Rural wealth creation strategy on coastal villages in Indonesia (Case Study: Weru village, Lamongan)

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Abstract. Rural Wealth Creation (RWC) can be considered how developing a rural economy, by increasing its potential including physical, financial, natural, human resources, and social, leads to self-sufficiency. Those also affect other factors such as infrastructure and creating opportunities for different villages and their people to grow and develop in villages. This research is purposed to show how implementing a rural economy is based on the RWC concept, with its locus focusing on coastal villages in Indonesia, especially Weru village, located on the north coast of Lamongan. Weru Village in Paciran District is one of the fishing centers in the Lamongan Regency where the dominant catch is fish. Data on this research is collected by multimethod approaches, which include Delphi analysis based on an interview with a stakeholder, and another interview with fishermen based on probabilistic sampling to determine factors that influence them. Stakeholder analysis was carried out to determine the actors who have influence and interest in the development of coastal villages. It is followed by identifying its advantages, disadvantages, and effectiveness in its implementation based on in-depth interviews. This leads to the policy-making process of giving strategies for developing the rural coastal economy in Weru village.

Keywords: coastal village, community development, rural economy, rural wealth creation

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1 Introduction

One of the factors in the development of a village is the condition of its economy, including its poverty rate. To overcome this, a village's economic growth was needed based on the resources of both natural resources and local human resources owned by the community and village government. This can be in the form of economic empowerment, increasing the productivity and quality of human resources, building facilities, infrastructure, and institutions. This can be a source of the village and community economies. Those things above sometimes raise problems when developing the five drivers of village economic development. The level of welfare, quality of life, availability of facilities and infrastructure, economic powerlessness of the community, suboptimal development of local economic potential, weak development actors, low productivity, and lack of accessibility can be problems in village development, especially in underdeveloped villages [1].

Coastal villages in Indonesia especially in East Java cannot be separated from fisheries activities, both capture fisheries and aquaculture. In 2022, 2.1 million people were living in coastal areas working in the fisheries sector, especially on a small scale (KKP, 2022). Despite their important position in economic activities in coastal areas, they have not yet provided welfare impacts to the community. The income of fisheries activity actors, although exceeding the average income of the village community, has not been able to cross the poverty line, except for those who have mechanized and own their boats. It can be said that not all coastal villages in Indonesia are economically independent, they even became pockets of poverty in Indonesia in addition to urban areas. Currently, the number of poor people in coastal regions reaches 17.74 million, of which 3.9 million are categorized as extremely poor (BPS, 2022). The poor in coastal areas also contribute to 68 percent of the total poverty rate in Indonesia [2]. In the case study in Sidoarjo Regency, the lack of empowerment both physically and socially is the main cause of fishermen's welfare problems in coastal villages [3].

East Java Province has considerable potential on development of coastal villages, especially in economic growth. Areas on the North Coast (Pantura) such as Gresik, Lamongan, and Tuban have great fisheries potential, both capture fisheries and aquaculture. In this study, two villages will be taken, each of which has its characteristics of capture fisheries and aquaculture. The location of this case was Weru Village, Paciran Subdistrict, Lamongan Regency, for coastal villages with capture fisheries characteristics.

The concept of *Rural Wealth Creation* (RWC) can be an approach in how to develop economically underdeveloped villages, where this concept can increase assets such as physical, financial, natural resources, human resources, and social so that they are no longer underdeveloped villages but also economically independent, which ultimately contributes to other factors such as infrastructure, as well as opening up opportunities for other village economic potential or communities who want to grow and develop in the village [4] There are eight elements of capital or "Capital" in the RWC concept by both Pender [5] and Ratner and Deborah [6], namely *intellectual* capital, *individual* capacity capital, *social* capital, *physical capital*, *natural capital*, *cultural* capital, *political* capital, and *financial capital*.

The RWC concept proposed by Pender in Indonesia as a whole has never been applied, so far this concept has been applied in several cases. Some developed countries that have case studies such as the United States [7],[8]; Sweden [9]; and Scotland [10] as *Community Wealth Building,* and in Oregon, USA this concept is linked to the *value chain* [11]. While in developing countries with rural poverty issues, most of them are in African countries such as Uganda, the RWC concept is seen from the *capital* factors developed, some of which have

been used in the majority of independent villages in Indonesia, such as tourism-based development such as *Desa Wisata*, Infrastructure development such as *PNPM Mandiri*, Rural Infrastructure Development Program (PPIP), Community-Based Sanitation (*Sanimas*) and others; financial access such as Village Fund; and entrepreneurship through Village-Owned Enterprises (*BUMDes*). In addition, other issues such as sustainable agriculture and education and training were raised as examples of RWC. But overall, the RWC concept-approach has never been fully developed in villages in Indonesia and even in Southeast Asia, both in available publications and implemented programs, especially in coastal villages that need economic development. Therefore, this research will identify how the RWC concept can be applied to the context of coastal villages in Indonesia, especially in East Java, and how effective this approach is in addressing the economic problems of coastal villages. In addition, there will be adjustments to how the RWC concept will be applied in coastal villages in Indonesia, especially in East Java.

