbo (2008) states that institutions are created when needed. Further Damastuti and de Groot (2017) argue that government's projects are usually short term and without

any follow up. Consequently, local support from both within and outside the group withered away as soon as the project ended. Moreover, the project is usually implemented on the project-oriented and sometimes it can only benefit a handful of parties (Purnomo et al, 2017). Some researchers argue that economic value seems to have a main role in encouraging the collective actions of local community on forests (Behera, 2009; Sunderlin et al, 2005; Aheto et al, 2016; Appiah, 2002; Cobbinah, 2015; Corbridge and Jewitt, 1997; Obiri and Lawes, 2002). Another expert is in line with this statement by saying that people accept reforestation as long as it is blended with an incentive (Appiah, 2002). It can be concluded that the groups “initiated” by government rely heavily on its funding (Damastuti and de Groot, 2017).

5.2.1.2. Support

Support from internal organization came from Dian. He is considered as an educated person and gives many changes to the group. Prior to leadership transition, he introduced business thought to Amat Ali relating environmental service provided by mangrove. In this case, outsider has intervened insider which has limited knowledge on mangrove. Post election he set organizational rules independently. This can be understood because the group has low quality human resource. So the chairman took the initiative. The new leader gave inspiration and spirit to the members to reactivate organizational activities. In this stage, collective awareness was rebuilt with different vision. Chairman's vision was far more advanced for long term. Aheto et al (2016) state that conservation leadership is needed to sufficiently guarantee the effectiveness of community-based natural resources management.

Projects from government i.e. mangrove planting and maintenance become an extraordinary support for the group. This support espouses community's effort to actualize its aspirations in restoring the mangrove (Kieffer, 1984). Sadan (2004) also argues that participation in the project educates the members on how to take on social roles, to employ social abilities, to utilize interpersonal influence, to develop commitment, to take responsibility and to acquire political efficacy. Besides aiming to rehabilitate damaged forest areas, this project can also provide income for the people involved. Direct incentives mechanism is introduced to compensate the communities' time and labor that might be taken away from paid employment or household work (Damastuti and de Groot, 2017). Cobbinah (2015) argues that community seems to express stronger support for conservation if those receive socio-economic benefits in the form of income. Further, Aheto et al (2016) add that economic incentives can still be applied to engender mangrove rehabilitation.

The mandate letter issued by Dishutbun Langkat become another support for the group to strengthen either individuals or the group in conducting mangrove planting, maintenance and guard. This mandate is considered as an entitlement for group to keep active in guarding and maintaining the plants (Alsop et al, 2005). In conducting interventions, either Pertamina or Yagasu wants the program benefiting both parties. It means the group can develop ecotourism, meanwhile Pertamina wants to achieve certain rewards and Yagasu wants to maintain its projects. To achieve these goals, both seek active groups. Outsiders' interventions are considered to empower the group because, as Sadan (2004) argues, many people have insufficient ability and need outsider assistance in order to free themselves from their limitations. Relating to this limitations, the chairman said,

“External assistances empower the group. There is a wish to raise community’s knowledge... Relating to means and infrastructures, the assistances are urgently required... Without acceleration, group advancement is very slowly... If the means and the infrastructures are sufficient, external aids are not needed anymore” (R15)

Pertamina is a main donor for Mekar. Its program lasts for five years from 2016 to 2020. Pertamina argues that it wants to focus on one group so the group can be independent in the end of the program. Matiku et al (2013) argue that certain groups receive more assistances than others depending on outsider interest in which the groups are potential. However, Damastuti and de Groot (2017) warn that long-term assistance can make the group highly dependent on external funding. In contrast, Akamani et al (2015) argue that an organization can collapse in the absence of continuous external support.

Meanwhile Yagasu’s programs depend on its donor. Yagasu focused on mangrove stands and put secondary attention on the group. Being facilitated by Yagasu, the village government set village regulations relating mangrove. These regulations aimed to make sure that the protection of mangrove has legal certainty in local level and to strengthen the group in managing mangrove. Village regulation issuance is hoped to strengthen the group by giving it local legitimacy (Damastuti and de Groot, 2017). Yagasu’s seriousness was proven by audience to Regent Office of Langkat.

