

The Positive Impacts of The Cooperative Existence to The Self Suffiecient of Fishermen in Tanjung Limau Bontang Indonesia

Sri Djuwani Ekowati⁽¹⁾, Sudharto P Hadi ⁽²⁾, Dwi P Sasongko ⁽³⁾

¹Doctoral Program in Environmental Sciences, Post-Graduate School, Diponegoro University, Semarang-Indonesia

²Professor at the Graduate Program of Environmental Science, Diponegoro University, Semarang-Indonesia

³Lecturer in Departement of Physics, Faculty of Science and Mathematics, Diponegoro University

Abstract: The group of Floating Net Cages (FNC) fishermen in Tanjung Limau Bontang, East Kalimantan Indonesia which is assisted by a team Creating Shared Value (CSV) of PT. Pupuk Kalimantan Timur (PKT) has reached *exit program*. The group started with 10 (ten) traditional fishermen under the name of *Fantasi*. Then the PKT chose 10 (ten) fishermen from all fishermen in North Bontang District. This group are trained in internship in cooperative *Alam Bahari* Tanjung Lesung in Pandeglang, Banten to learn grouper fish and lobster cultivation and cooperatives. After the internship is finished, the fishermen established a cooperative named *Koperasi Nelayan Bontang Ekonomi dan Pariwisata Maritim* (Bontang Fishermen Cooperative of Economy and Maritime Tourism) to be shortened *Kop BEM* and *Fantasi* group is merged with *Kop BEM*. The number of members and FNC increases every year, and at the end of 2020 there are 74 members with 124 plots including replications in Gusung and Bontang Kuala in Bontang City. The type of research is descriptive qualitative. The data collection techniques are observation with interviews to purposive informant. The result of research show that the positif impacts of the cooperative existence to the self suffiecient of Fishermen in Tanjung Limau. The harvest of grouper fish is exported to numerous countries. Each fisherman of *Kop BEM* obtained between IDR450.000 to IDR4.500.000 on average every month; The remaining results of operations for every member is IDR371.120 on average; the asset managed is IDR3.158.310.000. Under the guidance of PKT, *Kop BEM* becomes the place of internship for students of fisheries faculty and fishermen from outside Bontang to study grouper fish and lobsters cultivation, cooperatives and has replicated three FNC, two FNC in Bontang and one FNC in Miang Island, East Kutai.

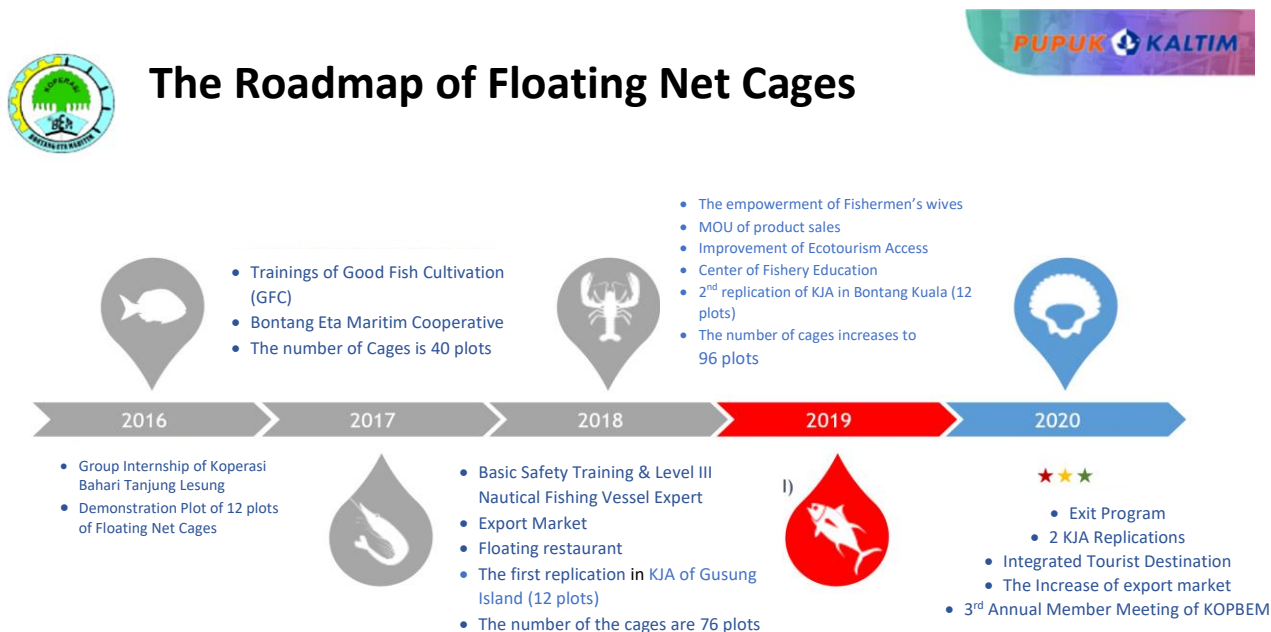
Keywords : Floating Net Cages (FNC) ; Cooperative ; Replication

