Poverty Trap of Seaweed Farmers In South Sulawesi Province

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Abstract. Most of the results of academic studies have placed coastal communities, especially the community of seaweed fishermen, in poverty. However, it is difficult to find a fishing village that has economic prosperity evenly. This study aims to look at the portrait of poverty among seaweed farmers in South Sulawesi. This research is an explanatory study that seeks to test the theory and findings of previous research related to the economic status of the heads of households of sea-weed farmers as the main research subject. This research used two types of data, namely secondary data in the form of raw data obtained from the Central Bureau of Statistics and primary data from the results of in-depth interviews. The reality of poverty in the lives of coastal communities, especially seaweed farmers, cannot be separated from the poverty trap proposed by Chambers, which consists of (1) low income, (2) low education, (3) physical weakness, (4) isolation (5) vulnerability, and (6) powerlessness. This research shows that poverty traps individually and collectively encompass the family life of seaweed farming communities in South Sulawesi. Low education, lack of bargaining value, limited capital, and lack of counseling for seaweed farmers become a vicious circle that entangles the lives of seaweed farmers into poverty. Although many government programs have been carried out to alleviate poverty in coastal communities, it is necessary to evaluate the programs that have been carried out, whether they have touched the root of the existing problems or only on the surface.

Keywords: Poverty, Poverty Trap, Seaweed Farmers.

1   Introduction

Indonesia is an archipelago that is geographically flanked by two continents, namely the Asian and Australian continents, and by two oceans, namely the Pacific and Indian oceans. Indonesia with an area of 8,300,000 km^2, which includes 1,900,000 km^2 (22.89%) of land and 6,400,000 km^2 (77.11%) of seawater, and a coastline length of 108,000 km (BIG, 2017) makes Indonesia endowed with wealth and marine resources that are very abundant. The abundant resources are both biological and non-biological resources. Non-biological resources can be in the form of environmental services around the sea. Thus, Indonesia has a unique character in that millions of potential natural resources can be utilized for the welfare of society.

Seaweed production in Indonesia is spread across 23 provinces. The total national seaweed production in 2020 was 5.01 million wet tons, consisting of seaweed production at sea of 4.66 million wet tons and seaweed in ponds of 351 thousand wet tons. The top five seaweed-producing provinces are South Sulawesi, East Nusa Tenggara, North Kalimantan, Central Sulawesi, and West Nusa Tenggara.

South Sulawesi seaweed is the most significant contributor to seaweed production in Indonesia, contributing 32.57% of total seaweed production. Indonesian seaweed has a large share in the world seaweed market. According to data from the International Trade Center, in 2018, Indonesia's seaweed exports in raw materials ranked first in the world, reaching 205.76 thousand tons, meaning that seaweed is an important industry for the region, country, and global market. More than 35,000 households in the province rely on seaweed farming for their livelihoods.

Based on the description of such a large natural resource potential and high economic value, the welfare of seaweed fishers and coastal communities should be prosperous, but the lives of seaweed fishers and coastal communities are synonymous with poverty. Most of the results of academic studies have placed coastal communities, especially the community of seaweed fishermen, in poverty.

Most academic studies have positioned coastal communities, especially fishing communities, as having a number of socio-economic limitations, such as social backwardness, poverty, and low welfare levels. Only a small number of coastal communities have above-average living standards, such as intermediary traders and successful boat owners. It is scarce, even challenging, to find a fishing village that has economic prosperity evenly [1]-[3]. This study aims to look at the portrait of poverty among seaweed farmers in South Sulawesi. This study is expected to increase knowledge as a provision for applying theoretical knowledge to research problems. It is expected to be a reference for anyone, especially the government, regarding poverty reduction policies for seaweed farmers.

2   Research Methods

This research is an explanatory study that aims to test the theory and findings of previous research related to the economic status of the heads of households of seaweed farmers as the primary research subject [4]. In addition to the individual factors of seaweed farmer household heads, research on external factors that are considered to influence the poverty status of seaweed farmer household heads is also carried out in this study [5]. A mixed method was used in this research to answer the existing problem formulation and achieve the desired research objectives [6]-[7].