2 Purposes and methods

2.1 Purposes

The purpose of this research is to identify the extent to which the concept of Rural Wealth Creation (RWC) can be applied to the economic development of coastal villages in Indonesia, especially in coastal villages in East Java. This research takes case studies in Weru Village, Paciran, Lamongan. From these objectives, it is divided into several objectives, namely;

1) Identification of *Capital* Factors in the RWC concept that are relevant to the development of Coastal Village Economic Characteristics
2) The identification of *capital* in the RWC concept that can be developed in Weru Village based on the *Rural Wealth Creation* (RWC) *framework*.
3) Identifying the Influencing Factors of Effectiveness, Strengths, and Weaknesses in the application of RWC to Village Economic development in the context of Coastal Villages in East Java
4) Develop recommendations for coastal economic development in Weru Village based on the *Rural Wealth Creation* (RWC) approach.

2.2 Methods.

Data collection was conducted through two methods, namely a primary survey where interviews were conducted with policymakers related to the economic development of coastal villages, which were determined through stakeholder analysis based on their interests and authority. It includes Provincial (East Java) and Local authorities including regency level and village level, which have more relevant and power on this study case. In addition, interviews were also conducted with fishermen and cultivators in Weru Village. Those stakeholders on this research are shown on Table 1.

Table 1. Stakeholders related to economic development based on Catchment Fisheries in Weru Village Lamongan

Stakeholders	**Level**
Marine and Fisheries Department of East Java Province	Provincial
Community and Village Development Department of East Java Province	Provincial
Marine and Fisheries Department of Lamongan Regency	Local (Regency)
Community and Village Development Department of Lamongan Regency	Local (Regency)
Weru Village Government	Local (Village)

Meanwhile, the secondary survey was conducted by searching for data and information from several agencies, such as fisheries production data and work plans. In addition, a literature survey was also conducted to identify literature correlations and link the concepts of RWC, Local Economic Development, and the characteristics of the Coastal Village Economy.

At the analysis stage, there are three analyses used, namely Delphi Analysis to determine the factors that are prioritized. After that, the factors were narrowed down based on the results of interviews with respondents. Followed by in-depth interviews to see how effective it is in its application and the advantages and disadvantages in its application later. Finally, from all of the above results, a Strategy and Recommendations for Coastal Village Economic Development will be prepared.

3 Overview of study areas

3.1 General Overview

Weru Village is one of the villages in Paciran Sub-district, Lamongan Regency, which borders the Java Sea to the north. The village has an area of 0.11 km2 or 0.18 percent of the Paciran sub-district area. The village is located in the east of the Paciran sub-district and also borders the Gresik district to the south. In terms of population, Weru Village has a population of 4,410 people, of which 2,247 are male and 2,163 are female. With a small area, Weru is a village with a high population density, with a density of 40,090.91 people per km2. It is shown in Table 2 below.

Table 2. Number of population in Weru based on Education Level (2023)

Education Level	**Weru (2023)**
Not yet in school	977
Elementary school (SD)	1.047
Junior high school (SMP)	802
High school graduate (SMA)	1.016
Diploma I/II	7
Diploma III	22
Diploma IV / Bachelor	24
Master's Degree	9
Doctorate	1

In terms of village institutions, Weru Village has advanced village status. In 2023, Weru Village also received a Village Fund Allocation (ADD) and a Village Fund (DD) which is shown in Table 3.

Table 3. Fund allocated by Weru Village Government (2023)

Fund Type	**Weru (2023)**
Village Fund Allocation (ADD)	292.178.600
Village Fund (DD)	805.560.000

In terms of economic institutions, Weru only has 1 Savings and Loan Cooperative and 2 other Cooperatives. Both villages do not have financial institution facilities such as Banks, Village Unit Cooperatives (KUD), Small Industry, and People's Craft Cooperatives (Kopinkra). In terms of economic activities, Weru has one market with a permanent building. In addition, Weru Village has 15 stalls and 15 grocery stores.

3.2 Detailed overview

Fisheries Potential in the Study Area is generally in the form of the Number of Fishery Business Households, Number of Fishery Individual Businesses, and Number of Fishermen. Tables 4 and 5 are per-sub-district data from the respective District BPS, while Table 6 is data from the Population Data Visualization at the Ministry of Home Affairs (Kemendagri).

