

COASTAL FISHERIES MANAGEMENT IN INDONESIA : THE CASE OF AWIG – AWIG IN WEST LOMBOK

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ABSTRACT

Local wisdom-based fisheries resource management had been done by Gangga sub district community since long time ago until 1965 in form of *sawen*, a traditional ritual conducted by *waktu telu* Moslems. In 1966 – 1999 the ritual disappeared because of changes of people's mind and economic-politic situation. In year 2000 *Sawen* was conducted again but only for reviving *Sasak*'s tribe customs and traditions which had vanished.

The emergence of *awig-awig* is influenced by conflict in coastal community caused by ecology condition, demography, legal politic condition, market distribution process, means of livelihood, and change of technology.

Awig-awig is established through formal and informal phase. It has several rules : 1) Fishing ground which is 3 miles away from shore is only for traditional fishermen; 2) Social unit as right holder is individual; 3) Legal source is by traditional ritual *sawen*; 4) *Awig-awig* is strictly up held by NLFS whose sanctions are a maximal Rp 10.000.000 fine, burning marine fishing gears, and mistreating by mass but it does not commit to murder. The problem coming up after the implementation is a conflict between local fishermen and outsiders using bomb and potassium in fishing activity.

Revitalization of *awig-awig* and other customary law, in order to work effectively like fishing right in Japan, need supports from government of Indonesia in the form of strengthening of fishermen organization and customary law to be a part of formal law product.

Keywords : fisheries resource management, *sasak* tribe, *sawen*, *awig-awig*, fishing right

BACKGROUND

Fisheries development in Indonesia so far has not created welfare especially for fishermen as economic subject. A factor causing lowness of fishermen's income is the damage of fish and marine resource from where they rely on for means of livelihood. Beside, government's hegemony is the biggest contribution on degradation of fisheries resource.

Fisheries policy based on collective ownership doctrine has created fighting arena on national marine waters among fisheries subjects under mob rule. As a consequence, the fisheries management policy is not able to provide law protection for fisheries subject especially both poor fishermen and marine and fisheries resource.

The damage of marine and fisheries resource caused by policy in the past is reflected by the declining of mangrove and coral reef area. According to the research done by COREMAP, coral reef area in Indonesia is approximately 85.707 km² but only 6.48 % of the area is in a very good condition, 22.53 % is good, 28.39 % is damaged, and 42.59 % is heavily damaged. The mangrove is also devastated. In 1982 there were 5.209.543 hectares of mangrove. But those areas decreased and there were only 3.235.700 hectares in 1987 and 2.496.185 hectares left in 1993 [1].

Along with the development of government system in Indonesia and reformation era, several laws reflecting people's aspiration have been produced that is law no 22 year 1999 about regional government. In the article 3 and 10 there is regulation about authority of province government in managing marine area which is 12 miles away from the lowest point of coast line when the tides rise and fall to offshore and

or to waters among islands while regency or municipality has authority to manage one third of the area which is 4 miles.

Implementation of law no 22 year 1999 shows a transfer of fisheries development paradigm from centralization in to decentralization. This law is used by West Lombok local fishermen to make a fisheries resources management model which is based on the former traditional wisdom in that area. The community and the local government revitalize custom and tradition living in society to establish fisheries resources management called *awig-awig*.

Awig-awig which is rooted from sea tenure, has a number of main rules, which that the fishing area and the permitted fishing gear, the rights and the legality of its social unit as right holder and its organizer. In this decentralization era, *awig-awig* as a new local regulation has a place as a new law system that up tight its member of society in fisheries resource utilization.

This paper tries to appoint fishermen community efforts in West Lombok to revitalize the former fisheries resource management *awig-awig*. And then this effort will be compared by Japan experience in fisheries resource management, specially in fishing rights practice which is give to Fisheries Cooperative Association (FCA) based on Japan Fisheries Law in year 1949.

Literatures which discuss fisheries resource management based on customary right or sea tenure in several areas in Indonesia are many [2,3,4]. But literature that discusses customary laws revitalization which arrange fisheries resources management after law no 22 year 1999 implementation, is still rare.

