Socio-Cultural Transformation of Seaweed Farmers in Ghone Balano Village, Muna Regency

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ABSTRACT: This study aims to determine the socio-cultural aspects of seaweed farmers in Ghone Balano Village, Muna Regency, Southeast Sulawesi. Seaweed farmers on the coast of Ghone Balano Village, Muna Regency, especially people who work as fishermen, are changing from traditional to more modern lifestyles with a focus on sea utilization or seaweed cultivation. This change can be seen in the production process of seaweed cultivation which is more characterized by household business activities dealing with marketing processes that have capitalistic value. However, this change was hampered by funding from government and private financial institutions. Although technology has begun to be applied in seaweed cultivation, it has not been optimal in increasing production because it is very dependent on the contributions of family members. As a result, slow capital formation and suboptimal use of technology hamper the progress of seaweed cultivation among these farmers.

A. BACKGROUND
In Muna Regency, the seaweed cultivation business is growing quite rapidly. In almost all coastal areas there are seaweed cultivation businesses. Every year, seaweed production (wet) reaches 23 thousand tons (Ramadan, 2019). Seaweed production ranks highest. Ghone Balano Village is a village located in Duruka District, Muna Regency, Southeast Sulawesi. Ghone Balano village has a residential area of 150 Ha, agricultural land and plantations of 475 Ha. The boundaries of Ghone Balano Village are with the North bordering Lagasa Village, the South bordering Lasunapa Village, the West bordering Wapunto Village and the East bordering the Buton Strait. The people of Ghone Balano Village have started seaweed farming business since the 90s and it continues to this day.

Improving the standard of living is one of the desires of the community. However, the condition of the community who has limited fishing capital so they choose to cultivate seaweed as an alternative livelihood. In its development, the seaweed cultivation business has experienced ups and downs, even assumed to be insignificant in creating an increase in the opinion of seaweed farmer households.

It is interesting to study the extent to which seaweed cultivation business is one of the alternative jobs that can create welfare for seaweed farmers in Ghone Balano Village, Muna Regency. Research on seaweed farmers has developed rapidly, especially the fishing community, because the existence of fishing communities has been identified as a community that has always been marginalized in the development process so far. Therefore, the focus of this study is 1) Analyzing the transformation process or pattern of change related to technology, investment and work organization of seaweed farmers in Ghone Balano Village, Muna District, 2) Analyzing patterns of social differentiation that occur in the form of possible specialization in activities and the establishment of new groups in seaweed cultivation in Ghone Balano Village, Muna Regency.

B. LIBRARY REVIEW
a. Social Transformation and Differentiation
In the early 1970s, Indonesia underwent its first transformation or change in agriculture, known as the green revolution. Various studies have been born from this transformation, including related to distortions, especially in smallholder farming communities. Meanwhile, around the end of the 1970s there was a transformation or change in coastal communities or known as the blue revolution, which occurred in the South Sulawesi region. As coastal communities enter a phase of transformation through reinvestment in fishing, more rational management systems, fishing communities, especially fishing workers, experience marginalized conditions. This happens evenly in fishing communities in Indonesia. As a further result, it raises theoretical debates on the validity of the effectiveness of modernization/transformation in seeing the process of change that occurs in society. In various social literature the term transformation becomes an important part of the predictive of social evolution, social change,
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modernization and capitalism, so that its use is always equated and interchanged according to the context in question. The end result is a study of the process of differentiation that occurs in a developing society compared to an advanced society or industrial society. In line with the notion of modernization, Schoorl (1980: 1-2) said that, modernization of a society is a process of transformation, a change in society in all its aspects. According to Donald Light (1989) holds the view that underdeveloped societies need to overcome their shortcomings and problems so that they can reach the stage of "take-off" (take-off) towards economic development. Modernization cannot be separated from life, because of the desire to change in a more advanced direction. In economics means the growth of complex industries in which the production of goods in services for production is carried out on a large or mass scale. The industrial complex has implications for the formation of organizations that hold raw materials, product marketing, and others. Furthermore, the development of the industry is related to agrarian, namely production per worker has been increased tremendously. Furthermore, based on agrarian and industrial development can be created widely called the service sector, which can include government institutions, scientific and educational institutions, health care, art recreation and so on.