1. Introduction

One of PT.Pupuk Kalimantan Timur's (PKT's) Corporate Social Responsibility (CSR) programs is cultivation of grouper and lobster in floating net cages (FNC). The Floating Net Cages fishermen group under the guidance a team CSV of PKT which is incorporated in Bontang Fishermen Cooperative of Economy and Maritime Tourism, has reached *exit program* according to the *road map* designed, since the beginning of its establishment at the end of 2016 until October 2020. This group is started from 10 (ten) traditional fishermen under the name of *Fantasi* led by Mr. Ismail who owns 8 (eight) traditional net cages. After that this group is facilitated by PKT to be self suffiecient and is given 12 (twelve) demonstration plots of FNC sized 4x4 meter and support of 4000 seedlings of grouper fish aid for every 12 plots of Floating Net Cages (FNC). Then the PKT chose 10 (ten) fishermen from all fishermen in North Bontang District who then are sent to internship at cooperative *Alam Bahari Tanjung Lesung Pandeglang Banten* province to study grouper fish and lobster cultivation there.

After the internship is finished, the fishermen are given trainings about cooperatives with speakers from PKT employees cooperative and from Department of Industry, Trade, and Cooperative of Bontang. After the fishermen understand about cooperatives well, this fishermen group began to establish a

cooperative named *Koperasi Nelayan Bontang Ekonomi Pariwisata dan Maritim* (Bontang Fishermen Cooperative of ETA Maritime) or *Kop BEM*. To improve knowledge about grouper fish cultivation and as a requirement of grouper fish harvest sales, 30 fishermen are given a training of Good Fish Cultivation (GFC) by PKT with the speaker from the Ministry of Marine Affairs and Fisheries (MMAF) of Manado in 2018. The location of FNC which is next to urea and supporting raw materials for fertilizer production carrier ship, enables PKT to provide a trainings of III Fishing Boat Nautical Expert (Indonesian language called Ankapin III) to fishermen of Kop BEM to allow them to have License so they can pilot fishing boats with the capacity above 5 Gross Tons (GT) and to understand traffic signs at sea, in order to avoid collision between *Kop BEM* ships with ships of PKT carrying raw materials products. For the safety of ship crews, 16 fishermen are given a Basic Safety Training (BST) in Tegal, Central Java. To foster the independence of *Kop BEM* and its programs that are compiled are able to be performed well and achieve its goals, a planning road map which is presented in Figure 1 is created at the start of the program until the exit program.



...ing continuous development in all aspects into reality and the goals which include no poverty, zero hunger, good health and well-being, quality education, gender equality, clean water and sanitation, affordable and clean energy, decent work and economic growth, industry, innovation, and infrastructure, reduced inequalities, sustainable cities and communities, responsible consumption and production, climate action, life below water, life on land, peace, justice, and strong institution, and partnerships for the goals have been agreed by 193 countries. According to Hadi, (2019) those seventeen (17) goals of SDGs are summarized into 3 (three) big goals, namely:

- (1) human development: health, education, and gender equality
- (2) social economic development: imbalance, poverty, environmental facilities and infrastructure availability, and economic growth
- (3) environmental development: maintaining the availability of good natural resources and environmental quality.

