# Bumdes institution and it's capacity to increase efforts, added value and marketing of seaweed production

# Syafiuddin Saleh

Universitas Muhammadiyah Makassar

Email: syafiuddin saleh@unismuh.ac.id

**Abstract**. This study aimed to identify aspects related to the condition and institutional capacity of BUMDes (Village Owned Enterprises) in order to increase added value, marketing and seaweed farming income. This study was conducted in Takalar and Pangkep Regency as seaweed production centers and ponds in South Sulawesi. The research method used in this research was a case study with descriptive data analysis. The results shown that in the two regions there were about 62 BUMDes in Takalar Regency which spreaded in eight districts, and 55 BUMDes in Pangkep Regency spreaded in 12 districts. BUMDes are known as actively rural business units (units) but it is still not well institutionalized. Mostly BUMDes business still revolves around saving and loan businesses in a small scale. Observations in two BUMdes in seaweed production centers, namely in Laikang, Takalar Regency and in Pitusunggu, Pangkep Regency, BUMDes management has not been much in touch with seaweed agribusiness activities. The seaweed-related business unit in the BUMDes is mainly in Pangkep, in the form of processed food products (pastries) whose marketing is still limited so that added value and income are also still low. Other businesses such as trading seaweed products on a larger scale, cannot yet be developed because (1) generally seaweed farmers/cultivators use village middlemen (capital owners) so that their products must be sold back to the capital owners so that the BUMDes can make farmers as business partners (2) adequacy of BUMDes venture capital to develop businesses is still limited (3) skills of BUMDes members in managing businesses is lack (4) marketing reach, has not developed yet, (5) efforts to build partnerships with parties others are also lacking. In the next stage, the appropriate model in the development of the BUMdes is needed.

#### 1. Background

Seaweed is one of Indonesia's export products that began to develop in recent years. South Sulawesi is a seaweed producing center in Indonesia. In 2014 South Sulawesi seaweed production was up to 2.88 million tons consist of 1.93 million tons Cottonii, Grasilaria with 0.83 million tons and spininosum around 0.12 million tons (BPS South Sulawesi, 2014). The great potential of seaweed really needs to be developed as a source of income for coastal communities. Not only important for regional income and economy, seaweed can also be a livelihood sector for coastal communities. South Sulawesi's seaweed is mostly exported to the Philippines, China, Taiwan and Hong Kong. In 2014 the value of South Sulawesi's

seaweed production reached Rp 3,198 trillion (Fisheries and Maritime Affairs Office of South Sulawesi Province, 2015). For coastal communities, seaweed cultivation is the main source of income other than fishing. In terms of certainty, seaweed cultivation is better than fish/sea catches. 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. Even though seaweed production increases from time to time, long market chains cause prices at the farm level to below. This condition will naturally affect the business, both in the field of general capture fisheries and seaweed cultivation and ultimately have an impact on the welfare of coastal communities. Market distortion also results in commodity prices being limited below the actual price (undervalue), production margins are much smaller than market margins that cause a tendency to greater margins generally obtained by business actors in the trade sector. Farmers' efforts to improve quality are not followed by the acquisition of 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 begun to be encouraging and needs to be considered in advancing farming, especially seaweed in coastal areas. Andi Samsir research [1] 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 loan, trade, and agro-industry business units are considered capable of overcoming problems faced by coastal communities. However, based on the data that has been described, BUMDes as a newly emerging business institution can not be claimed as strong and it still faces a variety of challenges and problems, especially on institutions, production capabilities, business diversification and marketing. So this research makes these cases as the focus of observation or research.

BUMDes is a business unit that brings together small-scale rural business actors so that it becomes a larger-scale business unit. Ramadana [2], 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 the income of communities and villages, the village government can establish a Village Owned Enterprise (BUMDes) beased on village needs and potential. In terms of planning and formation, BUMDes is built on initiatives (community initiation), and it is based on cooperative, participatory and emancipatory principles, along with two underlying principles, namely member base and self help. This is important, considering that the professionalism of BUMDes management is really 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 in the interests of production (as producers) and consumption (as consumers) must be done professionally and independently. The establishment of village-owned enterprises is mandated to increase the income of the community and villages, the village government can establish village-owned enterprises.

The pillar of the BUMDes institution is the village socio-economic institution that is truly capable as a commercial institution that is able to compete outside the village. BUMDes, as a people's economic institution, is a commercial institution; first of all the fulfillment of the needs (productive and consumptive) of the community is through the distribution of goods and services. This is manifested in the procurement of community needs that are not burdensome, such as: lower prices and easier to get and profitable. In this case, BUMDes, as a commercial institution, still pays attention to efficiency and effectiveness in the activities of the real sector and financial institutions [2](Ramadhana, 2013). The BUMDes business unit in rural agribusiness activities needs to be a strong institution or capable of competitiveness if the business unit has strong institutions as well. The institution becomes a determinant of the progress of BUMDes business units.

