

# TRADITIONAL MARINE TENURE IN INDONESIA ——A STUDY IN SANGIHE ISLANDS——\*

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## ABSTRACT

Natural resources such as land and sea without owner will create social and economical problems due to anybody can take advantage but nobody would like to take responsibility on its management and conservation. Therefore, ownership right on the certain sea area considered as the basic foundation for economic and management activities in Fisheries.

As avowed in the constitution law of 1945, the territorial waters of Indonesia is common property in nature. This was created many conflict among the fishermen since 1970s up to present. Therefore, it is thought to be necessary to search the way of management which create orderly and peaceful among the fishermen.

This study performed aim to explored the traditional management system which socially and culturally accepted by the fishermen and government as well. It is learned in *Sangihe* island that there are three type of ownership right rcognized by the fishermen namely ; communal, national, and individual right. The first type is of pure traditional system which seems more effective and efficient for fisheries management. The effectiveness of this system is supported by the existence of traditional organization of fishermen which incorporated in “*seke*” fishing gear.

However, this valuable traditional system is on the way of disappeared due to destroyed by the modernization.

## 1. INTRODUCTION

Ownership right is the pre – requisite for economical and management activities. Economi –

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cally, ownership right creates the price or money value of goods and services. In the daily economic life, somebody willing to expend money to buy goods because he does not only get the goods but also the ownership right transferred to his hand. The opposite, nobody want to buy goods without owner because he can take the goods but without legal ownership right.

From fisheries management point of view, ownership right on a certain sea area is a necessary conditions for managemet activities. This is because sea area without owner will creates socio — economical problems due to all people can exploit and take advantage but nobody want to take responsibility on its management and conservation.

In Indonesia, the ownership right on land and sea area by the individual and communal existed since the collonial period (1521 - 1945). After the independence day in 1945, the government legalized the communal and individual ownership right of land area but not for sea area. According to verse 3 article 33 of the Indonesian constitution law of 1945, the territorial waters of Indonesia is belong to the state and will be exploits for the welfare of all Indonesian citizen. This law implied that the sea waters of Indonesia is common property in nature i.e. all citizen free to fish everywhere within the territorial waters of Indonesia.

The first impact of this law is the traditional or customary ownership right on sea area by communal and individual people are gradually abolished and disappeared. This is particularly occured in western Indonesia which is near to the central government. In the eastern Indonesia however, some many islands fishing community remain continue applying their traditional sea tenure system.

The second effects of the common property law is fish resources seems decreases drastically in the western Indonesia due to everybody have a right to fish there. The opposite situation occured in eastern Indonesia, fish resources in term of catch volume remain continue to increases in some fishing area due to traditional right prohibit fishermen from outside to fish there. Facing this facts, then the government come into consideration to adopt traditional marine tenure as a basis for artisanal fisheries management. It is realized however, few studies if any, have been perform on this topic. Therefore, this study conducted aims to provide data and information about traditional marine tenure in the certain area of Indonesia.

The objectives of the study is to identify and learning some aspects of sea tenure system such as ; (1) The history or origin of marine tenure system, (2) Type of ownership right of the sea area and its content, (3) Concept and procedure of management, (4) Ownership on gear and technology, (5) Traditional management system, (6) Production and Marketing activities, (7) Earning share system, and (8) problems facing by traditional right system in modern Indonesia.

## 2. GENERAL SITUATION

*Para* is a group islands which composed of *Para*, *Salingkere*, *Siha*, *Nitu*, *Singgaluhang*, *Mamalokong*, *Bawondeke*, and *Nenung* island. The village of *Para* located on the two islands respectively *Para* and *Salingkere* islands. The former is the place of village administration office while the later is the extention village which called “*Dusun*”. The rest of the islands remain unhabitant. *Para* islands is among the 77 small islands within the adminsitration of *Sangihe* regency. It is situated about 140 mile in the north part of *Manado* city which can be reached within 12 hours by small merchant ship (figure 1).

The village inhabited by 1660 pupulation as August 1991 which is consist of 850 mele and 810 female. By age class it is composed of 50% less than 20 years old, 29% between 20 and 40 years old and the remaining 21% of more then 40 years old of the total population. All of them are christian protestant except two persons whose come from outside are islam.

Statistical data available in the village office indicated that by livelihood, the number of working population is as follow.

Table 1. Number of population by livelihoods in *Para* Fishing community.

Livelihoods	Number (person)	%
Fishermen	278	71.10
Farmer	86	21.99
Officer	24	6.14
Marchant	3	0.77
Total	391	100

Source : Village office, August, 1991

According to the observation during stay in the village however, almost all of the population more than 10 years old both male and female are going out to fish together. Thus the number of fishermen mentioned above only the head of households which eligible to pay tax.

Farmer also is not a real farmmer, they are fishermen which partime in cultivation of sweet potatos, cassava and vegetables for their family own consumption. Coconut trees seen growth elsewhere on the group of islands but the production seems just enough for local community consumption.

All officer are school teachers because there are two elementary school and one junior high school on this island. Except female, all male teachers are also partime as fishermen. It is

found that the principal of junior high school also parttime as fish middlemen. Several days in a week he spent in this parttime work and let his staff working alone. This was possible due to school located in the very remote island which too far from the control of education administration office in the regency capital. For this reason, the most part of their time were spent for fishing and fish trade activities.