These interventions make some improvement not only on ecotourism but also in group capacity. Assisting and training programs aim to improve community skills (Dev et al, 2003; Zimmerman, 2000; Purnomo et al, 2017; Arhelo, 2017; Clayton et al, 2014; Damastuti and de Groot, 2017; Mohammed and Inoue, 2014). Dev et al (2003) state that a training has an important influence in raising awareness, social role, confidence and empowerment. This transfer of knowledge has also significantly affected local comprehension and participation in the project

(Cobbinah, 2015). Training must be seen as an investment rather as a burden (Arhelo, 2017). Further, continuous training will provide support to the group (Arhelo, 2017; Clayton et al, 2014; Purnomo et al, 2017). Local capacity building can improve the resilience of ecotourism, sustain stability and help to face periods of uncertainty (Baral, 2013). These interventions are further to strengthen the processes of individual and organizational empowerment (Sadan, 2004). So that ecotourism improvement can attract more visitors.

However, in determining the aids, external entities must recognize group needs relating to issues such as conflict resolution, awareness improvement and assistance of inclusive planning and decision-making, and technical advice on specific issues (Springate-Baginski et al, 2003). Further, local capacity building, education of visitors and hosts, and tourism infrastructure development must also be considered (Baral, 2013).

Regarding with parties who provide assistance to groups, Pertamina has coordinated with other institutions. This coordination aims to synergize assistances among institutions so they are not overlapping and redundant. Dev et al (2003) argue that group's income generation can be supported through coordinating livelihood support activities of different external agencies.

Because Mekar is KPH's partner, KPH conducted many assistances on Mekar. KPH assisted Mekar in licensing process and making proposals. These assistances are very valuable for the group because most of its members have low capacity. This can also be a means of learning for the group. However, these kinds of support should be extended. Social forestry will only be successful if it is supported by government and community (Obiri and Lawes, 2002). Supports can be given in the term of strengthening local organizations and enhancing their

relationships with relevant local and external institutions (Akamani et al, 2015).

Further, government has to develop ecotourism through initiatives and priorities as a means to increase livelihood of citizen (Ayachi and Jaouadi, 2017). Springate-Baginski et al (2003) suggest that government can allocate its budget through investment within the forest sector in supporting the program.

5.2.1.3. Wish

In deciding the groups, Dishutbun Langkat was looking for people who had a will to rehabilitate forests and land. To gain legitimacy to participate in the project, Abdul Jalil and several fellows gathered several other villagers who had similar awareness and commitment. This effort is argued to create community enabling condition in the term of aspiration to work together (Cislaghi et al, 2016). Further, they organized themselves and formed an organization so-called Mekar in 2005. Couto (1989) indicates this as the indication of collective empowerment. Through this group, these villagers tried to access means to express their aspirations.

The area designated by Dishutbun Langkat also became support to the group. Even though group's efforts have been challenged by the entrepreneurs and the pro-compensation villagers, the founder of the group kept maintaining Mekar area and insisted on planting. In this case, the leadership of Mekar's founder for restoring the mangrove forests based on his awareness that community livelihoods threatened by the harsh damage of mangroves (Aheto et al, 2016). In conducting mangrove plantation, they further argue that awareness alone such as the recognition of depleted or degraded resources is not enough in ensuring the effectiveness of such collective action, but also need conservation leadership.

Over time, collective actions through group also enabled the members to

overcome external threats. Persson and Prowse (2017) explain that threats on community's effort in rehabilitating forest usually come from unofficial harvesting, demand for agricultural land, and low governance capacities. Realizing these threats, the group asked Dishutbun Langkat a mangrove guarding letter/mandate to maintain the rehabilitated area of the group. In this case, the members were aware that they needed written mandate to strengthen their efforts.

5.2.1.4. Consciousness

The supports have raised individual awareness and individuals' awareness towards their circumstances has created collective awareness and this further raised collective actions. The initiators' effort to gather some fellows prior to the execution of GNRHL project had proven this awareness. Participation in the projects indicated that these individuals had a strong wish to do mangrove planting and maintenance. Moreover, knowledge obtained from training is a proof on how knowledge becomes a valuable asset for developing individual capacity.

Furthermore, knowledge applications will provide additional skills that have not been obtained before. So that this will further strengthen member personal assets.