Table 4. Number of Fishery Business Households in Paciran District (2023)

Number of fishery business households	**Paciran (Weru)**
Cultivation	41
Capture	1.902
Total	1.943

Based on Table 4., Paciran including Weru is dominated by Capture Fisheries with a large number of 1,902 Household Businesses compared to 1,943. This can also be seen in Table 4. where Fisheries Individual Business Managers have numbers that are not far from Fisheries Business Households

Table 5. Number of Fisheries Individual Businesses in Paciran District (2023)

Number of individuals fisheries business managers	**Paciran (Weru)**
Cultivation	42
Catchment	1.910
Total	1.952

Based on data from *Dukcapil Kemendagri*, the number of fishermen in Weru, Paciran is 691 people, or 16 percent of the population. The data can be seen in Table 6.

Table 6. Number of Fishermen in Each Village (2023)

	Weru, Paciran
Total Population	4.317
Number of Fishermen	691
Percentage	16%

Fishing activities in Paciran (including Weru) are dominated by Sea Fishing with 1,908 people. It is shown in Table 7 below.

Table 7. Types of Fishing Activities in Paciran Subdistrict (2023)

District	**Type of Fishing Activity**				**Total**
	Ocean Fishing	**Fishing in Inland Waters**	**Seed Capture**	**Ornamental Fishing**	
Paciran (Weru)	1.908	2	-	-	1.910

4 Relations between RWCs in the context of coastal village economies

Activities in coastal villages cannot be separated from the fisheries sector industry that supports the village community, both capture fisheries and aquaculture. The RWC concept proposed by Pender mostly takes the context in the United States (US), so there needs to be a link between the *capital,* indicators, and variables of the RWC concept by Pender to the context and issues that occur in the Coastal Village and Fisheries Sector.

a. Physical *capital*

A key issue in this aspect is the need for investment in infrastructure to increase fisheries production, productivity, and export capabilities [12].

b. Natural *capital*

The context and issues that occur in the development of natural capital (SDA) are related to conditions in the waters that are the livelihood of fishermen, such as overfishing which causes the number of fish to decrease dramatically [13].

c. Human capital (HR)

The issue that occurs in the HR sector in fisheries is the contribution of this fisheries sector to the income of fishing communities, as well as how important skills, education, and social networks [14]. In addition, there is a need for education, training, and innovation to overcome HR issues in the fisheries sector [15]. Finally, the lack of skilled labor makes fisheries resources and technology development in the fisheries sector not maximized [16].

d. Intellectual capital

There are two main issues associated with intellectual capital, in this case, the application of technology or innovation in the fisheries sector. The first is the lack of protection for innovations (IPR) that can develop the fisheries sector. Second, is how the commercialization of the technology to be applied [17].

e. Social capital

The main issue that arises in social capital is how to manage conflicts between fishermen due to differences of opinion, which ultimately affects their lives and resource utilization [18]. In addition, the lack of trust, cooperation, and individualism among fishermen leads to the absence of collective agreement [19]. In the context of aquaculture, a good relationship with the community to participate is also an influence in implementing effective aquaculture [20].

f. Political capital

Politically, the issues that arise against the development of coastal villages or the coastal sector, are related to the policies made, both locally and from the central. There is also an emphasis on the exclusion of small-scale fishers from policies that are destructive to marine ecosystems, such as banning the use of explosives [21]. Also influenced by policies that affect incentives to rural communities, there is inequity in access to subsidies for small-scale fishers [22][23].

g. Financial capital

In the financial aspect, the main issues that arise are access to funding for fishermen [14], the impact of fisheries equipment assistance on the ability of fishermen [24], and how credit assistance as a form of investment in the fisheries sector, infrastructure development and socio-economic empowerment of fishermen [25].

h. Cultural capital (culture)

The issue of cultural capital focuses on how to maintain cultural traditions or local wisdom in coastal and fishing communities, where this local wisdom is crucial in the successful practice of fisheries activities in the village, this can also be influenced by the institutions in the village [26]. Traditions are characterized by beliefs, values, or networks that influence the way they survive and adapt to environmental changes [27].

5 Results

5.1 RWC Capitals and Factors that are Important to Coastal Rural Economies

Based on the results of interviews with policymakers and analyzed through Delphi analysis, 18 factors from seven capitals are considered important in the economic development of coastal villages. Table 8 below shows that human resources are the capital with the most factors, besides physical, financial, and social capital with the second highest number of factors considered important.