Actually, merchant in this village is the fishing gear owner whose also has a small shop which selling daily life needs such as rice, sugar, coffee, fishing supplies etc. In the most cases the payment of the goods not in cash but exchanges with fish. Then fish he send to the town market which spent about 4 hours by motorboat.

Thus, by livelihoods, the activities of the people in the community is centralize in fishing and fish trade. It is seems that the economy of the community are mainly supported by the fishing sector. In quantity term, 99% of the community income is derived from the sale of fish production. Additional earning from the other livelihoods is too small compared to those from fishing.

### 3. THE HISTORY OF SEA TENURE

It is difficult to find historical notes on the origin of sea tenure in this community because they are unfamiliar with written document. The oral history which delivered from generation to generation the only information which can be collect from the aged community members. One of their way to to keep save the oral history is arranged as the poem of a song which they always singing in the social event such as in the dead ceremony, wedding festivity etc.

According to the available information that the sea tenure existed since the Portuguese and Spain entered into the *Sangihe* islands. If this indicator will be used so, the sea tenure were existed since the middle of 1500s. This is because the historical notes indicated that the first Portuguese missionary came to the *Sangihe* islands in 1521 then replaced by the Spain in 1560s. At that time *Sangihe* islands consists of five small kingdom respectively ; *Siau*, *Tamako*, *Manganitu*, *Tahuna*, and *Tabukan*. Until 1890s the group of *Para* islands and its neighbours included in the administration of *Siau* kingdom. After 1890 however, the kingdom of *Siau* and *Manganitu* become a sister kingdom because of the marriage of their son and daughter. Since then the king of *Siau* transfered the group of *Para* islands to the kingdom of *Manganitu*.

After the independence day in 1945, the government of Indonesia reorganized these small kingdom to be the district administration which is called "*Kecamatan*". Thus, the present districts within *Sangihe* islands reflected the number of kingdom during the feudal time and

even still use then name of previous kingdom. Slight modification occurred for the group of *Para* islands i. e it is transferred again to the district of *Tamako* for the reason of geographical position. This administration status valid until today. However, the language of the community remain similar to those of *Sisu* dialect.

At the time of kingdom administration, all land and territorial sea belonged to the king and his imperial family. While the common people was treated as the worker or tenant. In 1521 the Portuguese colonial enter into these islands kingdom then replaced by the Spain 47 years later. The Portuguese colonial did not influence so much the culture and social life of the society on the islands kingdom. It is the Spain colonial introduced the structure of kingdom administration based on their army organization. In the village level, the head of village were called the “*Kapitan laut*” derived from the word Mariner captain, but the local people pronounced as “*Kapita lao*” which mean marine captain. After the independence day however, the village’s head were called “*Opo lao*” which means marine administrator. This term remain use until today.

During the kingdom or feudal period, the “*Kapita lao*” were delegated to manage the people in the village level to work at sea in the form of group according to the name of fishing gear. There are three main group of fishermen namely ; “*Seke*”, “*Soma*” and “*Noru*” groups. “*Seke*” is a very traditional fishing gear which remain operated until today by the fishermen of *Para* fishing community. “*Soma*” is the local name of traditional purse seine, while “*Noru*” is the local name of handline angling.

To make orderly the work at sea, the “*Kapita Lao*” received delegation from the king to divide the sea area around their village. The division also into three category according to the name of fishing gear respectively ; the fishing area of “*Seke*”, “*Soma*” and “*Noru*”. Generally, the fishing area of “*seke*” is fixed in the reef area which locally called “*Nyare*” area. The fishing ground of “*Soma*” were allocated along the coastal area with sandy bottom, while the fishing ground of “*Noru*” covered all of the village territorial water up to the offshore except the two fishing ground mentioned above. The area of shallow water along the beach is a free zone for all community member to collect seaweeds, fishes and other marine animals.

This divided fishing area valid until the early of 1970s in the entire of *Sangihe* islands. After 1970 however, some fishing community began to open their territorial sea for common use, while the others gradually suspended to operate “*Seke*” as a traditional fishing gear. Since the feudal time up to the early of 1970, “*Seke*” can be found in almost entire of *Sangihe* islands but now can be find only in *Para* and *Batuderang* fishing community. In the later fishing community however, was rarely use for fishing. The disappeared of “*Seke*” fishing gear is also considered as the destroyed of traditional culture in *Sangihe* islands. The

traditional sea tenure system however, remain existed in many fishing community especially those of remote small islands.

From the study it is known that the disappeared of “*seke*” fishing gear is caused by the modernization of fishing technology. “*Seke*” fishing gear required many fishermen to work together during its operation, while modern fishing technology need few labour. This situation make fishermen feel they can work alone without the support of many people. In other words, the impacts of modern technology changes the life pattern of fishermen from collective economy to be individualistic or capitalistic economy. The effect of this change can be seen in two aspects ; (1) the fishing ground of “*seke*” was replaced by modern purse – seine and (2) the ownership of “*seke*” and “*soma*” fishing ground transferred from group or communal ownership to be individual ownership.

#### 4. THE CONCEPT OF TRADITIONAL SEA TENURE

The people of *Sangihe* islands recognize at least three kind of ownership right of the sea area namely ; governmental, communal and individual ownership.

