

# The Application of Blue Economy Principle Through Local Wisdom of Seaweed Farmers in Labuhan Kertasari Village, West Sumbawa Regency

1<sup>st</sup> Tri wahyu Hardaningrum  
*University of Cordova*  
*Sumbawa Barat, Indonesia*  
 ayu.harda@gmail.com

2<sup>nd</sup> Budi Eko Soetjipto\*  
*State University of Malang*  
*Malang, Indonesia*  
[budi.eko.fe@um.ac.id](mailto:budi.eko.fe@um.ac.id)  
 \*Corresponding author

**Abstract** - There are a number of local wisdoms reflected in the economic activities of seaweed farmers in Labuhan Kertasari Village, West Sumbawa Regency which are in line with the Blue Economy principles, even though they basically do not know and understand the Blue Economy concept. This study is intended to analyze the existence of local wisdom among seaweed farmers in Labuhan Kertasari Village, West Sumbawa Regency, which is in accordance to the principle of blue economy. The study was conducted with a qualitative type of phenomenological approach, with 58 research subjects. The results of the study found that: (1) ongoing economic application is sufficient in fishing activities in accordance to mutual agreement and only for the consumption needs of local residents not for trading; (2) a kinship-based social life climate is applied as it curbs greed because there is no tendency for competition between individuals to have excessive wealth compared to other citizens; (3) Feelings of well-being emerge as a result of developed seaweed farming activities performed and there is also increasing needs and desires to have a simple economic life; (4) there are a number of norms in the community to maintain beaches and oceans to be sustainable for the sustainability of seaweed cultivation.

Keywords: Local Wisdom, blue economy, seaweed farmers

## I. INTRODUCTION

The economic progress of a country depends on the mindset of its people who want their country to become a developed country. Indonesia as a maritime country has all the elements to become a developed country with abundant natural resources. With natural resources owned, it does not mean that Indonesia will be able to empower economically, when the resources referred to are not managed wisely. For this reason, human resources who have the power of creation and innovation are needed to maintain the sustainability of existing natural resources, for the benefit of the advancement of the people of their nation.

One effort that can be done is to maintain the customs of local communities around in managing the existing natural resources. Although it is not easy to maintain local wisdom that is full of

challenges, various government policies can be used to preserve the management of nature wisely and sustainably. In addition to policy, public literacy, technological innovation, and market demand will influence the wise behavior of human resources in a society.

Local wisdom does not stop at ethics, but reaches the level of norms and actions and behavior, so that in behaving and acting humans will be guided by it as a religious footing [1]. Local wisdom is a solution to preserve the environment including the aquatic environment, where customary law is often more respected than government law. Local wisdom plays a role in developing attitudes both individually and in groups related to the environment and natural resource management efforts. Local wisdom also functions to develop socio-political systems and determine policies that impact the environment or natural resources including coastal and marine natural resources.

According to the World Bank, blue economy can be interpreted as the sustainable use of marine resources for economic growth, improvement of livelihoods and jobs while maintaining the preservation of marine ecosystems. The originator of Blue Economy Gunter Paulli said that the application of blue economy is to create a marine industry that has high economic value and is sustainable. USAID Deputy Kristen Bauer also said that the blue economy is not only a matter of increasing productivity but also the ability of humans to survive in the marine industry.

According to the World Bank [8], the blue economy is the "sustainable use of ocean resources for economic growth, improved livelihoods, and jobs while preserving the health of ocean ecosystem." European Commission [9] defines it

as "All economic activities related to oceans, seas and coasts. It covers a wide range of interlinked established and emerging sectors."

At present and in the future marine potential will become a source of state income that should be calculated and considered in order to create a just and prosperous society. Various marine potentials have shown their existence in improving the welfare of the community on the coast especially. Although the industrialization of fisheries and seaweed has succeeded in boosting its productivity and has added value to the marine potential sector, the application of the Blue Economy concept has not yet been carried out by the majority of the community. The concept of blue economy was developed to answer the challenge that the world economic system tends to be exploitative and damage the environment. According to Pauli [2] we are obliged to make people aware of the importance of applying the concept of blue economy in exploiting marine potential. The application of the concept of blue economy basically seeks to integrate three things in development, namely: efforts to increase economic growth, efforts to prosper the community, while maintaining the environment.

The application of the Blue Economy concept will further strengthen the management of marine potential in a sustainable and productive manner. The Blue Economy approach will also encourage efficient management of natural resources through creativity and technological innovation. Synergy is needed between various parties so that the application of the Blue Economy concept goes according to expectations. Support from stakeholders is possible to jointly encourage and oversee the transformation towards sustainable use of marine resources while improving the welfare of coastal communities.

Kertasari, one of the coastal areas in West Sumbawa Regency, has extraordinary marine potential in the form of fisheries and seaweed. The uniqueness of Kertasari compared to coastal communities in general is that it does not make fishing activities its main profession. The Kertasari community has transformed from a variety of economic activities except fisheries to seaweed farming since the 1980s and has slowly evolved until 2008, almost all of its citizens (98%) are seaweed farmers. From the seaweed cultivation business, it has increased income and of course also welfare for the people of Labuhan Kertasari Village.

Geographically, the Kertasari Beach area is suitable for seaweed cultivation. Sloping coastal contours with calm and stable sea current conditions make seaweed thrive in the peg system applied in Kertasari Village. The types of seaweed most cultivated by the Kertasari Village farmers are *Eucheuma cottoni* and a small portion of *Eucheuma spinosum*. The need for seaweed and its derivatives is increasing both in the food and non-food industries. Seaweed in food industry can be directly consumed without being processed as a mixture of ice and cooking, and becomes *dodol* (glutinous seaweed) or sweets made through certain process. In the non-seaweed industry many are used in the medical and beauty world.