Planting project became a medium for individuals to express their wish to restore mangrove forest. However, besides this strong motivation, members were also motivated by wages obtained from the project.

Alsop et al (2006) argue that psychological assets such as knowledge, information, consciousness, and income are very important in empowerment process on individual level. However, during group inactivity, individual consciousness had played an influential role in driving Amat Ali to conduct mangrove planting, maintenance and guard independently. Critical consciousness

develops when individuals acquire a progressively greater comprehension of existing situations that form their livelihoods, and of the extent of their ability to change these conditions (Sadan, 2004; Zimmerman, 2000). Realization of consciousness will change worthless individual into an acceptance of the self as a confident person and result in skills, based on understandings and abilities, to influence the environment (Kieffer, 1984; Zimmerman, 2000).

In this individual empowerment, the process consists of internal and external change. The former is personal belief in one's ability to act and the latter finds expression to act and to apply one's knowledge, information and skills in the process (Parsons, 1989).

5.2.1.5. Confidence

By being aware of the supports and a shared awareness from current situation, the group feels confidence in conducting collective actions. Individual involvement in communal organization is the element of the empowerment of individual and of collective (Sadan, 2004). The consequence is twofold, i.e. members' contribution to the group and members' benefit from the group. By participating in the projects and organizational activities, the members also learn to regard newly certain social norms affecting them. They initiate to take an active part in the actions, and then adjust their individual efforts.

However, collective action cannot be realized when it does not benefit members. Even though Amat Ali can maintain the mangrove, illegal logging and encroachment still threatened his efforts.

5.2.1.6. Empowered Group

5.2.1.6.1. Licensing Process

Donation collection has raised internal and external consequences. The external consequence was the protest related to management permit. While the internal consequences were the debates between group members and groups and village apparatus. Restlessness on donation collection have encouraged the group to legalize its activity.

The previous licensing process was failed because the administrative process of HD conducted by the village government run very slowly. This long duration process was due to the very limited village budget. Then the group decided to propose Kemitraan scheme based on the information obtained at the training in Pematang Siantar. In the licensing process, KPH strongly supported the group proposal in ecotourism and assisted in the administrative process in Dishutsu and KLHK. The draft of NKK was discussed by KPH, the group and the KLHK team and was agreed on 26 July 2017. After signing the NKK, KPH continued the licensing process by submitting Kulin proposal to KLHK. The Decree of Kulin was issued on 10 April 2018.

According to Appiah (2002), tenure rights are important in securing access on forest, especially in the long run. Rights are also the authority to initiate specific actions related to a certain domain (Schlager and Ostrom, 1992). This delegation is a mechanism to promote the transfer of power to local stakeholders (Agrawal and Ribot, 1999; Mohammed and Inoue, 2014). It can also be said that empowering community through power delegation results in more effective local governance, and in more socially and environmentally sustainable development (Ribot, 2002, 2003).

5.2.1.6.2. Rules and Sanctions

The transfer of leadership was also followed by designing organizational rules.

However, the chairman himself created the rules adapted from other organizational rules. These rules were not drafted or discussed with other functionaries or members. Moreover, these rules are not disseminated and elaborated further. As a consequence, some members do not recognize the organizational rules. There is also no derivative regulation governing the rules of the game and sanctions such as group regulation, chairman regulation, chairman decree and chairman directive.

However, these rules are not implemented properly. The chairman has also often applied verbal rules relating membership and sanction. According to Behera and Engel (2006),

“If the objectives are set and rules are framed to achieve them, an effective mechanism must be implemented to make sure that the rules are enforced and observed. Effective enforcement requires a mechanism to detect rule violations and proper sanctions to deter such violations”.

The weak enforcement is because the functionaries realize that most members are still less educated. So that their implementation still adopts a kinship leadership.

The weak enforcement of rules however has caused many internal conflicts.

Further, this becomes additional burden to the functionaries because the chairman usually handles these conflicts. Aheto et al (2016) state that the group can be strengthened through the application of its internal procedures. So that it results in more trust either for the leadership or for the members. Increasingly, the group also may gain credibility in the village and beyond. Moreover, Pahl-Wostl (2009) argues that the relative strength of rules is important for forest governance.

