



Strengthening Strategy of Land Cultivator Cooperative for Community Empowerment and Management of Sustainable Coastal

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Abstract

Land cultivator cooperative (LCC) in Karawang Coastal is one of the community's capital to increase the empowerment and sustainability of natural resource management. The objectives of this study are: (1) to analyze the contribution of LCC in community and village development; (2) to formulate a strengthen strategy of LCC for community and village development for sustainable coastal management in Karawang. This research uses a qualitative approach with a case study method. The research was conducted in Tambaksari Village, Karawang. The location was chosen purposively because it was relevant with the topic of study. The method of determining informants are using snowballing method. The data used are primary data and secondary data. Primary data were collected through field observations, in-depth interviews with informants, and focus group discussions. Secondary data were obtained from related institutions. Data analysis is done by qualitatively and quantitatively. Research results showed that the LCC needs to be strengthened in community development that includes social, economic, and ecological aspects. SWOT analysis show that LCC is in the third quadrant.

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The recommended alternative strategy is to strengthen cooperation between village communities through the Joint Village-Owned Enterprises. LCC as the initiator of development of Joint Village-Owned Enterprises.

Keywords: community development; land cultivator cooperative; sustainable coastal; village development.

1. Introduction

Poverty and low human resources are still a classic problem in coastal communities [3]. In addition, coastal communities on the North Coast of Karawang face threats related to natural resource management. The Coastal communities in the North Coast of West Java have now felt concern over rising sea levels and the occurrence of coastal abrasion marked by a pool of sea water up to about 300 meters inland [20]. According to [4] the rate of sea level rise in Java's coast is 6-10 mm per year or as high as 8 cm for 10 years. Abrasion at this location occurs in almost the entire length of the northern coastline, such as in the Districts of Pakisjaya, Tirtajaya, Pedes, Cibuaya, Cilamaya, and a number of other coastal areas. This condition is caused partly because of the conversion of mangrove ecosystems into residential and cultivation land. Based on research by [13], the rate of sea level rise in the north coast of Java was 11.1 mm per year. Another problem faced by the Karawang coastal community is uncertainty over pond land tenure. This is related that most of the farmers use Perhutani's land. One of the socio-economic institutions in the Karawang coast is land cultivator cooperative (LCC). The cooperative is one of the popular economic institutions in Indonesia. Cooperatives have grown and developed in most areas in Indonesia, including in coastal areas. The existence of cooperative in coastal areas is the hope of the community to help provide economic empowerment for the people. Cooperatives are an association with the aim of joint efforts consisting of those who are weak, and are always tried in the spirit of not thinking of themselves in such a way, so that each is able to carry out their obligations as members and receive compensation in proportion to their use of organization [17]. Cooperative is a form of collective action that has been known for a long time by farmers [8]. Merging the same small-scale business (as with most people's businesses) into a larger-scale joint venture and it is possible to produce greater efficiency because of the shared use of factors of production, management, and various aspects of the economy [8]. While togetherness is also very possible to enlarge the scope of business so that business access that can be utilized by each will be even greater. Togetherness at the operational level is also very important to reduce risks collectively and overcome information asymmetry. Cooperatives have an important role in the survival of the Indonesian people, especially in the Indonesian economy [7]. Cooperatives also play a role as a vehicle to empower the poor by overcoming various socio-economic, cultural and psychological constraints. This is in line with one of the functions of cooperatives is to improve the welfare of members. Based on this background, this research will attempt to answer the question, how is the LCC strengthen strategy for community empowerment and sustainable coastal management in Karawang? This research is important and interesting because it is related to social, economic and ecological issues in the north coast of Karawang. The purpose of this research is to formulate strengthening strategy on land cultivator cooperative for community empowerment and management of sustainable coastal in Karawang.

2. Research methods

The research uses a case study approach with qualitative methods. The research location is in Tambaksari Village, Tirtajaya District, Karawang Regency. The research location was chosen purposively, according to the topic studied. This location is a coastal village, which is a center for shrimp, milkfish and seaweed farming in Karawang Regency. The research was conducted from May to July 2019. The method of determining informants is using the snowballing method. The data used are primary data and secondary data. Primary data were collected through field observations, in-depth interviews with informants, and focus group discussions. Secondary data were obtained from related institutions. Data analysis is done qualitatively and quantitatively.

