

## **The Role of Social Capital in the Development of Shrimp Cultivation Pond Business**

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### **ABSTRACT**

Shrimp cultivation is a priority in the aquaculture sector, and the development of aquaculture in Indonesia to improve the national economy; something that cannot be ruled out is the element of social capital. This social capital is related to various forms of cooperation or collective action in society to achieve better life goals, which are supported by values, norms, trust, and networks. To overcome the various obstacles that arise in the implementation of the development and expansion of the shrimp pond business, group members or the community of Pedes District, Karawang Regency, cooperation and active participation from the community are needed. The component of social capital in the form of trust is the basis for forming social interaction. In addition to the trust that must exist between farmers, there is a desire to participate and form a network, both among fish farmers and with other parties such as investors and collectors or companies that accommodate their crops. So, social capital plays a role in developing shrimp farming in Karawang Regency. The data collection technique used is observation and in-depth interviews with a key informant who is an elder figure (star person) and three representatives of aquaculture farmers who have been cultivating for the last ten years so that primary data is obtained from informants regarding the role of social capital in developing aquaculture businesses. Shrimp Ponds in Pedes District, Karawang Regency.

**Keywords:** Social Capital; Vannamei Shrimp Pond; Business Development

### **INTRODUCTION**

The development of shrimp farming in Indonesia started in the 1990s. Seeing Indonesia's development and geographical suitability for shrimp farming ponds, in 2000, the Indonesian government officially accepted the introduction of the Vannamei Shrimp (*Litopenaeus Vannamei*) originating from the West Coast of the Pacific of Latin America into Indonesia through the Decree of the Minister of Maritime Affairs and Fisheries of the Republic of Indonesia No. 41/2001 (Widodo, 2020). Shrimp cultivation is a priority in the aquaculture sector, and the development of aquaculture in Indonesia to improve the national economy. In the 2012-2018 period, the contribution of the export value of shrimp to the value of

Indonesian fishery exports averaged 36.27% (BPS, 2019). It means that the shrimp commodity has a very significant role in the export performance of Indonesian fishery commodities.

According to FisStat (2019), world shrimp production grows by an average of 5.39% per year, with the dominance coming from aquaculture. In 2018, the volume of shrimp exports was recorded at 197.43 thousand tons with a value of USD 1,742.12 million (DJPB 2019). In 2019, shrimp production achieved 517,397 tons and was targeted to increase by 250% by 2024 to 1,290,000 tons, with a production value of 36.22 trillion in 2019 and 90.30 trillion in 2024 (KKP, 2020). Along with the program to accelerate the increase in production of the shrimp farming industry, the government (Ministry of Maritime Affairs and Fisheries, Directorate General of Aquaculture Economy) noted several problems with the capacity of shrimp ponds in Indonesia, including:

- 1) Attack of the disease. Overcome by implementing a sustainable shrimp farming system by applying the principles of biosecurity and food safety.
- 2) Capital and technical. Overcome by collaboration between the government and banking. Production technical problems can be overcome by maximizing the role of research institutions to overcome production technical problems' direct application in society.
- 3) Complicated regulations cause the shrimp industry to be slow in business expansion/development. Overcome with synergy between institutions to simplify permits and a moratorium on enforcement of pond business permits.
- 4) Unequal infrastructure development in various centers of shrimp ponds and the need for integration between downstream and processors upstream shooters. The government needs to build infrastructure that supports the private sector to be more interested in investing in the aquaculture sector shrimp.
- 5) HR and the involvement of young people to work in the world of trading. This problem can be overcome by developing elements of digital technology in shrimp farming which is currently a trend for millennials in carrying out work in various fields.

Apart from the things mentioned above, the element of social capital cannot be ruled out. This social capital is related to various forms of cooperation or collective action in society to achieve better life goals, which are supported by values, norms, trust and networks. The community's ability to work together is inseparable from the role of social capital they have (Rahmadani et al., 2021). Pedes District, Karawang Regency, one of the districts in West Java, has great potential for developing shrimp farming. Karawang also has a shrimp pond cluster at the Karawang Aquaculture Production Business Service Center (BLUPPPB) with an area of 75 hectares which is equipped with a central drain construction innovation with a production capacity of 2,000 tons per year. Within a year, the cluster is expected to be carried out at least two to three times the planting season

with a productivity target of increasing 2.5 times to 15 tonnes/ha/cycle (<https://kkp.go.id>)