Table 8. Capitals and Factors considered important by stakeholders

Capital (s)	**Factor**
Physical capital	Basic infrastructure
	Fishing infrastructure
	Processing infrastructure
Financial capital	Access to funding
	Grant programs
	Infrastructure and community development programs
Natural capital	Marine condition
Human capital	Education
	Working-ag
	Number of fishermen
	Fishermen's group
	Skills training
Intellectual capital	Technology
Social capital	Social-cultural condition
	Group's condition
	Community participation
Political capital	Regulations related to communities
Cultural capital	Tradition/local wisdom

5.2 Overview of Fishermen's Conditions

a) Incomes

Based on the interview results, 90 percent of the respondents have an income of around 1 million to 2.5 million per month, where they earn around 50 thousand to 100 thousand per day. The remaining 10 percent earn between 2.5 million and 5 million per month. It is shown in Figure 1 below.

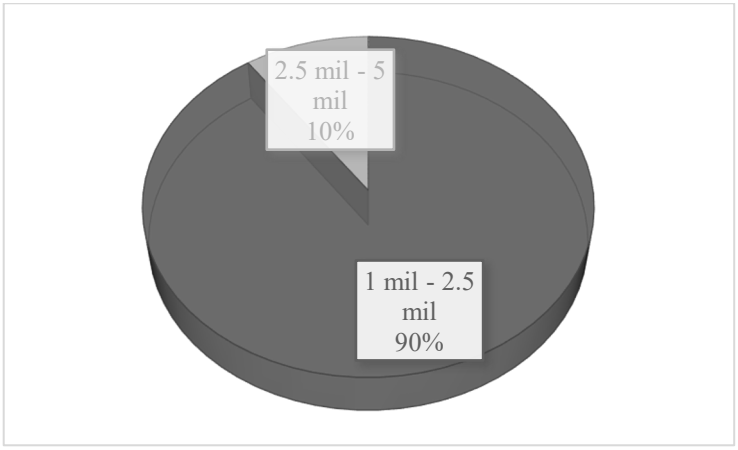

Fig. 1. Fishermen's income per month in Rupiah

b) Possession of fishing equipment

Based on the interview results, 69 percent of the respondents own equipment such as boats and nets. Meanwhile, the remaining 31 percent do not have, and most of the respondents who do not have are fishermen who are crew members. It is shown in Figure 2 below.

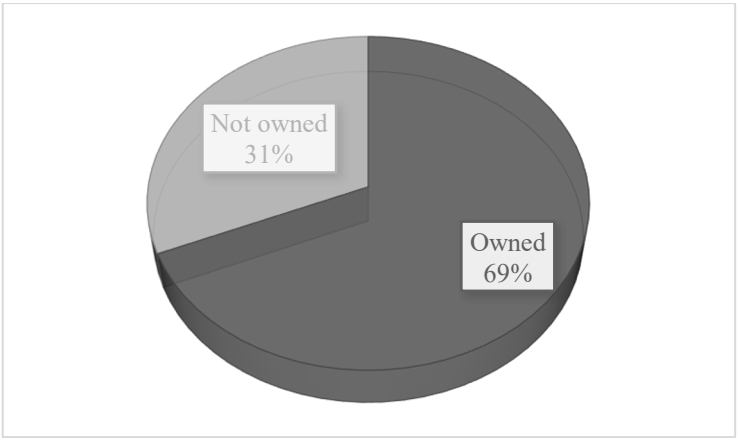

Fig. 2. Possession of Fishing equipment in Weru

c) Needs of fishing facilities

Based on the interview results, respondents mostly need equipment for fishing, such as boats, nets, or other equipment. In addition, many respondents also need a Fishermen's Fuel Filling Station (SPBN), where there is currently one SPBN near Campurejo Market, but it can only meet 10 percent of the needs of fishermen. So they have to take it from the nearest gas station. In addition to the two above, respondents also need breakwater infrastructure, because it affects the condition of their boats. It is shown in Figure 3 below.

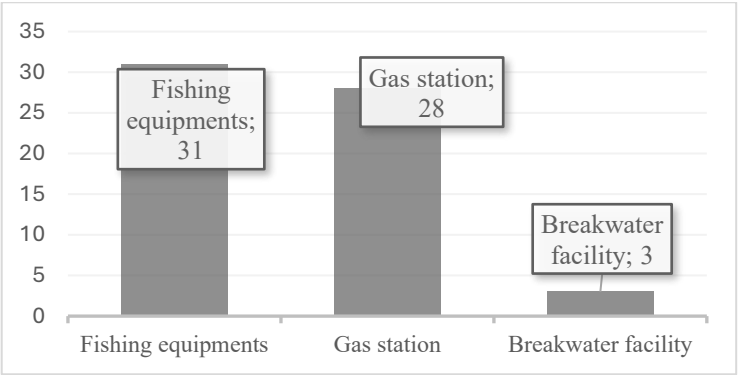

Fig. 3. Needs of fishing facilities in Weru

d) Needs of processing facilities

Based on the interview results, 57 percent of respondents do not need fishery product processing facilities, this is because most people outside the village buy fish directly in Weru, or fishermen already have regular distributors where their catches are taken directly to Lamongan or Gresik. It is shown in Figure 4 below.