The sea area outside their village and neighbour territorial water they assumed as the property of the government and everybody free to fish there. While the sea area around their village or island is belong to the community. The boundary of village territorial sea is decided as follow ; (1) For two or three villages on the same island, the boundary is the extension of land boundary to the seaward, (2) If two villages located on the neighbour islands, its boundary is decided at the line of equal distance, (3) The boundary at the offshore line is determined as far as eyesight capability toward the offshore from the coast line.

The individual ownership right of the sea valid only on a certain fishing ground within the village territorial waters. This kind of ownership right just began applied at near the end of 1970 as the partition of communal territorial water. The partition is made after “*seke*” fishing gear disappeared from the community. This is because “*seke*” not merely the name of fishing gear but the more important one is a form of social and economic organization of fishermen in the community. Thus, the disappeared of the gear followed by the dissolution of its organization. Since then, the individual fishermen especially of gear owner claimed a certain fishing ground for the operation of their own fishing gear. To keep community members living orderly without conflict, then the village’s head called “*opolao*” agree to grant a definite fishing ground within communal sea area for individual ownership right. No fee, tax or other reward was requested for the granted ownership right. The decision of granting fishing ground remain the same as in the feudal time i. e. by the head of the village without

intervention from district of regency government.

Particularly in *Para* fishing community, they recognized only governmental and communal ownership right. The sea area outside their village territorial waters is belong to the govern-ment. Their village territorial water were divided since the feudal time into four distinct function which can be summarized as follow.

Table 2. The dispensation of village territorial water according to its function

No.	Nature of sea area	Granted to	Fishing gear permitted
1.	Reef bottom	Group of “ <i>seke</i> ” fishermen	“ <i>seke</i> ”
2.	Sandy bottom	Group of “ <i>soma</i> ” fishermen	Traditional Purse seine ( <i>soma</i> )
3.	Pelagic water	Group of angling fishermen	Angling
4.	Shallow water	Ali community members	Hand collecting and fish trap

Source : Survey data, August 1991

This allocation were fixed since the feudal time and never modified until the recent day. Not all of reef and sandy bottom area granted to the group of “*seke*” and “*soma*” fishermen. The dispensed of fishing area were based on at least three consideration ; (1) after long observation and experienced in fishing activities that the school of fish notably of scab fish always appeared in the allocated area, (2) the reef area of “*seke*” fishing ground should directly adjacent to the deep water. This is because scad fish is a pelagic species which rhythmically rising on the reef for hunting foods, (3) Fishermen other than group of “*seke*” and “*soma*” both community member and outsider are prohibit to fish there.

## 5. TRADITIONAL MANAGEMENT SYSTEM

As presented in table 2, the sea area of *Para* fishing community were dispensed into four area of exploitation. Each of these fishing ground were managed separately such as the next explanation.

### 5.1. “*Seke*” fishing ground

There are five location of “*seke*” fishing grounds within the territorial water of *Para* fishing

Table 3. The group of "Seke" fishermen in *Para* fishing community

No.	Name of Groups	Members (household)	Unit of "seke" owned
1.	<i>Balaba</i>	50	1
2.	<i>Lumairo</i>	58	1
3.	<i>Ramenusa</i>	48	1
4.	<i>Lembo</i>	40	1
5.	<i>Lembe</i>	40	1
6.	<i>Kampiun</i>	45	1
Total		281	6

Source : Survey data, August 1991

village namely ; *Bintobango*, *Binuwn*, *Mangareng*, *Lanteke*, and *Singgaluhang* (figure 2). The exploitation of these five fishing ground were arranged as follow.

Firstly, the fishermen organized into six groups such as presented in table 3. The membership of the group not individual fishermen but included their household members. The total of membership differ with group and increased by year depend on the marriage of household member. The first four fishing ground i. e. *Bintobango*, *Binuwu*, *Mangareng* and *Lanteke* were scheduled by turns for the above six groups of fishermen from monday up to saturday. Sunday is the holiday and the community members prohibited to go out for fishing.

Secondly, the fishing operation in the four fishing area is arranged such as follow.

Table 4. Schedule of fishing operation in the four fishing grounds by six groups of fishermen

Night/day	Fishing grounds			
	<i>Bintobango</i>	<i>Binuwu</i>	<i>Manoareng</i>	<i>Lanteke</i>
Monday	3	1	4	2
Tuesday	4	2	5	3
Wednesday	5	3	6	4
Thursday	6	4	1	5
Friday	1	5	2	6
Saturday	2	6	3	1

Source : Survey data, August 1991

Notes : 1, 2, ... 6 denote number of group in table 3.

The schedule above valid every night disregarding full month except sunday. The full month did not influence fishing operation because fish keep rising on the reef area every night for hunting foods. This also supporting by the facts that fishing operation of "seke" and

others fishing gear never using any kind of lamp illumination, so there is no difference between dark and full month. They did not using illumination in fishing not because of they can not provided it but traditionally it is prohibited.

The fishing operation twice a day i. e. at about 17.00 – 18.30 PM and 5.00 – 6.30 AM. This is also the reason why they did not use any kind of illumination in fishing operation. The fishing time determined based on technical and biological reason. Technologically, “*seke*” would not in capacity to gather fish in largest quantity due to it is only 30 m in length and 85 cm in depth and operating in water with 7 – 10 m in depth. So, it is not enough to block the school of fish to run away. But they experienced that at this fishing time the light refraction under the sea make the “*seke*” shadow looks like blocking the way of fish from the sea surface down to the bottom which make the school of scad fish keep quite until captured by the net. Biologically, this fishing time is also as the time of fish school rising on the reef area to looking for foods. So, naturally, the local fishermen using the feeding habit of fish to determine the effective fishing time.