West Lombok has been chosen as the case because this area has the experience in practicing marine resource management based on its customary law until 1965. And there is a community will to put it back in to effect after law no 22 year 1999 implementation.

This research information is get from North Lombok Fishermen Society (NLFS), Marine and Fisheries Service of West Lombok Regency, fishermen groups and custom leaders. Some informal interviews have been done with the key infomen which are consist of chief and staffs of Marine and Fisheries Service of West Lombok, chief of fishermen groups, NLFS board and fishermen community prominent figure. The observation has also been done to have information about the general situation of the local fishermen community and the interaction between fishermen and fishermen groups.

The objective of this research is :

- 1) Explaining the history of fisheries resource management done by local community in West Lombok.
- 2) Explaining the establishment of *awig-awig* as a written collective regulation and it implementation in fisheries resource management.
- 3) Explaining problems coming up in the implementation of *awig-awig* as a collective regulation of fisheries resource management.
- 4) To compare the implementation of *awig-awig* with Japan fishing right practice.

JAPAN HISTORY

The Japan history period in fisheries resource management could be divided in to three phases. First phase was started in the time of feudal era. In this era the fisheries resource management applied user right mechanism through fishing right system. This regulation was applied because there were too many conflict in the fishing ground between the local fishermen and the outsiders. So the Edo feudal in 1743 made a regulation which was named *Urahou* to manage the fishermen in doing their fishing activities.

The based concept of *Urahou* were [5] :

1. The coastal fishing ground in nearshore waters should be used only by the people in the fishing communities.
2. Offshore fishing ground should be left open for free access by any fishermen.

Through this regulation the government gave rights to local fishermen referred on *soyu* (communal ownership) local fishermen society based on local laws [6]. Based on this fishing right the local community and local fishermen have property rights to its waters territorial.

Second phase happened after Meiji Restoration in 1868. In 1874 the same rights like *soyu* were deleted and all rights have been given back to the new central government. In the fishermen level, the

new policy implementation had made the same conflict as the era before *Urahou* exist, which conflict was fishing ground exploitation. Having been pushed by the fishermen, in 1875 the Meiji government gave the fishing rights back to the fishermen.

In 1901, the Meiji government made fisheries law. Through the fisheries law year 1901, the former fishing rights were changed in to exclusive fishing rights [7]. Through this law, the local feudal lord role which managed fishing rights since Edo era had been replaced by fisheries association. The objective of the establishment of fisheries association was to organize fishermen into associations, and then make the associations responsible to manage the fishing rights [8]. Furthermore this law also permitted the fisheries association to do the economic activity. The fisheries association which had had built up of capital from its member had changed its name in to fisheries cooperative association.

The third phase happened after the Second World War. Under the allied force surveillance, the Japan government had been asked to reform its fisheries organization to be democratic. The output was the Fisheries Cooperation Association (FCA) laws in 1948 and Fisheries Laws in 1949. The fisheries law in 1949 declared that there is two based system that has been developed in fisheries production, they are fishing rights and fishing license. Fishing license is for offshore and distant water fishing activity to catch high mobility fish. Fishing right regulate coastal fishing ground exploitation.

Based on the fisheries law year 1949, there are three kind of fishing rights, they are:

1. Common fishery right (*kyodo-kyoso-ken*) : The right was given to fisheries cooperation to make fisheries activity in coastal zone until 2-3 mile from coastal line. Furthermore this right was divided in to four type, they are :
 - a. Type 1 : right to catch demersal fish species which do not migrate;
 - b. Type 2 : right to catch using stationary gear in the sea of less than 27 meters in depth;
 - c. Type 3 : right to catch fish using beach seine; and
 - d. Type 4 : right to catch upland fisheries.

In this fishing right the fish species that could be catch, fishing period, fishing methods and the fishing gear are also been arranged. The outsider fishermen are may not operating in this area.

2. Set – net fishery right (*teichi-gyogto-ken*) : the right to catch fish by using set net for over 27 metres in depth with the territorial as ones right. This right is mostly for migratory fishes.
3. Demarcated fishery right (*kukaku-gyogyo-ken*) : the right to make a marine culture in the coastal waters.