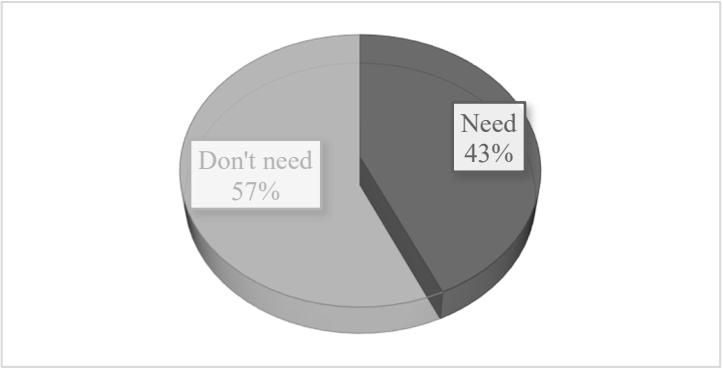

Fig. 4. Needs of processing facilities in Weru

e) Access to funding

Based on the interviews, more than half of all respondents had applied for and received funding including the People's Business Credit (KUR), most of which was used for operational capital such as boat repairs, nets, and so on. It is shown on Figure 5 below.

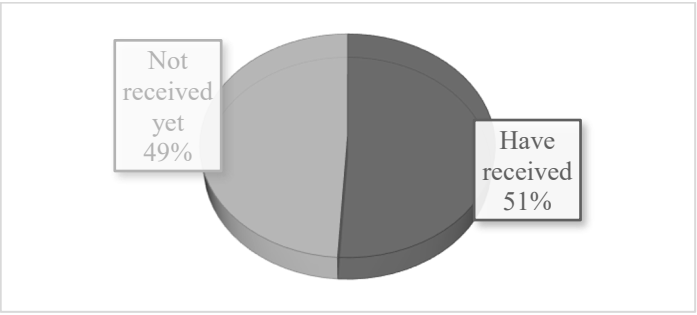

Fig. 5. Access to funding by fishermen's in Weru

f) Education level

Based on the interview results, 62 percent of respondents had a junior high school education, followed by senior high school at 22 percent, elementary school at 14 percent, and no schooling at all at 2 percent. It is shown in Figure 6 below.

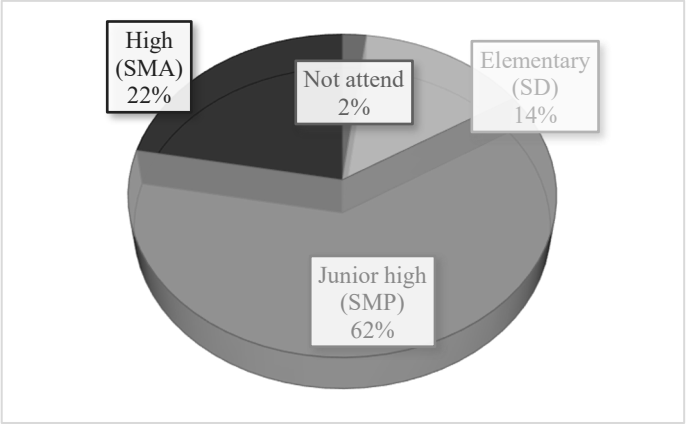

Fig. 6. Education level of Fishermen's in Weru

g) Participation in government programs

Based on the interview results, 84 percent of respondents have never participated in government programs. Only 16 percent have participated, at least at the village level. This is because they have been represented by Fishermen's Groups and Guardians as a representation of the fishermen as respondents. It is shown in Figure 7 below.

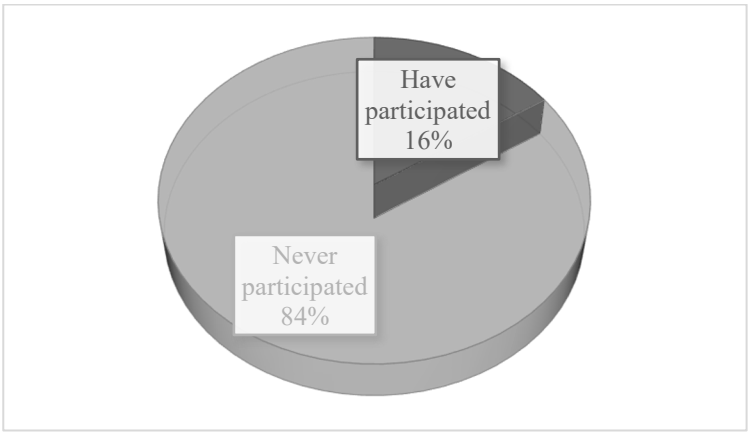

Fig. 7. Participation in government programs by Fishermen in Weru

h) Participation in skills training

Based on the interview results, 98 percent of the respondents have never participated in skills training, while only 2 percent have. This is because fishermen as respondents are considered to have sufficient skills in their activities to go to sea. It is shown in Figure 8 below.