The group has also organized itself by establishing working system, financial management and meeting mechanism. However, most of these organizational resources have not been regulated through written rules. Verbal rules are emerged

through group daily activities. According to Giddens' structuration theory (1984), these organizational systems are reproduced by daily social practices that are embedded contextually. Further, the rules guide and inform the members to act with the resources provided.

5.2.1.6.3. Membership

Members' consensus appointed Dian to become the chairman of Mekar. He was chosen because he possesses leadership characteristics such as adaptation, an educated person, interest in mangrove forests and network. These characteristics have been proven throughout his leadership. This leadership quality is supported by several experts who state that a qualified leadership is needed to sufficiently guarantee the effectiveness of community-based natural resources management (Aheto et al, 2016; Corbridge and Jewitt, 1997; Akamani et al, 2015; Mongbo, 2008). The chairman has also networks which are very useful in licensing process and consultation with forestry officials. As an educated person, he always gives motivation to group members relating mangrove and ecotourism. Because of these, community's leaders are appointed with local recognition and legitimacy, thus make them locally accountable (Mongbo, 2008).

Averagely, the strength of the group is member awareness. Most members are very aware of protecting the forest because they have a dark history related to the mangrove conversions. The members are also increasingly aware that the forest provides a living. Communities will enhance awareness on the importance of their environment upon which they ultimately depend (Butts and Sukhdeo-Singh, 2010; Damastuti and de Groot, 2017; Behera, 2009). Even so, some members are less motivated in managing mangrove because they are still money-oriented, members

think that every act must have money. However, according to Castro (2001), incentives are an essential factor of getting people to continue participating.

Characterised by lower incomes (Christensen et al, 2007), even though collective actions result in income (Obiri and Lawes, 2002; Appiah, 2002; Aheto et al, 2016; Damastuti and de Groot, 2017), coastal communities seem inclined their participation when the available incentives are insufficient or better alternatives emerge (Obiri and Lawes, 2002; Persson and Prowse, 2017; Matiku et al, 2013).

Similar to motivation, members' capacity is also low. Many members do not understand administrative and financial affairs, and technical knowledge about mangrove. Further, some members are still young and are rarely involved in meetings. Some efforts conducted by the functionaries are giving comprehension regarding this knowledge. Even though members have limited knowledge, they have high creativity and enough adaptation in daily activities.

5.2.1.6.4. Working System

The more advanced ecotourism makes the group more organized itself. It has arranged working system, financial management and meeting mechanism. These organizational aspects have been discussed and approved through consensus in group meeting. The working system consists of the division of functionary's duties, the establishment of sections, the appointment of section's coordinator and personnel, the appointment of non-member, the arrangement of tariff for each section, the arrangement of working hours and the mechanism of mutual cooperation. Even though the group has limited fund, its members work very hard to develop more-advanced ecotourism (Butts and Sukhdeo-Singh, 2010).

Individual empowerment can be seen from members' activeness in daily

ecotourism activities. Group records show that members become more active on day offs and less active in weekdays. It is understandable that members are motivated by income earned from ecotourism. Economic incentive become the most influential factor in raising members' awareness. Members need sufficient income to fulfill their livelihoods and their family needs. This becomes a challenging task for the group to fully empower its members.

In its daily practices, local community regards the group as a good group in cooperation among its members. Ecotourism business and well-organized group have raised the name of the group. Further, ecotourism promotion conducted either by the group or by visitors through online social media¹⁶ also lift up the name of Lubuk Kertang. Even in the site, the signboard put the name of Lubuk Kertang, not Mekar. As said by the chairman, "The image of the village will be lifted up when the mangrove is well managed by the group" (R15).

Fuller et al (2007) state that the advocates of ecotourism argue that ecotourism can deliver an increased or renewed pride in culture.

5.2.1.6.5. Financial Management

Income is an important outcome of community empowerment for the group and its members. Ecotourism has become income for the group and additional income for the members. In a month, the group earns net income almost IDR 1 million.

Meanwhile weekly profit is IDR 227,558 and daily profit is IDR 32,419. This profit is further used to run ecotourism management mainly for maintaining and constructing infrastructures. For its members, wages become additional income to

¹⁶ If we search videos by tagging "Ekowisata Lubuk Kertang", it will show many videos relating to it.

support their daily livelihoods. Members can earn IDR 13,524,667 per month, or IDR 3,121,077 per week, or IDR 444,647 per day.