The goals of SDGs are able to be performed through community empowerment programs conducted by companies which to be obliged to conduct social responsibility, according to Limited Liability Company Law Number 40, 2007 which in Article 74, clause (1), determines that Limited Liability Companies with a business in a field of and/or relating with natural resources must carry out social and environmental responsibility, clause (2), social and environmental responsibility as stated in clause 1 is the obligation of the Company which is budgeted and calculated as the Company's cost which implementation is performed

with due regard to propriety and fairness, clause (3) A company which does not perform its obligation as stated in clause (1) is charged with sanctions according to the provision of legislation. One of the companies as categorized above is PT. Pupuk Kalimantan Timur (PKT).

Coastal communities are still classified as marginalized and have low income. According to Nikijuluw (2001) in Kristiyanti (2016), the Ministry of Marine Affairs and Fisheries (MMAF) and other government agencies are making efforts to alleviate poverty in coastal communities. There are five approaches used, namely: 1. alternative job creation. Empirical data shows that too many fishermen are concentrating in certain sea. In fact, nationally, it seems that the number of fishermen has also been excessive. The available marine fish potential, if the estimation of marine fish potential is correct, cannot be used as a mainstay for improving welfare; 2. bringing people closer to sources of capital. The seasonal nature of the fishing business, uncertainty and high risk are often the reasons for the reluctance of banks to provide capital for this business ; 3. bringing people closer to new sources of technology, which are more successful and more efficient. Efforts to increase income are carried out through technological improvements, starting from production technology to post-production and marketing; 4. bringing people closer to the market. The market is a pull factor, opening market access is a way to develop a business because if there is no market, the development of the business will be very hampered; 5. build solidarity and collective action in the community. Empowerment through the development of collective action means the development of cooperatives or joint business groups. Collective action is a collective action which leads to the welfare of each individual member.

Rudito and Famiola, (2019) state that community empowerment is a series of programs which provides wider access to the community to support their independency such as with the establishment of cooperatives, and other small industrial businesses which supporting institutions are naturally already possessed by community members and the company provides access to the existing social institutions in order to continue.

According to Tanjung, (2017) a Cooperative cannot be monopolized by individuals in the form of ownership of capital or shares, the institutional elements in cooperatives are not based on the strength of economic but of human resources. The members of the cooperatives are the owners, managers, as well as supervisors of the cooperative business entities. The elements of cooperatives are different from the elements in other business entities. The elements in a cooperative include the meetings of members, caretakers, supervisors, and managers. In cooperative institutions, other than caretakers and supervisors, it is possible to appoint a manager who should manage the cooperative business based on the power and authority which are determined by the caretakers. In its operation, the position of caretakers can be applied as a new structure in a more operational form which is led by a manager. Cooperatives are not oriented towards seeking maximum profit but rather provide services for common needs and as a forum for the participation of economic agents who have the same economic interests. As a business entity, Cooperative is stated in Article 1 clause 1 of Law No 25, 1992 that a cooperative is a business institution with a legal status which in its operations is carried out based on the cooperative management which consists of the meetings of members, caretakers, and supervisory body. In running its operations, the status of cooperatives is equal with other business entities, namely subject to the regulations governing obligations as a business entity such as the obligation to have legal statuses such as deed of establishment, Tax Payer Identification Number (TPIN), Trading Business License (TBL) and others. The development of cooperatives and micro and small and medium enterprises (MSME) is intended for the creation of strong and independent cooperatives and MSME so that the cooperatives and MSME are able to support the national economy as well as a form of strengthening the foundations of the national economy.

Based on Article 3 Law No 25, 1992 regarding the purpose of cooperatives which outline includes: 1. promoting the welfare of members and society ; 2. building an economic order ; 3. the realization of a just and prosperous society

Tanjung, AM, (2017) says that based on its identity, a cooperative is a business entity which holds both comparative and competitive advantages. The comparative advantage lies on its members. The members of a cooperative are the main assets whose existence is very valuable to the cooperative because the cooperative is

established from, by, and for its members, then the cooperative is owned by the members. Caretakers and supervisors of a cooperative are elected by members and strategic decisions are made through Annual Member Meeting (AMM). With the more open and integrated global economic market, cooperatives are forced to participate in the competition as other companies in general. The important key words in running cooperatives to achieve competitive excellences are effectiveness and efficiency. A cooperative will not last if it only has comparative excellences but it also needs to have competitive excellences or competitiveness to enter market as the main requirement.