The fisheries right was legally been given to FCA, furthermore this rights were distributed to its member. The rights could not be loaned, rented, mortgage or transferred to other fishermen; only the holder of the right or member of the holder organization may conduct fishing operations [9].

The right to manage fishing rights is granted from the prefectural governor to the FCA. Every FCA has fishing right management committee which usually headed by the CFA chief. The committee member include fishermen representative from every group in FCA who are engaged in specific types of fisheries under the fishing rights [8].

Japan fisheries laws also regulate fisheries coordination commission. The committee is the sea – area fisheries adjustment commission (SAFAC) and the united sea – area fisheries adjustment commission (USAFAC). SAFAC is under join jurisdiction between Agriculture Ministry, Forestry and Fisheries Ministry and Governor Prefecture, Metropolis or division that included the Hokkaido. The USAFAC is under the join jurisdiction of the minister and the governor of local administrative unit that established the particular commission [10].

Every SAFAC has 15 members (9 from the fishermen, 2 from fisheries expert which are pointed by the governor and 2 represent the public interest). SAFAC main function is to prepare fisheries resource management planning. Its other functions are to give input about fisheries resource management to the governor, to give punishment to fishermen who disobey the rules and to figure the way out for the conflicts in the fishing right area.

The USAFAC is established by the prefectural governors within a sea area that unites two or more sea areas, or may be ordered by the minister to the prefectural governors. There must be coordination

with the prefectural governor of another local government unit if the commission crosses a local administrative boundary [11].

HISTORY OF AWIG-AWIG

Historically, community of West *Lombok* has had local wisdom in managing natural resource in order to be sustainable and give a great benefit for them. Community in several sub districts especially *Gangga* sub district has possessed *awig-awig* or customs and tradition regulation which relates with efforts to sustain fisheries resource. The regulation is *sawen*. It originated from customs of *wektu telu* Moslems centered in Bayan, West Lombok. They usually become customs leaders from one generation to the other.

Sawen is originated from Sasak tribe language which means sign, signal, or prohibition. Every sea area where *sawen* prevails on means all things (fish and marine resource) in it is prohibited to be captured or taken. Basically *sawen* is prohibition to do fishing in determined zone and time through deals of local community.

Ritual *sawen* is conducted in order to tame the fish (*isah*) and optimize the utilization of fish resource. In the past order, this ritual had a very high social value that whole community could feel Allah S.W.T's blessings. While in reformation era, this ritual is conducted only to maintain Sasak's culture as regular ritual.

Periodically, the existence of *sawen* ceremony can be divided into three periods: 1) since the existence of *Sasak* tribe until 1965 (sociopolitical order in Indonesia before 1965 or called as past order); 2) year 1966-1999 (sociopolitical order in Indonesia after 1965 or called as new order); and 3) year 2000 until now (reformation era).

In the situation when sociopolitical order in Indonesia was after year 1965, *sawen* ceremony was practically never conducted. It was caused by:

- 1) Changes in people's mind especially those who got formal education. Scholars thought that *sawen* ceremony was wasteful and violating Islamic principle.
- 2) Scholars in the sociopolitical order of post 1965 had put *wektu telu* Moslems who upheld *sasak* tribe's regulation at side.
- 3) Economic and political situation after coup d'état done by Indonesia Communist Party (PKI) in 1965 had destruct economic life of *Gangga* community. It caused disappearance of *sawen* ceremony because they ignored to uphold it.

The following paragraph will explain main concept of *sawen* ritual as local regulation in managing fisheries resource in *Gangga* sub district in the past order and reformation era.

SAWEN IN THE PAST ORDER

In the past order, *sawen ceremony* was part of agriculture activity. *Sasak* community always related their land activity with the sea that destruction of the land could cause destruction in the sea. Thus the ceremony on agriculture harvest was always followed with *sawen* ritual in the sea (sea *sawen*).

Sawen ceremony was started when the rice had contents or was one month of age. At that time custom leader, called *mangkubumi*, discussed with other customs leaders about the sea *sawen* (closing *sawen*). The result of this discussion then was socialized to whole community. Closing *sawen* was started with sticking bamboos in the middle of the sea 1 - 2 miles away from shore with 20 – 30 meters of water depth. The bamboos were stuck by *mangkubumi*. Duration for closing *sawen* which also meant a prohibition to fish in that area was three months. During the prohibition period, supervision was done by *mangkubumi* and *langlang*.

