

Increasing the Income of Coconut Farmers Through Community Empowerment in Selayar Regency, Indonesia

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Abstract: Community empowerment is a process that becomes the starting point for community independence in order to improve their own lives by using and accessing local resources as best as possible. This research aims to determine efforts to empower coconut farmers in increasing the income of coconut farmers in. The research was conducted in Selayar Regency, South Sulawesi Province. The population in this study were all coconut farmers in Selayar Regency. Data collection was carried out by means of observation, in-depth interviews with coconut farmers who were selected as respondents. Data analysis was carried out using descriptive analysis. The steps involved start from data collection, data reduction, data presentation and drawing conclusions. The results of the research show that the forms of empowerment carried out by farmers include counseling and training, but the results have not been optimal in increasing the income of coconut farmers in Selayar Regency. There are several things that are obstacles in empowering coconut farmers, one of which is the lack of awareness of coconut farmers to innovate processed coconut products, namely from processing ordinary copra into white copra. This is due to the limited competencies possessed by farmers such as education level and business group.

Keywords: Empowerment, Increased Income, Coconut Farmers

I. Introduction

Indonesia has abundant natural resource wealth. The natural wealth owned can become capital for implementing economic development for Indonesia. These natural resources can be optimized, one of which is through the agricultural sector (Andriani, 2018)). The strategic role of the agricultural sector in national development includes providing food for the Indonesian population, earning foreign exchange through exports, providing industrial raw materials, increasing employment and business opportunities, increasing regional income, alleviating poverty and encouraging the movement of other economic sectors (Fachry, 2012).

Agricultural products that can be used in the processing industry are coconut plants, namely sap produced from tapping the flowers of coconut plants (Marlina. (2022)). As a source of income, coconut plantations play a very big role because coconut plants have the ability to produce continuously throughout the year and can be sold. to meet the needs of farming families (Wijaya & Panji, 2009). According to the Central Statistics Agency, the area of coconut plantations in Indonesia in 2020 reached 3,396.8 thousand ha with total production reaching 2,811.9 thousand tons. Meanwhile, the area of coconut plantations in Pekuncen District in in 2019 it reached 684.1 ha and total coconut production reached 4,213.7 tons (BPS, 2023).

Coconut is an important tropical plant for Asian and Pacific countries and has long been known by the Indonesian people. This can be seen from the spread of coconut plants in almost all regions of the archipelago, namely Sumatra with an area of 1.20 million Ha (32.90%), Java 0.903 million Ha (24.30%), Sulawesi 0.716 million Ha (19.30%), Bali, NTB, NTT 0.305 million ha (7.80%) and Kalimantan 0.277 million ha (7.50%) (Nogoseno 2003). Coconut is a livelihood for millions of farmers who can provide a livelihood for tens of millions of families. Coconut has many benefits because almost all parts of coconut can be processed or used by humans, starting from the fruit, stems, and even the leaves. Therefore, coconut is often considered a multipurpose plant, especially for coastal areas.

Selayar Regency is a district located in South Sulawesi Province with an area of 10,503.69 km² (land and sea area) and a population of 139,145 people in 2022. Selayar Regency has 11 sub-districts and 88 villages. Apart from having high fisheries potential, Selayar Regency also has agriculture and plantations and is a source of income for the majority of the population in this area.

As an island region, Selayar Islands Regency is the largest coconut producer in South Sulawesi. As a people's plantation crop, coconut trees grow throughout the Selayar Islands, from beaches to villages. This is what makes coconut one of Selayar's main plantation commodities. In 2022, the area of coconut plantations will be 19,769.00 ha with total production of 26,734.16 tons. According to its geographical location, more than 50% of plantation crops are used for planting coconuts.