Nuraini (2016) defines institutions as covering two important demarcations, namely norms and conventions and rules of the game. Institutions are sometimes formally written 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 stable enough and can be applied to repetitive situations so that they are often interpreted as a set of rules or procedures for the survival of a group of interests. Thus, the definition of institutional 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 adopted by the community in general and are widespread, for example, the system of land rent, profit sharing, bonded debt, loans between farmers, paying loans after harvest, and others. Groups (farmers) are groups (farmers) that are informal. Bonds in groups stem from harmony in the sense that they have the same views, interests, and occupations as well as calmness, for example, rural broadcast listeners and arisan groups. Organizations or associations (farmers) are organizations (farmers) that are formal, adaptive, and clearly registered members. This organization (farmer) has a written household budget, stating objectives, efforts, membership requirements, and other provisions (Adjid, 2001 in Nuraini, 2016). BUMDes who have strong institutions are not only able to organize production units but are able to profitably market their products. The implications of the business give increasing income. The increase in income is not only determined by the quantity and quality of production but also determined 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 reclaim 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 desires (2) designing customer-driven marketing strategies (3) building integrated marketing programs that form superior value (4) building profitable relationships and create customer satisfaction and finally (5) create value from customers to create profit (revenue). If the BUMdes are able to do marketing according to the rules as mentioned, then it will provide a better level of income and result in increased welfare. Soekartawi in Purwanti (2007) stated that net income (profit) is one indicator of the level of welfare of farmers. Net income is calculated by the difference between gross income or revenue with costs during the production and marketing process that has been done

### 2. Methods

This study was conducted in Takalar Regency and Pangkep Regency in South Sulawesi Province as a center for producing seaweed and ponds. The research method used in this study is the first year focuses more on descriptive methods, case study methods and triangulation. In collecting data, aside from conducting general observations and interviews with the seaweed farming community and parties who understand the situation of coastal communities, in-depth interviews and evidence or documentation related to the activities of cultivation, post-harvest and marketing of seaweed as a whole at BUMDes specializing in managing grass the sea.

This research used descriptive qualitative and quantitative approaches. As has been stated before that using case study research as a combination with triangulation techniques. In the initial stage, this research conducted an enumeration of the existence of BUMDes as a whole in the two districts that were observed or to research. Subsequently, conducted interviews and general observations about the physical state of the physical environment and infrastructure, the state of agricultural resources or the process of seaweed production, seaweed farming community activities from a social, economic, and cultural perspective both individually and in groups. The next stage was to identify the institutions and management of BUMdes that focused of observation and conduct interviews that were designed in a semi-structured manner. After the data was collected, then the data was compiled and reduced, processed, and analyzed to obtain conclusions and solutions.



In the following years, the research design used a more qualitative approach while still analyzing the data in a quantitative manner as needed. Data analysis was performed using qualitative and quantitative analysis. For quantitative data analysis, the formula was used according to the needs of this study. To determine the added value of seaweed production 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 income by comparing the entire revenue or gross income with the total costs used during the process of producing seaweed.

#### 3. Result and discussion

# 3.1. Overview of research locations

The two districts were Takalar Regency and Pangkep Regency (Pangkep), South Sulawesi Province. Both districts are known as seaweed production centers. Takalar Regency is located in the southern part of Makassar, the capital of South Sulawesi, while Pangkep Regency is located in the northern part.

Takalar Regency has of 566.51 km2, with a population of 292,893 inhabitants. Takalar Regency is divided into nine subdistricts and 100 villages and wards. The nine districts are: (1) Mangarabombang consists of 10 villages and one subdistrict, (2) Mappakasunggu has eight villages and one subdistrict, (3) Sandrobone 6 villages, (4) Pulombangkeng Selatan has four villages six subdistricts, (5) Pattalasang has nine villages, (6) Pulombangkeng Utara has 12 villages six subdistricts, (7) Galesong Selatan has 12 villages (8) Galesong has 14 districts and finally (9) Utara Galesong with nine villages and one subdistrict. (BPS, Takalar District in Figures, 2017).