Even though income from ecotourism cannot be relied to fulfill daily needs yet, ecotourism still develops and has a good prospect in the future. Ecotourism is related with the development of local community and environmental conservation (Ayachi and Jaouadi, 2017; Butts and Sukhdeo-Singh, 2010; Cobbinah, 2015; Dimoska and Kocevski, 2010; Fuller et al, 2007; Martínez et al, 2018). It means ecotourism has substantial impacts to improve local economy and the livelihood of villagers (Ayachi and Jaouadi, 2017; Jaafar et al, 2013; Butts and Sukhdeo-Singh, 2010; Clayton et al, 2014; Mohamad and Hamzah, 2013; Snyman, 2014; Fuller et al, 2007; Martínez et al, 2018; Adeleke, 2015; Dev et al, 2003). This further results in multiplier effects (Mitchell, 2012; Ayachi and Jaouadi, 2017; Fuller et al, 2007; Snyman, 2014; Jaafar et al, 2013; Clayton et al, 2014). As an informant said, "Local people who are crossed by visitors also get income...previously a villager can sell 5 bottles of fuel, now he can sell 15 bottles" (R2)

In long term, ecotourism may reduce poverty in local community (Mohamad and Hamzah, 2013; Ayachi and Jaouadi, 2017; Dimoska and Kocevski, 2010; Adeleke, 2015; Snyman, 2014). However, this is influenced by its adeptness to boosting the livelihoods of local people. Ecotourism can be fruitful only if the members are involved and received benefits equitably (Jaafar et al, 2013; Snyman, 2014), and government support ecotourism (Ayachi and Jaouadi, 2017). In addition, ecotourism development needs product diversification and value creation to the visitors for satisfaction and learning experiences (Nigatu, 2017; Snyman, 2014; Baral, 2013).

5.2.1.6.6. Meetings

The group has adopted the concept of general meetings and conduct them in democratic atmosphere. Members have equal opportunity to voice their aspirations and to argue each other. However, most of members have less experience and knowledge about mangrove. So this impedes the transfer of information to the members. In their implementation, meetings are not held regularly. In addition, not every meeting follow-up is carried out by members, because the character of most of the members are not work-bound.

According to Butts and Sukhdeo-Singh (2010), meetings are a means to give members a voice and to empower themselves effectively. They must also be followed up by concrete action in the form of efforts to guard organizational resources from rule-breakers (Agrawal and Yadama, 1997). Persson and Prowse (2017) argue that meetings that are not held on a regular basis will prohibit information exchange and members will be difficult to access to information.

5.2.1.6.7. External Relations

The group builds relationships to external parties based on their interventions. In its development, these relationships experience dynamics among external parties. Good relationships are intertwined with forestry agencies and Pertamina. Meanwhile, disharmony is happened with the village government, Lestari Mangrove and Yagasu.

According to Armitage et al (2009), the formation of horizontal and vertical linkages and networks is very useful to foster trust building and social learning.

Further, this relationship will shape governance outcomes. Akamani et al (2015) also stress that linkages with relevant local and external organizations will

strengthen community-based forest organizations. Relationship between the group and KPH is considered as a kind of accountability relation (Mohammed and Inoue, 2013), where the group will report its activities and development and KPH will supervise and assist the group. Relating to disharmony with Yagasu, Purnomo et al (2017) argue that transparency in every stage of activities is required to develop a relationship based on mutual trust. Meanwhile the group should build harmony relationship with local actors since social forestry will only be successful if there is strong institutional support from both local government and community (Obiri and Lawes, 2002).

5.2.1.6.8. Conflicts

Conflict becomes a prominent issue in empowerment. The group has experienced many conflicts either internally or externally. Internally, conflict usually happened between members relating to daily activities and financial management. Since members seek to pursue their own interests, conflict can arise across and within members. Conflicts often arise when members interact with one another in the midst of change (Castro, 2001). Participation in daily activities can also escalate conflicts. A conflict has also occurred between functionaries. Akamani et al (2015) argue that internal conflicts among the functionaries can cause the collapse of organization. However, the functionaries can handle all conflict so the conflicts did not widen. The ability of the functionaries to manage conflicts is a proof that the functionaries have good skill in leadership. Springate-Baginski et al (2003) state that conflict resolution is one of the most common needs relating to forest-management issues. Further, conflict resolution should be regulated in written rules (Alló and Loureiro, 2016).