Copra itself is the main raw material for various other coconut derivative products. After the coconut is dry, the copra is extracted to extract the oil and processed into various types of coconut derivative products. Such as crude coconut oil (CCO), fried coconut oil, margarine, virgin coconut oil (CCO), biodiesel and other coconut derivative products. Copra making is carried out by the people of Barugaia Village with the raw material being coconut meat which comes from cultivated coconut plants (Hermanto *et al.*, 2020). Making copra will provide much greater added value so that it can contribute high economic value and increase farmers' income. A large enough increase in added value will have a significant impact, because the coconut processing industry's purchasing power for coconut raw materials will be high. The price of copra often experiences a drastic decline from the previous year, even though the raw materials for making copra are very abundant. This is the reason that copra farmers in Selayar Regency need a development strategy to increase sales of copra products. Based on these considerations, this research aims to determine the efforts made to empower coconut farmers in an effort to increase the income of the people of Selayar Islands Regency.

II. Literature review

Community empowerment

The concept of empowerment includes community development and community-based development. Related to this understanding, it is necessary to first understand the meaning and significance of empowerment and community empowerment. People who have achieved collective goals are empowered through their independence, in fact it is necessary to be more empowered and other resources in order to achieve their goals without relying on help from external relationships (Friis & Deborah. 2012.; Suriyani *et al.* 2023)

The main aim of community empowerment is not to provide consumptive assistance to the community, but rather productive assistance that makes the recipient have the capacity to help themselves and not depend on help or mercy from others (Huraerah, A. 2011).

Community development known in much literature includes three models, namely; economic growth, basic needs, and people centered. Of these three development models, the third model is the choice for community empowerment (Romadhoni, 2022 *et al.*).

People centered is a development model that reflects social values that are participatory, empowering and sustainable (Milen & Anelli 2004). This model is broader than just meeting basic needs or providing mechanisms to prevent further poverty processes, so that community-based development using empowerment strategies will be more appropriate in changing community conditions (Sedyastuti, 2018).

Empowerment comes from the word empowerment which means giving power because power is not only power but also power, so the word power not only means being able, but also having power (Fenny & Very, 2015). Empowerment is an effort to provide empowering power to society. Sumodi ningrat defines the existence of society as the individual's ability to be attached to society in building community empowerment. Therefore, empowerment can be conveyed by gaining power and access to resources (Najati, 2005).

Community empowerment is a process that becomes the starting point for community independence in order to improve their own lives by using and accessing local resources as best as possible. In other words, empowerment is the process of increasing the ability and attitude of independence (Milen & Anelli. (2004). The ability to be independent is carried out with all the abilities and potential that exist within oneself and the environment, or in other words, empowerment uses principles (Suharto, 2005). Empowerment must able to build public critical awareness of the problems they are experiencing and facilitate efforts to solve them.

As a process, in the implementation of empowerment there are several stages that support an empowerment program, the stages in empowerment are as follows (Edi Suharto, 2005): (a) Preparation stage. In the preparation stage there are two things that need to be prepared, firstly preparing the officers, namely community workers. Meanwhile, the second preparation is field preparation, namely conducting a field feasibility study. (b) Assessment stage, at this stage the problems and resources owned by the client or community are identified. This assessment can also be carried out using a SWOT, strength, weakness, opportunity, threat assessment. (c) Program Planning Stage at this stage the change agent tries to look at the community to understand the problems they face and tries to find solutions to these problems. (d) Action Plan Formulation Stage: At this stage, change agents in community groups determine the programs and activities they will carry out to overcome existing problems. The officers and the community formulate an action plan. (e) Program or Activity Implementation Stage: At this stage the change agent works together with participants from community groups to implement the planned program. (f) Evaluation Stage, at this stage the change agent together with participants from community groups supervises the program being implemented and supervises it (Gunawan, (1999).

III. Research Methodology

This research was conducted in Selayar Islands Regency. The population in the study were all coconut farmers in Selayar Regency, sampling was carried out deliberately with two samples each in 11 sub-districts in Selayar Regency. The number of samples selected was 22 people.

Data collection technique

The collection technique is carried out using the observation method, namely observing people or places at the research location. Apart from observation, researchers also used the interview method, namely by conducting direct questions and answers with 22 coconut farmers who were used as samples.