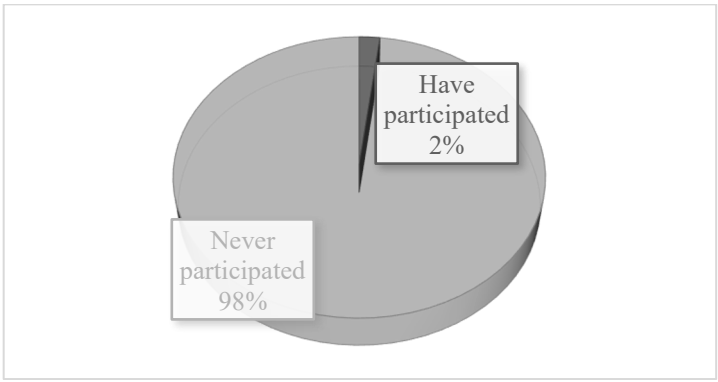

Fig. 8. Participation in skills training by Fishermen in Weru

i) Technology used by fishermen

Based on the interview results, the net is the most widely used equipment by fishermen, followed by Cantrang, then Trawl and Payang. It is shown in Figure 9 below.

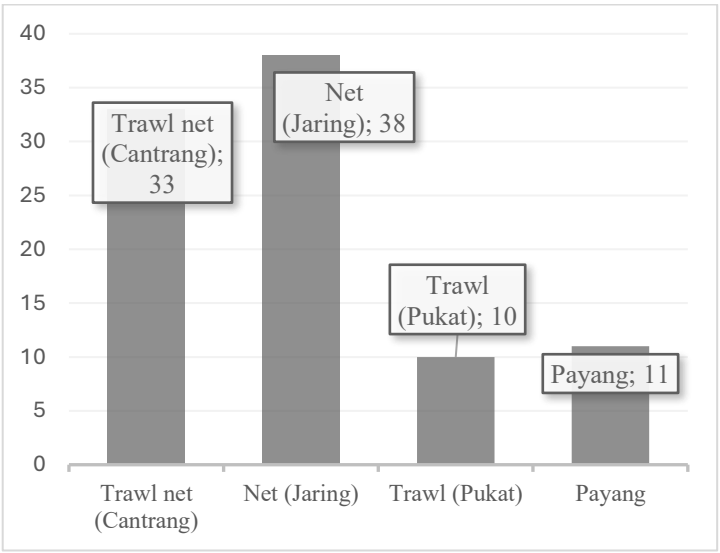

Fig. 9. Technology used by Fishermen in Weru

j) Grants by government

Based on the interview results, 73 percent of respondents have never received any assistance from the Government, while only 27 percent have received assistance. Such assistance can be in the form of money, but mostly in the form of boats and supporting fishing equipment. It is shown in Figure 10 below.

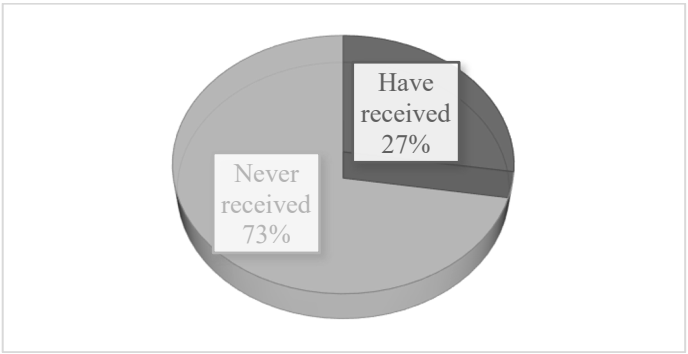

Fig. 10. Grants received by Fishermen in Weru

k) Level of Participation in Fishermen's Group

Based on the interview results, all respondents have joined a fishermen's group in Weru. A list of the Fishermen's group, its location, and the catchment technologies used by them are shown in Table 9.

Table 9. Fishermen's group, location, and catchment technologies used.