3. Result and discussion

3.1. LCC's role in community empowerment

In this study, LCC's contribution to community development refers to the concept of sustainable development [5] about the triple bottom line, namely social, economic, and ecological aspects. Socially, the role of the LCC is assessed from five dimensions of community development, namely advocacy, community organizing, network development, capacity building and communication, information and education (Lubis, 2010). Economically, it is assessed from the income (income) and value added (value added) created for coastal communities. Ecologically, the role of LCC was examined in the techniques of aquaculture management, waste treatment and contribution in abrasion reduction through mangrove planting. The social role of cooperatives is seen from the role of the LCC in community empowerment, which includes advocacy, community organizing, network development, capacity building and communication, information and education. Advocacy is an effort to change or influence policy determinants to take sides with the public interest through the delivery of messages based on arguments that can be scientifically, legally and morally accountable. The advocacy that LCC has carried out is advocacy for the Karawang Regency's marine and fisheries service. The result is that the Karawang regency government has made this sub-district a seaweed center in Karawang regency. In addition, the Karawang regency government provides assistance to cooperatives, in the form of: ice machines, seaweed warehouses and freezers. Community organizing is an action so that the community has an arena to discuss and make decisions about the problems around them. LCC organizes the community by forming and organizing three community-based business groups. These groups are (1) Anugrah Pertiwi Group, groups that process processed seaweed, (2) Creative Earth for Makmur groups, groups that process seaweed waste into feed, (3) C73 milkfish groups, which are groups that process by milkfish. The existence of these groups is a strength of the LCC because it strengthens the cooperative business results, also accommodates the efforts of members. This is in line with the opinion of [21], that a cooperative is an organization, because in a cooperative there is coordination of the activities of two or more people to achieve a goal. Network development is carried out through efforts to collaborate with other parties to support each other to achieve goals. Network and trust is one important element of social capital, so that it becomes an important component in community development. LCC has built cooperation with various parties / institutions, including academics, companies, government, and community communities. From the academics, LCC collaborates with the Karawang Fisheries College (STP), relating to student research. LCC is also partnered with companies, namely PT. Pertamina EP Tambun Field and PT. Agarindo Bogatama. Collaboration with PT. Pertamina EP Tambun Field is conducted in the form of assistance

and capacity building for cooperative members. Partnership with PT. Agarindo Bogatama in terms of seaweed sales. All cooperations conducted by cooperatives with their partners are based on trust capital. This trust is one of the social capital of cooperatives that can encourage social collaboration to achieve shared interests and goals [15, 1, 6, 2, 19]. The success of LCC in establishing various partnerships is due to LCC leadership factors. The LCC leader has a very wide network. The leader becomes the entrance for empowerment, as a liaison between the group and related parties, and as a bridge for the entry of important information. This is in line with the research of [12] that leaders have an important role in developing farmer groups and influencing their members to be involved in empowerment activities. Similar opinion with [9], that a strong and trustworthy leader is one of the requirements for a cooperative to take place. Research from Yunasaf (2014) also suggests that leadership is related to cooperative dynamics. Capacity building is intended to improve the ability of the community in all fields. Capacity building is an effort to increase or change the behavior of individuals, organizations and community systems in achieving goals effectively and efficiently. The capacity building of LCC members has been carried out through training. LCC has carried out the role of communication, information and education. Education is done through training and field visits to cultivation sites. Communication and information is done through meetings, such as member meetings. In addition, LCC has utilized digital technology to support cooperative efforts by creating Seaenergy applications. This application can be used via a smartphone. This application is useful, among others, to determine the availability of stock and consultation on cultivation issues. The use of digital technology by LCC is very useful in community development, especially members of LCC. This is in line with the opinion of [18], that the use of digital technology is important to accelerate the process of community development.

3.2. Identification of internal and external factors

Table 1: Internal factors of LCC

No	Internal factors	Weight	Rating	Weight Rating	x
Strength					
1	Application of innovation of polyculture and organic pond systems	0,10	3	0,30	
2	Capacity of cooperative leaders	0,10	4	0,40	
3	A marketing cooperation agreement	0,10	4	0,40	
4	The location is close to the raw material	0,10	4	0,40	
5	Initiation of cooperative secondary business	0,10	3	0,30	
Total of Strength				1,80	
Weakness					
6	The majority of land is cultivated / leased land	0,10	4	0,40	
7	The quality of human resources of management and members of cooperatives is still weak	0,10	4	0,40	
8	The quality of seaweed and its processed products is still low	0,10	3	0,30	
9	The institutional capacity of cooperatives is weak	0,10	4	0,40	
10	LCC member participation is low	0,10	4	0,40	
Total of Weakness				1,90	
Strength - Weakness				-0,10	

