

Analysis of Bumdes System Development and Institutional Principles in the Framework of Seaweed Agribusiness System Development

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ABSTRACT. This study aims to analyze the system development and institutional principles in the framework of the development of the seaweed agribusiness system. This study was conducted in the Takalar Regency and Pangkep Regency areas as centers of production of marine seaweed and ponds in South Sulawesi. The research method used in this research is a case study with descriptive data analysis. The results showed that in these two areas there were around 62 BUMDes in Takalar Regency which spread over eight sub-districts, and 55 BUMDes in Pangkep Regency spread over 12 sub-districts. In general, BUMDes are declared to be actively operating as rural business groups (units) but are still not properly institutionalized. The dominant BUMDes businesses still revolve around small-scale savings and loan businesses. Observations in two BUMDes at seaweed production centers, namely in Laikang, Takalar Regency, and in Pitusunggu, Pangkep Regency, BUMDes management has not had much contact with seaweed agribusiness activities. Business units related to seaweed in BUMDes are mainly in Pangkep, namely in the form of processed food products (pastries) whose marketing is still limited so that added value and income are still low. Efforts to develop institutional systems, namely regarding persons, goals/interests, norms/rules, and relationships. Meanwhile, the principle of institutionalism focuses on existing conditions, shared needs, systemic thinking, participation, effectiveness, efficiency, flexibility, added value/benefits, decentralization, and sustainability. The two studies focus on agribusiness institutions, namely production institutions, post-harvest institutions, processing institutions, and marketing institutions.

Keywords: System; Principles; Institutions; BUMDes; Agribusiness.

1. INTRODUCTION

Seaweed is one of Indonesia's export products that has begun to develop in recent years. South Sulawesi is a seaweed producing center in Indonesia. In 2014, seaweed production in South Sulawesi amounted to 2.88 million tons, consisting of Cotton 1.93 million tons, Grasilaria 0.83 million tons, and spinosum around 0.12 million tons (BPS South Sulawesi, 2014). The large potential of seaweed needs to be developed as a source of income for coastal communities. Not only important for local income and economy, but seaweed can also be a sector of livelihood for coastal communities. Most of the seaweed produced in South Sulawesi is exported to the Philippines, China, Thailand, and Hong Kong. In 2014, the production value of South Sulawesi seaweed reached Rp. 3.198 trillion (South Sulawesi Provincial Fisheries and Maritime Affairs Office, 2015). For coastal communities, seaweed cultivation is the main source of income apart from fishing. In terms of certainty, seaweed cultivation is better than

fish catches/fishing. However, seaweed cultivation by the community still faces many obstacles. The living conditions of coastal communities are very vulnerable to environmental changes. Seaweed farmers generally have a small business scale. Although seaweed production increases from time to time, the long market chain results in low farmer-level prices. This condition will automatically affect business, both in the general capture fisheries sector and seaweed cultivation and ultimately have an impact on the welfare of coastal communities. Market distortion also causes commodity prices to be cornered below their intended price (undervalue), production margins much smaller than market margins so that there is a tendency for larger margins to be generally obtained by business actors in the trading sector. Farmers' efforts to improve quality are not followed by obtaining the added value that allows farmers to get better income. (Syafiuddin Saleh, 2018).

The presence of Village-Owned Enterprises (BUMDes) as a business group in rural areas has

started to be encouraging and needs to be considered in advancing farming, especially seaweed in coastal areas. Andi Samsir's research (2016) in Bantaeng Regency concluded that BUMDes can encourage and develop the economic potential of the village; In addition, business units developed through BUMDes such as savings and loans, trade and agro-industry units are considered capable of overcoming problems faced by the coast community. However, based on the data that has been described, BUMDes as an emerging business institution cannot yet be said to be strong and still faces various challenges and problems, especially in institutions, production capacity, business diversification, and marketing. So this research makes this case the focus of observation or research.

BUMDes is a business unit that brings together small-scale rural business actors so that they become larger-scale business units. Ramadana (2013), citing the opinion of Rahardjo and Ludigdo (2006) states that in Law Number 32 of 2004 and Government Regulation Number 72 of 2005 it is mandated that in increasing community and village income, village governments can establish Village-Owned Enterprises (BUMDes) in accordance with needs and potential of the village. In terms of planning and formation, BUMDes is built on the initiative (community initiation) and is based on cooperative, participatory, and emancipatory principles, with two underlying principles, namely member base and self-help. This is important considering that the professional management of BUMDes is truly based on the willingness (agreement) of the community at large (member base), as well as the ability of each member to be independent in meeting their basic needs (self-help), both for production (as a producer) and for consumption (as consumers) must be done professionally and independently. The establishment of village-owned enterprises is mandated to increase community and village income, the village government can establish village-owned enterprises.