Takalar Regency's regional income is dominated by the agriculture and fisheries sector. Among the nine subdistricts, there are six subdistricts that have coastal and marine areas with the main production sectors are rainfed agriculture, capture fisheries and aquaculture (seaweed), one of which is Mangara Bombang District which is now as the focus of this research observation. Among the 11 villages in this district, there are four coastal villages as seaweed cultivation areas, namely Cikowang, Punaga, Laikang, and Pattopakang. In the four villages, there are 2,867 households (RT) who depend their lives on seaweed cultivation. With an average production of 892.3 tons per year (BPS, Takalar Regency in Figures, 2017). In the context of improving the community's economy, the local government of the Takalar Regency since 2011 has sought to promote the formation of village-owned enterprises (BUMdes).

Furthermore, Pangkep Regency is a regency that consists mostly of the coast, sea, and small islands. Pangkep Regency has an area of 1112.9 km2, with a population of 329 791 people consisting of 159 male residents, 611 people, and 179 180 people. Pangkep Regency consists of 13 sub-districts, among others: (1) Liukang Tangaya consists of 8 villages one subdistrict (2) Liukang Kalmas has six villages one subdistrict (3) Liukang Tupabbiring has seven villages two subdistricts (4) Liukang Tapabbiring Utara has seven villages (5) Pangkajene has nine subdistricts (6) Minasatene has two villages, and six subdistricts (7) Baloci has one village, and four subdistricts (8) Tondong Tallasa has six villages (9) Bungoro has five villages and three subdistricts (10) Labakang 9 villages and four subdistricts (11) Ma rang has six villages and 4 villages (12) Segeri has two villages, and four villages (13) Mandale consists of 6 villages. (BPS, Pangkep Regency in Figures, 2018).

As with other districts in South Sulawesi, the economic potential of Pangkep Regency is currently still dominated by the agriculture and marine fisheries and aquaculture sectors. The biggest defense sector is food crops. Statistical data shows that rice production in this area is around 220,445 tons of dry milled unhulled rice per year. Corn production is around 9,583 tons per year, 2,310 tons per year, and the rest are tubers. In addition, it is also supported by livestock production, such as 53,816 cows per year, 41,795 goats, and the rest are lost to chickens. The agriculture and animal husbandry activities are supported by



9,958 ha of irrigated rice fields, 6,774 ha of non-irrigated rice fields, dry fields and gardens 7,265 ha, 2,467 ha of fields and 986 ha of idle land.

Other important economic activities in Pangkep Regency are the marine fisheries, fishponds, and aquaculture sectors. The marine fisheries activities are managed by around 8,156 Households (RT) with the production of 15,310, 20 tons in 2017. While the number of households that manage aquaculture is around 6,254 RT with a production of 273,296 tons per year and on the pond area around 27,751 tons per year. The aquaculture area is located in Ma'rang District with 11,947 cultivator households with a production of 49,584 tons per year and 7,535 tons in ponds so that further exploration in this study is to maintain the Ma'rang district. Development of BUMDes in Takalar and Pangkep.

#### 3.2. BUMDes Profile in di Takalar dan Pangkep

Based on data from the Takalar District Community and Village Empowerment Office, the number of BUMdes formed almost reaches all villages in the regency, however, some have not yet had an adequate structure. The latest data shows that the number of BUMdes in the District of Takalar recorded at the Village Community Empowerment Agency (PMD) and has the name and certificate of incorporation amounted to 62 BUMdes from 100 villages in the District of Takalar. The existence of the BUMdes is partly, which already has a complete organizational structure, but another part is still a simple formation. According to the Kasubdin evaluation data for the Development of Microfinance Institutions for the Production and Marketing of the local PMD Office (2018), BUMdes, which already have 51 deeds (82.43%) and 31 units (41.89) of them have a Management Decree. Distribution of BUMDes formed in several districts can be seen as follows:

**Table 1.** Potential BUMDes in each District in Takalar Regency, 2018

No	Districts	Number of units	The name of BUMDes
1	Sanrobone	2	Bina mandiri, Ujung Baji Sejahtera
2	Polombangkeng Utara	12	Saharing, Assamaturu, Mandiri, Karya Mandiri Bersama, Baruga jaya, Bontolassang, Angin Mamiri, Minasa baji, Berkah, Komara Jaya, Dampang Komara, Sejati
3	Polombangkeng Selatan	4	Gassing gau, Lantang Sejahtra, Raya Cikura, Kembang Mekar Desa
4	Galesong Utara	5	Sikamaseang, Tamasaju, Usaha Benur, Aeng Towa, Al Mufhlih
5	Galesong Selatan	12	Sawakong, Kare Marewa, Mandiri, Mujur Jaya, Daya Guna, Kale Benteng, Tunas Bangsa, Kadatong, Marannu Mandiri, Pammang Lengata, Mandiri Bentang Panggumangta
6	Mappakaunggu	6	Semoga Jaya, Pulau Harapan, Seni Lestari, Sinar Harapan Tanakeke, Baang Datu Tani, dan Minasa Baji
7	Mangarabombang	9	Langkese sejahtera, Karya Abadi, Lakatang sejahtera, Manyangari, Berkah, Makasaung Rilangi, Topejawa, Mandiri, Banggae
8	Galesong	12	Maju Bersama, Sunggumanai, Kalompang, Irsyad Jaya, Bontloe, Salamata, Karya Mandiri, Matahari, Tonasa, Turikale, Pasangang Beru, Sinar Harapan