As the main livelihood, seaweed cultivation is the main economic activity for the people of Labuhan Kertasari Village on a daily basis. In these economic activities and social activities there are a number of local wisdom values that they unconsciously associate with the principle of blue economy, namely the use of marine resources to improve economic welfare, making the beach and sea as land for livelihoods and jobs, and the development of attitudes and behavior based local wisdom to preserve marine ecosystems in order to maintain the sustainability of seaweed cultivation.

The purpose of this paper is to study and analyze the values of local wisdom of the seaweed farming community of Labuhan Kertasari Village, West Sumbawa Regency, which they apply in economic and social behavior in their daily lives, and without realizing it is in line with the application of the blue economy principle.

## II. METHOD

The study was conducted with a qualitative type of phenomenological approach, with 58 active seaweed farmers as research subjects. Data collection is predominantly done through in-depth interviews and observation. Interviews were conducted individually or in groups in social activities carried out by respondents. The observations were made when they were doing seaweed farming activities and when respondents conducted routine household management activities. For this reason, researchers stayed in the study village for almost two months, in separate spans of time. In general, the activities carried out to manage and analyze research data include: (1) Preparing and organizing the data; (2) Reviewing and exploring the data; (3) Coding data into categories; (4) Constructing descriptions of

important concepts; (5) Building themes and testing hypotheses; and (6) Reporting and interpreting data.

### III. RESULT AND DISCUSSION

#### A. *The Blue Economy Life of Kertasari Village*

Based on the results of interviews and observations, it was found that the Kertasari community with their seaweed cultivation has shown the life of the blue economy. The seaweed production process carried out by the community is automatically carried out by preserving the environment, which is a condition for the sustainability of seaweed cultivation, as well as a sustainable production process. In addition, the customary pattern of the community in utilizing existing natural resources with certain limits, without over-exploiting. People catch fish only for daily consumption needs in sufficient quantities and not excessive. This behavior shows the tendency of the coastal communities of Kertasari Village to feel enough about the available natural resources, and to make use of them as needed. This is certainly part of moral economic behavior that shows asceticism. Sutrisno [3] said that "asceticism refers to the meaning of those who practice to become" soul-minded people ", moral and religious. He went through all forms of effort to eliminate bodily desires or passions. "

#### B. *The Blue Economy Awareness of Kertasari Village*

In general, the Kertasari people are not fully aware of the blue economy life that is happening around them. The blue economy life of the Kertasari community occurs naturally according to the community's need for environmental sustainability which is the main condition for the success of seaweed cultivation. This is actually what supports public awareness about the importance of applying the concept of blue economy in everyday life. This awareness continues to grow and shows the tendency of people to begin to understand the concept of blue economy life, even though it has not been done with full awareness.

Blue economy is a production process that utilizes natural raw materials that take into account excellence and innovation by following the workings of nature, so that the production process can occur sustainably. This effort will provide a solution to increase productivity while building an environmentally conscious community [4]. It is

this awareness that needs to be instilled in coastal communities, by internalizing them about efforts to increase growth and prosperity that do not neglect environmental conditions.

In an effort to increase understanding of the community, as well as the application of blue economy principle which includes efforts to increase economic growth, efforts to prosper the community, as well as maintaining the environment, it is necessary for government support, which can be in the form of adequate facilities and infrastructure, accompanied by intensive assistance [5].

#### C. *Potential Development Opportunities in the Development of Environmentally-Friendly and Sustainable Economy in Kertasari Village*

The choice to become a seaweed farmer for the Kertasari community is part of local wisdom and efforts to preserve a sustainable environment. If on land we know green economy, then in the sea area there is the term blue economy which together has the meaning of human efforts to preserve the environment, which we must admit is part of moral economic behavior.

Blue Economy is a concept that explains economic activities that not only reduce waste, but also improve the community's economy. It is also interpreted as the Blue Sea Economy which makes the sea as an ecosystem that must be protected and optimized for its benefits in order to improve the people's economy. The aim of the blue economy in Indonesia is to achieve overall national development by empowering elements related to the blue economy and maintaining marine sustainability [6]

APEC defines blue economy as an economic model that encourages sustainable development. An economic model that develops marine and fisheries industrialization that emphasizes growth, job creation, and encourages environmentally friendly technological innovation. Marine development that is less optimal and tends to be unsustainable is caused by a pattern of development that is less based on science and technology does not apply an integrated supply chain system approach, is less inclusive and is not environmentally friendly.

The concept of blue economy above is very appropriate to be applied in Indonesia which has a very wide sea, with abundant economic potential. As part of the concept of sustainable economic

development, the blue economy is interpreted to utilize the resources available from the sea to the coast by prioritizing maintaining and protecting the marine ecosystem, so that it can continuously provide long-term economic impacts.

In the end, efforts to increase the productivity and welfare of coastal communities contribute to the preservation of ecology, which will increase the resilience of natural resources. Blue economy works in the real sector, and has an impact on increasing the country's foreign exchange in the long run [7].

#### IV. CONCLUSION

The research findings consist of: (1) the economic life of the Kertasari community has the concept of a blue economy, which is characterized by limited community fishing activities based on mutual agreement, and only for the fulfillment of dishes need; (2) the Kertasari people are not fully aware of the blue economy life that is happening around them; & (3) there are opportunities to develop economic potential with an environmentally friendly & sustainable economy in Kertasari. The above findings show that increasing public awareness about the importance of the application of blue economy in daily life in coastal areas is slowly growing, this shows that the

community's need for environmental sustainability, which is the main condition for the success of seaweed cultivation, also supports community awareness about the importance of applying the concept of blue economy in everyday life.

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