Groups	Location	Catchment technologies used
Perdamaian	West	Payang
Perseine		
Aserehe		
Weringin		
Jariyah	Central	Net
Waru Kembar		
Siang Malam		
Rukun Sentosa	East	Payang
Rukun Sejahtera		

5.3 Advantages, Disadvantages, and Effectiveness of its Implementation

5.3.1 Advantages

Based on the results of interviews with policymakers, it is concluded that the Economic Development of Coastal Villages based on the RWC Framework has several advantages such as

a) Increasing Production and Village Economic Potential from Fisheries
Optimizing important capital such as Infrastructure, Finance, and Human Resources, can increase the catch and production of fishermen and cultivators, as well as raise the economic potential of the village through the community's ability to process and distribute fishery products so that if maximized, it will provide additional income for the village community.

b) Reducing Operational Costs incurred by Fishermen or Cultivators
Programs that focus on the needs of fishermen or cultivators will directly reduce operational costs so that they can produce optimal catch or cultivation. So far, most of the income received has been used up for operations such as gasoline, repairs, and other important needs. Most fishermen borrow money from middlemen instead of creditors, banks, or other schemes, which causes them to sell their fish at a price that is objected to by their middleman.

c) Value Added of Fishery Product Production in the Village
Specifically for the case of Weru, the focus is on Fishermen's Family Empowerment to be encouraged to support the fishermen's business by absorbing the catch and processing it into products, while at the same time preparing a market so that the products have a steady market during production. At the same time, increasing its value can prevent fishermen from distributing directly to their middleman.

d) Fishermen or Cultivators, especially young ones, can adapt to the latest technology
With the latest technology in fishing and aquaculture, they can adapt to the technology through training and socialization, in addition, there needs to be a gradual policy to reduce the use of fishing and aquaculture tools that have the potential to adversely affect the environment on land and at sea.

e) Policies that are local can provide benefits to Fishermen's Groups
The RWC framework that focuses on local potential, including policies issued by the Village Government based on Village Consultation, will indirectly impact the Fishermen Group so that the agencies above (Local Government, Province, Center) only encourage Villages and Communities to develop, but the main role remains the Village Government.

f) Broader and more equitable market
By optimizing local potential, the community, including fishermen and farmers, can also explore potential markets for products from the village so that the current market can be wider and more equitable.

5.3.2 Disadvantages

Based on the results of interviews with policymakers, it is concluded that the Economic Development of Coastal Villages based on the RWC Framework besides its advantages also has some disadvantages such as

a) Risk of overfishing
RWC theory focuses on encouraging Village income from the Village itself, as well as programs provided to fishermen to increase catches. At the same time, there will be a risk of overfishing that will push fishermen farther and farther away, exacerbated by erratic climatic conditions and reduced fish within 10 miles of the coastline.

b) Financial assistance and equipment do not reach all fishermen or farmers
Programs such as financial assistance and equipment are at risk of not reaching fishermen or cultivators as a whole for several reasons, such as the budget being diverted, or illegal levies at the district, sub-district, and even village levels. So-there needs to be transparency from all levels from the district to the fishermen group so that the assistance provided reaches and is right on target.

c) Risk that the value-adding business is not sustainable
The main key of RWC is whether the efforts to increase village income continue after the program that targets 7 RWC capitals as a stimulant because it will return to the Fishermen or Cultivators and the Community if they have no assistance after this program, it may not continue and only last for a while. In addition, it is also ensured that the supporting facilities and infrastructure built as part of the program that targets 7 RWC capitals can be used by the community.

5.3.3 Effectiveness

Based on the results of interviews with policymakers, it is concluded that the Economic Development of Coastal Villages based on the RWC Framework can be effective if some factors driven from villages can enhanced such as

a) The success of the Development Program based on Village RWC's Potential depends on the Implementers
Most RWC programs target fishermen/aquaculturists as primary actors in the fisheries sector that are prominent in each village. The effectiveness of wealth creation programs developed in these villages depends on how they utilize existing programs. Program providers must assess field conditions before determining program details.

b) Program Outputs related to Education and Training
Training and education programs are deemed very important by stakeholders; however, if they are ineffective for fishermen, it will affect outcomes for enhancing human capital in each village. While experienced in their activities, fishermen must enhance their capacities to increase income; remaining stagnant will hinder wealth creation efforts.

c) Market Targets
Weru have their own markets buying their catches and aquaculture products. However, many transactions remain traditional either sold at landing sites or through middlemen. A key point in wealth creation is added value and mutually beneficial distribution; thus markets must be prepared for their catches and planned products.

d) Direct involvement of Fishermen/Cultivators and Fishermen/Cultivator Groups
Fishermen and aquaculturists need to be involved directly as key stakeholders in economic development based on RWC capitals from planning to implementation stages.

e) Accessibility of Funding to fishermen's
As explained before, most fishermen in Weru borrowed money from their middlemen instead of creditors, banks, or other financial institutions. This affects- --their income because its selling price does not follow market prices. Village government can establish village-owned enterprises (BUMDes) focusing on lending money to local fishermen or partnering with local financial institutions (banks or co-operatives) to provide accessible and provident funds to locals.