Data analysis

Data analysis was carried out descriptively qualitatively. What is meant by descriptive is to clearly describe or explain the actual situation regarding the facts as the results of research conducted using the concept of interviews with respondents related to the empowerment of coconut farmers in increasing community income in Selayar Regency. Data processing in this research was carried out in 4 stages, namely data collection, data reduction, data presentation, and drawing conclusions or verification

IV. Results and Discussion

General Description of Islands Regency

Selayar Islands Regency is a Regency located in South Sulawesi which has 11 sub-districts within it. 5 sub-districts are located on the main island and 6 sub-districts are located outside the main island. Selayar Islands Regency has a land area of 1,357.15 km² with the largest area being in Bontosikuyu district and the smallest area being in Benteng District. Given the existing geographical conditions, Pasilambena sub-district is the furthest sub-district which is + 193 km from the district capital.

The total population in Selayar Islands Regency in 2022 is 13,145, where the largest population is in Benteng District and the smallest population is in Buki District. According to age group, the majority of residents in the Selayar Islands are aged 0-4. Meanwhile, the number of households in Selayar Islands Regency is around 32,687 households. The total workforce in the Selayar Islands as of 2022 is 73,127. Meanwhile, according to the distribution of main employment opportunities, 3798% of the population works in the Agriculture, Forestry, Hunting and Fishing sectors, while 10.13% work in the Processing Industry sector, 19.56%. And 42.45% usually work in the service sector (BPS, 2023).

The area of coconut plantations and coconut production in Selayar Selayar Regency in 2019-2022 can be seen in Table 1.

Tabel 1. Perkembangan Luas Areal dan Produksi Kelapa di Kabupaten Selayar

Year	Area (ha)	Production (tons)
2018	19808	25138,99
2019	19787	24342,36
2020	19768	24120,34
2021	19769	26436,42
2022	19769	26734,16

Source: BPS Selayar Regency

Research result

Coconut Processing and Its Problems

Coconut management is carried out every four months, and usually in one year coconuts are processed into copra 3 times a year. Coconut processing in Selayar Regency is still traditional where most people process coconut granules into ordinary copra or smoked copra by roasting or using sunlight as a drying method. However, there are already several farmers processing it into white copra. In general, existing coconut farmers generally process coconut seeds into copra.

The research results also show that the majority of people process coconut from their own coconut plantations. And the average community has more than one coconut plantation. In the past, there were still many people who processed coconuts into coconut oil and sold them in the market, but nowadays processing coconuts into coconut oil is rarely done by coconut farmers. Even if it still exists, it is only for personal consumption and only a few sell it on the market, this is because there are already many factory processed oils sold on the market and most consumers prefer to use this oil for daily use.

Coconut farmers generally process coconut by making it into smoked copra, namely drying it by roasting it over coals. Generally, after the coconut has finished climbing, the coconut is then separated from the husks and then split in half, after which it is dried on a roasting stove made of wood and bamboo which is made by the head farmer himself with sizes ranging from 2 x 2 meters to even larger than That. After the coconut is dry, the coconut is pried open to separate it from the coconut shell, after that it is cut into small pieces to make it easier to put in the sack. After that, the copra coconut is ready to be sold. This processing method has been carried out from the past until now. Until now, a way to process coconut into white copra has been discovered, but some people still process it into smoked copra or regular copra.



Figure 1. Copra production in Selayar Regency

Processing coconut into white copra is different from smoked copra. What makes it different is that white copra is processed from old fresh coconuts using an indirect drying or heating system, namely using hot sunlight and before drying, it is smoked overnight using sulfur or a special medicine for coconuts which will be processed into white copra so that the resulting coconut does not get moldy. The white copra drying furnace is larger than the furnace for roasting smoked copra and lower with a little space left underneath for sulfur fumigation.

Processing white copra can take up to 5 days to dry so that the resulting dry quality is good, whereas for smoked copra itself, because the drying is done by roasting over coals, the drying time is only 1 day. Even though several farmers have processed coconuts into white copra, the majority of coconut farmers in Selayar district have still not innovated their coconut processing, this is because starting a white copra business definitely requires initial capital and also requires open land and a different drying furnace. with a smoked copra stove, even though the selling price of white copra is much higher than smoked copra. If you look at it in terms of quality, white copra is better than smoked copra. The processing of white copra pays great attention to cleanliness and strict procedures so that it produces clean white copra and pays great attention to the dry quality of the copra. It is different from smoked copra because the drying uses hot coals so that sometimes the resulting dryness is uneven, some dry well, some are not good, and some are too dry and even burnt. This is one of the factors that makes the selling price of smoked copra unstable.

