Socioeconomic studies in the utilizing of livelihood capital to meet the needs of coastal communities

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Abstract. Punaga Village is a coastal area that has great potential for proper management. The society is very pluralistic and multicultural. This study aims to determine the utilization of capital livelihood owned or easily accessed in meeting needs. Capital livelihoods are generally used by the community in socializing, networking, finding work and building trust among the community. The analysis method used in this study is a descriptive analysis. The limitation of this study is that most populous coastal communities in the village work as farmers. The results of this study indicate that socioeconomic conditions are very influential in the utilization of capital livelihood that is run by the community. Utilization of capital livelihood in socializing activities or building harmonious relationships is expected to build a sustainable economic system.

1. Introduction

Indonesian society is well known as a farming society, whether it is in the agricultural sector or the coastal sector where the community is more focused on the use of natural resources in the broad sense of agriculture. Community work that we often encounter in everyday life such as farmers, fishermen, ranchers, and others. It has also been hereditary as the main livelihood for most Indonesians. However, the important thing to consider is that coastal communities are highly dependent on various factors, including social, resources, public policy, and technology [1].

Coastal society faces various problems that cause poverty. In general, it depends on the livelihoods from the land use, also sea and beach resources, which require large investments by capital owners. Most people work seasonally. They work as rice farmers, small fishers, fishing workers, small-scale fish processors, and small traders because they have limited investment and capital capabilities. Lowland rice farmers are a source of community livelihood but are only able to cover their daily needs and are limited by one season while small fishers are only able to utilize the resources in the coastal area with catches as one of their livelihoods. The problems that often arise tend to decrease their catches due to technology/fishing equipment that is still simple and competition with large fishing vessels and the decline in marine resources [2,3].

The socioeconomic condition is socially regulated and places a person in certain positions in society, giving that position accompanied by a set of rights and obligations that must be played by the bearer of status [4]. Meanwhile, according to Soerjono Soekanto [5], socioeconomics is a position in society related to other people in the sense of social environment, achievements, rights, and obligations about resources. The socio-economic condition of the community is marked by mutual acquaintance with one another, the community, the nature of cooperation, and kinship. The social life
of the farming community consists of social interaction, social values, and education level. While the economic life of the farming community consists of the ownership of the dwelling house, the extent of the arable land, or the land it owns [6].

According to Mulyanto Sumardi and Hans Dieter Evers [7] in Lubis [8], the socio-economic situation is rational and assigns a person to a specific position in society. That position is followed by a set of rights and obligations that must be played by the status bearer. According to him, there are also characteristics of socio-economic conditions, namely as follows:

- More educated.
- Having a social status that is marked by the level of life, health
- Work and self-introduction to the environment.
- Have a higher level of upward mobility.
- Having a large field.
- More oriented to the commercial economy of the product.
- Have a more credit-related attitude
- More specific work.

The socioeconomic aspects of the village and employment opportunities are closely related to issues of welfare of the village community. Food sufficiency and economic needs for new communities are affordable if household income is sufficient to cover household needs and the development of their businesses based on the opinions of experts can be stated that socioeconomic conditions are the position of individuals and groups with regard to the generally accepted average size of education, ownership of goods, and participation in group activities of the community, while socioeconomic conditions are related to the socioeconomic status itself with the daily habits of individuals or groups [4].

Coastal communities living together inhabiting the coastal areas form and have a distinctive culture associated with their dependence on the use of coastal resources. The coastal community is a community that lives, grows and develops in the coastal area, which is a transition zone between land and sea areas. Coastal communities in general, most of the population earn a living in the sector of marine resource use, such as fishermen, fish farmers, sand mining and sea transportation [9].

Communities living in coastal areas and sources of economic life depend directly on the utilization of marine and coastal resources through fishing and cultivation activities. Poverty as an indicator of underdeveloped coastal communities is caused by three main things, namely structural poverty, superstructural poverty, and cultural poverty [10], namely:

- Structural poverty is the social-economic structure of society, the availability of development incentives or disincentives, the availability of development facilities, the availability of technology, and the availability of development resources, especially natural resources.
- Superstructural poverty is poverty caused by macro policy variables that do not or do not favor the development of fishing communities.
- Cultural poverty is poverty that is caused by inherent, inherent, and certain lifestyle variables that make it difficult for the individual concerned to move out of poverty because these factors are not realized or unknown by the individual concerned.