IOP Conf. Series: Earth and Environmental Science **681** (2021) 012009

doi:10.1088/1755-1315/681/1/012009

Amount 62 -

Source: Takalar District Community and Village Empowerment Agency, 2018

The business sectors that are the focus of management are savings and loans, trade in agricultural products such as grain, other crops, seaweed, fisheries, provision of production facilities such as fertilizer, clean water supply, gallons, tent rental, handicrafts or home industries such as earthenware vessels, becoming bases gas cylinders and others. However, during observation, business units that have begun to grow are savings and loans. Among these BUMdes, it is not yet apparent that it is able to manage agricultural products such as seaweed due to various obstacles. However, because the potential of seaweed in several existing BUMdes locations is quite large, observations of the linkage of BUMdes businesses with these products and the activities of seaweed farmers need to be further assessed and developed. BUMDes Potential In Pangkep Regency is spread in 12 sub-districts in this district. Among the BUMDes that have been formed, they are declared to have been actively operating with the Village Fund Budget (ADD) funding source. The distribution of BUMdes can be seen in table 3.

**Table 2**. Potential of BUMDes in Each District in Pangkep Regency, 2018

No	Districts	Number of Units	The Name of BUMDes
1	Minasate"ne	2	Padaidi, Panaikan
2	Labakkang	9	Gentung, Ana Ogie, Bontomanai, Bontopole, Mandir Manaku, Permata, Barabatu, Pelitaromang.
3	Tondong Tallasa	6	Abadi, Malabang Singara, Tondong Mandiri, Bonto singara, Tondongkura, Tamanggae
4	Baloci	1	Sipakatau
5	Ma'rang	6	Mandiri, Mattuju, Sipadecengi, Sipakkarennu, Subur Makmur, Mitra mandiri.
6	Bungoro	5	Citra karya, Semasi, Tabo tabo, Pamanai, Amanah Mandiri
7	Mandale	6	Boci BociE, Usaha Bersama, Sukamaju, Masyarakat Tamarupa Bersama, Mandalle, Makeade
8	Segeri	2	Baring, Sama Karya
9	Liukang Tupabbiring	7	Kuda Laut, Matiro Langi, Mitra Baru, Sipakainge, Baji pamai, Mattiro Bone, Julu Kannayya
10	Liukang Tupabbiring Utara	7	Sabutung, Matiro Baji, Sejahtera, Matiro Bombang, Massamaturue, Mattiro Uleng, Matiro Walie
11	Liukang Kalmas	6	Pammas, Cahaya, Sipatuo, Bahagia, Marasende, Dewakang jaya
12	Liukang Tangaya	8	Sipakatau Sabaru, Sahabat, Sipakatau Sabalana, Tampaang, Sailus, Satanger, Kapoposang Bali, Makkiyade
	Amount	55	-

Source: Pangkep District Community and Village Empowerment Office, 2018

Table 3 describes the distribution of BUMdes in various villages in 12 sub-districts of Pangkep Regency, where the most BUMDes are in Labakkang District, following Liukang Tangaya, Liukang Tupabbiring, and North Tupabbiring Liukang, Tondong Tallasa, Ma'rang, and Mandale. According to the



head of the local BUMD Department of Village BUMD which has been said to be operating actively with various businesses such as most are savings and loans, following the trade of agricultural products, distribution of fertilizers, seaweed cultivation, and processing, manufacturing of brown sugar, trade of sea products, drinking water depots, workshop, shops department store, and tent and transportation equipment rental.

# 3.3. Institutional Conditions and Capacity of BUMDes

In Takalar Regency, as explained, each village has been formed by the BUMdes as a village economy unit, but most of not developed into well-institutionalized business units. One of the BUMdes that is the focus of observation in this study is BUMdes Laikang. Initially, the choice of observation in BUMDES Cikoang but because the potential amount of seaweed in Cikoang village is relatively less compared to the potential of seaweed in Laikang Village, the next observation option in BUMDes Makkasaung is relaxing in Laikang Village. Laikang Village is a village located in the southern part, 23 km from the capital city of Takalar Regency, the border area of the Jeneponto Regency. Whereas in Pangkep Regency was chosen was carried out in Ma'rang District. 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 as the target of observation. This village has a farmer or cultivator household, including seaweed, which is bigger than other villages, and besides that, it has a BUMdes that has started to have seaweed related activities. The BUMDes are BUMDes Mandiri Desa Pitusunggu. Based on the condition of the two locations, it can be stated the location profile of this study, as in table 3.