When the season of harvesting rice came, the customs leaders discussed again to determine when they would do ceremony of harvesting rice. Usually the ceremony took two weeks after finishing harvesting rice. It was held in *bedugul* (sluice of irrigation where water is channeled to rice fields).

The ceremony in *bedugul* was guided by *penghulu* (religion leader). It also slaughtered a buffalo for meal. The head of the buffalo was then put into the water and the rest of the ceremony was then thrown into *bedugul*. It was because they believe that all animals in the water had rights to get blessings obtained by local people from utilization of natural resource.

A day after ceremony in *bedugul* whole community went to beach to attend the sea *sawen*. *Mangkubumi* guided the sea *sawen* opening by pulling out the bamboos stuck in the middle of the sea where the prohibition to fish was limited until here. The rules in this ritual were: 1) First capture for each fisherman had to be given to organizer committee for meals served to all people attending in the beach; 2) fishing gears allowed were small scale which didn't destruct ecosystem of marine waters.

After *mangkubumi* had pulled out the bamboos, fishermen started fishing activity. The first capture was given to organizer committee for meals served to all people. The next capture was brought home. Before they started to eat the meals, *penghulu* had guided to pray in order to be always given blessing and prosperity by God.

Area

Determination of fishing ground closed and not allowed for fishing when sea *sawen* occurring was 1-2 miles away from shore with 20 – 30 meters of water depth. This limitation was based on the ability of fishing gears possessed by the local community. This area was exclusive where only certain fishing gears allowed such as nets, lines, portable traps, scoop net, and spears. Fishing was also only allowed in certain time (after sea *sawen* was opened) which the time was determined by customs leader (*Mangkubumi*).

Customs regulation decided that no area was owned and claimed by certain community or group. People outside *Gangga* sub district was allowed to do fishing but they had to use permitted fishing gears.

Area limitation where fishing ground was not allowed during ritual sea *sawen* was marked with two bamboos stuck in the middle of the sea in a row. Thus area border didn't use natural border as it did in *Maluku* with *sasi* [2].

Organizer

In this period sea *sawen* was held by *mangkubumi* helped by *langlang*, *penghulu*, and *kliang*. *Mangkubumi* was a leader in the circle of community who had right to determine every traditional ritual activity which related with utilization nature resource both in the land and the sea. *Mangkubumi* was in charge in organizing sea *sawen*, guiding the meeting, coordinating with customs leaders and government official in the village, reporting every customs violation done by member of community, and guiding the opening and closing ritual of sea *sawen*.

Mangkubumi in his daily activity in supervision was accompanied by *langlang*. *Langlang* was in charge in up holding customs regulation including organizing sea *sawen*.

Penghulu was a religion leader who was in charge as guider in praying during customs ritual. *Kliang* or chief of a village far from urban areas was responsible to organize community in a smaller area but still in the same village.

Sanction for violator of the customs regulation was dropped by customs leaders after there was a report from *mangkubumi*. Sanction was isolation or eviction from the village if the violation was heavy. For those who do light violation, the sanction was fine that was a goat for ceremonial meal and put a sign called *bedak langit* on the violator's forehead as a sign for expiating a sin.

During this period there had not been any violation on customs regulation. Because *waktu telu* Moslems were very discipline in avoiding prohibitions made by customs leaders and believed that they would get calamity or be cursed if they violated the prohibitions.

Social unit of Right Holder

In the past order, no individual or group has a right to claim fishing ground. Fishing in whole village area in *Gangga* sub district is open for local community and outsider. Fishing is allowed after sea *sawen* is opened and uses allowed fishing gears.

Legality

In this order, legality source of sea *sawen* was not written customary law. But community of Gangga sub district obeyed the existence of this regulation very much because sea *sawen* was a rule known since long time ago. Due to *sawen* in fisheries resource management was transferred from one generation to other thus it could be concluded that customs was legality source of regulation in fisheries resource management in this sub district.