The existing shrimp farming system in Pedes Subdistrict is a traditional and intensive cultivation system, which is traditional where farmers do not provide feed, but shrimp feed comes from nature; growing feed has been prepared at the bottom of the pond, while intensive cultivation is a pond that has been modified, using a water pump and wheel, the bottom of the pond is covered with HDPE plastic and usually a denser number of shrimp fry stockings. The shrimp farming community in Pedes District, Karawang Regency, forms a group or association designated as a strong association forum in the context of developing aquaculture businesses as well as a common place to face various obstacles. Community groups for shrimp farming in Pedes District, Karawang Regency, still have business patterns or business characteristics in groups where associations are family businesses and neighborhoods, which like-minded people establish to foster unity (harmony) among its members led by a trusted person or an elder.

The concept of social capital arises from the idea that members of society as social beings will not be able to live individually to overcome various problems they face. There needs to be togetherness and good cooperation from all community members who are interested in overcoming problems to achieve goals. To overcome every problem farmers face, in this case, including poverty, we must look for every source and cause of the problems that occur so that they can be resolved properly (Rahmadani, 2021). Social capital, such as trust, norms and social networks, play a role in changing the mindset of each individual so that they can make good changes. Fukuyama (1995) states that the role of social capital is also very complex. What supports social capital are resources that have the integrity of knowledge about values, socializing, and networking.

In order to overcome the various obstacles that arise in the implementation of the development and expansion of the shrimp pond business, group members or the community of Pedes District, Karawang Regency, cooperation and active participation from the community are needed. The success of a group in achieving its goals is determined by the potential social capital possessed by the individuals in it, especially for someone who is elderly who is often referred to as a "star person" who has qualified social capital capable of influencing the community or group members to participate actively in the group, including implementing government programs that the group embraces. The role of the government will certainly be in vain if it is not supported by the local community and strong social capital in developing tourism development in the region (Nugraha, 2021).

The development of a business is the responsibility of every individual in a community group with the desire and motivation to progress. Consistent effort and having a harmonious relationship between one person and another can increase the productivity of shrimp farming. Based on the description above, the researcher wishes to conduct research on social capital for the development of

shrimp pond cultivation in Pedes District, Karawang Regency. This research aims to discover the social capital between shrimp farmers in developing shrimp pond cultivation in Pedes District, Karawang Regency.

### The Concept of Social Capital

The concept of social capital has developed in line with the various studies conducted in the last 20 years. There are three important scientists who introduced this concept, namely: Pierre Bourdieu, James Coleman, and Robert Putnam. These three scientists emphasized the role of the concept of social capital and its implications in every activity in society (Field, 2003), which can be seen in the table below:

<b>Bourdieu</b>	<b>Coleman</b>	<b>Putman</b>
As a basis for social reproduction along with economic capital and cultural capital	As a middle way between the perspective of rational choice and social norms	As a way of predicting political (including economic) performance
Focus on Individuals in a social relationship	Various Aspects of the social structure facilitate individual actions within the structure.	Collective Interest
The principle of social embeddedness is the mechanism of social integration and reproduction.	Bonds and expectations (reciprocity), channels of information, and norms and sanctions	Trust, norms, and social networks

Many social capital studies have been carried out by previous researchers, using both quantitative and qualitative approaches. The social capital study conducted by Nababan et al. (2016) looks very complex, using quantitative and qualitative analysis covering groups and networks, trust and solidarity, collective and collaborative aspects, information and communication, cohesion and inclusion aspects, empowerment actions and political actions. This study discusses social

capital, not only covering aspects of relations but also aspects of the system. Other research looks at social capital in the role of government and community participation in sustainable tourism development (Nugraha, 2021). Five elements of social capital were found that existed between cultivators, namely network, cooperation, trust, social norms and citizenship in the Development of Pond Cultivation Business in Towua Village, Wundulako District, Kolaka Regency (Rahmadani, 2021) to social capital with the level of community resilience in facing the Tsunami disaster (Kurnia, 2021).

Humans must be seen as a whole so that the concept of "social capital" cannot be separated. The higher the quality of social capital of a nation, the higher the nation's progress level. And vice versa, the lower the quality of a social nation's social capital will lead to a society's (Declineumardjo et al., 2021). Social capital refers to aspects of social organization, such as beliefs, norms, and social networks that can facilitate collective action (Putnam, 1993). Social capital is emphasized community togetherness to improve the quality of life together and make changes for the better from time to time. Fukuyama (1995) says that social capital is the ability that arises from trust in a community. The ability of the community to cooperate must be kept from the role of social capital that they have. The essence of social capital lies in how people's ability in an entity or group to work together to build a network to achieve common goals.