The role of entrepreneurs in a cooperative should be optimized if the cooperative wants to stay in the market. Many cooperatives are not able to operate as what business organizations should do due to the inability of the cooperatives to play their role as a business entity, namely a business Institution which will compete in open markets. This condition happens because the cooperatives do not have professional resources who act as cooperative entrepreneurs. Generally a cooperative is managed by people who do not understand that a cooperative is a business organization or a business Institution which existence equals with other business organizations in the market (Tanjung, 2017).

Meanwhile, indicators of the success of community development, according to Hadi (2019) include: 1. economy: that community development activities are able to open jobs, business fields and increase community income.; 2. social: improving the quality of health, education and competence of group members in managing group activities.; 3. improve environmental quality through reducing the waste load, reducing the use of fossil energy and so on.; 4. There are innovations in the form of new products (follow-up activities) or new methods.; 5. Can be replicated in other places, so that the benefits can be felt by the wider community.

3. Research Method

The method applied in this research is qualitative with participative observation with interviews to purposive informant. The informants were selected from key figures such as the head of the *Kop BEM* fishing cooperative, a local hero for grouper farming in floating net cages in Tanjung Limau and a former PKT CSR staff tasked with assisting coastal communities.

4. Results

According to the opinion of Tanjung (2017) that a good cooperative is able to carry out comparative advantage and competitive advantage. With the establishment of *Kop BEM* as a Fisheries Sector Cooperative with the Number of Legal Entity: 005973/BH/M.KUKM.2/X/2017 on 30th October 2017, *Kop BEM* is able to exercise competitive advantages, namely: being able to compete in selling live grouper fish to the market domestic and have an MoU, are able to sell grouper harvested products to the international market through third parties at international prices that do not depend on middlemen and are able to provide added value to the grouper harvest which is processed into grilled fish and grilled lobster, so that the selling price is in floating stall *kerlob-kerlob* increase. Some of the business fields run by *Kop BEM* during 2019 that provide cash income to *Kop BEM*, are:

1. The sales of grouper and lobster from each member of the cooperative and *Kop BEM* receive a fee of IDR 5,000 per kg of grouper sold at harvest time. The income received by *Kop BEM* is IDR14,065,500 on 31th December 2019.
2. *Kerlob-Kerlob* food stall managed by the members of Fishermen Wives Unity (FWU) with the main dish grilled grouper with the price of IDR 80,000 per portion and grilled lobster with minimum order is per 3 ounce serving, price per ounce is IDR50,000 (including rice, chili sauce, and fresh vegetables and a bottle of mineral water). *Kop BEM* receives a fee of IDR5.000 for 1 portion of grilled grouper and IDR 10.000 for 1 portion of lobster. The income obtained by *Kop BEM* from *Kerlob-Kerlob* food stall is IDR16.990.000

3. From ice factory, *Kop BEM* earned the income of is IDR 240,000. The income from the ice factory is very small because the ice produced is in the form of small pieces of ice cubes, so fishermen are not interested in buying it because it is easy to melt and does not last long when used while sailing and the location of the ice factory is far from fishing settlements.

The business multiplier effects obtained by *Kop BEM* as a cooperative with legal entities are:

1. Access to markets to sell living groupies with international price during the harvest time with a purchase requirement of 1 ton for exporters who load the fish by using special ship to be exported overseas.
2. Obtaining 3 fishermen 3-Gross Tonnage capacity ships, used as fish transport at domestic markets and between main *FNC* in Tanjung Limau and the Replication in Gusung and Bontang Kuala as a support from the Minister of Marine Affairs and Fisheries (MMAF) of the Republic of Indonesia.
3. Ice maker given by MMAF for the business of ice cubes used for fish preservation
4. Agreement contract with several restaurants and star hotels in Bontang to sell harvest products for the guests of the restaurants and hotels.
5. Selling the harvest to domestic markets in Bontang
6. 1 passenger ship from PKT to carry passengers outside of PKT from Fish Auction Place (FAP) in Tanjung Limau to *Kerlob-Kerlob* food stall
7. a culinary destination for local officials, company officials, ministers, company guests, company employees and Bontang residents to eat grilled grouper and lobster in *Kerlob-Kerlob* floating food stall.
8. as the place for internship and sources for the fishermen of Miang Island in East Kutai, assisted by Indonesian Bank, Samarinda branch to learn grouper and lobster cultivation in Floating Net Cages (FNC) and replicate FNC in Miang Island.
9. As the place for internship for students of fisheries faculty of universities in East Kalimantan, Sulawesi, and Java.
10. Each member receives the remaining results of operations (RRO) as of IDR371.000 per member in the third annual member meeting (AMM) of *Kop BEM*
11. Trusted by PKT to manage assets as of IDR3.158.310.000 (Three billion one hundred fifty-eight million and three hundred and ten thousand rupiah) in the form of 124 of floating net cage pieces along with the facilities which are handed by the board Director of PKT to the Chairman of *Kop BEM* at the end of October in 2020. The amount of the asset does not include the costs for trainings and Floating Net Cages (FNC) maintenance for almost 5 (five) years.
12. Award from Indonesian Bank (IB) for the second winner in 2019 with the prize of IDR40 million.