Technological transformation and forms of stratification in Indonesia have received much attention in studying the phenomenon of agrarian society, the same thing happens to coastal communities. Transformation in coastal communities as shown in seaweed farmers follows the pattern that occurs in agrarian communities, namely the phenomenon of forms of control over ownership of tight production tools/assets then causes inequality in social structure and socioeconomic phenomena of fishing households (Sumantri, and Kolopaking 2002; Siswanto, 2007; Kinseng, 2007; Andriati, 2008).

b. Socio-Cultural Concept

Socio-culture is a concept to examine basic assumptions in people's lives. Giving meaning to the concept of social system and culture is considered important because it is not only to explain what is meant by the social cultural system itself but to provide an explanation of description through reality in people's lives.

Understanding Concept Concept is an idea, idea, or thoughts that become the basis (carrier of meaning). The concept is still abstract or just wishful thinking. Socio-cultural systems are patterns of order; unity consisting of interconnected components or elements. Culture is closely related to society. Everything that exists in society is determined by the culture owned by the community itself Main Component in Culture 1. Material Culture Refers to all concrete human creation 2. Immaterial Culture Abstract creations passed down from generation to generation

So, the concept in the social system of culture can be described as a thought and idea that contains the components that make up the culture of a society. Understanding system according to Tatang M. Amirin "System comes from Greek which means: 1. A relationship composed of parts 2. Relationships that take place between units or components on an orderly basis. · Social means everything that is related to the system of living together or living in the community of people or groups of people in which the structure, organization, social values, and aspirations of life are included and how to achieve them. Culture means the way or attitude of human life in relation reciprocally to nature and its living environment which includes all the results of creation, taste, charity, and work, both physical, material, and psychological, medical, and spiritual. Community Life as a Social and Cultural System · Community life is seen as a system or social stem, that is, a whole of parts or elements that are interconnected in a whole. Alvin L. Bertrand, a social system exists: a. Two or more persons b. There is an interaction between them Aim d. It has a structure, and shared expectations that it believes in. In social systems in general some processes influence each other. This is due to the interrelationship between one element and another.

Margono Slamet, social systems influenced by ecology; Demographics; culture; personality; time, history, and background. · The main characteristic of the social system is accepting elements from outside (open). But it also causes the establishment of bonds between elements with other elements (internal) and mutual exchanges between the social system itself and its environment (external). · Processes in the social stems: a. Communication b. Maintaining boundaries c. System weaving d. Socialization e. Social supervision f. institutional k.g. Social change Community Life as a Cultural System · Learn about starting → behavior · Elements of behavior → "social movement" 4 conditions: - to achieve certain goals - occur in certain situations - regulated certain rules - driven by certain motivations · The nature of some of these subsystems as a cybernetic order → each subsystem above it regulates for the subsystem below it.

According to Parsons, the 4 subsystems act as functional needs referred to as imperative functional LIGA. Motion Social System Cultural subsystem: Latent pattern maintenance Social subsystem: Integration Personality subsystem: Goal attainment Behavioral organization subsystem: Adaptation · Latent pattern maintenance (L) or the function of maintaining patterns. The cultural subsystem provides answers to problems from the factors of the philosophy of life. Integration (I) or integration function includes important factors in achieving a state of harmony between systems. Goal attainment (G) or the function of achieving goals. Determining factors: a. Development of systems to uphold values and rules. b. Organizing to achieve common goals. · Adaptation (A). Includes the direction and adjustment of human tree needs to the surrounding conditions. · Main elements of socio-cultural subsystems: a. Beliefs b. Feelings and thoughts c. Purpose d. Rules e. Position and role f. Supervision g. Sanctions h. Facilitation. Sustainability and survival j. Harmony of the quality of life with the environment.
c. Constitutional

Established patterns of human behavior, consisting of structured social interactions within a relevant value framework are the definition of Institutions in the Big Dictionary Indonesian. Institutional understanding is everything related to institutions. Institutions are organized systems of social relations that embody certain common values and procedures and meet the basic needs of certain communities, this understanding is a statement from Horton and Hunt (1993: 69). Horton and Hunt (1993: 244) stated that institutions (institutions) are a system of norms to achieve a goal or activity that society considers important or formally, a set of habits and behaviors that revolve around a basic human activity. Institutions are structured processes (structured) to carry out certain activities.

According to Etzioni (1985: 1), studying institutions or organizations is essential, because the pattern of life of every community can be traced from its organizational system. Each individual's behavior is generally the result of the formation of the underlying social organization. Our whole life is carried out in organizations, from birth, and work to death.