5.4 Strategies

Based on three previous analysis stages, policy formulation is conducted regarding strategies for coastal village economic development within the capture fisheries context in Weru Village. Five capitals can be developed along with eight detailed strategies related to them. The natural resources capital is combined with technology capital since their purposes are related; applying new technologies in fishing is expected not only to optimize catch results but also to be environmentally friendly without adversely affecting existing marine

ecosystems. Cultural capital was not included in strategies because interviews with fishermen indicated it does not significantly impact village economies since existing traditions are not mass-oriented towards tourism. Table 10 contains developed capitals along with strategies and explanations for each economic development strategy based on the RWC Framework in Weru Village.

Table 10. Capitals and Factors considered important by stakeholders

Capital(s)	Strategy	Explanation
Infrastructure	Prioritize Fisheries-related Infrastructure (SPBN, Tool Warehouse, TPI)	Fishermen in Weru need facilities related to their fishing activities, such as SPBN (Fuel Stations for Fishermen). On the other hand, the basic infrastructure in Weru Village is already of good quality. The processing infrastructure is directed towards the establishment and development of small and medium enterprises (SMEs) that will process the fishery products; once they have developed, attention will then be focused on the infrastructure, including buildings and equipment.
Finance	Prioritize Access to Funding (Bank, Village Government, District Government) to cover operational costs of Fishermen/Cultivators	Fishermen in Weru are burdened by operational costs incurred each time they go to sea, and the income they earn daily leaves little after deducting these operational expenses. At the same time, they mostly borrow money from middlemen instead, affecting their selling prices. With access to funding, both credit and non-credit, fishermen are encouraged to allocate these funds to operational expenditures so that they- - are not burdened and do not have to borrow money from middlemen who usually set prices for their catch. In addition, the village government can partner with local financial institutions (Banks or co-operatives) or establish village-owned enterprises (BUMDes) focusing on providing funds to local fishermen.
	Assistance or Incentives are focused on physical (ships, tools, etc.)	Based on interview results, fishermen in Weru require more assistance related to their activities, such as boats (including repairs), nets, and other fishing gear, as well as other physical tools. Therefore, the government is requested to provide assistance or direct incentives in

		physical forms according to the needs of each fisherman group and the available budget.
	The Community Development Program focuses on establishing small-scale fishery product production and providing markets.	Since most fishermen's activities take place along the coast and at sea, communities residing in the village, such as fishermen's families and other residents, can be directed to become small-scale processors of the fishermen's catch. However, before this can be established, it is essential to ensure that there is a market for their production so that it does not go to waste.
Human	Crew members and fishermen/cultivators (especially young ones) are prioritized to enter fisheries-related vocational schools or training center.	There is potential among young fishermen and crew members (under 30 years old) who can develop their skills even if they already have experience, especially in adapting to the latest fishing equipment or other technologies. Therefore, human resource development should focus on this age group so that they can adapt better than older fishermen.
	Socialization and Training for Fishermen/Cultivators, to adapt to technology	Regarding training at vocational schools (SMK) or training centers (BLK), the initial stage involves socializing with fishermen and fishermen groups about equipment that can be used without harming the environment, along with other necessary skills such as mapping fishing locations so that their catch can be optimized.
Technology	Socialization of new technologies in the fishing or aquaculture process that can increase yields while remaining environmentally friendly	The implementation of new technologies will relate to human resources because it targets younger fishermen's abilities to use the latest fishing gear, as well as natural resources because this technology's use will impact the condition of fishery ecosystems. Fishermen groups should not only serve as a link between fishermen and the government but also be considered during policy-making processes that will affect them.
Social and Political	Improving the position of fishermen/farmers groups in the policy-making process	Fishermen groups should not only serve as a link between fishermen and the government, but also how these groups are taken into account and considered

		during the policy-making processes that will impact them.

6 Conclusions

Based on interviews with stakeholders and Delphi analysis, there are seven capitals and 18 factors that are important in the economic development of coastal villages using a RWC (Resource-Based Community) approach. During the interviews with fishermen, several conditions were mentioned, such as income, facility needs, equipment ownership, processing facility needs, access to funding/credit, education levels, involvement in government programs and training, technology used, acceptance of government assistance, and participation in fishermen groups. In implementation, there will be advantages and disadvantages that may arise during execution, along with several considerations to ensure effective application. Based on the three stages of analysis above, a strategy for the economic development of coastal villages in Weru consists of five main capitals and eight strategies as derivatives for enhancing each of these capitals.

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