Coconut farmers in several areas in Selayar Regency experience several obstacles in coconut processing, one of which is finding climbing workers. Sometimes coconut farmers have difficulty finding people who can grow their coconuts. This is because there are very few people who can climb coconuts and also the people who can climb coconuts also have other activities so it is difficult to divide their time between the work they do and climbing people's coconuts. Due to the lack of climbing workers, coconuts which are supposed to be harvested once every four months can only be harvested when the next harvest season arrives, in this case four months later after the coconuts can be harvested when they are four months old. This of course has an impact on the results that farmers will get because the quality of the coconut will certainly decrease if it is old.

Apart from the problem of climbers, there is another problem that is an obstacle for coconut farmers, namely the distance of the coconut processing place or community coconut plantation from residential areas, which is an average of 3-5 kilometers. This has an impact on the length of the transportation process, especially during the rainy season because the roads are damaged, making the work more burdensome for coconut farmers. Apart from that, the level of knowledge of farmers is still low regarding coconut plantations and there has also been no effort made by the government.

From a marketing perspective, coconut farmers are disadvantaged by the monopolistic market practices of copra traders who determine prices unilaterally. This situation sometimes causes farmers to be disappointed and less enthusiastic about caring for their coconut plantations. This results in coconut productivity dropping drastically. According to respondents, the price of smoked copra coconut or regular copra ranges from around 8,500 to 10,000 per kg. The price of smoked copra itself is always uncertain, in contrast to the price of white copra, which is fixed and ranges from 8,000 per kg. Based on interview results, around 400 coconut seeds can produce 1 ton of copra.

The formula for analyzing copra business income is by calculating the total receipts or gross income minus the costs incurred in the production process, with the form of the formula being $\Pi = Tr - Tc$ (Soekartiwi, 2002; Akhmad, 2015).

Where

Π = Profit (Rp)

Tr = Total Revenue (Rp)

Tc = Total Expenditure (Rp)

The following is the difference in income obtained by coconut farmers from processing ordinary copra and white copra:

For processing into ordinary copra, 3000 coconut seeds are produced. The research results showed that 3000 coconut seeds can produce around 7.5 tons of copra on average or 1 ton of coconut can produce 400 coconut seeds. So the gross income for ordinary copra is multiplied by the current highest price for public copra sales, namely Rp. 650 thousand per ton so that farmers receive income of Rp. 4,875,000, while the costs incurred to process coconuts into copra are an average of 3,250,000 which consists of climbing, and the costs of processing coconuts into smoked copra.

Table 1. Comparison of Income from Processing Regular Copra and White Copra for 3000 Coconut Seeds in 1 Time Production

No	Description	Smoked Copra			White Copra		
		Product	Price	Total	Product	Price	Total
1	Total receipts	7,5 ton	650.000	4.875.000	7,5 ton	1.100.000	8.250.000
2	Total cost			3.250.000			5.700.000
3	Profit			1.625.000			2.550.000

Meanwhile, for processing into white copra with 3,000 coconut seeds produced, the average income is as follows: For processing into ordinary copra with 3,000 coconut seeds produced. The research results showed that 3000 coconut seeds can produce around 7.5 tons of white copra or 1 ton of coconut can produce 400 coconut seeds. So the gross income for ordinary copra, if multiplied by the highest selling price for white copra, is Rp. 1,100,000 per ton so that the total income of farmers is IDR. 8,250,000, while the costs incurred to process coconuts into white copra are an average of 5,700,000 which consists of climbing, and the costs of processing coconuts into white copra.

Empowerment Efforts

Processing coconut into white copra is an opportunity for coconut farmers to develop their business and increase income where the selling price of white copra is much higher than smoked copra. Apart from that, the processing of white copra can provide employment opportunities for other farmers. However, people are still less aware of the potential for developing coconut businesses by processing them into white copra. There are many coconut farmers who want to process it into white copra, but they are constrained by capital and think long and hard about setting up a white copra business, because setting up a white copra business requires open land and a drying furnace, and also a stock of coconut supplies, because processing white copra It would be good if it was done continuously because it would be a shame if you had made a white copra drying furnace but the processing was only done occasionally, for example when harvesting coconuts from your own garden.