Living capital consists of five income capitals where people use them by carrying out their economic activities both from agriculture and daily activities. For a handful of people, using this living capital is very helpful in meeting household needs. Natural capital can be seen from the use of natural resources such as water, wood, and accessible natural resources. Physical capital can be seen from the utilization of ownership of household assets and ownership of production assets owned by households. Human capital can be seen from the age, sex, health, education level, and the number of household members that can affect livelihood activities. Financial capital can be seen from the use of savings and loans owned or accessed. Social capital can be seen from the use of networks, organizations, and trusts to make a living strategy.
Takalar Regency is known as an area that has a vast coastal area. Most of the people who live in coastal areas work as rice farmers, fishers, fish farmers, seaweed farmers and have businesses in the tourism sector. This great potential from both land and marine resources is used by most people or capital owners to invest to earn income to fulfill their family life. One of the sub-districts in the coastal area of Takalar Regency, which makes it a location, is the District of Mangarabombang. This sub-district is a sub-district that should be developed by the Regional Government of Takalar Regency itself because it sees the real potential. In addition to land resources, in this district, the tourism sector is well known as well as its seaweed cultivation centers. The number can see this of tourism locations such as Punaga Resort, Puntondo Environmental Research Center (PPLH), Laikang Bay, Topejawa Beach Tourism and others. The seaweed cultivation sector also has great potential because quite a lot of people are working in this field even there is a seaweed management office by the Ministry of Maritime Affairs and Fisheries. Considering all the potential, coastal communities in this area may have a variety of sources of livelihood, even having one or more work done simultaneously because of the large number of resources that can be utilized. One of the villages in Mangarabombang Subdistrict is Punaga Village, which has a tremendous resource potential, which has land resources and marine resources that have not been maximized in its management, even the sea resources are more significant than the existing land resources, this village still has a large area of land rice fields which classified as very large to be used for coastal communities, because every year when the rainy season arrives, coastal communities use the land to plant crops such as rice, chili, and corn even though it only uses rainwater as the only source of irrigation for their plants. However, it is possible to be utilized for coastal communities by prioritizing livelihood capital in conducting searches to meet the needs of their households.

2. Methods

2.1. Location and time of research
This research was conducted in Punaga Village, Mangarabombang District, Takalar Regency. The time of the study begins in April 2019.

2.2. Populasi dan sample
The population in this study took the object that is rice farmers who do household income fulfillment activities. The number of farmers in Punaga Village is 115 farmers spread over four hamlets. The sample used is by taking 25% of the population that is as many as 115, with 30 respondents taken at random.

2.3. Method of data analysis
According to Basrowi [4] descriptive analysis is a study used to determine the value of independent variables, either one or more variables (independent) without making comparisons or connecting with other variables, such as describing the characteristics of the socio-economic conditions of the respondents consisting of the education of respondents, farming experience, age, land area of livelihood strategies carried out by households in meeting their needs.

3. Results and discussion

3.1. Research overview
Punaga Village is a village in the Mangarabombang District of Takalar Regency. The village is located in a coastal area that has many activities in the fisheries and marine sector, although some family heads work as farmers. The Punaga people have many resources that have not been properly utilized and have not yet been commercialized due to the lack of technological facilities and the lack of community understanding regarding resources management. Extensive resources are owned by Punaga Village, by the land and the sea. Land resources are quite extensive even though located in the
coastal area of 9,681.4 Km2, which is divided into 1,379.7 rice fields and 8,301.7 drylands. The average paddy field in the coastal area is used every year to grow paddy and dryland, and people often use it to plant non-rice plants such as corn, chili, and others according to the conditions of the land.

Punaga village is known as a considerable seaweed production center, especially in the Malelaya sub-village, the majority of residents in the sub-village work or on seaweed. They do seaweed activities throughout the year with a harvest cycle of 30-45 days. Seaweed produced by the community of Punaga Village as raw material or in this case as a producer, no technology can change seaweed into renewable products or products that have higher economic value. There are two types of seaweed planted in this area, namely SP type with a selling price of IDR 5,000/kg and the type of Katoni for IDR 23,000/kg. Some are sold in the dry form or the wet form. Seaweed prices are relatively volatile following the season and government policy. Seaweed sells to collectors both within the scope of the village itself and from outside the village. Testimony from one of the seaweed collectors, seaweed was distributed to the factory of PT. GIWANG NUSANTARA which is located in Palleko Village, North Polongbangkeng District, Takalar Regency and in Makassar Industrial Area (KIMA) which is located in Makassar City.

To find out the level of welfare in the community of Punaga Village, there are several indicators used in assessing the level of welfare in the study location. These indicators are:

- Own a private house (wood or stone)
- Have a permanent job
- Highly educated and knowledge level
- Health and nutrition
- Infrastructure and services
- Recreation (natural environment)
- Asset ownership

There are seven indicators in assessing the level of welfare that researchers propose in this study that are adjusted to the conditions at the study site, Punaga Village. With these indicators, researchers can provide an assessment using four schemes, namely:

- Very good (7 indicators)
- Good (5-6 indicators)
- Sufficient (3-4 indicators)
- Less (<2 indicators)