This research used two types of data, namely secondary data in the form of raw data obtained from the Central Bureau of Statistics and primary data from the results of in-depth interviews. Raw data was sourced from the enumeration results of the Seaweed Potential Commodity Survey, which consisted of individual characteristics of the head of the seaweed farmer household: age, number of household members, education level, employment status, main source of capital, and asset ownership. Primary data was obtained from in-depth interviews with informants related to the characteristics of

seaweed farmer household heads and an assessment of the accessibility of public services (education, economy, health, and social protection).

3   Results and Discussion

South Sulawesi is a maritime province with an area of 46,717.48 km2 consisting of 314 islands, making South Sulawesi a potential fishery area. The population of South Sulawesi reached 9.14 million people (2020 Population Census Results), requiring the fulfillment of large amounts of protein, carbohydrates, and fiber food. As an area of fisheries potential, seaweed is one alternative food from the waters that are rich in nutrients and should be developed.

South Sulawesi seaweed is the largest contributor to seaweed production in Indonesia, where South Sulawesi contributes 32.57% of total seaweed production in Indonesia. Indonesian seaweed has a large share in the world seaweed market. According to data from the International Trade Center, in 2018, Indonesian seaweed exports in the form of raw materials ranked first in the world, reaching 205.76 thousand tons.

If you look at the potential of seaweed products in South Sulawesi, seaweed farmers should be a promising and prosperous profession, but in fact, they live in isolation and poverty. This is a paradox or an opposite question. Talking about seaweed farmers, the majority of whom live in coastal areas, it is almost certain that the issue that always arises is that the community is helpless, marginalized, poor, and is the target of exploitation by the authorities both economically and politically.

In the study of sociological perspectives, poverty is a situation where a person is unable to maintain himself following the group's standard of living and is also unable to utilize his mental and physical energy in the group [8]-[9].

The reality of poverty in the lives of coastal communities, especially seaweed farmers, cannot be separated from the poverty trap proposed by Chambers [8], which consists of (1) low income, (2) low education, (3) physical weakness, (4) isolation (5) vulnerability, and (6) powerlessness. These six elements are interconnected with each other so that they constitute a poverty trap that is truly dangerous and kills the life chances of low-income families.

Based on the results of the SKPPRL-21 data collection, it was found that seaweed farmers in South Sulawesi mostly meet a decent standard of living with the status of ownership of their residence, the type of floor, walls, and roof of the house is quite adequate [9].

However, when looking at education, it can be seen that most of the education of seaweed managers is in elementary school and below.
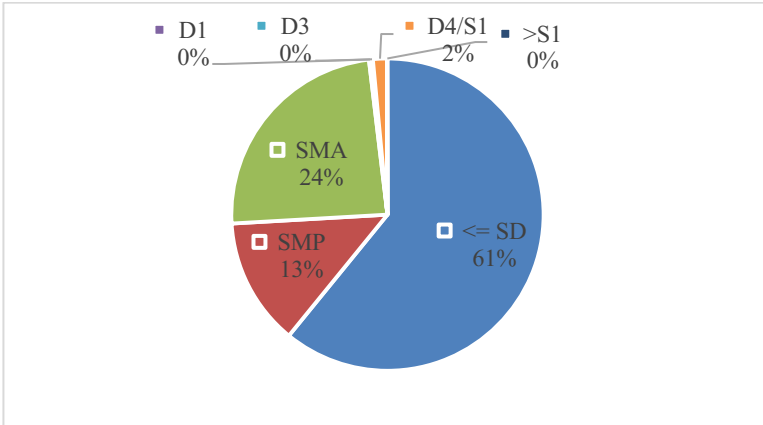
Fig. 1. Number of Seaweed Aquaculture Cultivators in Sulawesi Selatan, 2021. Source: Result of SKPPRL-21