In the fishing ground of *Singgaluhang*, the schedule of fishing operation arranged one season from May 20 to August 20 every year. Before 1980 two groups of “*seke*” fishermen fishing together during the season but since then permitted only one group per year. This is not because of fish resources decreased but the number of group members increased. For example, before 1980 the members of each group vary between 15 and 20 households but since then gradually increased and reached 40 – 58 households per group in the middle of 1991. For this reason then the head of the community rescheduled the rotation of each group to fish there become once in six years such as arranged bellow.

Table 5. The schedule of fishing operation in the fishing ground of *Singgaluhang* island after 1980.

No.	Name of group	Scheduled years		
		I	II	III
1.	<i>Balaba</i>	1980	1986	1992
2.	<i>Lembe</i>	1981	1987	1993
3.	<i>Lumairo</i>	1982	1988	1994
4.	<i>Ramenusa</i>	1983	1989	1995
5.	<i>Lembo</i>	1984	1990	1996
6.	<i>Kampiun</i>	1985	1991	1997

Source : Survey data, August 1991

The fishing season from May 20 to August 20 of 1991 is belong to the group of *Kampiun*. Therefore, they remain stay on the *singgaluhang* island during this study performed. The fishing season of the next year between May 20 and August 20, 1992 is belong to the group of *Balada*. It means during this season they absent to fish in the other four fishing grounds.

The distance of *Singgaluhang* island is about 7 mile from the village of *Para*. All households of group member stay there during the fishing season. Therefore, preparation usually began in the early of April every year. There is no fresh water on the island so, some two or three fishermen of the group member by turns back to the village every three days to take fresh water for drink.

According to the experience of fishermen that the average catch during the fishing season vary between 3.3 tons and 5.2 tons per trip of fishing. So, they usually landed 165 – 250 tons of scad fish in a season with money value reached 185 – 280 millions rupiah. These ammount of money is shared by all members of the group.

The volume of catch relative unchanges during the last 10 years. Its price however, fluctuated by year vary from Rp.15/tail up Rp.35/tail. According to the fishermen that to Rp.35/tail is the highest price of scad fish along the history of fishing in the *Singgaluhang* fishing area. The size of fish is about 12 tail per kilograms. The money earned from this fishing season, mostly they use for rehabilitation of their house and other social investment in their village.

## 5.2. “Soma” fishing area

The sea area of “soma” is a definite area within the village territorial water which special granted for the operation of traditional purse – seine which locally called “soma”. Generally, this area allocated near the beach with sandy bottom. This is also allocated based on the long experiences that the area are always passed by the school of pelagic species particlarly of scad fish.

There are four definite fishing area of “soma” respectively ; *Mamalokang*, *Batuleke*, *Bawondeke*, and *Nenung* (figure 2). The exploitation of these fishing ground are arranged almost similar to those of “seke” fishing ground. Firstly, the fishermen is divided into 24 group for 24 units of fishing gear in the community. The member of each group vary from 15 to 25 fishermen. Secondly, these groups of fishermen arranged by turns to fish the definite four fishing grounds mentioned above.

The schedule of fishing operation is arranged by rotation as presented in table 6. Here seen that four groups operated simultaneously in the four fishing ground. Group 1, 24, 23, and 22 respectively operating in *Mamalokong*, *Batulekehe*, *Bawondeke*, and *Nenung*. Then the next day replaced by the group 2, 1, 24, 23 and so on. Fishing operation conducted on the night

time without using any kind of illumination both in the fishing grounds and its surroundings. The reason is that, fish school will not come naturally to the fishing ground but forced artificially which in turns will destroying the natural fishing ground. The traditional fishing regulation implemented strictly in fishing operation of “*seke*” and “*soma*” fishing gear.

### 5.3. “*Noru*” fishing area

The fishing ground of angling fishing gear which locally called “*noru*” covered all pelagic water of village territorial water extended to the off – shore. All type of angling fishing gear owned by the community members such as vertical hand – line, long – line, Pole and line etc. are permissible to fish on this area. One condition should be obey by all fishermen is fishing operation should be in the day time. Fishing at night also permissible but without using any kind of lamp illumination. This is the reason that almost all angling fishing trip performed during the day time particularly afternoon between 15.00 PM and 20.00 PM. This fishing time is adjusted to the time of fish consignment to the market of nearest town. The consignment boat departure from the village at 2.00 AM and arrived at 6.00 AM at the town market.

### 5.4. “*Igi*” fishing ground

“*Igi*” is the local name of fish trap made from bamboo with 30 – 40 cm in diameter and 50 cm in length. Mostly of this traditional fishing gear is set down in the shallow water along the beach. Therefore, this area is called “*igi*” fishing area. Actually, it is a free area for all community members to harvest seaweeds, collects shell and others marine animals included to set down fish trap. There is no special regulation imposed to manage this fishing ground, this may be because the population density remain lower so that the sea environment of shallow water still clean and abundance with various species of marine resources.