This is a consideration for coconut farmers who want to run a white copra business, so that until now people generally still process it by roasting it over coals as a drying method or there are also some people who dry it using sunlight but without sulfur fumigation, where the selling price is for This method is the same as smoked copra. Apart from that, coconut farmers find it easier to process smoked copra, namely when they want to buy coconuts per seed from people who don't want to process their coconuts, coconut farmers can process smoked copra in the coconut seller's garden. So most coconut farmers still choose to process smoked copra even though the selling price is low and the profits they get are small, they feel that it is better than not processing it at all.

Coconut processing in the Islands is considered very slow when compared to other regions which have made many innovations in coconut processing, especially copra. Starting from having a copra drying machine, to selling copra to various countries. However, currently there has been no special effort made by the government to focus on empowering farmers which benefits coconut farmers. They generally provide assistance to farmers in general, namely providing fences or fences to protect gardens as well as providing fertilizer and plant seeds. The government must make more efforts to awaken the potential of community coconut plantations, as well as the ability of farmers to further increase their productivity, provide motivation and training and raise community confidence in their own abilities.

Empowerment Steps

Enabling

The results of the research show that one of the obstacles for coconut farmers is the difficulty in transporting copra products to the village due to the condition of farm roads which do not allow motorbikes to access them, so they use carts for transportation. Therefore, the government must pay more attention and make efforts to improve community farming roads to make it easier for farmers so as to create a more exciting agricultural atmosphere so that farmers can be more productive and mobilize community potential so they can develop their coconut business. Regional governments must have a strategy in planning related to efforts to empower farmer groups so that farmers can prosper. With the large number of coconut farming communities, the government should be able to create an atmosphere for the coconut farming community to develop, such as by providing business capital assistance, socializing about processed coconut products which are initially always processed into copra and into other derivative

products that can provide added economic value such as pure oil, culinary delights, food, and coconut cakes and other processed products.

Empowering

The research results show that in order to strengthen its potential, local governments need to take more positive steps apart from just creating a good climate and atmosphere. For this reason, there needs to be a special program for less empowered coconut farmers. It is hoped that the financial assistance program, training and understanding of coconut processing will make coconut farmers independent in managing and developing their business so that coconut farmers' income increases and all their living needs are met. Apart from that, it is also necessary to provide guidance and training to coconut farmers starting from technology and product diversification so that they can produce products needed by the market, to facilitating with the private sector for marketing copra products, or facilitating business capital loans, so that the coconut farming community in Tanete Village experienced expansion of production and increased economic added value. Therefore, the role of the government and related agencies is very necessary in terms of empowering farmers.,

Protecting

The results of the research show that one form of protection that can be carried out by the government is by establishing infrastructure that encourages entrepreneurship in coconut farming communities, such as copra industrial houses, equipment, because the farming equipment used is still very simple, or providing copra processing machines to make processing easier. Thus, the ultimate goal is to make society independent, enabling and building the ability to advance towards a better life on an ongoing basis.

V. Conclusions and Recommendations

Conclusion

Empowering coconut farmers in Selayar Regency can basically change mindsets and better empower head farmers in Selayar Regency. It is said that this is because the head farmers in several areas have started to switch from the method of processing coconut to ordinary copra to white copra, which has been proven to increase the income of coconut farmers in Selayar Regency. However, most coconut farmers themselves lack the motivation to develop their coconut business. Therefore, empowerment efforts and the role of local government are very much needed

The lack of awareness of coconut farmers to innovate their own processed coconut products as well as limited funds are factors or obstacles to the slow pace of coconut farming in Selayar Regency, apart from that, the low level of knowledge and understanding of the community regarding processed coconut products is an obstacle so that the coconut processing carried out is still traditional. and there hasn't been much progress.

Recommendations

1. The government must maximize efforts to empower coconut farmers in Selayar Regency by providing support and assistance in the form of counseling and training which can make coconut farmers more motivated to increase their business productivity and income.
2. There needs to be an institution that can protect and organize farmers so that their existence is no longer marginalized so that they can get better empowerment so that they can increase the income of coconut farmers.