Sociological institutions, namely institutions such as organs in the human body are the understanding of Saptana et al (2003). Everyone involved in society must be run by one or more institutions. For the necessities of life, in terms of production and distribution, it is run by economic institutions. Everyone involved in it is bound by a pattern of values and norms as a guide for behavior and behavior, which is patented with a standard structure. The structure is the person involved and its positional. According to Tjondronegoro, the institution meets the needs of community members directly, while the organization meets the needs but is not separated from power because the goals to be achieved by the organization require neat arrangements, more or less by reducing the personal role of members.

Institutions rank among the most formal and coercive societal norms, and when the customs and values surrounding an important activity become organized into highly formal and binding systems of beliefs and behavior, institutions develop.

CONCEPT FRAMEWORK

The seaweed cultivation business by farmers cannot be separated from the response to the development of industry and global trade. Developed countries that are struggling to develop industrial production. Developed countries that are developing in seaweed-based industrial production are trying to build partnerships through the pattern of international cooperation including cooperation in seaweed commodities. In theory, harmonization of the international division of labor is built through the principles of transformation that cause imbalances, especially among business actors at the second level, namely farmers. Transformations characterized by the occurrence of the differentiation process always experience lags so that unbalanced stratification occurs. This needs to be considered so that it has a positive impact in efforts that can improve survival, especially for coastal communities or seaweed farmers.

SEAWEED FARMING BUSINESS

![Concept Diagram]

Figure 1. Concept
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C. RESEARCH METHODS

This research was conducted in Ghone Balano Village, Muna Regency, Southeast Sulawesi, one of the coastal areas of seaweed cultivation. Access to survival outside the fishing sector has been very minimal so the existence of the seaweed cultivation business is one of the hopes in improving the household economy. Thus, it is interesting to study what seaweed cultivation is like as one of these survival alternatives.

The main sources of information in this study are seaweed farming families, in addition to village government officials, local community leaders and related stakeholders, with details of 14 seaweed farmers, 1 small trader, and 1 person-related industry. The data collection process is carried out through in-depth interviews, in addition to observation techniques on the behavior of certain activities. While Focus Group Discussion (FGD) is carried out to support the integrity of information. The results of the information are then netted in the budata social study so that the data collected is qualitative data. The data then processed, then categorized then tabulated simply. Further data are obtained to make conclusions.

D. RESULTS OF RESEARCH AND DISCUSSION

a. Brief Profile of Ghone Balano Village

The village of Ghone Balano is an area on the east coast of Duruka, adjacent to the Buton Strait. Gone Balano is a word derived from the Muna language which consists of two words, which have their own meanings, namely "Ghone" and "Balano". "Ghone" is sand and "Balano" is big. So Ghone Balano means big sand in Indonesian. It is named Ghone Balano because along the coast it is full of sand.

Ghone Balano Village is one of the villages Duruka sub-district, Muna Regency, Southeast Sulawesi. Classified as one beach with an area of 1 Km², a residential area of 150 Ha, a farming area, and plantations of 475 Ha. The boundaries of Ghone Balano Village are as follows: The North is bordered by Lasunapa Village, the South is bordered by Lasunapa Village, the West is bordered by Wapunto Village, and the East is bordered by the Buton Strait. The climate in Gone Balano Village as in other villages in Indonesia has a dry, pancaroba and rainy climate, it greatly affects the activities of the community in Ghone Balano Village. In general, the rainy season occurs from December to June when winds containing a lot of water vapor are blown from the Asian continent and the Pacific Ocean, causing rain. While the dry season occurs between July to November, in this month the wind blows from the Australian continent which is dry and contains water vapor. On average, the number of rainy days per month in 2018 was 13 days with an average rainfall of 201.99 mm. The highest rainfall occurs in November at 792.0 mm with the number of rainy days amounting to 18 rainy days.

The livelihood of the residents of Ghone Balano Village is Fishermen, Farmers, Handymen besides traders, a small part are Civil Servants (PNS). Ghone Balano village consists of two hamlets that have a population of 842 people, with the number of families = 358, the number of males 430, and the number of females 412. The majority of Ghone Balano Village is Muslim i.e. about 99.8% and the rest is Christian. As many as 80% in this village are classified as poor families with an average income of Rp. 20,000 per day.