### **Components of Social Capital**

Social capital accumulates resources that encourage individuals or groups to form networks (Bourdieu and Wacquant 1992) and facilitate collaborative action (Putnam, 1995). The form of social capital can also be seen from the interaction concept conveyed by Fukuyama, Putnam, and Westamaster (Sumardjo, 2010). The concept of social capital interaction (Woolcock, 2000) can be divided into three types, namely, 1) Bonding, namely social interaction carried out internally within the community by residents who have and share similar demographic and geographic characteristics; 2) Bridging, namely social interaction carried out horizontally by residents/groups within the community with other residents/groups outside the scope of the community, regardless of similarity in demographic and geographical characteristics; and 3) Linking, namely social interaction when citizens or communities interact vertically with other parties that have higher authority, for example, the government, formal social/political organizations, and business institutions, and so on.

Kusumawati's research (2015) states the components and parameters of social capital below for the relationship between social capital and the diffusion of innovation:

<b>Component</b>	<b>Parameter</b>
<b>Participation</b>	- Participation in activities - Participation motivation
<b>Cooperation</b>	- Awareness to achieve

	<ul style="list-style-type: none"> <li>- common goals</li> <li>- Willingness to exchange information</li> <li>- Ability to solve problems</li> </ul>
<b>Mutual Care</b>	<ul style="list-style-type: none"> <li>- Concern for others</li> <li>- Desire to help others</li> </ul>
<b>Mutual Relations</b>	<ul style="list-style-type: none"> <li>- There is a reward for someone's kindness</li> <li>- There is two-way communication between individuals</li> </ul>
<b>Trust</b>	<ul style="list-style-type: none"> <li>- Absence of traumatic feelings toward others</li> <li>- Willingness to lend money or goods to others</li> <li>- There is a feeling of security to leave the house</li> <li>- Close kinship relationship with each other</li> </ul>
<b>Mutual Trust Norms</b>	<ul style="list-style-type: none"> <li>- The desire to repay someone's good deeds by way of reciprocity</li> </ul>

Social capital plays an active role in supporting business continuity and the life of community groups in achieving goals. Use all abilities to have an optimistic attitude and mentality that today is better than tomorrow. Departing from the agreement that an individual needs others to achieve his goals. Social capital is a set of informal values or norms owned by an individual in a society that allows cooperation to occur.

Putnam (1993) presents three components of social capital that are needed in social life: 1) Trust is a cooperative relationship that is established and mutually beneficial between two or more people through social interaction; 2) Norms are rules or guidelines in reciprocal relationships that function to balance conditions in the community that function to control behavior; 3) Social network is the ability of an individual to involve himself in a group or network that is regular and consistent with obtaining benefits and reciprocal relationships.

## METHOD

The research was conducted from September 2022 - January 2023 in the Pedes District, Karawang Regency. The data collection technique used was observation and in-depth interviews with a key informant who was an elder figure (star person) and three representatives of aquaculture farmers who had been cultivating for the last ten years so that primary data was obtained from informants regarding

the role of social capital in the development of shrimp pond cultivation in Pedes District, Karawang Regency.

## **RESULTS AND DISCUSSION**

Karawang is one of the West Java districts with great potential for developing this shrimp culture. Modern agriculture uses the Citarum River as a source of water. The potential for ponds owned by Karawang Regency is 18.275 ha, and only 15,828.80 ha are used, or 86.61%, with total shrimp production reaching 11,756.61 tons (Rahman et al., 2018). Social capital is a set of values or norms embodied in behavior that can encourage the ability and capability to work together and coordinate to make a major contribution to sustainable productivity (Nababan, 2016). Social capital creates cooperation between shrimp-cultivating communities in order to achieve common goals. Social capital can be seen clearly in the development of shrimp farming ponds in Pedes District, Karawang Regency, namely trust, norms and networks (Putnam, 1935).

### **Trust**

Francis Fukuyama, in his work *Trust: The Social Virtues and the Creation of Prosperity* (1995), reveals the importance of trust in achieving the welfare of society. Furthermore, he said that trust in the conditions of welfare and democracy and the competitiveness of society is determined by the level of trust between fellow citizens. Trust is where a person has the will to rely on other people because they have faith in these other people. Trust is closely related to cultural roots, especially those related to prevailing ethics and morals (Fukuyama, 1995). Trust is the foundation for the shrimp farming community in Pedes District in establishing cooperation. The existence of a "star" as an "old" community figure in the shrimp farming community in the Pedes Sub-District greatly influences the implementation of good cooperation in terms of providing seeds and feed up to the harvest time.