**Table 3.** Profile of BUMdes research locations in order to increase added value, marketing, and seaweed income.

No	Name of regency	An Area (km²)	Total population (psyche)	Number of districts	Location of observation
1	Takalar Regency	566,51 km <sup>2</sup>	292 893	9	BUMdes Makasaung Rillangi, Laikang Village, Mangarabombang District
2	Pangkep Regency	1112,9 km <sup>2</sup>	329 791	13	BUMDes Mandiri Pitusunggu Village, Ma'rang District

Makasaung Rilangi BUMDes is a business unit formed in Laikang Village, Mangara Bombang District, Takalar Regency. Laikang Village is a village located at the end of the sea from the Mangara District of Bombang and bordered 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 familiar with seaweed cultivation, and finally, this area has become the biggest seaweed supplier in Takalar Regency. Laikang Village consists of 6 subdistricts with a total population of around 4000 inhabitants. The villagers generally work in dry/brackish land agriculture and are planted once a year. In the coastal areas, some residents are fishing fishermen. In addition, they become seaweed cultivators. In general, the environment of Laikang Village is part of the land and part of the sea. According to S. Dg Sau (61), local community leaders in the past, the source of clean water from residents was from dug wells around residential areas. In general, residents dug wells around large trees in the coastal area, but some other residents lack clean water.



In recent years, residents of Laikang Village have obtained clean water facilities through plumbing. The social relations among the villagers did not differ greatly from the situation in other villages in South Sulawesi. Their social interaction is still thick with togetherness and kinship. The elder leader in this village is Dg Nyangka, or usually also called Karaeng Daeng Nyangka (67 years old), former Village Head for almost 30 years. Mutual cooperation among the population is still there at certain times, especially when residents want to solve joint problems. However, in some areas, the forms of mutual support such as money backup have begun to be invisible except in Puntondo Area, which is close to the Puntondo tourist area. Citizens' meeting at a certain scale still always exists at every salvation event conducted by residents at every celebration. But the big celebration that is always celebrated every year in this region, which is quite wide and well-known in South Sulawesi, is Maudu Lompoa (commemoration of the birthday of Prophet Muhammad SAW). The center of the activity is in Cikoang Village.

Seaweed farming (cultivation) is carried out by most farmers in six areas in this village. The choice of cultivating seaweed is an effort made by the population because farming is only done once a year ie during the rainy season. The highest number of seaweed cultivators are in Puntondo and Ongkowa areas. The two areas are the centers of seaweed cultivation in Laikang Village. The scale of seaweed farming can be seen from the number of cultivated stretches, ranging from 400 to 1500, with an average production of 10 tons per stocking season. The results of the local seaweed business are generally directly marketed by farmers to local traders/financiers. These investors are farmers (farmers) but also act as traders and capital providers. Two traders who played an important role were H. Ondang and H. Siriwa.

BUMDes Makkasaung Rilangi is a BUMdes formed since 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, the BUMDes did not go well because of difficulties in working capital and inactive management. In November 2017, it was reactivated by agreeing to change management and fix the BUMDes administration and agree on the Articles of Association.

In 2017 this BUMDes received an injection of Village funds, but almost all of it was used to supplement business facilities such as shops and lobster nursery preparations 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 financiers), so that it is difficult for BUMdes to intervene as one business entity, for example by building a trading business. In 2018-2019, BUMdes still have not received additional funds from village funds, so that BUMDes are practically still not operating properly. According to the BUMDes secretary, an effort to start a business channeling basic needs requires sufficient capital for a certain business scale. Existing funds are still not enough to operate, and if forced, do not provide significant benefits.

Furthermore, Pittusunggu Village, Pangkep Regency, is a village bordering Tammangapa Village, Pitue Village, Villages in Liukang Tupabbiring District. Pitusunggu Village has three areas, namely Bontosunggu, Kampong Baru, and Punglawahi. In general, Pittusunggu village community life is still bound by traditions and customs. According to Nurhayati, the village head of Pitusungu there were several community leaders who were elder in this village, such as the names Kullo, Ase, Haji Gaju, Haji Tuo and Iye Essu. These names are considered community leaders because of their understanding of the ins and outs of local traditions and customs that are good compared to other residents. The condition of the village environment is quite well organized with a relatively clean environment, even though there are complaints that there are still residents who do not understand the danger of ignoring waste. The disease that is often complained by residents is dengue fever symptoms, also diarrhea. But the disease sometimes lasts for a long time, very much depending on weather changes. In general, residents seek help from the Puskesmas in the village.