Using the scheme above, we can provide an assessment following the conditions at the location. The researcher gave a qualitative assessment by giving scheme 2, which was very good by meeting 5-6 indicators explained as follows; the majority of the population of Punaga Village had private houses, both on stilts and stone houses, with various conditions according to income. The higher the income, the better the occupancy or vice versa. Having a permanent job that is sought every year by the community to generate more income than usual, for example, working as a farmer, seaweed seller or meatballs, this community works consistently by doing continuously. Health and nutrition in the community in the area are quite beneficial because it is driven by the fulfillment of nutrients such as protein, namely fish and shrimp, rice and vegetables. Recreation (natural environment), in meeting human needs, because it is a recreated area that is visited by many people from outside the village such as the famous Punaga Resort. Asset ownership, the community has private assets such as rice fields, seaweed land, boats, vehicles, and others as support in generating income.

Maintaining friendship between people can be said as a habit. In the context of friendship, rural communities with urban communities are very diverse, relationships and kinship are very thick in village communities because not much is eroded by time, in contrast to urban communities that are strongly influenced by changing times and existing technology, even urban communities that they fight with each other but don’t know each other due to lack of socialization activities between them. For the people of Punaga Village itself, he has a strong friendship and is ingrained. Research reveals that this is based on several indicators as follows:
• Cooperation
• Togetherness
• Helping each other
• Cooperation
• Kinship
• Friendship

By looking at the indicators above, the researcher revealed that in Punaga Village, cooperation, togetherness, help, cooperation, kinship, and friendship. It is said that researchers while in the field saw the ties of local community fraternity as an example of helping to push a boat into the sea, flocking in helping parties or disasters, sitting together while joking, helping to clean public facilities and others. Relationships that are familiar and harmonious can be created when a person's body condition is healthy, for this study also revealed the health condition and access to health facilities. Some indicators reveal like health facilities in Punaga village, namely:

• There is a health center in the village
• The distance is easy to reach
• There are midwives, nurses or doctors
• The needs of the drug are very fulfilled
• Inpatient rooms are available
• Decent building
• Clean environment
• Proper MCK facilities

There are eight indicators used in assessing existing health facilities in Punaga village. For this reason, researchers provide 4 rating schemes, namely:

• Very good (8 indicators)
• Good (6-7 indicators)
• Sufficient (4-5 indicators)
• Less (<3 indicators)

Using the scheme above, the researcher gave an assessment of access to health facilities in Punaga, which is Less (<3 indicators), this is because that in Punaga village has one health facility, namely PUSTU (Puskesmas Pembantu) in Punaga, but in health services, this is only one midwife who serves patients, but the work of this midwife has been replaced by health cadres formed by the government. Building and environmental problems are not feasible. Apart from health facilities, access to clean water is still difficult to obtain and there is no MCK in one house. Conditions related to education in Punaga village, researchers also provided indicators such as:

• Educational facilities available (kindergarten, elementary, junior high, high school)
• Decent building
• Teacher
• Clean environment
• Close distance
• Proper MCK facilities
• Book/library facilities are sufficient
• Fitness facilities

Eight indicators are used to assess educational facilities in Punaga village. For this reason, researchers also provide a scheme in assessing this, namely:

• Very good (8 indicators)
• Good (6-7 indicators)
• Sufficient (4-5 indicators)
• Less (<3 indicators)
Using the assessment scheme above, the researcher gave a good rating (6-7 indicators) for education in Punaga Village because there were 3 kindergartens, 3 elementary schools, and 1 junior high school scattered in several regions. The buildings are still suitable for use in educational purposes, the number of teachers is still appropriate, the distance traveled by students to the school is quite close, either by cycling, escorted by parents or walking alone. But the junior high school located in Punaga is still one roof (SATAP) with its primary school. Sports field facilities, playgrounds and places to learn are adequate, but for MCK facilities are still lacking because these facilities are not appropriate, students and teaching staff usually hitchhike at residents' homes.

Furthermore, facilities for houses of worship in Punaga village have been classified as adequate because each village has a mosque that is used by the community in worship. In the village of Punaga itself, the majority even 100% of the population is Muslim. The safety and social comfort problems created in this village are very convenient because thieves rarely occur. After all, motorized vehicles are usually stored anywhere, nobody steals. The high bond of friendship between people who carry high trust, by establishing relationships like this will make a harmonious society so that people rarely fight or fight with each other, stressing the importance of personal trust in maintaining social capital [1].

3.2. Socioeconomic conditions in the utilization of living capital

3.2.1. Natural capital. The natural capital described in this study is the ease of human resources in accessing natural resources, both land and sea. The area of land owned by farmers consists of paddy fields and dry land. Paddy land which is 1379.7 Ha / Km and dry land/garden which is 8301.7 Ha / Km, is a source of income for most people. Sea resources that are open for use, for example, seaweed cultivation, have huge potential to be developed and the location of seaweed is not far from the government-owned shrimp ponds. Social networks help smallholders to assist farming even with a production sharing system.