Conflict with other group makes their relationship is disturbed. Indeed, both have similarity in managing mangrove. In this conflict, the village head has already directed both leaders and tried to bridge them in any chance.

Misunderstanding between the group and Yagasu seemed to be personal for the chairman. However, this also affected the group as a whole. In this case, both parties need to introspect each other. Yagasu must give a simple but comprehensive explanation concerning its "big project" in Lubuk Kertang.

Meanwhile the chairman must think clearer and try to develop a constructive communication. Even though Yagasu has no activities recently, Yagasu might conduct programs in the near future.

Conflict potential with village government also creates disharmony. The village government should think that any scheme of social forestry is not a problem as long it brings an advancement for the village and its community. The village head's policy regarding one-door system can also prohibit the development of the village and the group. This is because each outsider has its own system and the village head must respect this.

According to Castro (2001), conflictual situations are neither positive nor negative but they can be used in a constructive or destructive way. Conflicts are crucial not only for social change but also for the continuous creation of the group by the group itself. Therefore, conflict should not be viewed only as a dysfunctional relationship between individuals that should be avoided at all cost, but also, as an opportunity for constructive change and growth. Further, conflict management considerations need to be a part of any social forestry arrangements.

5.2.2. Constraints in Empowerment Process

Economic incentive becomes the most influential factor in raising members' awareness. People become inactive because of less economic incentive. This state is related to income obtained from ecotourism. Akamani et al (2015) argue organization can collapse if members lose interest in sustaining the group due to a decline in income. Dev et al (2003) state that impacts of social forestry upon livelihoods can be traced to the direct provision of new income opportunities, the enhancement of human and financial capital, and possibly in the pay-offs of each activity. To make ecotourism more valuable, Nigatu (2017) suggests that there must be product diversification and value creation to the visitors for satisfaction and learning experiences. Further, the infrastructure and facilities for ecotourism development must be developed.

Table 6. Constraints in Empowerment Process

| No. | Constraints | Focus | Theme | Conclusion | Suggestion |
|-----|--|---|---------------------|---|---|
| 1. | Members' activeness relating to economic incentive | Individual empowerment | Empowerment process | Members are more active on weekends and day offs, but less active on weekdays | 1.The personnel appointment uses rota system. 2.The inactive members can be replaced through new member recruitment |
| 2. | The weak enforcement of rules and sanctions | Individual and organizational empowerment, and leadership | Empowerment process | 1.The existing rules and sanctions are not enforced properly 2.There is no derivative regulation | 1.Simple and understandable regulative regulations must be created. 2.Rules adopt greater tolerance and they must be enforced properly. 3.Simple merit system may be applied. |

The management does not implement rules of the game because it still regards the kinship approach. Less disseminated rules also make the members do not recognize their obligations and rights, as well as sanctions. Behera and Engel (2006) argue that if the objectives are set and rules are framed to achieve them, an effective mechanism must be implemented to make sure that the rules are enforced and observed. Effective enforcement requires a mechanism to detect rule violations and proper sanctions to deter such violations.

The group should not just rely on AD and ART. It must arrange simple and understandable derivative regulations such as group regulation, chairman regulation, chairman decree and chairman directive (Table 6). These rules can also adopt greater tolerance, especially by the establishment of graduated sanctions (Alló and Loureiro, 2016). Further, to treat members fairly, the functionaries can adopt rota system in appointing personnel in sections. Moreover, strict sanction such as dismissal can be applied in order to give non-member villagers a chance to join the group and to participate in it. To attract members and to support rule enforcement, simple merit system may be applied.

CHAPTER 6

CONCLUSIONS AND SUGGESTIONS

6.1. Conclusions

Some conclusions derived from this research are:

1. The process of empowerment cannot fully adopt Sadan's theory (2004). Sadan states that the second step is "support" and this is further followed by "wish".

However, the results show vice versa. The group needs to raise its wish to reach the support. In other word, the wish is a prerequisite for the support.