Table 2: External factors of LCC

No	External factors	Weight	Rating	Weight x Rating
Opportunity				
1	Potential of seaweed market	0,15	4	0,60
2	Synergic partnership with government, universities, and corporate	0,10	4	0,40
3	The development of digital technology	0,10	3	0,30
4	Village Law No 6/2014 and the existence of Village Owned Enterprises (BUMDES) in villages around LCC	0,10	3	0,30
5	The potential of Perhutani's arable land is still extensive (located in one area in several villages)	0,10	3	0,30
Total of Opportunity				1,90
Threat				
6	Coastal abrasion	0,15	4	0,60
7	Mangrove forest damage	0,15	4	0,60
8	Competition of similar products from other regions	0,15	2	0,30
Total of Threat				1,50
Opportunity - Threat				0,40

LCC is a community-based social economic institution located in the seaweed production center in the North Coast of Karawang. LCC has played in the economic development of coastal communities. Therefore, in the future LCC needs to be strengthened, because strengthening this cooperative will strengthen community economic development. Analysis of the LCC strengthening strategy using SWOT analysis. According to [16], SWOT analysis is the systematic identification of various factors to formulate organization goals. This analysis is based on logic that can maximize strengths and opportunities, but simultaneously minimize weaknesses and threats. The following Table 1 and Table 2 presents the results of identifying internal and external factors from LCC.

3.3. Formulation analysis of LCC strengthening strategy

Formulation analysis of LCC strengthening strategy is using SWOT quadrant. SWOT quadrant is done by matching the value of internal factors on the Y axis and internal factors on the X axis [14]. Referring to SWOT matrix analysis, it can be seen that LCC has a weakness (-0.01) to get opportunities, especially market opportunities, especially in the digital era like now (+0.40). A positive negative value (-, +) means that the position of LCC is in third quadrant. This position illustrates that LCC is a weak organization, but has good opportunities. The recommended strategy is a corrective strategy, it means LCC is advised to change the previous strategy. This is because the old strategy was feared difficult to capture the opportunities that exist while improving organizational performance. Graphically is presented in Figure 1.

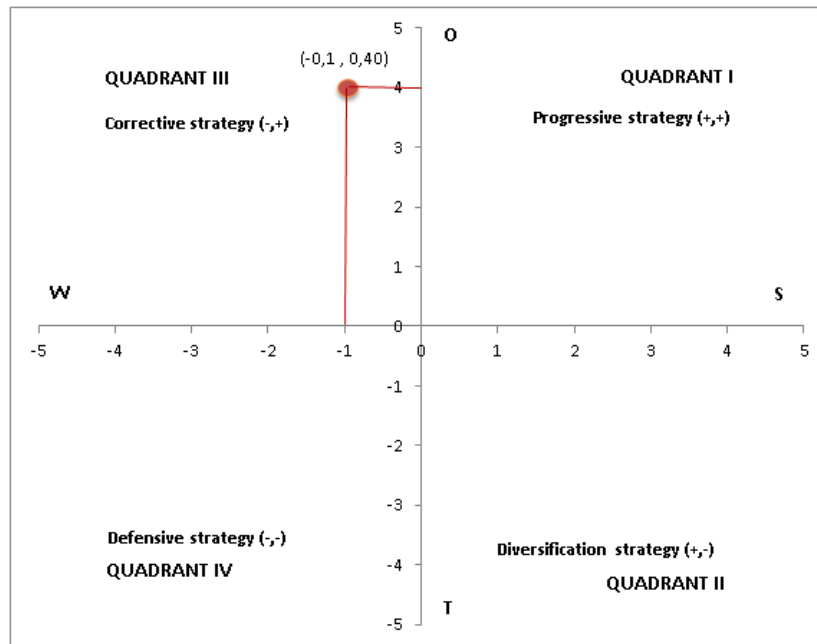


Figure 1: SWOT Cartesian quadrants

3.4. Strategy Formulation with SWOT Matrix

Other strategy choices base on SWOT matrix are: Progressive Strategy (S-O), Defensive Strategy (WT), and Diversification Strategy (ST), as presented in Table 3. Following LCC's strategy going forward: (1) Development of business networks based community and digital technology; (2) LCC institutional revitalization and human resource capacity building; (3) Improving the quality of seaweed and the innovation of its processed products in collaboration with universities or research institution; (4) Development of an environmentally friendly pond management system; (5) Increasing advocacy and bargaining power towards Perhutani in sustainable land use; and (6) Development of cooperation between seaweed producing villages by forming Joint Village Owned Enterprises in collaboration with LCC.