## 6. OWNERSHIP OF GEAR AND TECHNOLOGY

There are four kinds of fishing gear mainly used by the local fishermen i. e. “*seke*”, traditional purse – seine, fish trap and angling. Statistical data of the village office indicated as follow.

“*Seke*” is the device for fish aggregating. Thus, a unit of “*seke*” composed of boats, net, and “*seke*” itself and it is owned by the group. The investment and operating capital provided by all group members. Those who have no cash money can give their support in the form of material such as bamboo, rope etc. or their labour to make the gear. Hence, all group members have a equal right on the fishing gear. The same pattern on ownership right valid for “*soma*” fishing gear.

Table 6. Schedule of “soma” fishing operation in its respective fishing ground during August 1991

Data	Fishing Grounds							
	<i>Mamalokang</i>		<i>Batuleke</i>		<i>Bawondeke</i>		<i>Nenung</i>	
	Group	member	Group	member	Group	member	Group	member
1.	1	15	24	21	23	17	22	20
2.	2	25	1	15	24	21	23	17
3.	3	20	2	25	1	15	24	21
4.	..... Holiday .....							
5.	4	25	3	20	2	25	1	15
6.	5	25	4	25	3	20	2	25
7.	6	25	5	25	4	25	3	20
8.	7	25	6	25	5	25	4	25
9.	8	15	7	25	6	25	5	25
10.	9	20	8	15	7	25	6	25
11.	..... Holiday .....							
12.	10	15	9	20	8	15	7	25
13.	11	15	10	15	9	20	8	15
14.	12	15	11	15	10	15	9	20
15.	13	20	12	15	11	15	10	15
16.	14	17	13	20	12	15	11	15
17.	15	17	14	17	13	20	12	15
18.	..... Holiday .....							
19.	16	20	15	17	14	17	13	20
20.	17	18	16	20	15	17	14	17
21.	18	23	17	18	16	20	15	17
22.	19	20	18	23	17	18	16	20
23.	20	22	19	20	18	23	17	18
24.	21	17	20	22	19	20	18	23
25.	..... Holiday .....							
26.	22	20	21	17	20	22	19	20
27.	23	21	22	20	21	17	20	22
28.	24	21	23	21	22	20	21	17
29.	1	15	24	21	23	21	22	20
30.	2	25	1	15	24	21	23	21
31.	3	20	2	25	1	15	24	21

Source : Survey data, August 1991

Table 7. Number of fishing gear by type in *Para* fishing community

No.	Fishing gear Name		Number (unit)	Ownership status
	Local	English		
1.	"seke"	fish aggregating device	6	group
2.	"soma"	Traditional purse-seine	42	group
3.	"igi"	Fish Traps	27	Individual
4.	"Noru"	Angling	223	Individual

Source : Village office, August 1991

Fish trap and angling fishing gear is owned individually by the fishermen. Some of them are the member of "seke" and "soma" group. They use this fishing gear as a parttime work after participate in their group fishing operation. A unit of the four kind of fishing gear are composed of the following component.

Table 8. The component of a unit of fishing gear and its price as August 1991 (Rp.000)

No.	Component	Fishing Gear							
		<i>seke</i>		<i>soma</i>		Trap		Angling	
		Unit	Price (Rp)	Unit	Price (Rp)	Unit	Price (Rp)	Unit	Price (Rp)
1.	<i>Pamo</i> boat 2GT	1	700	1	700	--	--	--	--
2.	<i>Pelang</i> 〃 0.5GT	2	400	2	400	--	--	--	--
3.	<i>Londe</i> 〃 0.2GT	10	500	5	250	--	--	1	50
4.	Net	1	3,000	1	3,000	--	--	--	--
5.	Aggregating device	1	1,000	--	--	--	--	--	--
6.	Trap	--	--	--	--	1	1	--	--
7.	Angling	--	--	--	--	--	--	1	25
Total investment/ unit (Rp.000)		5,600		4,350		1		75	

Source : Survey data, August 1991

Although “seke” fishing gear required more capital investment but it become cheaper because the capital is shared by more then 40 households of fishermen. Fish trap do not required any boat because it is set down in the shallow water with 0.5 – 1.5m depth.

## 7. PRODUCTION AND MARKETING ACTIVITIES

Almost all commercial fish species that commonly sold in the market of big cities are found living in the water of *Para* islands. The scad fish (*Decapterus*, sp.) which locally called “*Malalugis*” is the main fish produced by the local fishermen. It is not too much to say that 95% of the total fish production of fishermen in this village is consist of scad fish. The remaining other are small bonito which locally called “*deho*”, skipjack, Tuna, sail fish, shark, red snapper and various demersal fishes and shelfishes.

The activity of “*seke*” and “*soma*” fishing gear is focused on the scad fish production. The fishing trips of each fishing gear is arranged by rotation on the definite fishing ground. The exchanges of fishing ground is strictly prohibited. The group member of “*seke*” fishing gear however, is allowed to be the member of “*soma*” fishing gear vice versa. The fishing time arranged twice a day between 17.00 – 18.30 PM and 5.00 – 6.30 AM and it is performed every day along the year except sunday or in bad wheather condition. This is thought to be the different with the other fishing community in the region. Although they living on a very remote islands and maintaining traditional way of life but they work regularly such as those of industrial way of production. This because no livelihoods other than fishing in the village. The land of the island is too narrow for the livelihoods of local fishermen. It is also ag-gravated by its soil which not so fertile to cultivate rice, vegetables etc.