Therefore, the process of empowerment in this research is powerlessness, wish, support, consciousness, confidence and empowered organization. In addition, the group experiences two empowerment processes i.e. prior to 2013 and 2014 onward. This distinction is based on a figure of Dian.

2. Even though local community is aware of mangrove ecosystem and outsiders support community-based ecotourism, economic incentive and the weak enforcement of rules and sanctions have become the major constraints in empowerment process. Generally, members are inactive because ecotourism cannot be relied to support their daily needs. Further, leadership applies familial mode in accordance with the characteristic of local community.

6.2. Suggestions

Some suggestions derived from this research are:

1. External interventions must be maintained continuously. Such interventions are intended to improve local capacities in managing ecotourism.
2. Organizationally, personnel appointment in daily activities can adopt rota

system, so each member has the same chance to participate. Further, the inactive members can be replaced through new member recruitment in order to give non-member villager a chance to participate. In addition, simple and understandable derivative regulations must be created. Rules and sanctions must also adopt greater tolerance and must be enforced properly.



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APPENDICES

Appendix 1. Letter of Information

Surat Pemberitahuan

Judul Penelitian : Community Empowerment in Coastal Community: Case Study of Community Forest in North Sumatra, Indonesia

Nama Peneliti : Longgak Arianto Tampubolon (Mahasiswa Pascasarjana Magister Ilmu Administrasi Publik Fakultas Ilmu Administrasi Universitas Brawijaya)

1. Undangan Partisipasi

Saya mengundang Bapak/Ibu untuk berpartisipasi dalam penelitian yang berjudul "Community Empowerment in Coastal Community: Case Study of Community Forest in North Sumatra, Indonesia" (Pemberdayaan Masyarakat Pesisir: Studi Kasus Hutan Kemasyarakatan di Sumatera Utara, Indonesia).

2. Tujuan Surat

Tujuan surat adalah untuk menyediakan informasi yang Bapak/Ibu perlukan dalam menentukan keputusan untuk berpartisipasi dalam penelitian ini.

3. Tujuan Penelitian

Tujuan penelitian adalah untuk menganalisis latar belakang dan proses pemberdayaan masyarakat dalam pengelolaan mangrove di Lubuk Kertang.

4. Kriteria Partisipan

Penelitian ini melibatkan para pihak yang terlibat langsung maupun tidak langsung dalam pemberdayaan masyarakat. Misalnya, masyarakat lokal yang terlibat dan tidak terlibat, perangkat pemerintahan desa (perangkat desa dan badan perwakilan desa), tokoh masyarakat, staf pemerintah (Dinas Kehutanan Provinsi Sumatera Utara, Balai Pengelolaan Hutan Produksi Wilayah II Medan, Balai Perhutanan Sosial dan Kemitraan Lingkungan Wilayah Sumatera atau eks Balai Pengelolaan Hutan Mangrove Wilayah II, Kesatuan Pengelolaan Hutan Wilayah I Stabat), akademisi (Universitas Sumatera Utara), staf organisasi non pemerintah atau lembaga swadaya masyarakat (jika ada) dan staf badan usaha (jika ada).

5. Prosedur Wawancara

Jika Bapak/Ibu setuju untuk berpartisipasi, saya akan mewawancarai Anda. Wawancara akan berlangsung satu hingga dua jam (tergantung situasi) dan akan direkam. Silahkan menjawab sesuai dengan pengetahuan Anda.

6. Risiko dan Bahaya

Partisipasi Bapak/Ibu tidak akan menimbulkan risiko dan bahaya apapun.

7. Manfaat

Penelitian berusaha menggali pemberdayaan masyarakat dalam pengelolaan mangrove. Bapak/Ibu mungkin tidak akan menerima manfaat langsung dari penelitian ini, tapi diharapkan temuan penelitian akan menjadi bahan masukan bagi pihak-pihak terkait terutama pemerintah untuk pengembangan pemberdayaan masyarakat ke depannya.

8. Kompensasi

Bapak/Ibu tidak akan menerima kompensasi apapun terkait partisipasi dalam penelitian.

9. Sifat Partisipasi

Partisipasi dalam penelitian ini bersifat sukarela. Anda dapat menolak berpartisipasi, menolak menjawab pertanyaan atau menarik diri kapanpun tanpa ada akibat apapun.