The condition of the economy in the village is marked by the results of production and the livelihood of the population. Generally, residents are fishermen, fish farmers, rice farmers, and seaweed farmers. In



Pitusunggu Village, there are around 125 households that are seaweed cultivators. Each farmer manages seaweed farming between 200 and 1500 stretches. Among the three areas, there is a lot of seaweed cultivation in the villages of Kampong Baru and Pangkalawahi, with an estimated production of less than 1 ton of pling per year. Seaweed production is generally marketed in the village, namely at the village level collector. BUMdes in this village is one of the business units that bring together members of farmers and fishermen, including sea clump cultivators. During this time, the funds from BUMDes to be lent to farmers and fishermen. In addition, working with village women's groups to process food such as seaweed, fish, and crabs. The correlation between the villagers is not different from other rural areas. Generally, the interaction is reciprocal and dyadic. Mutual cooperation among them is still there for activities aimed at mutual benefit. If there is a problem, generally solve the problem by deliberation. Initiation in the form of salvation that invites neighbors and relatives still exists and is sustainable in this village, especially at the time of circumcision of children, marriages, the beginning of fishing events at sea, or on a pond. For the last one, the event takes place once a year.

The condition of road infrastructure in the village is quite good, as is the connection between the village and other villages, to the sub-district or to the district. To go to the city, residents use public transportation (pete-pete) for a fee of Rp 10,000 each time. Electricity reaches every villager in the village, in addition to self-pay, some are subsidized by the government. Electricity is an important tool that helps people's activities. Aside from being lighting, there are also those who use electricity for business activities or to improve the family economy, such as the use of electricity for refrigerators. Electricity is also used to move household industry activities such as crab, milkfish, and seaweed processing. The activity is carried out in groups. In Pitusungu Village, there are about eight groups that carry out these activities. The means of communication are also quite good. Residents already use cell phones. Almost all people have cell phones; some even have an android phone. The use of communication facilities such as the internet is common among some residents in this village.

The BUMDes Mandiri Business Unit as a business unit formed by residents in this village has existed since 2011 and is still active. The management, which from the beginning moved the business unit, still carries out business activities in BUMDes. The business undertaken is savings and loan and processing of marine products, including seaweed processing. BUMdes Mandiri has been using a business or office area of 5 x 4 meters, located in the Pungkalawahi area. The location is self-owned or not leased with personnel who become movers or managers of 7 people. Business capital so far has been sourced from village funds, currently totaling Rp 140,000,000. The capital is generally rotated in the form of savings and loans.

BUMDes Mandiri has an organizational structure that consists of management, supervisors, and business units. So far, each unit and management carry out their respective duties according to their main tasks and functions as agreed, but each sector and each unit continues to help each other and other fields or units. Everyone carries out responsibilities in accordance with the tasks that have been agreed upon. So far, BUMDes Mandiri does not have a legal entity like other business units, but still tries to follow the applicable laws and regulations. The relationship arrangements for each personnel have continued to run well because the units inside are still on a small scale with the highest level of decision making being the Deliberation. Every BUMDes decision making is generally done by the meeting.

Based on the results of interviews with the chairman and members of the BUMDes Mandiri village of Pitusunggu, that BUMdes membership was recruited based on the principle of achieving goals. Each member must realize that BUMdes progress is largely determined by the awareness of members in achieving the goals BUMdes. The rules and systems that apply to BUMdes depend on the potential of human resources (HR) in the community where the procedure for selecting members is carried out directly by the community. Each member of management stops being a BUMdes member when he dies, resigns, and does not carry out his duties and functions. According to BUMdes members, the perceived benefits of being a BUMDes member are satisfaction in building the community and when engaging in becoming a



manager or member can add to the experience of managing the business. Management of BUMDes Mandiri from the beginning has aspired to become a business unit that seeks to advance the welfare of the community. Initially, a more varied business unit was added to the program, but on the way, there were only a few business units that could operate, such as savings and loans, especially fertilizer for farming communities, fish farmers, and seaweed farmers. In addition, seaweed products are processed in combination with other potential products such as crab and milkfish. BUMDes involvement in seaweed management is small in terms of added value, marketing, and income, but the benefits are huge, especially in fostering the ability of the community in the field of the local food supply. However, Pitusunggu BUMDes Mandiri made a large contribution to providing savings and loans for some seaweed farmers.