References

1. Akhmad. (2014). *Ekonomi Mikro: Teori dan Aplikasi dalam Dunia Usaha*. Andi Offset. Yogyakarta.
2. Andriani, L. (2018). *Analisis Faktor-Faktor Yang Mempengaruhi Pemberdayaan Masyarakat Petani Oleh Dinas Perkebunan Kabupaten Indragiri Hilir*.
3. BPS. (2023). *Kabupaten Selayar Dalam Angka*. Badan Pusat Statistik Kabupaten Selayar.
4. Edi Suharto (2005). *Membangun Masyarakat Memberdayakan Rakyat*. Bandung: Refika Aditama.
5. Gunawan, Sumodiningrat. (1999). *Pemberdayaan Masyarakat & JPS*. Jakarta: PT. Gramedia Pustaka Utama.
6. Fachry M. 2012. *Analisis Sosial Ekonomi Potensi pengembangan Pulau di Kabupaten Selayar*. Laporan Kerjasama KKP Jakarta dan DKP provinsi Sulawesi Selatan
7. Fenny M. G dan Very. (2015). *Peningkatan Pendapatan Masyarakat Melalui Program Pemberdayaan di Desa Lolah II Kecamatan Tombariri Kabupaten Minahasa*,
8. Friis-Hansen, E and Duveskog Deborah. 2012. *The Empowerment Route to Well-being: An Analysis of Farmer Field Schools in East Africa*”. *World Development*. Vol.40, Issue 2, pp. 414-427.
9. Hermanto R., E.Ruauw, & R.Kaunang. 2020. *Value Added Analysis of Copra and Sun Dried Copra in Buyat Village Kotabunan Sub District East Bolaang Mongondow Regency*. *AGRIRUD*. Volume 1 Nomor 4, Pp. 436 - 447
10. Huraerah, A. 2011. *Pengorganisasian dan Pengembangan Masyarakat*. Bandung: Humaniora
11. Marlina. (2022). *Entrepreneurship Perkebunan Kelapa di kabupaten Indragiri Hilir*. Selodang Mayang
12. Milen, & Anelli. (2004). *Pegangan Dasar Pengembangan Kapasitas*. Diterjemahkan secara bebas. Yogyakarta: Pondok Pustaka Yogya.

13. Najiati Sri. 2005. Pemberdayaan Masyarakat di Lahan Gambut. Bogor: Wetlands International
14. Nogoseno. 2003. Reinventing agribisnis perkelapaan nasional. Prosiding Konferensi Nasional Kelapa V. Tembilahan, 22–24 Oktober 2002. Pusat Penelitian dan Pengembangan Perkebunan, Bogor. hlm. 17–27.
15. Romadhoni B., Akhmad I. Halid, A. Muhsin. 2022. Pemberdayaan Umkm Dalam Rangka Peningkatan Kesejahteraan Masyarakat Di Kabupaten Gowa. | Jurnal Ilmiah MEA (Manajemen, Ekonomi, Dan Akuntansi). Vol. 6 No. 3. Pp. 1074-1088.
16. Sedyastuti, K. (2018). Analisis pemberdayaan UMKM dan peningkatan daya saing dalam kancah pasar global. INOBIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia, 2(1), 117–127.
17. Soekartiwi. 2002. Faktor Faktor Produksi. Jakarta: Salemba Empat.
18. Suharto, E. 2005. Membangun Masyarakat Memberdayakan Rakyat. Bandung: Reflika Aditama
19. Suriyani A, S. Saleh, and Akhmad. 2023. Capacity Building Empowerment of Weaver Groups Through Weaving Business Innovation at the Ikat Jata Kapa Weaving Center in Sikka Regency, East Nusa Tenggara Province, Indonesia. European Journal of Development Studies. Vol 3 | Issue 2. PP.59-68.
20. Wijaya Adi, Panji.2009. “Analisis Implementasi Program Perusahaan Inti Rakyat (PIR-BUN) Pada PTPN VII Unit Sluma di Kabupaten Bengkulu Tengah”. Undergraduated thesis, Fakultas Ilmu Sosial dan Politik, UNIB