This BUMDes institution pillar is a village socio-economic institution that is truly capable of being a commercial institution capable of competing outside the village. BUMDes as a people's economic institution as a commercial institution, first of all, take the side of meeting the needs (productive and consumptive) of the community through distribution services for the provision of goods and services. This is manifested in the procurement of community needs that are not burdensome, such as cheaper prices and easy to obtain and profitable. In this case, BUMDes as a commercial institution still pays attention to efficiency and effectiveness in real sector activities and financial institutions (Ramadhana, 2013). The BUMDes business unit in agribusiness activities in rural areas needs to be a

strong institution or able to compete if the business unit has a strong institution as well. This institution determines the progress of the BUMDes business unit.

Nuraini (2016) defines that institutions include two important demarcations, namely norms and conventions and rules of the game. Institutions are sometimes written formally and enforced by government officials, but institutions can also not be formally written as in the customary rules and norms adopted by the community. Institutions are generally predictable and fairly stable and can be applied to recurring situations, so they are often interpreted as a set of rules or procedures for the continuation of a group of interests. So, the institutional definition is a collective activity in control or jurisdiction, liberation or liberation, and expansion or expansion of individual activities (Arifin, 2005 in Nuraini, 2016). Based on the level, institutions can be categorized into four categories, namely: social institutions, groups, organizations or associations, and institutional institutions. Social institutions are certain rules that are adhered to by the community in general and are widespread, for example, the land rental system, production sharing, bonded bonds, lending and borrowing between farmers, paying loans after harvest, and others. Groups (farmers) are groups (farmer farmers) that are informal in nature. The ties in the group originate in harmony in the sense of having the same views, interests, and occupations as well as the same calm, for example, rural broadcast listeners groups, arisan groups. Organizations or associations (farmers) are formal organizations (farmers), with clearly registered members and management. This (farmer) organization has a written bylaw, including goals, businesses, membership requirements, and other provisions (Adjid, 2001 in Nuraini, 2016). BUMDes that have strong institutions are not only able to organize production units but are able to carry out product marketing profitably. The implication of this business will result in an increase in income. The increase in income is not only determined by the quantity and quality of production but also by the high selling price or volume in product marketing.

Marketing is the process by which companies create value and build strong customer relationships to recapture value from customers (Kotler and Armstrong, 2008). In creating value for customers and building customer relationships, there are steps: (1) understanding the market and customer needs and wants (2) designing customer-driven marketing strategies (3) building an integrated marketing program that creates superior value (4) building profitable relationships and creating customer satisfaction and finally (5) creating value from customers to create profit (revenue). If BUMdes is

able to do marketing according to the rules as mentioned, it will provide a better income level and result in increased welfare. Soekartawi in Purwanti (2007) suggests that net income (profit) is an indicator of the welfare level of farmers. This net income is calculated by calculating the difference between gross income or revenue and costs during the production and marketing processes that have been carried out.

2. METHODS

This study was conducted in Takalar District and Pangkep Regency, South Sulawesi Province as centers for producing marine seaweed and ponds. The research method used in this research is that in the first year it focuses more on descriptive methods, case study methods, and triangulation. In data collection, apart from conducting general observations and interviews with seaweed farming communities and parties who understand the condition of coastal communities, in-depth interviews were also carried out, and collection of evidence or documentation related to cultivation, post-harvest, and overall marketing of seaweed at BUMDes which specializes in managing grass. the sea.

This research uses descriptive qualitative and quantitative approaches. As already stated, using a case study research method combined with the triangulation technique. In the early stages of this research, a comprehensive enumeration of the existence of BUMDes will be carried out in the two districts being observed or that will be the research subjects. Furthermore, interviews and general observations were made about the physical condition of the physical environment and infrastructure, the state of agricultural resources or the seaweed production process, the activities of the seaweed farming community from a social, economic, and cultural point of view, both individually and in groups. The next stage is to identify the institution and management of BUMDes that will be the focus of observation and conducting interviews that are designed in a semi-structured manner. After the data is collected, the data is compiled and reduced, processed, and analyzed to obtain conclusions and solutions.