Based on the conditions of the two BUMDes, it should be stated in more depth about the capacity of the BUMDes so that it is easy to see its sustainability and development efforts. Syahyuti, 2006 stated that the institution has a component (1) person, (2) interests, (3) rules, (4) structures or relationships. Furthermore, in institutional development it is explained that there are several principles such as (1) starting from the existing conditions, (2) the need (3) systemic thinking (4) participatory (5) effectiveness, (6) efficiency (7) flexibility (8) added value or benefits (9) decentralization and (10) sustainability. The conditions of the BUMDes management system component in the location observed can be seen in the following Table 4.

**Table 4.** Condition of System Components in the Management of BUMDes Makkasaung Rilangi Desa Laikang Takalar and BUMDES Mandiri in Pitusunggu Village, Pangkep

No	The name BUMDes	Person	The importance	Rules	Relationship Structure and Administration
1	Makkasaung BUMdes relaxes Laikang Takalar Village	<ul> <li>Have active members</li> <li>Collective commitment in trying between members is still not solid</li> <li>Managerial skills still need to be improved</li> </ul>	<ul> <li>Common interests / goals set out in the BUMdes plan</li> <li>The implementation of the goals and vision has not been supported by the common understanding of all personnel (village heads, BUMDes management and the community)</li> <li>Tends to be influenced by outside interests</li> </ul>	<ul> <li>Have rules</li> <li>The implementation of the rules has not been implemented well</li> <li>Some personnel did not understand the rules of the game as written in writing</li> </ul>	<ul> <li>Has a structure</li> <li>There are arrangements and division of labor</li> <li>Interpersonal interactions are still not compact enough</li> </ul>
2	BUMDes Mandiri Pitusungu Village, Pangkep	<ul> <li>Have active members</li> <li>Collective commitment between village officials and BUMDes is relatively solid</li> <li>Managerial skills still need to be improved</li> </ul>	<ul> <li>There are goals as a basis for doing business</li> <li>There is a common interest, purpose/vision between the village head as a supervisor with BUMdes operational implementer</li> <li>Common interests have begun to be limited to the village government, BUMdes managers and the community</li> </ul>	<ul> <li>Have written rules</li> <li>Existing regulations have started to be implemented consistently by BUMdes managers</li> </ul>	<ul> <li>Has a structure</li> <li>There are arrangements and division of labor</li> <li>Interpersonal interactions are quite good</li> </ul>

Table 4 explains the picture of the system from the point of view of the institutional component, which is a unity in the management of the Makasaung BUMDes, Laikang Takalar Village, and the BUMdes Mandiri Village, Pitusunggu Pangkep Village. The two BUMDes have different capacities where the BUMDs Mandiri in Pitunggu Pangkep Village tend to have better



institutional capacity compared to BUMDes Laikang Takalar. The advantage has active members, having a collective commitment between village officials and BUMDes, relatively solid, managerial skills still need to be improved, there are goals as a basis for doing business, common interests, goals / vision between village heads as supervisors and supervisors with BUMdes operational implementers, interests together have begun to be arranged in a limited way to the village government, BUMdes managers and the community; BUMdes has written rules, then the existing rules have begun to be implemented consistently by the BUMdes manager, have a structure and arrangement and division of work and interaction between personnel is quite good.

Furthermore, in the two BUMDes studied, even though it has become an ideal, there is a large amount of trading activities that cannot be carried out due to various reasons. These obstacles are: (1) seaweed farmers/cultivators generally have used middlemen or village financiers, so that their products must be sold to owners of capital so that it is unlikely that BUMDes cannot make farmers as business partners more broadly, (2) the adequacy of venture capital which is still limited, (3) the skills of BUMDes members are still limited, (4) marketing coverage has not been fostered, and (5) efforts to build partnerships with other parties are also still limited. However, there have been a number of efforts that have been made by BUMDes and have become achievements such as farmers feeling the benefits of having easy access to loans for farmers, farmers, and fishermen. In its development, the most probable effort undertaken by BUMDes regarding seaweed that is now underway is processing, involving a group of seaweed farmers to provide raw materials. The processing is in the form of making cookies and drinks whose marketing is still limited. With improved packaging mastery, the business of pastry products and other foods has begun to develope and developed by expanding partnerships.

