



Seaweed Farmer Income and Family Socioeconomic Life

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Abstrak. Fluctuating incomes of seaweed farmers are considered to affect the socioeconomic life of their families. For this reason, this research article aims to describe the income of seaweed farmers in relation to the socioeconomic life of their families. The research method uses descriptive-qualitative methods. The determination of research informants is carried out deliberately based on research objectives and certain considerations. The sources of research data, are 1) Primary data, which is collected from direct observation and interviews. 2) Secondary data, which is obtained from library sources and data relevant to research. Data analysis techniques are descriptive-qualitative. The results showed that the income of farmers from trying to farm seaweed in Lasitae Village can be said to be sufficient to meet the needs of their families. This is supported by the area of land owned and the success of farmers during each harvest and the selling price of seaweed which is quite good today. This can be seen from the awareness that farmers have to send their children to school even though it requires a large cost. The motivation to send children to school is seen up to graduating from high school and even to the college level. Most of them already have adequate facilities and facilities to support their daily activities and families. Also, have a habitable place to live from the income they set aside from the results of farming seaweed.

Kata kunci: *Income; Farmer; Seaweed; Socioeconomic life; Family*

A. INTRODUCTION

Indonesia as an archipelagic country with a coastline of 81,000 km, and also a coastal and marine area that has a variety of biological resources that are very large and diverse. However, poverty is one of the problems that always receives attention in fishing communities where there is income inequality and social inequality in coastal communities. Several studies on the level of welfare among fishermen have shown that poverty and socioeconomic inequality are fundamental problems faced and not easily overcome. For this reason, various biological resources owned in coastal areas are very important potential for aquatic development as sources of new economic growth.

One of the biological resources of these waters is seaweed (Rasyid, 2010). Seaweed is a marine biological resource that is rich in benefits because it can produce agar, carrageenan and alginate which are widely used in the world of food, beverage, pharmaceutical and non-food industries. Given its very high production potential and ease in the cultivation process, the use of domestic seaweed becomes so large (Utomo, dan Satriyana, 2006). To achieve maximum production, several supporting factors are needed, including the

use of quality seaweed types, intensive cultivation techniques, proper post-harvest and smooth production (Jana T. Anggadirejo, 2006).

As an archipelagic country, seaweed development in Indonesia can be carried out widely in coastal areas by farmers / fishermen. Although not all coastal areas in Indonesia can be used as land to cultivate seaweed (Ardiantara, 2011). However, in coastal areas that allow for cultivating grass, the results of livelihood as seaweed farmers can be used as one of the income and export commodities that can contribute to the country's foreign exchange sources. In addition to a source of income for seaweed farmers, seaweed cultivation can also absorb labor from coastal communities, and maximize the use of coastal waters in Indonesia's coastal areas which are very potential. Therefore, seaweed cultivation has been considered as an important commodity that contributes to increasing economic growth in Indonesia (Fauzi, 2010).

Some of the main factors to support seaweed cultivation, namely site selection, as one of the success factors of seaweed cultivation. This is because it is relatively difficult to make certain treatments for the ecological conditions of marine waters that are always dynamic, so the amount of seaweed production in some regions varies greatly. Fluctuating environmental changes sometimes cause the emergence of pests and diseases that affect production capacity. Seasonal factors and factors affecting global warming also affect seaweed planting patterns because the quality of waters decreases and due to high waves results in less suitable for seaweed growth. As a result of seasonal changes such as high waves during the production period, the bonds of buoys, seaweed seeds, wooden stakes and anchors will become looser if the initial binding is less strong. The loose ties are getting longer and longer causing buoys, seaweed seeds, wooden stakes and anchors to be released so that if control is not carried out it will harm seaweed farming (Setyaningsih, 2011).

The results of preliminary observations of the study show that the coastal communities in Lasitae Village, some of their livelihoods do depend on marine wealth, one of which is seaweed and some work as traditional fishermen, charcoal makers, and others. For seaweed farmers, seaweed cultivation is a staple job because side jobs only depend on the season and free time. Seaweed farmers in Lasitae Village, are seaweed farmers who farm seaweed on their own land and not work for others, in order to meet family needs. Their income as seaweed is sometimes enough to meet the needs of their families and sometimes also insufficient if the selling price of seaweed products is relatively cheap. This does not make them discouraged, in their work as seaweed farmers due to fluctuations in the price of seaweed products in the market. As in recent years, with the unstable selling price of seaweed in the market, the results obtained by seaweed farmers have become erratic.