b. Transformation in Seaweed Cultivation Business in Ghone Balano Village

1. Forms and Types of Investment in Seaweed Farming

Ghone Balano Village is one of the locations for seaweed cultivation. However, the government faces limitations in investment development except for only providing extension workers to transfer knowledge to seaweed farmers. The absence of capital sources from the private sector to invest causes seaweed farmers to have difficulty developing their businesses. On the other hand, there appeared collecting traders both locally and from areas outside the village of Ghone Balano. The role of collecting traders is to be an intermediary between seaweed farmers and wholesalers (private). The role of the collecting trader causes price competition that tends to be imperfect on the part of the collecting merchant which causes unstable prices. The price of seaweed currently ranges from Rp. 5,000 – Rp 12,000. In addition, collecting merchants provide capital to farmers with an agreement that production products must be sold to collectors at prices determined by collecting traders. In the agreement, no interest and contract period are applied except that the produce is sold to the collecting merchant. From banking, so far it has not played its role in providing capital assistance to seaweed farmers in the cultivation business in Ghone Balano Village, Muna Regency. Banking constraints in providing credit to farmers mainly concern administrative processes. Similarly, the role of other institutions such as BUMdes (Village-Owned Enterprises) has not been accessible to farmers, even the role of cooperatives is defeated by the role of collecting traders.

The increasing demand for seaweed in the world market today does not have a positive impact on seaweed farmers in Arungkeke Village. The management of seaweed cultivation in Ghone Balano Village in its development has not changed much significantly in the use of investment and creating improvements in the welfare of farmers.

2. Forms and Types of Technology in Seaweed Cultivation Business

In the practice of seaweed cultivation, seaweed farmers in Gone Bhalano Village carry out local wisdom inherent in their lifestyle. This aims to ensure the sustainability of livelihoods without having to damage the environment, in accordance with the cultural values that seaweed farmers have about the importance of protecting nature for business sustainability. With this application,
seaweed farmers hope to meet their needs while still paying attention to the environment so that they can be enjoyed by future generations.

The production process in the seaweed cultivation business, starting from site preparation, selection of seedlings, tying the span rope, planting, harvesting and drying is still relatively managed in a simple way. Seaweed farmers use nylon rope as a hanging medium more resistant to waves and can last up to 5 years. One of the informants said that, "The nylon rope used has a long durability after each use, the nylon rope is cleaned and washed and then reused with seaweed".

In the initial process of planting, it is done carefully to keep the rope stretched regularly and prevent the seaweed ties from untiring. The use of technology during the production process was carried out which initially used rowboats to increase switching to using motorboats. Drying technology that originally used a court around the sea coast or the side of the road body ended up using a hanging system and para. Farmers know that the drying method is most effective in reducing moisture content quickly and evenly.

3. Stages of Seaweed Cultivation by Farmers
The stages of seaweed cultivation in Gone Bhalano Village involve a series of sequential steps to achieve the desired results. Here are the general stages in cultivation by seaweed farmers:

a. Land Preparation
Determining the location of cultivation is the first step for a series of land preparation for seaweed cultivation activities. Coastal locations are protected from industrial pollution, household waste, and other things that cause a decrease in water quality that can cause turbidity. These conditions can potentially reduce the quality of seawater and ultimately hurt seaweed growth. An informant provided information that "The cultivation site must have sufficient water movement so that it can cause the plant to obtain food". Waters that have sandy bottoms mixed with dead coral are good locations for seaweed cultivation. Good water conditions are often found with the condition of sea waters that are still clear, slightly bluish, and protected from hard waves. The depth at low tide is as low as 0.4 m, the water temperature is optimal 20-36°C. An effective method of cultivation at locations more than two meters deep is by longline. Longline is a way of cultivating seaweed in the water column (euphotic) near the surface of the water using ropes stretched from one point to another with a length of 25-50 m, in the form of loose columns or connected with the help of buoys and anchors. Assembly of the stretch for the cultivation site using the longline method takes 3.5 hours.

b. Planting
Seaweed planting by farmers in Gone Balano Village by longline method, using plastic rope and aqua bottles as buoys. Because of the location of deep waters, this method is most appropriate for farmers. This method is simple and economical and can be applied at the cultivation site. The advantages of this method are that the plant is sufficiently receptive to sunlight, the plant is free from pests that are at the bottom of the water, fast growth, easy way of working, cheap. The seeds obtained come from seaweed raised until the age of 29-30 days. For planting seaweed by propagating plants through cuttings, namely by cutting the tip of the plant along 10-15 cm. Seaweed pieces as much as 2-3 thallus or weighing about 50-100g with a bond distance of 10 cm. Then tied to the rope is then tied to the rope that stretches out in the waters. Rarely between the ropes about 10-15 cm.