As found elsewhere in the traditional fishing community, no statistical data available on their village production. The observation along stay in the fishing village indicated, they landed at least 1000 tail of scad fish per trip and maximum catch reached 60,000 tail per trip or equal to 5.0 ton in weight. Some trips of “*seke*” fishing gear are failed to capture fish but it is replaced by the successful trip of “*soma*”, angling and trap fishing gear. Thus in total, there are always production every day.

The production of all species of fishes is counted in the unit of tail which locally called “*ekor*”. Commercial unit in term of kilograms remain unusual in the mind of local fishermen. Even in the nearest town market unit of tail still common used in the transaction.

Marketing activities is closed association with the production acitvities. The catch of local fishermen was mainly sold in the form of fresh. Catch landed in the morning is processed by smoke and consigned to the market of regency capital city together with fresh fish which is

landed in the evening fishing trip i. e. at 19.00 PM. *Tahuna* is the capitol city of *Sangihe* regency which is also as the central market of fish in this region. It is spent about 4 hours by motorboat of 3 GT with 25 HP engine. Therefore, fish consigning boat departure at 2.00 AM from *Para* island and arrived at *Tahuna* fish market at 6.00 AM.

There are at least three step of fish traders should be passed by fish on its way from fishermen in the island to the consumers in the capitol city. The fishermen delivered their catch to the hand of local middlemen whose bring it directly to the city market. The fish then delivered to the hand of city's fish middlemen who eventually dispensed it to fish retailer in the city market.

The cash money paid by the consumers back to the fishermen in the village through the same path. Fish minddlemen of the city market collect money from several retailers then it is paid to the fish traders from the island whose bring it back to be paid to the fishermen. Therefore, village's fish middlemen always waiting for their fish price from 6.00 AM to 11.00 AM. Usually they use this span of time to buy daily needs of fishing households which they requested before departed from the village. Thus, some of fishermen received payment in term of goods instead of cash money.

There are six fish middlemen in the village of which four are boat owners of "*soma*" and the remaining two persons are school teachers. These number of fish middlemen reflected also the volume of fish production in the villages. Each fish middlemen has a consigning boat of 1 - 2 GT in capacity with outboard engine of 25 - 40 HP. Considering the cost of transportation then they always consign fish beyond 5000 tail or about 416 kg. So, if all of middlemen consign their fish to the city market it means there are at least 30,000 tail of scad fish or equivalent to 2.5 tons in weight. In case of less then 5000 tail of fish landed, it is processed by smoke. The processing plant is not owned by fish middlemen but by individual fishermen as their partime work. If there are 3000 tail of scad fish, it is distributed to 5 - 6 fish smoker plant which paid Rp.10 per tail as their wages. It means for six fish middlemen in the village, there are at least 30 - 36 small smoking plant.

According to the manager of city fish market, about 70% of the daily fish sold in the market is came from *Para* islands. Therefore, if fish meddlemen of *Para* islands did not consigned their fish due to bad wheather condition, it will rising the price of fish in the city market. This one of the reason that *Para* islands is recognized as the bank of fish by the consumers in the town and city. This is because the price of fish in the city market is determined by the supply of fish from this island.

## 8. EARNING SHARE SYSTEM

The catch of angling and trap fishing gear is owned by the individual fishermen. Hence there is no need to share with the other fishermen. The catch of “*soma*” and “*seke*” however, is belong to the group of fishermen, so it must be share among them.

Both catch of “*soma*” and “*seke*” has the same concept of share i. e. all group member have the same ownership right on the catch, so it must be distribute proportionally. The catch of “*soma*” distributed to the group member equally in unit “*ekor*” or tail. If there are 3000 tail of scad fish landed by a group of fishermen with 15 members, then each member will get 200 tail. Fishermen free to decided where to sell his fish. There is no fixed middlemen for each group of fishermen, they are depend on the highest price which offered by the fish traders. In case of “*soma*” owned by the individual fishermen, then the catch is divided into three portion i. e. for gear (20%), owner (20%) and crews (60%) of the total earnings.

The earning of “*seke*” fishing gear is treated as the communal ownership. The catch is shared not only limited among the group members but also with some important community members such as Village’s head, school teachers, midwife, nurse, priest, widowers, orphan etc. Since the membership of “*seke*” are household hence, all households member disregard whether they are still a baby or adult who living in the city outside the village. This is considered as a unique share system which can not be found elsewhere in north Sulawesi region or even in Indonesia. The way of share is performed as follow.

1. The share for village’s head, school teachers, midwife, nurse, priest, widower, orphan etc is deducted firstly from the total catch. This portion is called “*tonggole*” i. e. the portion of catch for those whose did not directly participate in fishing operation and also not the member of the fishing group but they have particular social status in the community eligible to get the share.
2. The second step is the deduction of catch for the share of the group leader i. e. group’s head which is called “*tonaseng*”, secretary, and treasurer. The distribution of share is conducted by the secretary of the group. As a rule he will take his share after all member and group leader got their share. For this reason, sometimes the secretary did not received his share especially when the catch is lean.
3. Finally, the distribution of share for the group members. Considering, the membership is household instead of individual fishermen, so all households members get their share, disregarding they still a baby or adult who living outside the village. Therefore, the quantity of share different with household members. The more household members the more share they will get.