Based on capital ownership, 84% of seaweed farmers cultivate autoweed using capital. This shows their limitations in developing their own seaweed business.
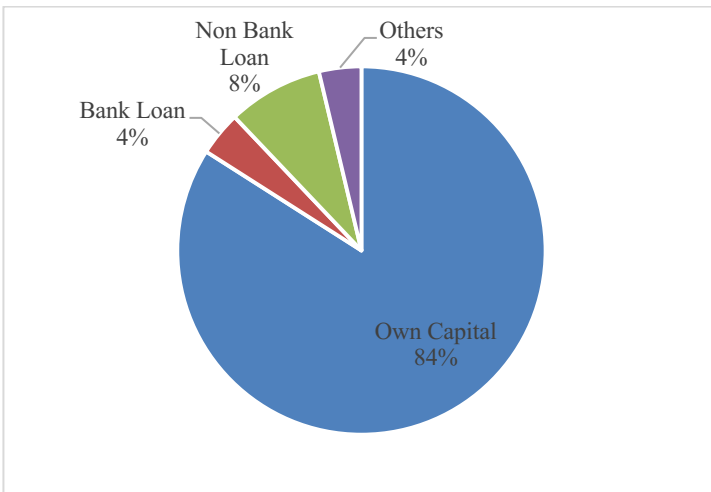

Fig. 2. Number of Seaweed Aquaculture Households and Main Source of Funding Over the Past Year. Source: Result of SKPPRL-21

Meanwhile, if we look at the main purpose of selling the harvest, 95% sell to collective traders, which shows the powerlessness of seaweed farmers in determining the value of their production.
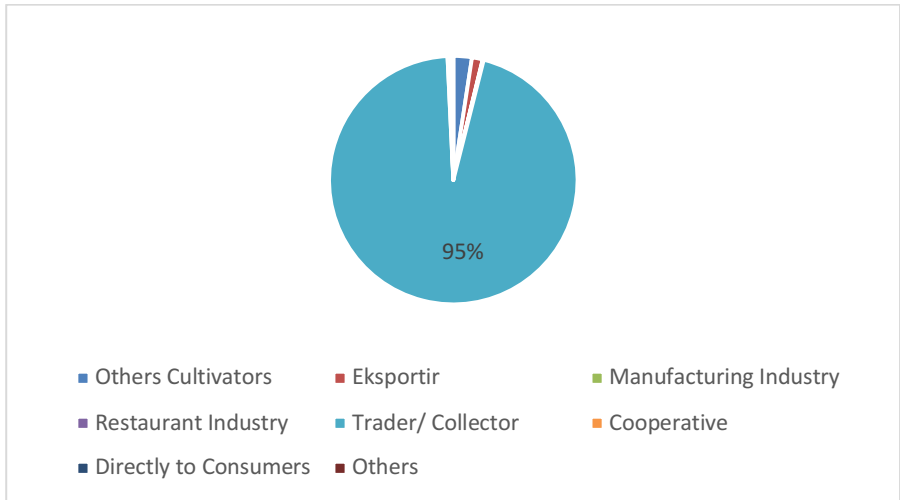
Fig. 3. Number of Seaweed Aquaculture Households in The Sea by Province and Main Sales Destination of Harvest, 2020. Source: Result of SKPPRL-21

4   Conclusion

This research concludes that according to Chambers' understanding, poverty traps both individually and collectively encompass the family life of seaweed farming communities in South Sulawesi. Low education, lack of bargaining value, limited capital, and lack of counseling for seaweed farmers become a vicious circle that entangles the lives of seaweed farmers into poverty. Although many government programs have been carried out to alleviate poverty in coastal communities, it is necessary to evaluate the programs that have been carried out, whether they have touched the root of the existing problems or only on the surface. This can be done by inviting each stakeholder to dialogue with the people about the potentials, threats, opportunities, and challenges the community faces. This dialog will later become a joint formulation or a concrete step to alleviate poverty together.

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