THE ESTABLISHMENT PROCESS OF WRITTEN AWIG-AWIG

Realizing to the destruction of fisheries resource was ongoing, community of *Gangga* sub district tried to improve the fisheries resource. Therefore, it created collective consciousness to establish written *awig-awig* as a guideline in fisheries resource management. The implementation *awig-awig* is a adaptation strategy of local fishermen to allocate existing resource in their area in order to overcome economic-social push.

Establishment of written *awig-awig* was on fishermen community initiative involving government element such as Marine and Fisheries Service, sub district and district. In the first phase, a need to establish written *awig-awig* was only an informal discussion among fishermen. The result of this discussion was then announced to the chiefs of fishermen groups.

The aspiration was then responded by each fishermen group in an internal group meeting. The meeting also talked about obtaining deal in *awig-awig* thus it could be prevailed in whole North Lombok waters without territorial boundaries. The meeting discussed about: 1) fishing ground and fishing gears allowed; 2) bombing, potassium cyanide and other poison; 3) institution which was able to prevail *awig-awig* and its sanction.

Then 8 fishermen groups made special committee. Numbers of special committee were 24 or 3 persons from each group. The special committee met regularly and announced the result of the meeting through wall announcement and speech of Friday praying in mosque.

On 6 March 2000 fishermen group of *Patuh Angen*, Tanjung sub district, and fishermen group of Sumber Laut, Gangga sub district, met in Jambianom-Tanjung village. The meeting discussed fishing activity using bomb, potassium, and other poison.

The meeting was then responded by following meeting attended by the chief of Tanjung sub district, nature resource conservation government official, commander of military territory of Tanjung, chief of Sokong village, fishermen groups, and Gili Indah unit on 10 March 2000. The meeting discussed concrete action to secure and manage marine resource and the planning to establish North Lombok Fishermen Society (NLFS).

On 12 March of 2000 the board of NLFS was established. The meeting was attended by fishermen group from 3 sub districts which are Pamenang, Tanjung and Gangga. In that meeting it was agreed to hold a convention on 19 March 2000 in meeting house of Patuh Angen fishermen group. The agenda in the convention was a discussion about marine and fisheries management to run NLFS.

The convention on 19 march 2000 as attended by whole fishermen community of Northern West Lombok, marine and fisheries service, police, village adviser, chiefs of sub district and districts. The result or *awig-awig* agreed were:

- 1) If a person is proofed fishing by using bomb, potassium or other poison, fishermen group has to capture him and give him to the authorities in each sub district. He has to be forced to make a statement letter that he will not repeat his crime again and he has to pay Rp 10,000,000.00 of fine which he will be released then.
- 2) If the person repeats his crime, together the fishermen group will capture him and they will destruct and burn the person's apparatus which is used to commit his crime
- 3) If he still repeats his crime after getting the first and second sanction, then the fishermen group will mistreat him but doesn't commit to murder.

The agreement about area boundaries and allowed fishing gear in that convention was not legalized in an agreement but prevailing an agreement which had been used in community. The prevailing

agreement is prohibition to fish in 3 miles zone using purse seine, muro ami, troll line, and gill net whose 200 meters of length.

The result of that convention was then announced to whole community through religion speech, speech in Friday praying, and various social events. Socialization to all government official was carried out by making a circular which was also sent to Governor of West Nusa Tenggara until all chiefs of villages in Northern of West Lombok.

SAWEN IN REFORMATION ERA

In this period sea *sawen* is only conducted to maintain Sasak customs which has vanished for a long time. There are a lot of regulations which have changed. For instance, sea *sawen* ceremony is not related with agriculture activity in the land, sea *sawen* is held on the initiatives of fishermen groups not customs leaders.

Sea *sawen* (opening and closing) is held based on discussion among fishermen groups. The result of this discussion is then socialized to village community through speech of Friday praying in the mosque and out of the village through Fishermen Society (NLFS).

Sea *sawen* closing is maximally only conducted in one month even one week in several villages. It is because the economic factor influences economic life of fishermen very much. The supervision of sea *sawen* is done by all local fishermen.