## 4. Conclusion

The result of the research shows that in the two regions observed; there are about 62 BUMDes in Takalar Regency, which spread in eight districts and 55 BUMDes in Pangkep Regency spread in 12 districts. BUMDes are generally declared to be active as rural business units (units) but are still not well institutionalized. The dominant BUMDes business still revolves around saving and loan businesses on a small scale. Observations in two BUMdes in seaweed production centers, namely in Laikang, Takalar Regency, and in Pitusunggu, Pangkep Regency, BUMDes management has not been much in contact with seaweed agribusiness activities. The seaweedrelated business unit in the BUMDes is mainly in Pangkep, in the form of processed food products (pastries) where marketing is still limited so that added value and income is also still low. Other businesses, such as trading seaweed products on a larger scale, can not yet be developed because: (a) generally seaweed farmers / cultivators use village middlemen (capital owners), so their products must be resold to capital owners so that BUMDes can not make farmers as business partners more broadly, (b) the adequacy of BUMDes business capital to develop businesses, is still limited (c) the skills of BUMDes members in managing businesses, still lacking (d) marketing reach, not yet developed, (e) efforts to build partnerships with other parties, it is also still lacking (f) BUMdes generally requires a shared vision of the village government with BUMdes managers



#### References

- [1] BPS South Sulawesi 2014 South Sulawesi in Figures, Central Bureau of Statistics South Sulawesi Office
- [2] BPS South Sulawesi 2017 Takalar Regency in Figures, Takalar Regency Statistics Office
- [3] BPS South Sulawesi 2018 Pangkajene Kepulauan Regency in Figures, Statistics Office of Pangkep Regency
- [4] Budiyanto M A K 2012 The banana-based food security development model through the revitalization of local wisdom values *Journal of Industrial Engineering*. *11*(2) 170 177
- [5] Directorate General of Aquaculture 2005 Indonesian Seaweed Profile Jakarta: Ministry of Maritime Affairs and Fisheries
- [6] Fadhil R, Maarif M S, Bantacut T, & Hermawan A 2017 A model of the strategy for developing Gayo coffee agro-industry human resources in dealing with the ASEAN economic community. *Journal of Technology Management*, 16 (2), 141-155
- [7] Hayami, Yujiro and Masao K 1987 Village Economic Dilemma: An Economic Approach to Institutional Change in Asia Obor Indonesia Foundation Jakarta
- [8] Karsudi, K., Soekmadi, R., & Kartodihardjo, H. (2010). Model of Institutional Development in the Formation of Forest Management Unit Areas in the Province of Papua. Journal of Tropical Forest Management **16** (2) 92-100
- [9] Kotler, Philip, and Gary A (2008) Marketing principles Vol 1 Jilid 2008
- [10] McHugh D J 2003 *A Guide to Seaweed Industry*, FAO Fisheris Technical paper. Rome: Food and Agriculture Organization of United Nations
- [11] Ngamel A K 2012 Financial analysis of seaweed cultivation and added value of carrageenan flour in Kei Kecil District, Southeast Maluku Regency *Jurnal Sains Terapan*. 2 (1) 68-83
- [12] Nuraini C, Darwanto D H, Masyhuri M, & Jamhari J 2016 The Institutional Model of Organic Rice Agribusiness in Tasikmalaya Regency AGRARIS: Journal of Agribusiness and Rural Development Research. 2(1) 9-16
- [13] Ramadana C B 2013 The existence of Village-Owned Enterprises (BUMDES) as Strengthening the Village Economy *Journal of Public Administration*. 1 (6) 1068-1076
- [14] Prawoto N 2012 Model of Development and Community Empowerment Based on Independence to Achieve Economic Security and Food Security (Economic Empowerment Strategy in the Dieng Community in Central Java Province) *Journal of Organization and Management*. 8 (2) 135-154
- [15] Purnaningsih N 2008 Model of partnership development and marketing of temulawak in Semarang City Sodality: *Journal of Rural Sociology.* **2**(3)
- [16] Purwanti R 2007 Income of Malino Highland Sub Watershed Farmers. *Journal of Forestry Social and Economic Research.* 4(3)
- [17] Saleh S 2018 Seaweed Value Chain Mapping Mapping with a gender perspective in the districts of Takalar, Maros, Pangkep and Barru South Sulawesi, Indonesia *Octopus Journal of Fisheries*. **6** (2) 2018



- [18] Syamsir A 2017 Comparative Study of BUMDes Model in Bantaeng Regency, *Administrative Journal.* **3** (2) 45-50 2017
- [19] Syahyuti 2006 Important Concepts in Rural Development and Agriculture. Jakarta: Bina Rena Pariwara
- [20] Yumi Y, Sumardjo S, Gani D S, & Sugihen B G 2011 Farmer Learning Development Model in Sustainable Community Forest Management: Cases in Gunung Kidul Regency, Yogyakarta Special Province and Wonogiri District, Central Java Province. *Journal of Forestry Social and Economic Research.* 8(3)



Reproduced with permission of copyright owner. Further reproduction prohibited without permission.