Haji Endi, who is a figure who has worked in the Budibaya shrimp ponds in Pedes Subdistrict, said, "*I trust them; I have been used to harvesting with me for a long time; I already know how it works, sorting and weighing, I don't need to keep an eye on it, just trust me,*" in line with Zuwandasari's research (2021) who has confidence in his co-workers because they have worked together from the start, are not afraid of being deceived, their fortune is already set. Likewise, people who contribute labor during the harvest usually no longer need to question how much wages will be paid because, in general, they already know each other and understand that wages will be paid. There is no feeling of worry about not being paid.

The mutual trust that the community of aquaculture farmers has in Pedes District, Kabu Patent Karawang, can be classified as very high. It is because they have known each other for a very long time. Even though the farmers who practice

shrimp farming in Pedes District are not all native people, because they have known each other for a very long time, trust arises in one another; this is in line with research. It aligns with Fadli's statement (2007) that trust is the basis of moral behavior on which social capital is built.

### **Norm**

Norms (norms) are a collection of rules and guidelines which are a reference to be obeyed by a particular social group. Fukuyama (2002) says that norms are part of social capital formed through habits, traditions, history, and charismatic figures, forming a procedure/guideline/rule of behavior. The shrimp farming community in Pedes District upholds social norms, respects each other, and helps each other with fellow farmers in cultivating shrimp. *"There are no written rules regarding regulations, but in daily life, we respect each other, for example regarding canals, use and disposal of water from ponds, we already know with our own awareness not to disturb other ponds."*

The harvest cycle in Pedes District is usually twice a year, but in the last two years, shrimp cultivation has experienced a drastic decline. It is caused by pests/diseases that cause the shrimp to die before the harvest. The farmers continue to run shrimp farming. As a form of tradition, usually after one harvest cycle, they carry out a recitation as a thanksgiving to the creator for the harvest they have given. Besides that, other traditional activities, such as breaking the fast together during Ramadan, are always carried out to remain grateful and maintain the friendship of the shrimp farming community in Pedes District. It shows that farmers still adhere to existing social norms to support the development of a sustainable aquaculture business Rahmadi's research (2021).

However, *according to one informant, "there are always people who violate the norms, for example, dishonesty at work, not doing the sorting and sizing properly so that when they are sold to collectors or to PT, we can lose because the calculations are wrong."* No sanction or penalty has been determined regarding this violation, only a verbal reprimand. Because this concerns the norms concerned, they realize not to do the same thing because it will harm the harvesting farmers.

### **Network**

Putnam describes social capital as a set of horizontal relationships between individuals in society, which means that social capital consists of "networks of civic engagements," networks of social attachments governed by norms that determine the productivity of a community or community group. Two things that dominate the basic assumptions of the concept of social capital are norms and networks. The success of a business's development can be achieved through social capital.

Shrimp farmers in Pedes District build a network through regular meetings. "Meetings were held to exchange ideas (sharing) about knowledge, experience and provide mutual support for the current conditions that these shrimp farming farmers were experiencing. As happened in the last two years, it is safe to say that the harvest or results of shrimp farming in Karawang failed or were not successful.

The network is a component of social capital that can increase knowledge (transfer and sharing of knowledge) between communities, where they get information related to technological developments, trends, sources of funding, as well as situations and market prices that can be used in developing the productivity of a business.

These aquaculture farmers always network with several companies to guarantee daily price information (updates). Because if it only hopes for collectors, the profit they get will be less (minimal); that is why apart from investors, farmers also build networks with cold storage companies as containers for harvests at competitive prices. In this case, "the fixed price is in accordance with the market price; if the PT (cold storage company) already knows the market price, we only see the best PT price which is according to the size of the shrimp we will harvest. If PT has a standard price, then we have collaborated and made approaches to several PTs so that when we harvest, we will get the best price" so we do not rely on one company or collectors.

## **CONCLUSION**

Results of the research and discussion above can be concluded that shrimp farmers in Pedes District own lauded that social capital consists of trust, norms, and District. The component of social capital in the form of trust is the basis for forming social interaction. In addition to the trust that must exist between farmers, there is a desire to participate and form a network, both among fish farmers and with other parties such as investors and collectors or companies that accommodate their crops. So, social capital plays a role in developing shrimp farming in Karawang Regency.

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