The unstable price of dried seaweed in recent years, and the lack of production due to pests and diseases that attack their seaweed plants, have an impact on the lack of income / income of seaweed farmers. In addition to the problem of uncertain selling prices of seaweed, several problems identified in the seaweed business that affect the income of seaweed farming families include: 1) Seaweed business development strategies are still lacking: 2) The bargaining position of farmers to traders is still low: 3) Limited application and transfer of seaweed cultivation technology needed to increase the productivity of quality crops, 4) Problems that can hinder the creation of competitiveness and productivity in the development of the seaweed industry, 5) In potential unmanaged cultivation locations, 6) Infrastructure to develop seaweed is still very limited, 7) The potential of cultivation areas is still not optimal use, 8) Crop failure problems still often occur in an area.

Uncertain income is supported by seaweed harvest period for ± 30 -40 days and drying period for ± 40 -45 days, then seasonal factors that are sometimes unfriendly because it depends on changes in the ecology of marine waters in seaweed cultivation sites and fluctuating seaweed selling prices according to prevailing market prices. So it is assumed that the income obtained from seaweed farming will affect the socio-economic condition of seaweed farming families in the coastal area of Lasitae Village, Barru Regency. For this reason, this research article aims to describe whether farmers' income from seaweed farming can be a solution to the socio-economic life of farming families in Lasitae Village, Barru Regency.

B. METHOD

The research method used is a descriptive-qualitative research method that aims to find, study, and describe data systematically, factually from accurate facts, properties and relationships between the phenomena studied, which describe the socioeconomic conditions of families working as seaweed farmers. Qualitative research method is a method based on the philosophy of postpositivism, to examine objective conditions that are natural, and researchers are key instruments (Sugiyono, 2012).

This research was carried out in Lasitae Village, Barru Regency with the consideration that in this village area, some of the people work as seaweed farmers. The informants in this study were seaweed farmers. The determination of research informants is carried out deliberately based on the purpose of research and certain considerations, from relevant government agencies and agencies and community members who work as seaweed farmers and are considered worthy of being a source of data in research because they are considered a lot about the things and problems studied. The determination of informants to facilitate the research process is carried out deliberately.

The source of research data, is 1) Primary data, namely data collected from direct observation (observation) and interviews. 2) Secondary data, namely data obtained from library sources and data relevant to research. Data collection is carried out in the following ways (1) determine the scope of study, (2) collect data or information through observation and interviews.

The data collection techniques used are 1) Observation, where researchers are directly involved in the process of identification, data collection and studying existing phenomena; 2) The interview is conducted in an open interview, that is, the researcher gives freedom to the informant as a source of informant data so as to encourage the informant to express his opinion broadly and deeply about the object studied. Data validity is carried out through data validity tests in qualitative research including credibility tests (internal validity), transferability (external validity), dependability (reliability), and confirmability / objectivity (Sugiyono, 2012).

The analytical technique used in this study is qualitative data analysis technique. Qualitative data analysis (Moleong, 2010) is an effort made by working with data, organizing data, sorting it into manageable units, synthesizing it, searching and finding patterns, finding what is important and what is learned and deciding what can be told to others. According to Miles and Huberman (1984), states that there are four main stages in qualitative descriptive analysis methods, namely data collection, data reduction / data simplification, data presentation and conclusions.

C. RESULTS AND DISCUSSION

1. Farmer Income from Seaweed Cultivation

The contribution of the agricultural sector in Indonesia's development is very important. The development of the agricultural sector is directed to increase the productivity of agricultural products to meet the food needs of the community and the needs of domestic industries, increase exports, increase farmers' incomes, expand employment opportunities and encourage agricultural opportunities. Agriculture is the basis of human life, in addition to being the main source of food, agriculture also contributes other potentials as a trade material and as an industrial material.

Farmers as subjects in agriculture according to Koslan A. Tohir (1991), that are people who work in the agricultural sector, both garden agriculture, fields, rice fields, fisheries and others on a land. This means that farmers are people who grow crops (cultivate) on agricultural land (Scott, 2012). Also, as an owner and working on agricultural land to produce products that are used to meet their own needs (Wolf, 1985). Thus a seaweed farmer can be interpreted as a farmer who does business in the field of fisheries, namely working on seaweed, with the hope of obtaining results from the seaweed business, to meet daily needs.

The Lasitae community who work as farmers consist of owner farmers and sharecroppers as well as agricultural laborers. This causes a difference in income from the farming products they get. Grass farmers in this village area have an average of 5-12 years of work experience where work experience shows the average worker who has undergone his profession as a seaweed farmer in a certain period of time measured in years. Although among coastal communities this village has a variety of livelihoods such as working as fishermen, and gardening.

For seaweed farmers in Lasitae Village, trying to farm *Euchema cottoni* is a life that requires a business by working and aims to achieve family welfare. The life of the Lasitae people who depend on work as seaweed farmers makes them fully expect a good income to meet the family's economic needs, such as children's education needs, health costs, and housing which are the basic needs they must meet. The life of seaweed farmers is basically the same as the life of farming people in general, namely working, collecting produce to sell and earning money in order to meet the needs of their families.