In the following years, the research design used more of a qualitative approach, although still analyzing the data in a quantitative way as needed. Data analysis was carried out using qualitative and quantitative analysis. For quantitative data analysis, a formula is used according to the needs of this study. Determine the added value of seaweed production is calculated using the Hayami method (2009). namely by comparing the value of the final product with the use of raw materials in the post-harvest process, processing, and marketing of seaweed. Meanwhile, to determine the amount of profit income, namely by comparing all gross revenues or revenues with the total costs used during the process of producing seaweed products

3. RESULT AND DISCUSSION

In Takalar District, each village has been formed BUMdes as a forum for the village economy but not many have developed into well-institutionalized business units. One of the BUMdes that is the focus of observation in this research is BUMdes Laikang. Initially the choice of observation at BUMdes Cikoang, but because the potential amount of seaweed in Cikoang Village is relatively less than the potential of seaweed in Laikang Village, the next choice of observation is at BUMDes Makasaung rilangi Laikang Village. Laikang Village is a village located in the southern part, 23 km from the capital city of Takalar Regency, bordering Jeneponto Regency. Whereas in Pangkep District the choice of the district was made in the Ma'rang District area. This sub-district has several villages, namely: Talaka, Mata Allo, Padanglampe, Alasipito, Ma'rang, Bonto-bonto, Pitue, Pitusunggu, Tammangapa, and Punranga. Among these villages, Pitusunggu Village was chosen to be the target of observation. This village has farmer or cultivator households including seaweed which is bigger than other villages and besides that, it has BUMdes which have started to have activities related to seaweed. The BUMDes is BUMDes Mandiri, Pitusunggu Village. Based on the conditions of the two locations, the profile of this research location can be stated as in Table I.

TABLE 1. Profiles Of Bumdes Research Locations For The Development Of Seaweed Agribusiness Systems

No	Name of Regency	An area(km ²)	Total population	Number of District	Area of study
1	Takalar District	566,51 km ²	292 893	9	BUMdes Makasaung Rillangi, Laikang Village, Mangarabombang District
2	Pangkep Regency	1112,9 km ²	329 791	13	BUMDes Mandiri, Pitusunggu Village, Ma'rang District

Table I explains that BUMDes Makasaung Rilangi is a business unit formed in Laikang Village, Mangara Bombang District, Takalar Regency.

Laikang Village is a village that is located at the end of the sea from Mangara Bombang District and borders Jeneponto Regency. This village is bordered

by other villages such as Punaga, Pattopakang, and Cikoang. The villages that have been mentioned are coastal villages that have long been familiar with seaweed cultivation and most recently this area is the largest seaweed supplier in Takalar District. Laikang Village consists of 6 hamlets with a total population of around 4000 people. The people of this village generally make a living in dry/brackish agriculture and are planted once a year. In the coastal areas, the population is partly fishermen who catch fish. Besides, they become seaweed cultivators. In general, the environment of Laikang Village is part land and part sea. According to S. Dg Sau (61), a local community leader, in the past, the source of clean water for residents has dug wells around residential areas. Generally, residents dig wells around large trees in coastal areas, but some other residents have difficulty getting clean water.

In the last few years, the residents of Laikang Village have obtained clean water facilities through plumbing. Social relations among villagers are not much different from those in other villages in South Sulawesi. Their social interactions are still thick with togetherness and kinship. The eldest figure in this village is Dg Nyangka or also known as Karaeng Daeng Nyangka (67 years old), the former village head for nearly 30 years. Mutual cooperation among residents still exists at certain times, especially when residents want to solve problems together. However, in some hamlets, forms of mutual support such as *arisan* have begun to appear, except in Puntondo hamlet which is close to the tourist area of Puntondo. Citizens' meetings on a certain scale are still there at every salvation event held by residents at every celebration. But the big celebration that is always celebrated every year in this region which is quite widely echoed and well known in South Sulawesi is Maudu Lompoa (commemoration of the birthday of the Prophet Muhammad SAW). The center of this activity is Cikoang Village.

Most of the farmers in the six hamlets in this village are practicing seaweed farming (cultivation). The choice of cultivating seaweed is an effort made by residents because farming is only done once a year, namely during the rainy season. The largest number of seaweed cultivators is in Puntondo and Ongkowa hamlets. The two hamlets are the center for seaweed cultivation in Laikang Village. The scale of seaweed farming can be seen from the number of stretches cultivated, ranging from 400 to 1500 stretches with an average production of 10 tons per stocking season. The local seaweed business products are generally marketed directly by farmers to local traders/investors. These investors are farmers (cultivators) but also act as collectors and providers of capital. Two traders who played an important role were H. Ondang and H. Siriwa.

BUMDes Makkasaung Rilangi is a BUMDes that was formed in 2012 at the initiative of community leaders in Laikang Village, facilitated by the district government and village government as well as NGOs. In its journey, this BUMDes is not running well due to difficulties in working capital and inactive management. In November 2017, it was reactivated by agreeing to make changes in management and fix the BUMDes administration and agreeing on the existence of the Articles of Association.