Table 3: SWOT Matrix

INTERNAL FACTORS EXTERNAL FACTORS	STRENGTHS (S) S1 Application of innovative organic pond systems and polyculture S2 Capacity of qualified cooperative leaders S3 A marketing cooperation agreement S4 The location is close to the raw material S5 Initiation of secondary business groups / cooperative support	WEAKNESSES (W) W1 The majority of land is cultivated / leased land W2 The quality of human resources of management and members of cooperatives is still weak W3 The quality of seaweed and its processed products is still low W4 The institutional capacity of cooperatives is weak W5 LCC member participation is low
	OPPORTUNITIES (O) O1 Potential of seaweed market O2 Synergic partnership with government, universities, and corporate O3 The development of digital technology O4 Village Law No 6/2014 and the existence of Village Owned Enterprises in villages around LCC O5 The potential of Perhutani's arable land is still extensive (located in one area in several villages)	 ➤ Development of business networks based community and digital technology (S1, S2, S3, S4, S5, O1, O2, O3) ➤ Development of cooperation between seaweed producing villages by forming Joint Village Owned Enterprises in collaboration with LCC (S2, S3, S4, S6, O1, O2, O4, O5)
THREATS (T) T1 Coastal abrasion T2 Mangrove forest damage T3 Competition of similar products from other regions	Increasing advocacy and bargaining power towards Perhutani in sustainable land use (S1, S2, S3, S6, T1, T2, T3)	Development of an environmentally friendly pond management system (W1, T1, T2, T3)

3.5. LCC as the initiator of Village Cooperation for Community Empowerment

Based on field observations, it was found that the similarity of resources owned by several villages around the LCC. Naturally, the location has become a seaweed production area. Therefore, LCC can be the initiator of cooperation between villages. At present, there are two villages that have the potential to build cooperation, namely Tambaksari Village and Sedari Village. Cooperation between villages is important to increase the scale of business, also to strengthen the bargaining position of communities and villages. This is important because the community is currently utilizing Perhutani land (status of forest area). This is also in line with Law No. 6 of 2014 concerning Villages. This law mandates villages to manage village resources [10]. This law provides an opportunity for two villages or more for cooperation, through the establishment of a Joint Village Enterprise. In this case, the position of the LCC that already existed first was as the initiator for the formation of the Joint Village Owned Business Enterprise. The action programs to support the formulation of joint village enterprises are: (1) Each village develops a village initiative regarding inter-village business service needs. The village initiative is an input for the village midterm development plan. (2) Conducting village meetings to discuss cooperation between villages. The outcome of this meeting was the village regulation on village cooperation. (3)

Conducting inter-village consultations to discuss Joint Village Head Regulations on Inter-Village Cooperation, and Inter-Village Cooperation Agency. (4) Creating a business model design for a Joint Village Owned Business Enterprise. (5) Conducting meetings between villages to discuss the Joint Village Head Regulation on Joint Village Owned Enterprises. After the five stages are carried out, the Joint Village Owned Business Enterprise is ready to be operational.

4. Conclusion

- The strengths of the LCC are: (1) Application of organic and polyculture ponds systems innovation, (2) Capacity of qualified cooperative leaders, (3) There is a marketing cooperation agreement, (4) Location is close to raw materials, (5) Initiation of secondary business groups. The weaknesses of the LCC are: (1) The majority of LCC members is land cultivator, (2) The quality of the human resources management and members of LCC is still weak, (3) The quality of seaweed and its processed products needs to be improved, (4) The institutional capacity of the cooperative needs to be improved, (5) Member participation is lacking. From the external side, the opportunities for LCC are: (1) Potential of seaweed market, (2) Synergistic partnerships with government, universities, and corporate, (3) Development of digital technology, (4) Village Law No 6/2014 and the existence of Village Owned Enterprises (BUMDES) in villages around LCC, and (5) The potential of Perhutani's land is still extensive (located in one area in several villages). The threats of LCC are: (1) Threat of abrasion, (2) Damage to mangrove forests, and (3) Competition of similar products from other regions.
- The results of the SWOT quadrant analysis, indicate that the LCC is in third quadrant. This position illustrates that LCC are weak organizations but it have good opportunities. The recommended strategy is a corrective strategy, it means that LCC is advised to change the previous strategy.
- Base on SWOT matrix analysis, there are six strategies needed to strengthen LCC: (1) Development of business networks based community and digital technology; (2) LCC institutional revitalization and human resource capacity building; (3) Improving the quality of seaweed and the innovation of its processed products in collaboration with universities or research institution; (4) Development of an environmentally friendly pond management system; (5) Increasing advocacy and bargaining power towards Perhutani in sustainable land use; and (6) Development of cooperation between seaweed producing villages by forming Joint Village Owned Enterprises in collaboration with LCC.

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