The main problem that arises from seaweed farmers is mainly in terms of income. Income until now is still a benchmark for the welfare and social status of a community. Differences that are too unequal will cause social problems in the midst of society. Because income distribution must be carried out more fairly in one of the leading commodities, the agricultural sector such as seaweed has become one of the sources of income for farmers in Lasitae Village. Seaweed is a potential commodity in contributing to the income of farming families.

The success achieved by seaweed cannot be separated from the large amount of land owned, and working capital to the income of seaweed farmers, but the area of land owned affects the income produced by seaweed farmers. Because land area and working capital are very important for the income of seaweed farmers. Income from seaweed farming is supported by the existence, land area and working capital costs needed in cultivating seaweed. If seaweed farmers do not use as well and optimally as possible their land area, it will affect their income conditions.

The amount of working capital used by seaweed farmer informants will certainly determine the results of seaweed production. In general, seaweed farmers in this region have

working capital between Rp. 3,000,000 to Rp. 5,000,000. Meanwhile, some of the seaweed farmer informants have a working capital of Rp. 6,000,000 to Rp. 8,000,000. But there are 3 seaweed farmers who have working capital of Rp. 10,000,000 and above. The working capital expenditure depends on the area of land owned, materials and tools used, labor wages, quality of seeds and others that are considered by farmers to be very influential on seaweed cultivation. From the data found, generally seaweed farmer informants have a land area of 1,500 m². And some of the informants of seaweed farmers who have a land area of 2,000 m² to 5,000 m². Medium 2 which has a land area above 5,000 m² to 7,000 m².

The income in this study is the income of informants who process as seaweed farmers in Lasitae Village in one harvest. In Christopher's view (Sumardi, 2004) defines income based on the economic dictionary as money received by someone in the form of salary, rent, interest, profit and so on. Data from interviews found that the income of seaweed farmers is quite diverse due to several factors that are quite influential in cultivating seaweed, including: capital, quality of seaweed seeds, weather, area of cultivation land and seaweed cultivation techniques applied.

At the beginning of cultivating seaweed, the income of seaweed farmer informants from cultivation results was still minimal but seaweed was increasing day by day. This is in line with the increasing demand for seaweed and a good selling price in 2022, which is Rp. 27,000 per Kg for dried seaweed. The average yield obtained from harvesting seaweed is not less than Rp. 7.500.000,- per harvest. If accumulated seaweed farmers can harvest up to 3 to 4 times a year with reference to the age of seaweed that can be harvested at the age of 40 days and the use of quality seeds that can be used for 3-4 times cultivation and a land area of 1,500 m², then the income of seaweed farmers if successful in cultivation in a year is Rp. 22,500,000 to Rp. 30,000,000. This income will certainly be different from the harvest of seaweed farmers who have more land if successful for a year for each harvest.

According to Hendropuspita (1989) said that the main criteria used to classify a number of people into types of economic society are economic factors that play a dominant influence on people's lives as a whole. This means that the economy is the highest law of all activities of the entire population, aimed at economic success as the highest peak. High and low social status and position in society are measured according to high and low economic status.

2. The Impact of Income on the Socioeconomic Life of Farmer Families

The results showed that through seaweed business, the income earned so far can support the economy of seaweed farmers and their families even though the income from seaweed farming is sometimes erratic due to seaweed pests and diseases and the erratic local selling price of seaweed. Sometimes high yields have an impact on income but also have obstacles they face, for example ranging from crop failure, low yields or falling selling prices. Therefore, income from working as a seaweed farmer is sometimes not sufficient to meet the needs of their families, especially educational needs, health costs, and other family needs. Regarding the amount of income obtained by seaweed farmers from seaweed farming, it cannot be said to be an absolute number because their income is unstable or always changes depending on the selling price of seaweed and growth rate. However, one thing is certain that their income can meet the daily needs of their family.

Because of the increasing economic needs so that the income from working as a seaweed farmer, of course, family finances must be really managed properly, especially with the obstacles experienced during the cultivation process. Some informants complained about

inhibiting factors that they considered to be part of the risk of the work they pursued as seaweed farmer workers. It is not an easy thing where they have to adjust to the circumstances of the ecological environment to survive. Although the work of being a seaweed farmer has been done so far, it has become the main job for them, but the inhibiting factors they encounter sometimes do not dampen their enthusiasm in working because there are more important things to fulfill, namely the basic needs of their own families.