The illustration of share is presented in table 9. This illustration was taken from a group of “*seke*” which landed about 4000 tail of scad fish in a trip of fishing during stay in the village.

Table 9. The illustration of earning share system  
among the group members of “*seke*” fishermen

No.	Share receiver	households members (prsn)	Share quantity (tail)
I . COMMUNITY´ S LEADERS			
1.	Village’s head	1	9
2.	Village’s secretary	1	9
3.	Priest	1	9
4.	Schools teachers	6	54
5.	Nurse	1	9
6.	Midwife	1	9
7.	Church charity	3	27
II . GROUP LEADERS			
1.	Head of Group	6	108
2.	Secretary	5	90
3.	Tresurer	7	126
III . GROUP MEMBERS			
1.	<i>Alce</i>	5	90
2.	<i>Lutang</i>	4	72
3.	<i>Bayang</i>	7	126
4.	<i>Panto</i>	10	180
5.	<i>Samsu</i>	2	36
6.	<i>Alex</i>	4	72
7.	<i>Teresia</i>	3	54
8.	<i>Neta</i>	2	36
9.	<i>Nagi</i>	5	90
10.	<i>Wilmer</i>	6	108
	• ••••	•	••
	• ••••	•	••
	• ••••	•	••
40.	<i>Budiman</i>	5	90
Total		229	3,996

Source : Survey data, August 1991

Notes : No. 11 – 39 omitted because illustration only.

In general, the share is dispensed into three division i. e. for community's leaders, group leader, and group members. The community's leader get one share per household and the quantity of share just a half from those for group leader and members. Church charity get 3 share which is used for rehabilitation and maintenance of the building. The quantity of share increased with the volume of catch but the household member of community's leader did not take into account in the share.

The group leader and members get one share for each household members and the quantity of share twice from those received by the community's leader. As seen in table 9, the community's leader received 9 tail par share while the group leader and members got 18 tail per share. If the group head has 6 household members then he will get 108 tail of scad fish as his household share. The same way of distribution valid for group members, those who have 10 household members will receive 180 tail of fish. The quantity of share vary with the volume of catch but the share for group leader and members always twice to the share of community's leader.

Actually, the head of "seke" group has a special supernatural power or sacred which they received from their ancestor through their retired or died father. Therefore, not everybody in the community have the capacity to be the head of fishermen group. In modern fishing technology, usually the fishing master looking for the school of fish using fish finder equipment but in "seke" fishing operation, fish are calling by the head of the group who also plays the role as the traditional fishing master. However, this position did not take into account in the share system, so, he get the same quantity of share with members. This is because traditionally, prohibited to use the supernatural power for the advantage or benefit of himself. Neglecting this ancestor rule will result to the lost of sacred from him.

## 9. PROBLEMS AND DISCUSSION

Customary ownership right on the sea area existed since the feudal time in this community with orderly. The problem began to arise in 1977 on the "seke" fishing ground in *Singgalu - hang* in which the fishermen from the village of neighbour island called *Mahangetang* began to fish there without permission from the head of *Para* fishing community. This was creating battle between the fishermen of the two communities at the *Singgaluhang* fishing ground. Several fishermen of both side injured. The incident were solved by the regency government through the admittance that the disputed fishing ground is belong to *Para* tishing community. Therefore, the fishermen of neighbour island prohibited to fish there without admission from the leader of *Para* fishing community.

Since then the fishing activities become running well and orderly, but the conflict arise again 10 years latter in February 1987. The battles between fishermen of the two fishing village occured again in the same fishing ground and also resulted several fishermen of both side injured seriously. Again, the government of regency level conciliate the dispute with the same way as previously. Here seen that government directly admitted the status of traditional right on the sea area by the local fishing community.

Actually, the neighbour fishing village also has their own territorial water but from the interview with some of them it is known, they enter to fish in the dispute fishing ground based on the national legal law which mentioned in article 33 of constitution law of 1945. According to this article that the territorial water of Indonesia is belong to the state and will be exploited for the welfare of all Indonesian citizen. It is imply that the sea area of Indonesia is common property in nature. All citizen both fishermen and non – fishermen free to fish any time and anywhere. It means that the fishermen of neighbour village has came into the conscious that the sea area around them is common property in nature and hence they free to fish elsewhere including in *Singgaluhang*.

Now, the status of traditiona seal tenure facing the collide with the national law which enacted since 1945. Actually this law came into effect since it promulgated in 1945, but to keep fishing community always in peace and orderly, so the government also sdmitted the traditional right on the certain sea area. At present however, fishermen in some fishing communities known that beside customary sea tenure there are also national law which permitted them to fish elsewhere including in the territorial water of neighbour village.

Facing this problem, the government of regency level become confused to keep admitted traditional sea tenure or to enforce national law. The confirmation from the officer of regency government indicated that they remain admitted traditional ownership right instead of national law for the reason of orderly, peaceful and effective management of marine resources. It is seems that in the long run, the traditional sea tenure still will be admitted by the government together with the enforment of national law.