The opening of sea *sawen* in the reformation era is similar with that in the past order which first capture has to be given to organizer committee and uses small scale fishing gears. The opening ceremony tends to entertain because it is combine with entertainment.

The opening of sea *sawen* in the reformation era is held was April 2000 by fishermen community of Gondang village. At that time fishermen Society (NLFS) announced the establishment of *awig-awig* which manage the fish resource in North Lombok. Officially *awig-awig* has been legalized on 19 March 2000 in *Kandang Koak* village, *Tanjung* sub district, West Lombok regency.

Area

In this period ritual sea *sawen* adopts past regulation about limitation of fishing ground. Fishing ground is 3 miles away from shore adjusted with developing people's ability. The area border of sea *sawen* in this period uses coral reef as a natural border. Although it uses natural border until the research is done but it doesn't create a conflict because there is a supervision done by local fishermen. Fishing gears allowed are traditional fishing gears.

Organizer

In the reformation era, sea *sawen* ritual is held by local fishermen community on their initiative after coordinating with North Lombok Fisherman Society (NLFS). Similar with the past order, sea *sawen* in reformation order is held in different time for each village. The role of NLFS is very important in the smooth running of sea *sawen* because it become such a communication facilitator among villages and sub districts. Thus it can minimize the conflicts among fishermen. Supervision of sea *sawen* is conducted directly by local fishermen and so far there has nor been any violation on it.

Social Unit of Right Holder

In the reformation era, right ownership of fishing is individual or still same with the past order. It means every fisherman has a right to fish but he has to use allowed fishing gears. While outsiders have to possess permission from marine and fisheries service of west Lombok and have to pay retribution. NLFS also has to know permission given to outsiders.

Legality

In this period, there is no legality aspect regulating sea *sawen* ceremony. Sea *sawen* ceremony in this period is not for religion ritual but only for maintain *Sasak* culture. People's awareness has grown up

to maintain old customs for sustaining fishing activity. Thus the community spontaneously makes local deals to protect marine waters environment.

DISCUSSION

The Establishment of *Awig-awig*

Model of fisheries resource management which ever prevails in Gangga sub district, West Lombok, can be divided become two models. First is community-based fisheries resource management. This model was used by *wektu telu* moslems when they held the power structurally in customs life until 1965. According to the result of interview, this model was proofed in maintaining the sustainability of fisheries resource and guaranteeing fishermen life.

The second model is fisheries resource management conducted by central government since 1965 until 1999. In this period there were a lot of actions destructing fisheries resource because weakness in up holding the law, less number of government official who is responsible in up holding the law, and less community involvement in law supervision.

Therefore the establishment of *awig-awig* in reformation era is an effort to combine both models. *Awig-awig* established is co-management model because it reconstructs sea *sawen* legalized by local government. The role of government in *awig-awig* is as facilitator thus this model is co-management informative type [12].

Influence Factors in Strengthening *Awig-awig*

Strengthening *awig-awig* in fisheries resource management in Gangga sub district is influenced by conflict usually coming up. The conflict in utilization of fisheries resource is influenced by destruction of environment (ecology), increase of population (demography), lessening job (means of livelihood), legal-politic condition, change in technology, and change in commercialization level (market).

- 1) Ecology: Destruction of marine and fisheries resource in Gangga sub district is caused by fishing activity using bomb and poison and mining coral reef done by community. This destruction causes decrease in production of capture fishing. Year 2000 the production of fish consumption decreased 25.64 %.
- 2) Demography: The population growth of Gangga sub district is not too high. In 1990-2000 population growth was 7.72 %. But it influenced the conflict which happened because of less socialization of sea *sawen* ritual to younger generation thus unawareness upon environment condition.
- 3) Means of Livelihood: Jobs offered in agriculture decrease because there are a lot of people who work in this sector. Year 2000, 64.54 % of household worked in agriculture sector. As a consequence fishing is as an alternative.
- 4) Change in technology: Change in capture fisheries technology causes horizontal conflict between traditional fishermen and those using purse seine or between local fishermen and outsider using bomb and poison.
- 5) Market: high demand especially from outside of the area tends to push the fishermen to increase the exploitation of fisheries resource as much as they can do to meet their need for family.
- 6) Legal-politic condition: Law no 22 year 1999 pushes community initiatives to do revitalization of *awig-awig* which they have fought for it since 1990.