In 2017, this BUMDes received an injection of Village funds, but almost all of it was used to complement business facilities such as shops and preparation for lobster nurseries as part of the BUMDes business plan. Activities related to seaweed activities have not been implemented because the potential for seaweed cultivation generally uses capital obtained from middlemen (village investors), making it difficult for BUMDes to intervene as a form of business, for example by building a trading business. In 2018-2019 this BUMDes still has not received an injection of additional funds from village funds, so BUMDes is practically still not operating properly. According to the BUMDes secretary, efforts to start a business to distribute basic needs require sufficient capital for a certain business scale. The existing funds are still insufficient to operate, and if they are enforced it will not provide significant benefits.

Furthermore, Pittusunggu Village, Pangkep Regency is a village bordering Tammangapa Village, Pitue Village, Villages in Liukang Tupabbiring District. Pittusunggu Village has three hamlets namely Bontosunggu, Kampong Baru, and Punglawahi hamlets. In general, the life of the Pittusunggu village community is still tied to traditions and customs. According to Nurhayati, the Head of Pittusunggu Village, there are several elder community leaders in this village such as the names Kullo, Ase, Haji Gaju, Haji Tuo, and Iye Essu. These names are considered as community leaders because of their understanding of the intricacies of local traditions and customs that are better than other residents. The environmental conditions of this village are quite well organized and the environment is relatively clean, although there are still complaints about the community who do not understand the challenges of ignoring garbage. Diseases that are often complained of by residents are symptoms of dengue fever, as well as diarrhea. But the disease sometimes does not last long, depending on the weather changes. In general, residents seek help at the Puskesmas in the village.

Economic conditions in the village are marked by the results of the production and livelihoods of the population. Generally, the population is fishermen,

fishpond farmers, rice field farmers, and seaweed cultivators. In Pitusunggu Village there are about 125 households who become seaweed cultivators. Each farmer manages a seaweed farm between 200 and 1500 stretches. Among the three hamlets, there are many seaweed cultivations in Kampong Baru and Pangkalawahi hamlets with an estimated piling production of less than 1 ton per year. The results of seaweed production are generally marketed in the village, namely at village level collectors. BUMdes in this village is one of the business units that bring together members of farmers and fishermen including seagrass cultivators. So far, managing village funds to be lent to farmers and fishermen. In addition, they work with a group of village women to process marine products such as seaweed, fish, and crabs. The relationship between the villagers is no different from other rural areas. Generally, interactions are reciprocal and sister-in-law. There is still mutual cooperation between them for activities aimed at the common good. If there is a problem, generally resolve the problem by deliberation. Initiations in the form of salvation that invite neighbors and relatives are still present and sustainable in this village, especially during child circumcisions, marriages, the initiation of fishing in the sea or in a pond. For the last one, the program takes place once a year.

The condition of road infrastructure in the village is quite good, as are those that connect the village to other villages, to the sub-district, or to the district. To go to the city, residents use public transportation (pete-pete) for IDR. 10,000 per trip. Electricity facilities reach every resident in the village, apart from paying for themselves some are subsidized by the government. Electricity is an important means of helping residents' activities. Apart from being used as lighting, some also use electricity for business activities or to improve the family's economy, such as using electricity for the refrigerator (freezer). Electricity is also used to drive home industrial activities such as crab processing, milkfish, and seaweed. These activities are carried out in groups. In Pitusunggu Village, there are about 8 groups that carry out these activities. Communication facilities are also quite good. Residents are already using cell phones. Almost all people have cell phones, some even have an Android phone. The use of communication facilities, such as the internet, is a common practice for some residents in this village.

The BUMDes Mandiri Business Unit as a business unit formed by residents in this village has been around since 2011 and is still active now. Since the beginning, the management has moved this business unit to carry out business management activities in BUMDes. The business undertaken is saving and borrowing and processing of marine

products including seaweed processing. BUMdes Mandiri has been using a business place or office covering an area of 5 x 4 meters, located in Pungkalawahi hamlet. The location is owned or not rented, with 7 people as the driving force or manager. So far, business capital has been sourced from village funds, currently amounting to IDR. 140,000,000. This capital is generally in the form of savings and loans.

4. CONCLUSION

In the two BUMDes which are the focus of observation, there are potential differences to be developed further in an effort to advance the village economy. BUMDes Mandiri in Pitusunggu village for the initial stage has better potential to be developed as a model in system development and institutional principles in the framework of institutional development of seaweed agribusiness.

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