With the existence of grouper and lobster cultivation at FNC and *kerlob-kerlob* grilled fish stalls at FNC Tanjung Limau, it creates alternative employment opportunities for fishermen, according to Kristiyanti (2016) as one of the fishermen's poverty alleviation by providing alternative job creation.

Kop BEM is also able to carry out a comparative advantage, proven to have been able to hold the first Annual Member Meeting (AMM) in 2018 for 2017 performance, second AMM in 2019 for 2018 performance and third AMM for 2020 for 2019 performance and have the remaining results of operations (RRO) *Kop BEM* is able to create a new economic institution, namely Fishermen Wives Unity (FWU) which manages *kerlob-kerlob* stalls that provide the largest share of remaining results of operations (RRO) 54.3% in the third AMM *Kop BEM*, able to replicate FNC Tanjung Limau in three (3) other locations, namely in Gusung, in Bontang Kuala and on Miang Island, East Kutai. With the cooperative with legal entities capacity and institutional improvement to the fishermen of *Kop BEM*, independent fishermen may get positive impacts, such as gaining:

1. a strong social cohesion between members and caretakers
2. a strong confidence for negotiation with tri sector partnership stakeholders (company, government, and civil society)

3. a guaranteed access to markets with international rate tariff and continuity for selling grouper fish without dependency to wholesalers.
4. trusts from stakeholders that will enable the cooperative to get moral, facilities, and operational supports needed from the stakeholders.
5. environmentally friendly

5. Discussion

The importance of cooperative institutions that are legal entities and increasing the capacity of the assisted community, will give confidence to the fostered community and give confidence to relevant stakeholders to play a role in advancing the assisted community. PKT realizes this so that in assisting community empowerment, PKT carries out some of the capacity building priorities for *Kop BEM* members, namely: internship, cooperative training, assistance in fulfilling the requirements for cooperative formation and other capacity building. Some of the capacity building programs for Tanjung Limau fishermen are:

1. The internship of Tanjung Limau fishermen group at cooperative Alam Bahari in Pandeglang, Banten which one of its purposes is to learn about how a cooperative manages grouper and lobster farming in Floating Net Cages (FNC), cooperative and administrations leadership, in December 2016. Other trainings obtained are fresh water fish farming and fish feed pellets making.
2. The training of cooperative about the theory and how to manage a cooperative with 2 keynote speakers from PKT Employees Cooperative and also from the officer of Industry, Trade and Cooperatives Office of Bontang in March, 2017.
3. The establishment of fisherman cooperative of Bontang Economic and Maritime Tourism (*Kop BEM*) during 2017, so that at the end of 2017 *Kop BEM* with a legal entity is formed.
4. A training on administration and finance conducted by Industry, Trade and Cooperatives Office of Samarinda in 2019 with the goal to create a better finance report.
5. Trainings and certifications of Good Fish Cultivation (GFC) in order to support the marketing of grouper harvest to be sold well at international markets.
6. Fishing Boat Nautical Expert 3rd (Indonesian called *Ankapin III*) Trainings as the License for driving over 5-Gross Tonnage (5 GT) fish boats in order to pilot fishing boats legally and to understand traffic signs at sea.
7. *Basic Safety Training* (BST) Trainings for safety at sea during sailing.
8. Included in several exhibitions both regionally in Bontang or nationally in Indonesia Quality Award (IQA) events in Makasar in 2017, in Surabaya in 2018, in Semarang in 2019 and in Padang Sumatra Barat at the end of 2019 which are held by the Ministry of Marine Affairs and Fisheries (MMAF) of the Republic of Indonesia.