Implementation and Problem of *Awig-awig*

Area

Area occupied by *awig-awig* is 3 miles away from edge of shore and exclusive because every fishing activity is prohibited to violate the regulation. Fishing gears allowed are traditional fishing gears which are nets, shrimp gill net, beach seine, hook and lines, portable traps, and small bottom lines.

Capture zone boundaries is imaginer based on as far eyes can see from shore away to the middle of the sea. But the community believes that it is 3 miles away. This limitation is also adjusted with traditional armada. Beside imaginer limitation, community also uses coral reef as agreed limitation.

Legality and Its Implementation

Institution agreed by the community to implement *awig-awig* is NLFS. The board of NLFS consists of: 1) adviser who are chief society of Pamenang, Tanjung and Gangga sub district, and chief of Pamenang, Tanjung and Gondang Village; and 2) board of executive which consists of chairman, vice chairman, secretary I and II, treasurer I and II and sections (marine security, beach cleaning, social welfare, and conservation and rehabilitation).

The convention is the highest decision-maker in this institution. It is held once in 3 years and is attended by whole fishermen community of North Lombok. It functions to choose board for the next period.

The chairman is responsible in coordinating *awig-awig* in 5 sub districts. Vice chairman is responsible in helping chairman or replace his position if he is not able to work. Secretary and treasurer are responsible to help chairman's duty in administrative.

Daily implementation of *awig-awig* is done by sections. Marine security is responsible to do patrol, supervising marine secure, capturing and reporting *awig-awig* violation. Beach cleaning section is responsible in cleaning environment, controlling the boat end. Social welfare is responsible in distributing finance for fishermen ceremony. Conservation and rehabilitation section is responsible in managing coral reef, and make artificial coral reef upon government program. These sections usually work together.

Fine taken from *awig-awig* violator is allocated for various institutions. The allocation is : 25 % for NLFS, 1 % for each sub district office, local sector police office, local military office, 21 % for groups (13 groups) and 50 % for operational of capture.

Sanction is given through court after the violator is captured. The court is done in the edge of shore and led by one of NLFS board. In the court, the violator may state objections. If he is proofed on his violation, chairman of the court will give sanction along with statement letter on revenue stamp which contains promise not to repeat the violation.

Problem in Implementation of Awig-awig

Before re implementation of *awig-awig* is conducted, conflicts between local fishermen and outsider usually happened in waters of North Lombok. It is because there is no effort to up hold the law by government official over the fishermen who violate the regulation in fishing. For instance, no action is taken for purse seine fishermen who fishing in 3 miles zone done by local ones or no capturing over outsider who uses bomb and poison.

The implementation of *awig-awig* has minimized conflict even there are almost no conflict among local fishermen due to community consciousness to fish in fishing ground agreed and use allowed fishing gears.

While conflict between local fishermen and outsiders after re implementation of *awig-awig* decreased sharply till the research was done. Numbers of violation done by outsiders are only 3. Those violations were brought to court and the violators were given sanction conforming to the regulation.

Awig-awig and Japan Fishing Right

From chapter 2, about Japan history in managing the fisheries resource, and from chapter 6, about revitalitation *awig-awig* which was done by the fisheries community and the local government in West Lombok, there are differences and similarities. The differences and similarities are:

1. Fisheries resources management applied by *awig-awig* and Japan fishing right are both co-management systems. Because they included the government involvement and the society active participation which was represented by the organization or the cooperation [13]. But the involvement level of the Indonesian government (central government, province government, and the local government) in helping the fishermen and NLFS is still rare. The government did not give too many supports to implement *awig-awig*. But there are high involvement levels of the Japan government to support FCA. Close interaction between the national, prefecture and municipal government and the

FCA is maintained on fisheries matter concerning the drawing up and implementation of management plans, fisheries projects, budgets and subsidies as well as credit and insurance programs [14].