3.2.2. Social capital. The social capital referred to in this study is the social resources found in the community that will affect the lives of farmers' households. This social relationship is formed by itself. Based on the results during the study, interaction between communities was harmoniously established with the community and neighboring villages, namely Cikoang Village and Laikang Village. However, in the Tamalabba sub-village, some transmigration residents had lived for years at this location. By prioritizing trust in fellow farmers, compassion and empathy will arise when there is a disaster, in addition to having a social network that can bring good relations and help when needed such as work or capital loans. The more frequent social interactions are carried out, the quality of the network will be stronger and will have a positive impact on farmers.

3.2.3. Financial capital. Savings is one of the financial investments that farmers can use to manage resources to meet family needs. In general, the management of rice farming uses personal capital. Private capital be it money or property. The average community has savings more than IDR 200,000 saved for other urgent special needs such as farming and an average of >1 gram of gold that can be sold or mortgaged on the market when economic difficulties. Owned property is only limited to motorcycles, cars, land certificates, gold that can be mortgaged to capital borrowers to help the family economy or build small and medium businesses. Big or small the amount of savings owned by a farm family depends on the income strategy adopted by the family. However, some farmers save their savings in financial institutions such as banking.

3.2.4. Human capital. The human capital that will be discussed in research is the level of education. Based on the primary data processed, the results of the research in the field show that of the 30 respondents the average farmer has an education level of SD-equivalent of 8 people namely 26.6%, SMP-equivalent of 6 people namely 20.2%, SMA-equivalent as many as 8 people is 26.6% and the
last is Never School as many as 8 people namely 26.6% and the education of household members that is education at the elementary level-equivalent amounted to 26 with 25.4%, junior-level equivalent amounted to 20 people with 19.60%, the level of high school-equivalent 16 people with 15.6%, the level of S1-equivalent amounted to 7 people with 6.9% and the number of people who had never attended school either who had not yet attended school or had never undergone the educational process that was as many as 33 people with 32.5%. This shows that there is a relationship between the level of education of farmers to the livelihood strategies adopted in the family. The higher the education level of a farmer, the more diverse livelihood activities that are applied in the family. Because the higher the education level of a farmer, the easier it will be to apply knowledge in earning a living.

3.2.5. Physical capital. Physical capital in the form of facilities and infrastructure can help human resources in carrying out activities. Based on field facts, physical capital accessed in the form of access roads and lighting already exists and includes a communication network that is easily accessible and useful in the form of electronic networks and agricultural equipment such as tractor aids, combining harvesters, water pumps, and others. In addition to physical capital in farming, most of the households in this location also have equipment in their homes to help with daily activities such as household appliances, eating utensils or kitchen utensils, motorized vehicles or cars used to earn a living, to take children to school or daily activities. The days that support household needs, the MCK (Bathing Wash Case) facilities are still limited, because not all households have this facility, but are combined into one, namely public toilets either built by the government or self-built as a result of independent communities, in this MCK there are wells and water machines. For convenience in accessing physical capital, this will also affect household livelihood strategies that can be carried out by farm households. For example, for access to communication networks, if there is no communication network, farmers will find it very difficult to obtain market information related to selling prices and weak information obtained.

Table 1. Capital matrix income.

| Relationship                  | Natural capital | Social capital | Financial capital | Human capital | Physical capital |
|-------------------------------|-----------------|----------------|-------------------|---------------|------------------|
| Community social conditions   | Friendship network: Profit-sharing in land management after harvesting | Harmonious emotional relationships | Savings and loans | Labor of family members | The access road is already there but badly damaged |
|                              |                 | The level of trust is still high | Loans to relatives, friends and other families | Innovation is still low because it is difficult to change people's mindsets | Access to electricity and safe access to safe water |
|                              |                 |                 |                   |               | Good communication network |
|                              |                 |                 |                   |               | Household furniture |
|                              |                 |                 |                   |               | MCK already exists but is limited |
Economic conditions | Source of income | Capital lending in farming and daily necessities | Private capital in farming | Education is still low in livelihood strategies | The facility is used for daily needs and fulfills household needs
---|---|---|---|---|---
Land resources (rice, corn, chili) | | | | | 
Sea resources (seaweed, shrimp, fish) | | | | | 

4. Conclusion
Utilization of capital livelihood for the socio-economic relations of the Punaga society, namely by making use of livelihood capital which is divided into five capitals. Natural capital: utilizing the potential of existing natural resources such as land and sea resources. Social capital: have a social network of kinship and kinship to get work through a sense of trust and deep concern, among others. Financial capital: savings are used as financial reserves, which will later be used for farming purposes. Human capital: the higher the education, the easier it will be to get a job. Physical Capital: access roads that are used daily in activities in earning a living.

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