## 10. CONCLUSION AND IMPLICATION

There are three type of ownership right on the sea area recognized by the people in *Sangihe* islands respectively ; communal, national, and individual ownership right. The first type is a pure traditional system which existed since the feudal time. While the second type is enacted after the independence in 1945 through the article 33 of constitution law of 1945. This law is common property in nature but its implementation however, did not exactly abolished the

previous traditional ownership right on the sea area. Thus, both are admitted by the government until today. The third type is the transformation of communal ownership to be the individual right which began in the early of 1970. At present, these three type of ownership right is admitted by the government simultaneously.

From fisheries management point of view, the traditional ownership right seems more feasible than the others. This is because socially and culturally accepted by the local fishermen and more important one is remain admitted by the regency government. Economically, also still relevant with the present situation because traditional system encourage all community members to cooperate to developing their village economy through the propotional share of its yield.

One of the traditional culture which incorporated in the “*seke*” fishing gear gradually disappeared and now can be found only in *Para* fishing community. The more important aspect of this fishing gear is its social and economic organization which practically helpful for rural economic development. Its earning share system is more social oriented rather than economic and can organized fishermen to work together oerderly and peaceful.

The implication of this study is the traditional sea tenure not always bad and weak. This is proved by the fishermen of *Para* fishing village that they can managed effectively and efficiently their village territorial water so they can harvest fish continuously. It is advisable to take into consideration to adopt this traditional sea tenure system to be a legal right as valid on the land tenure system.

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Figure 1. Map of Nouth Sulawesi.

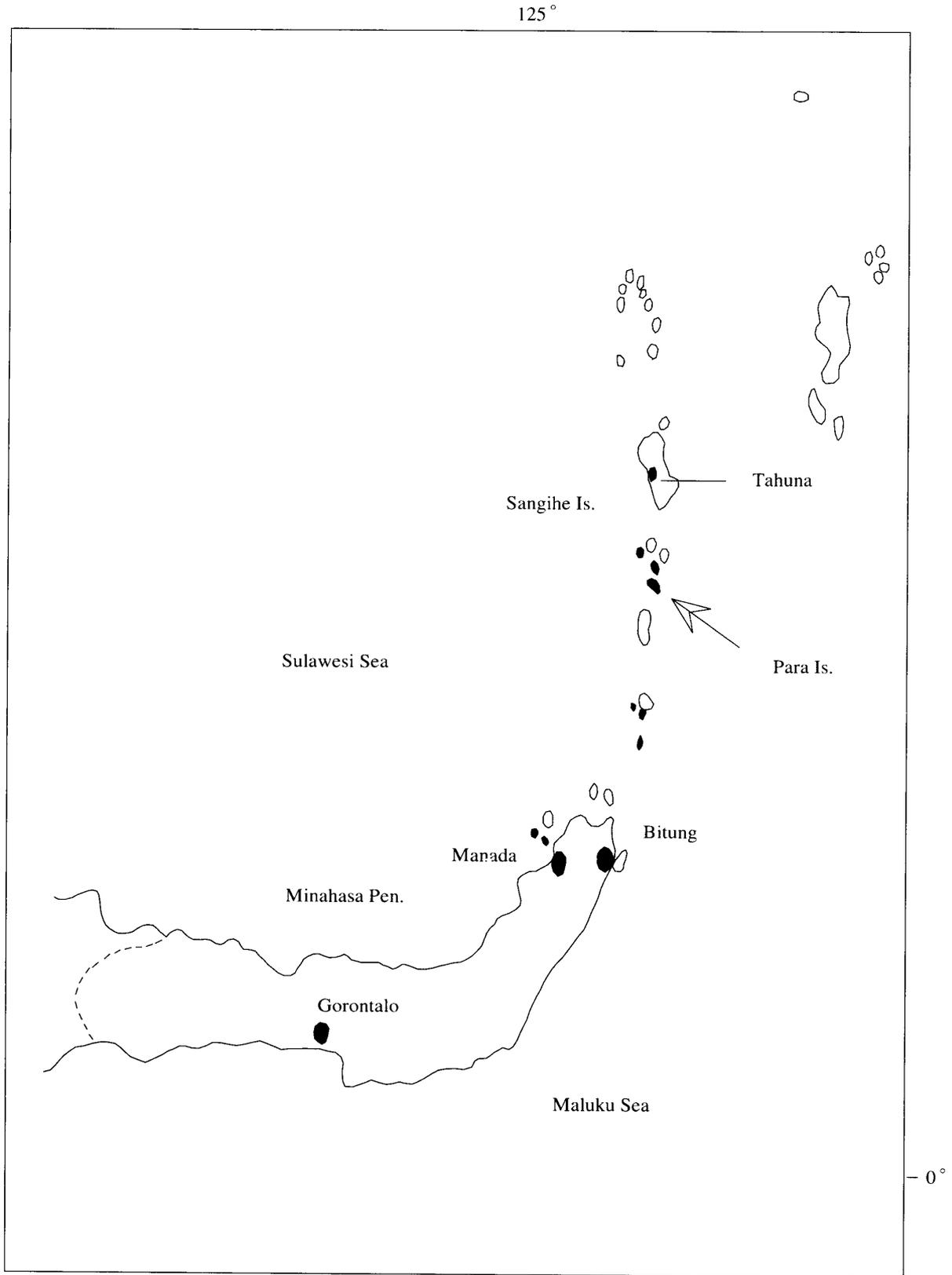


Figure 2. Research site and the allocation of sea water by village and fishing gear.

