AQUACULTURE DEVELOPMENT STRATEGY BASED ON THE STUDY OF UU NO. 31 TAHUN 2014

Ahmad Hasyim Asari Taufiqurrohman¹, Dwi Edi Wibowo¹, Heri Ariadi^{2*}

¹Faculty of Law, Pekalongan University, Indonesia ²Faculty of Fisheries, Pekalongan University, Indonesia *Corresponding author : ariadi_heri@yahoo.com

Abstract

Implementation of UU NO. 31 TAHUN 2014 is an important effort in aquaculture activities. The purpose of this research is to find out the obstacles to developing the concept of sustainable aquaculture in terms of the aspects of enforcing existing legal regulations and strategies that can be developed. The research method used is normative legal method with qualitative analysis referring to literature. The results of the study show that the main obstacles in the development of aquaculture by fish cultivators are limited resources, the impact of climate change, environmental pollution, socio-economic impacts, and a lack of understanding regarding the advantages of UU NO. 31 TAHUN 2014. In UU NO. 31 TAHUN 2014 describes several technical advantages related to the implementation of this regulation, such as options for resource management, technology application, scientific collaboration, and aquaculture technical development efforts. Therefore, several implementative strategies are needed for the development of the aquaculture sector which aim to determine the direction of developing a business and facilitate effective analysis. The conclusion from the results of this study is that there are limited resources, socio-economic factors and a lack of awareness regarding the regulations of UU NO. 31 TAHUN 2014 which affects the performance of the aquaculture sector. Therefore it is necessary to develop an implementable strategy such as providing legal education, strengthening social capacity, and developing a pattern of empowerment based on legal education.

Keyword : Aquaculture, law, empowerment, society, fish

INTRODUCTION

Aquaculture is one of the fisheries agribusiness sub-activities that has been widely developed in Indonesia (Ariadi et al, 2019). Aquaculture activities can be carried out in wet or dry land which includes fresh, brackish and salt water categories (Wafi et al, 2021). Commodities reared in aquaculture activities include fish, shrimp, seaweed, shellfish and other cultivars. Currently, aquaculture activities are much in demand by the community because of their good productivity levels and easy management systems (Ariadi and Syakirin, 2022).

In some places aquaculture activities are also mostly carried out in highland or mountainous areas. Aquaculture activities in mountainous areas are one of the productive natural resource management options. Cultivation in upland areas is a way to minimize the impact of carrier and vector distribution on cultivated ecosystems (Tucker, 1999). Even though it is quite productive, aquaculture activities in the mainland are also under threat from agribusiness activities which are considered more suitable based on the surrounding environmental conditions.

Aquaculture activities carried out in the mainland area urgently have had a major impact on other aspects. The aspects that are affected by the existence of aquaculture activities are the socio-cultural, economic and resource management aspects. The socio-cultural aspect here is related to the impact of cultivation activities on the

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surrounding community (Ariadi et al, 2022). The economic aspect is related to how this aquaculture activity has an impact on the economic growth of the surrounding community and its potential in the future (Muqsith et al, 2021). The aspect of resource management is an explanation regarding how aquaculture activities are an implementable example of managing aquatic resources for productive activities (Ariadi et al, 2022).

Although aquaculture activities can have a positive impact on several aspects of people's lives, there are still some problems found. The problems encountered include over-exploitation of resources and inappropriate cultivation management systems. Apart from that, there are other problems related to the application of legal access that the majority of cultivators do not really understand. The cultivators' lack of understanding of the application of the law is due to the fact that fish farming activities are carried out based on options for utilizing existing resources. Implementation of law in the field of fisheries is classified as difficult because the cases in the field are dynamic (Sasvia, 2019). Weak legal knowledge of cultivators can also be caused by minimal socialization of related laws (Ariadi et al, 2022).

In UU NO. 31 TAHUN 2014 Article 7 paragraph (1) in points (m) and (n) is written regarding the protection of fish cultivators and wise management of aquatic resources. The existence of the basis for these regulations still cannot be implemented perfectly, because cultivators have never paid attention to the regulations contained in the law. The practice of law enforcement in the field of fisheries which is still weak is possible because there are quite different scopes of study (Banjarani, 2020). In addition, it is difficult to apply the law in the aquaculture sector due to the legal substance that is still lacking in support, inadequate human resources, unsupported facilities, and

the level of legal awareness by the community which is relatively low (Ismantara et al, 2021).

Based on the explanation above, the purpose of this research is to find out the obstacles to developing the concept of sustainable aquaculture in terms of aspects of enforcing existing legal regulations and strategies that can be developed.

METHODS

The research method used in this study is a normative legal method with qualitative analysis referring to literature. The research respondents were fish cultivators in Beji Village, Purwokerto. Data collection was carried out by technical deep interviews and distribution of questionnaires to research respondents, then the data were analyzed by comparison and descriptive qualitative analysis.