2. The same fishing ground border, that is 2 – 3 mile from the beach. But *awig-awig* does not arrange and specifically divide the species that can be catch and the fishing gear can be used. But Japan fishing rights arrange and specifically divide the species and fishing gear allowed as explain in chapter 2.
3. Fisheries resource management by *awig-awig* is being done by the fishermen groups in ones area and coordinated by NLFS. The fishermen group and NLFS are non formal organization and the *awig-awig* law which was made by NLFS has not been accommodate in formal law or regulation, so its legality in fisheries resource management only based on the unwritten traditional right. Fishing right management in Japan is being done by FCA under coordination of SAFAC or USAFAC. FCA and SAFAC or USAFAC are formal organization because their existences are admitted in FCA laws year 1948 and fisheries laws year 1949.
4. According to *awig-awig* the fisheries resource management is open access for anybody, including for outsider fishermen. The arrangement of *awig-awig* management is in the limitation of permitted fishing gear and fishing period. Japan fisheries resource management is limited access, which only the FCA member allowed to fishing in fishing right area. The fishing right regulation consists of the limit of mesh size, fishing period, fishing ground and fishing gear.

From the above explanation, it is shown that the revitalization of *awig-awig* fisheries resource management which has been done by the fishermen society in West Lombok, still need support and reinforcement from the government so it can work out effectively like fishing right management in Japan. The central, province and local government support is very needed in order to make *awig-awig* in West Lombok become legal and be part of national law product. The fishermen organization is also need to be strengthened to be able to run the fisheries resource management from stage of planning, implementing and controlling.

The enactment of law no 22 year 1999 into effect presumably can be made as a momentum to reinforcement for *awig-awig*, in Lombok, and other traditional fisheries right in Maluku, Papua, Sulawesi and Nangroe Aceh Darusalam. The traditional fisheries right needs revitalization and modernization in order to make fisheries resource management increase the coastal community welfare and income, and to keep the fisheries resource sustainability.

CONCLUSION AND SUGGESTION

Conclusion

The fisheries resource management in Gangga sub district, West Lombok, has existed since *waktu telu* Moslems conducted ritual of sea *sawen*. Local regulation of sea *sawen ceremony* has main variables which are: 1) fishing ground prohibited for fishing when closing sea *sawen* is 3 miles away; 2) social unit as right holder is individual on regulation legalized by *mangkubumi*; 3) legality source of sea *sawen* is customs and traditions and people's belief.

Re implementation of *awig-awig* in reformation era is caused by collective consciousness over the need in fisheries resource management and adaptation strategy of fishermen to maintain their life. The re establishment of *awig-awig* is started from informal phase among fishermen until formal phase involving whole community and related local services.

Awig-awig in the reformation era has regulations: 1) *awig-awig* area is 3 miles away from shore with allowed fishing gears which are nets, shrimp gill net, beach seine, hook and lines, portable traps, and small bottom lines; 2) social unit as right holder is individual and 3) legality source of *awig-awig* is still influenced by customs and tradition but the decision in convention of NLFS also has big roles.

Problem coming up after the re implementation of *awig-awig* is conflict between local fishermen and outsiders. But the frequency of the conflict decrease sharply. Since 2000 until the research was done, there were only 3 violations.

There is a basic different between *awig-awig* in West Lombok and fishing right in Japan. The involvement of Indonesian government to help the fishermen group and NLFS in implementing *awig-awig* is still low, but the Japan government help FCA to run the fishing right actively. The fishermen group and NLFS are non formal organization, in other hand, FCA is a formal organization. *Awig-awig* has an open access for any fishermen, but the fishing right in Japan give permission only to the member of FCA so it has a closed access.

Suggestion

The central, province and local government in Indonesia should be more proactive to support the implementation of *awig-awig* especially in helping and implementing and giving tools for supervising fisheries resource management.

Awig-awig and other traditional fisheries right still needs improvement and adjustment over formal law and strengthening the regulation become firm decision or regency in form of territory decision.

The strengthening of fishermen organization needed to be done to have ability to run the stage of planning, implementing and controlling the fisheries resource management.

The following research is needed relating with institutional economic aspect to gain information about the affectivity an efficiency of transaction fee of sustainable fisheries resource management.

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