While the wives of the fishermen are organized and guided by PKT with the establishment of Fishermen Wives Unity (FWU) under *Kop BEM* in order to produce additional income for their families. FWU is given trainings in processing and serving grouper fish and lobsters from a 3-star hotel chef in Bontang, so they are able to process and serve restaurant-style dishes with 3 flavors, namely grilled grouper fish and lobsters and sweet and sour lobsters. After that, the members of FWU are able to innovate with new dishes, namely *gami cumi* and *gami udang pete* (squid and prawn with stinky beans cooked in hot plate chili sauce), and *rajungan santan* (crabs cooked in coconut milk) sold in *Kerlob-Kerlob* floating food stall in Floating Net Cage (FNC) in Tanjung Limau. FWU is assigned by *Kop BEM* to manage *Kerlob-Kerlob* food stall.

According to Tanjung (2017) a well-established Cooperative is indicated with the ability of performing both comparative and competitive excellences. *Kop BEM* is also able to establish comparative excellences by conducting the first Annual Member Meeting (AMM) in 2018 for the performance in 2017, the second AMM in 2019 for the performance in 2018 and the third AMM in 2020 for the performance in

2019 and it also produces the remaining results of operations (RRO). *Kop BEM* is also able to generate competitive excellence with its ability to compete in selling living grouper fish from the harvest in both domestic and international markets through the third party with international price which leaves it independent from middlemen and is able to provide additional values. The grouper fish which are processed further into grilled fish and lobster, making the selling price in *Kerlob-Kerlob* food stall increasing. It is able to create new economic institution namely fishermen wives unity (FWU) group which manages *Kerlob-Kerlob* food stall and provides the biggest remaining results of operations (RRO) as of 54.3% in the third AMM of *Kop BEM*. *Kop BEM* is also able to replicate FNC Tanjung Limau in other three (3) locations, namely Gusung, Bontang Kuala and Miang Island in East Kutai. Replication of FNC in Miang Island under the coordination of Miang Island fishermen assisted by an Indonesian Bank (IB). *Kop BEM* fishermen as trainers, assistants and field advisors.

Based on the results of the previous description of the PKT CSR program in empowering Tanjung Limau fishermen, according to Hadi's opinion (2019) it fulfills the 3 goals of SDGs and meets the comdev success indicators.

6. Conclusion

From the previous explanation, it can be concluded that society empowerment performed by the Company should be accompanied with the establishment of groups in the form of a cooperative which holds legal entities, for its independency in order to provide credibility to stakeholders in supporting the cooperative's existence.

References

1. Ekowati, S.D. (2019) *Budidaya Ikan Kerapu dan Lobster di Keramba Jaring Apung Binaan CSV Pupuk Kalimantan Timur. Seri Manajemen Pengetahuan*. Bontang.
2. Hadi, S. P. (2019) *Tanggungjawab Sosial dan Lingkungan Perusahaan*. Undip Press Semarang.
3. Kartini, Dwi (2013). *Corporate Social Responsibility*. PT. Refika Aditama. Bandung
4. Kristiyanti, M. (2016) 'Pemberdayaan Masyarakat Pesisir Pantai Melalui Pendekatan ICZM (Integrated Coastal Zone Management)'.
5. Mukhtar, (2020) *Laporan Kinerja Tahunan Pengurus dan Pengawas Koperasi Bontang Ekonomi Pariwisata dan Maritim (Kop BEM) Tahun Buku 2019*, in the Third Annual Member Meeting (AMM).
6. PKT, (2020a) *Laporan Akhir Program Creating Shared Value (CSV) Pupuk Kaltim Bontang*.
7. PKT, (2020b) *Materi presentasi kandidat Proper Emas Nasional 2019 Pupuk Kaltim Bontang*.
8. Rudito, B. dan Famiola, M. (2019) *Corporate Social Responsibility*. Bandung: PT. Rekayasa Sains Bandung
9. Sugiyono (2014) *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Bandung: CV. Alfabeta Bandung.
10. Tanjung, A. M. (2017) *Koperasi dan UMKM*. Jakarta. PT. Gelora Aksara Pratama.
11. Undang-Undang No. 25, 1992 about Cooperatives
12. Undang-Undang No. 40, 2007 about Limited Company