It can also be seen from the data obtained that seaweed farmers and their families are very passionate about and value the work of their livelihoods. This is because by being successful seaweed farmers every harvest season, they are able to produce material to support the fulfillment of the family economy. They can even send their children to school, and can meet their basic daily needs, and can have valuable items supported by family side jobs such as opening stalls, gardening, farming, traditional fishing etc. Although when viewed from their level of education, it shows that the education level of these seaweed farmers can be said to be very low. Almost some of the seaweed farmers in the area did not finish or finish their primary school. Some other seaweed farmers only reach the elementary level. The low level of education of these seaweed farmers, motivated by the understanding that education is not needed and believed they are hereditary, but want to work directly to earn income.

Meeting the educational needs of children, of course, requires a lot of money. And it has become the duty of parents of seaweed farmers as heads of families to educate children and provide facilities for their children's educational needs. When viewed from the results of interviews conducted by researchers with several informants, it can be concluded that all informants have realized that receiving education for children is very important. For the most part, seaweed farmer informants have been able to send their children to school. For them, education is the most important thing because the times are increasingly advanced and developing so for them it is necessary to equip themselves with education. Therefore, they try to improve the family economy so that they can provide the highest education to their children. Some children of seaweed farming families have reached the level of marriage and some have received the title of serjana. For some seaweed farming families who do not have children who are in school and or their children have finished school and do not want to continue their education to a higher level, they save for their children for marriage and other purposes in the future.

Seaweed farmers in Lasitae Village are always motivated to get a better income every harvest. In the hope that the income they get when harvesting can be sufficient for the survival of their families. But the income of some seaweed farmers is also inseparable from additional income from side jobs and their families. For seaweed farming families to have additional income, side jobs other than as seaweed farmers are certainly inseparable from personal expectations, needs, wants, and satisfaction. This is inseparable from the obstacles they sometimes face, such as crop failure, low yields, and falling selling prices. From the income from the seaweed business and side income, of course, seaweed farmers can meet their living needs. So it can be concluded that from meeting the needs of seaweed farmers, it can be classified according to Maslow's theory of needs, namely the first level of needs to the third level of needs, namely the first, the level of physiological needs, namely primary needs, such as eating, drinking, clothing and shelter but the need for education which is an important factor and other needs. The second needs security, after physiological needs are met and the third is social needs, because in living life, humans always need help from others.

The results of the researchers' observations also show that in terms of ownership or wealth, including residence or household conditions, most of these seaweed farmers already

have several facilities including valuable items such as televisions, refrigerators, and motorcycles, as a support in carrying out their daily activities. The goal is that they can speed up the process of carrying out their work so as to save time, increase productivity, and make it easier for them to move, as well as provide comfort both for farmers and for their families. Most seaweed farmers already have a place to live or a habitable living condition from the income they get from the results of their business. According to Melly G Tan that socioeconomic position includes 3 (three) factors, namely employment, education and income.

High and low income from seaweed farming can indicate the socioeconomic life of seaweed farming families. This according to Paulus Wirutomo, (2012), states that more due to the high and low socioeconomic conditions of a person in society are determined, namely: from the level of education, income, economic activity or type of work, wealth ownership can be explained in the state of residence or residence and position in the organization, as well as the existence of social relationships created in the work environment. This will then show the social status of the seaweed farmer's family. Socioeconomic status according to Kaare Svalastoga, (1989), is a position occupied by an individual or family in accordance with the prevailing general average measure of cultural ownership, effective income, goods and participation in the activities of his group and community.

In addition, the social status obtained from the socioeconomic life of the seaweed farming farmer family, in the perspective of studying the structure and function of the community is a sociological problem. Where a function is a collection of activities that are shown towards meeting certain needs or system needs. Then in Parsons' concept of cybernetics, that it controls the existence of a mechanism for the continuity of the social system in its society. For this reason, every society needs to carry out socialization of its social system, aiming to integrate the personal system and cultural system into the social system. The cultural system in this case becomes the foundation of the social system, then the social system becomes the basis of the individual and then the individual system becomes the basis of the biologicistic organism system (Ritzer, 2012) In order for the entire system to live and take place, there are certain functions or needs that must be met. The two main things of need are related to the needs of internal needs or system needs when related to the environment and those related to the achievement of goals or objectives, as well as the means necessary to achieve goals.

3. CONCLUSION

The farmer's income from trying to farm seaweed in Lasitae Village can be said to be sufficient to meet the needs of his family. This is supported by the area of land owned and the success of farmers during each harvest that is not disturbed by pests and diseases and the selling price of seaweed is quite good today.

The better socio-economic life of the family is driven by the large income generated by seaweed farmers every harvest in a year. Although the education of seaweed farmers can be said to be low, they have the awareness to send their children to school at a large cost. This can be seen from their motivation to be able to send their children to graduate from high school and even to the college level to achieve a bachelor's degree. Most of them already have adequate facilities and facilities to be able to support their daily activities and their families. Also. already have a habitable place to live from the income they set aside which is obtained from the results of the seaweed business.

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