![Figure 1. Longline Method](image)

Tali nilon

c. Therapy
Treatment is carried out one week three times or see the condition of the plant by shaking the rope up and down, in the hope that the dirt that sticks can be released. Pay attention to each bonding condition, if a rotten or detached seaweed condition is found, it is replaced with healthy seaweed. Taking into account the condition of the plants, the longer the maintenance, the more weight the
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seaweed, it causes the float to sink. So to maintain the seeds in the right position, plus the number of buoys, the hope is that seaweed will get enough sunlight. Treatment is still carried out even if the water conditions are not supportive such as choppy. Damage caused by waves and decreased equipment durability must be repaired immediately so that losses can be avoided.

d. Harvest
Harvesting is done when the seaweed has reached the desired size, which can last several weeks or about 30-45 days. Harvesting is done by untying the rope and transporting it to the drying location on the coast together with the rope. The harvesting process is carried out by carefully avoiding seaweed thallus fractures. Cleaning remains to remove sand, shells, or foreign bodies attached to the plant. After subsequent cleaning, the drying process. After drying, the seaweed is sorted based on its size and quality. The better part is sold, while the other is processed into value-for-sale products.

e. Marketing
Marketing is essential to connect crops with consumers. Seaweed farmers work with collectors to market their crops. Lack of information about seaweed buyers often makes seaweed farmers limited in the choice of selling their products. In situations where farmers do not have sufficient access to markets or do not have a strong network with direct buyers, they often sell their crops to collecting traders. These collecting traders act as intermediaries between farmers and wholesalers who may have access to a wider market. Collecting traders will buy seaweed from farmers at a price they specify, and then they will send the harvest to wholesalers or exporters. While this can give farmers access to larger markets, a lack of information and direct involvement in the marketing process can potentially reduce the profits earned by farmers.

Marketing of seaweed cultivation products in Gone Balano Village, Muna Regency is local because marketing is carried out in Gone Balano Village. As for the condition of the selling price of seaweed per kilo, which is Rp. 5,000 - Rp. 12,000 / Kg bagged, related to efforts to increase the selling value of seaweed, no efforts have been made to advance seaweed marketing so that it affects the economy that does not increase.

4. Post-harvest Handling of Seaweed Cultivation
Unlike other businesses, the post-harvest processing process is still simple. The harvest is dried directly and then sold to collecting merchants. The relatively low post-harvest handling process in seaweed cultivation does not encourage the creation of other functional effects. According to the informant, "The ability comes from one's own knowledge by looking at other farmers, there are procedures for handling seeds until harvest is obtained from extension workers. Meanwhile, how to be able to process the harvest has not been conveyed by extension workers.

Seaweed farming business actors are an important part of the study to see the marketing chain as well as the role of seaweed farmers. Since the development of seaweed cultivation in Ghone Balano Village, the role of farmers as seaweed cultivation business actors has not represented the interests of coastal communities into commodities that can have an impact on improving welfare. One obstacle is that the role of farmers remains shackled in the network of other business actors who play a role. Farmers have resources in the form of location, equipment and labor. The production process until drying takes about 50 days depending on the length of maintenance time and the drying process. The end-of-harvest process in the form of dried seaweed with certain qualities is ready to be sold / marketed. No post-dry storage container is needed as the merchant/collector is ready to weigh and pay. The bond that occurs between farmers and collecting traders occurs in the form of loans/capital assistance. Transactions to farmers are carried out in cash without bargaining, because the price is determined by the collector. Seaweed is purchased at a price of Rp. 5000-Rp 12,000 / Kg according to the type of seaweed.

1. CLOSING
a. Conclusion
From the results of the research, as described, the following conclusions can be drawn:
1. Seaweed farmers in Ghone Balano Village represent themselves as a community that is transitioning from the life of fishermen who have a traditional-based socio-cultural system to a farmer culture or layt grass cultivation with a modern socio-cultural system.
2. Seaweed farmers in Ghone Balano Village are increasingly real when the production process in the seaweed cultivation business which is more characterized by household business activities is faced with a marketing process that tends to be capitalistic.
3. The transformation process through capital formation is very slow in the absence of capital from the government or related institutions.
4. The absence of knowledge of seaweed farmers related to production results is an obstacle to increasing the added value of seaweed.

b. Suggestion
From the conclusion of the study of the problem of seaweed farmers in Ghone Balano Village, it is hoped that related parties, especially the government, can make the following efforts:
1. The role of the government and private sector is needed to create access to capital through the establishment of financial institutions that touch the interests of weak economic groups with easy conditions and affordable installments.
2. The role of the government and private sector is needed to form institutions so as to facilitate market access by farmers who ensure the sustainability of seaweed production and prices.
3. The role of the government and private sector is needed to develop businesses oriented towards post-harvest development through the development of industrial centers in Ghone Balano Village.

REFERENCES