In the analysis of the results of the research, a comparative study method was carried out between the research data and the points in the articles in UU NO. 31 TAHUN 2014. The aim is to find an implementable strategy that is in accordance with the problems in the field.

RESULT AND DISCUSSIONS Barriers to Aquaculture Development

Obstacles that may arise in efforts to develop sustainable aquaculture:

- 1. Limited Resources: Resources such as land, water, fish feed and fish fry may be limited. Availability of suitable land for ponds or cages, sufficient clean water for aquaculture needs, and quality feed can be obstacles in the development of sustainable aquaculture (Ariadi et al, 2019).
- 2. Climate Change: Climate change can have a negative impact on aquaculture. Rising water temperatures, increasing ocean acidity (a result of increased levels of carbon dioxide in the atmosphere), and

changes in rainfall patterns can affect fish health and productivity (Ariadi et al, 2022).

- 3. Pollution: Water pollution due to industrial, agricultural or residential waste can threaten the sustainability of aquaculture. An increase in the content of chemicals or toxic substances in water can have a negative impact on the health of fish and aquatic ecosystems (Banjarani, 2020).
- 4. Dependence on Fish Seed: The availability of quality and healthy fish seed is a key factor in sustainable aquaculture. However, the stable and reliable production of fingerlings can be a challenge, especially if there are diseases or genetic problems that affect the quality and quantity of the fry (Sasvia, 2019).
- 5. Social and Economic Aspects: Sustainable aquaculture must also consider social and economic aspects. Factors such as local community involvement, conflicts of interest with traditional fishermen, and economic dependence on the fishing sector can affect the development of sustainable aquaculture (Ariadi et al, 2019).
- 6. Lack of Awareness and Understanding: Lack of awareness and understanding of the importance of sustainable aquaculture can be an obstacle in developing this concept. Education and awareness-raising about the long-term benefits of sustainable aquaculture practices is critical to addressing this barrier (Ismantara et al, 2021).

Implementation of the Republic of Indonesia Law

UU NO. 31 TAHUN 2014 concerning Fisheries provides a legal and regulatory basis for the development of sustainable aquaculture in Indonesia. Following are some solutions that can be implemented in developing the concept of sustainable aquaculture, taking into UU NO. 31 TAHUN 2014

- 1. Management of Fishery Resources
 - Implement an ecosystem-based management system to ensure environmental balance and fish population sustainability.
 - Implement minimum catch sizes, catch quotas and fishing season restrictions to avoid overfishing.
 - Establish fisheries management institutions that involve relevant stakeholders, including fishers, governments, scientists, and nongovernmental organizations
- 2. Use of Technology and Innovation
 - Introduce modern technologies such as monitoring systems through the use of sensors and remote sensing to monitor fishing activity and obtain accurate data.
 - Take advantage of innovations in tissue culture, sustainable fishing, waste treatment and the use of environmentally friendly feeds.
 - Support research and development in the use of renewable energy and environmentally friendly technologies in aquaculture.
- 3. Development of Sustainable Aquaculture
 - Prioritize the development of fish farming which has a short life cycle, high growth rate, and disease resistance.
 - Diversification of cultivated species to reduce pressure on vulnerable species.
 - Promote environmentally friendly aquaculture practices, such as the use of sustainable feeds, effective waste management, and the use of aquaculture techniques that do not damage natural habitats.
- 4. Education and Awareness
 - Improve education and training for fishermen and fish farmers regarding sustainable aquaculture practices and

the importance of conserving fishery resources.

- Campaign for public awareness about the importance of sustainable fish consumption and how to choose fishery products that are environmentally friendly.
- Involve the community in monitoring and supervising illegal fishing activities through community participation programs.
- 5. Cooperation and Collaboration
 - Support cooperation between the government, private sector, research institutions, and civil society in efforts to develop sustainable aquaculture.
 - Form partnerships with international and regional institutions to exchange knowledge, technology and experience.

Implementative Strategy

As for several implementative strategies from the implementation of the UU NO. 31 TAHUN 2014 based on the obstacles experienced by fish cultivators and the implementation points of the articles in UU NO. 31 TAHUN 2014, several strategies can be displayed as follows:

- 1. Legal aid education regarding the rights of fish cultivators
- 2. Development of the concept of sustainable fish farming
- 3. Development of community empowerment patterns
- 4. Strengthening human resource capacity for fish cultivators
- 5. Making the downstream concept in the aquaculture sector

Based on the above strategy, several implicative steps can be shown for the development of the aquaculture sector so that it can develop further. This development strategy analysis is also very good for use in the process of determining the direction of business development (Palomares et al, 2020). The existence of a clear direction of development will make it easier to determine the appropriate level of analysis in that field (Sprecher et al, 2023).

CONCLUSIONS

Obstacles encountered from the research results are limited resources, socioeconomic factors and lack of awareness regarding the regulations of UU NO. 31 TAHUN 2014. Based on these problems, strategies that can be developed are implementative strategies such as providing legal education, strengthening social capacity. and developing patterns of empowerment based on legal education.

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