10. Kerahasiaan

Seluruh data dan informasi yang terkumpul dalam penelitian ini akan tetap rahasia dan hanya dapat diakses oleh saya sendiri. Supervisor dan/atau perwakilan Magister Ilmu Administrasi Publik Fakultas Ilmu Administrasi Universitas Brawijaya mungkin akan menghubungi Bapak/Ibu atau memerlukan akses ke data dan informasi yang terkumpul untuk memantau penelitian ini. Saya akan melakukan yang terbaik untuk tetap menjaga kerahasiaan data dan informasi yang Anda berikan.

11. Narahubung untuk Informasi Lebih Lanjut

Jika Bapak/Ibu memerlukan informasi lebih lanjut, Anda dapat menghubungi Fakultas Ilmu Administrasi Universitas Brawijaya, Jl. MT. Haryono 163, Malang 65145, nomor telepon 0341-553737, 0341-568914, 0341-558226, email fia@ub.ac.id

12. Publikasi

Jika hasil penelitian ini dipublikasikan, nama Bapak/Ibu tidak akan dimuat.

13. Persetujuan

Jika Bapak/Ibu bersedia untuk berpartisipasi, maka saya memerlukan persetujuan Anda. Persetujuan berupa pernyataan "Saya setuju" dan direkam, atau pernyataan tertulis.

14. Catatan (berlaku jika partisipan setuju terlibat dalam penelitian)

Jika memungkinkan, saya akan memvalidasi pernyataan Bapak/Ibu di kemudian hari.

Note: Adopted and translated from (except no. 14):

<https://www.uwo.ca/research/docs/ethics/Letter%20of%20Information%20template.docx>

Downloaded at 25 April 2018

Malang, Mei 2018
Hormat saya,

Longgak Arianto Tampubolon
NIM. 176030100111037

Surat ini menjadi milik Bapak/Ibu.

Appendix 2. List of Informants

| No. | Code | Name | Institution | Position | Telephone Number | Note |
|-----|------|------------------------|--|---------------------|------------------|---------------------------------------|
| 1 | R1 | Amat Ali | Mekar | Vice Chairman | Not available | |
| 2 | R2 | Efendi | Mekar | Member | Available | |
| 3 | R3 | Armansyah | Mekar | Member | Not available | |
| 4 | R4 | Satriadi Lubis | Mekar | Member | Not available | |
| 5 | R5 | Kurniawan | Mekar | Member | Not available | |
| 6 | R6 | Sofyan | Mekar | Member | Available | |
| 7 | R7 | Arsy Rakhmanissazly | PT Pertamina EP Aset 1 | Member staff of CSR | Available | |
| 8 | R8 | Zakharia (alias Dede) | Mekar | Member | Available | |
| 9 | R9 | Azhar Kasim | Keluarga Bahari | Executive Director | Available | |
| 10 | R10 | Rasmianto | Mekar | Treasurer | Available | |
| 11 | R11 | Khairul Munadi | BPSKL Wilayah Sumatera | Member staff | Available | |
| 12 | R12 | Elizabeth Ika Herawati | KPH Wilayah I Stabat | Member staff | Available | Ex member staff of Dishutbun Langkat |
| 13 | R13 | Meilinda Suryani | Yayasan Gajah Sumatera | Technical Manager | Available | |
| 14 | R14 | Zulinsan | Lubuk Kertang Village | Village Head | Available | |
| 15 | R15 | Hadyan Jamili Batubara | Mekar | Chairman | Available | |
| 16 | R16 | Lilik Pudjasmoro | None | None | Available | A retired Dishutsu senior officer |
| 17 | R17 | Darwis | Lembaga Pemberdayaan Masyarakat Desa Lubuk Kertang | Secretary | Available | |
| 18 | R18 | Suharso | Dinas Kehutanan Provinsi Sumatera Utara | Member staff | Available | Ex member staff of Dishutbun Langkat |
| 19 | R19 | Prayitno | None | None | Available | Ex member staff of PT Sari Bumi Bakau |

Note:

1. Interviews with R16 and R17 were not recorded as the interviewee request
2. R18 and R19 were interviewed by phone. These interviews were recorded.