INTRODUCTION

Restrictions on community mobility to speed up breaking the chain of the spread of the Covid-19 pandemic have drastically affected the global economy. Ministry of Finance data shows that economic growth experienced problems with these restrictions until it grew negative 3.2% in 2020 (Administrator, 2021b). The first quarter of 2021 showed that the economy grew negatively by 0.74% (Larasati, 2021). In addition, the growth rate of national income per capita also decreased to 3.15% in 2020 (Administrator, 2021a). One concern to the Government is extreme rural poverty in coastal areas, which is relatively higher than in other regions. In 2021, the extreme poverty rate in Indonesia was 10.86 million people or 4.19%, of which 12.5% or 1.3 million people live in coastal areas (Adhi, 2021).

East Lampung Regency is one of the many coastal areas in the Lampung Province that is facing the problem of poverty. East Lampung Regency ranks third poorest in Lampung Province, with a poverty rate of 15.08% (Administrator, 2021c).
This condition makes East Lampung Regency one of the areas that are the center of national attention.

The Government has made various efforts to overcome the problem of poverty. One of them is by increasing development in the fisheries sector. East Lampung Regency has potential resources to cultivate ponds. It is noted that the area of ponds in this Regency is around 8,271 hectares. To maximize this potential, East Lampung Regency has been designated as a Minapolitan Area based on the Decision of Minister of Maritime Affairs and Fisheries Number KEP.32/MEN/2010. In this case, it covers part of the area with a primary economic function consisting of a center for production, processing, marketing fishery commodities, services, and or other supporting activities.

The lake, located on the east coast of East Lampung Regency, was previously a breeding ground for tiger prawns (*penaeus monodon*) and milkfish (*chanos chanos*). Farmers in Purworejo Village have started a pond business with a traditional system since the 1980s. For almost the last 20 years, shrimp farmers in the Regency of East Lampung have turned to the development of whiteleg shrimp (*litopenaeus vannamei*). Shrimp cultivation in East Lampung is carried out in three ways: simple pond, semi-incentive pond, and intensive pond. The potential for developing shrimp cultivation in East Lampung Regency is located in Labuhan Maringgai Subdistrict and Pasir Sakti Subdistrict. In Pasir Sakti Subdistrict, the village with the most significant pond potential is Purworejo Village. The area of Purworejo Village is only 11.31 km² consisting of 7 hamlets with a population of 3,352 people. Based on the Fishery Statistics data for the Pasir Sakti Subdistrict in Figures 2021, the pond area of Purworejo Village reaches 494 hectares or 23.8% of the total 2,075 hectares of pond land in the Pasir Sakti Subdistrict. Based on the latest data, there are 17 groups of fish cultivators in Purworejo Village with hundreds of members. This potential makes Purworejo Village the backbone of the minapolitan area in the Pasir Sakti Subdistrict.

The majority of the farmers in Purworejo Village were initially cultivating tiger prawns. However, because tiger prawns are very susceptible to disease compared to whiteleg shrimp, many farmers have turned to whiteleg shrimp cultivation. In addition, the transition of these commodities stems from one farmer’s success. With his long experience in cultivating, he invites other farmers to try the semi-intensive whiteleg shrimp cultivation system. The system is carried out by adding stocking density and feeding regularly. The wheel also increases the density of shrimp in the pond. With this system, the community began to work together to form groups and jointly carry out pond repairs so that a farmer community was formed. The goal is to maximize their pond yield. This farmer community then carried out independent coaching for several years so that the assisted farmer groups grew and spread in several areas. This collaboration between farmers is driven by the solid social capital owned by the farmer community in Purworejo Village. These farmers have kinship relations and
the same background, so it is easy to build trust between them. Trust has a positive impact on farmer productivity. Increasing pond productivity through a semi-incentive scheme encourages the continuity of the collaboration. In addition, the networking built between farmer communities, including the Government and the private sector, allows for knowledge transfer. The transfer of knowledge and information then directly impacts feelings of mutual trust.

The cultivation development initiated by the farmer then received assistance from the local Government. In 2014, the Department of Marine Affairs and Fisheries of East Lampung Regency began implementing a shrimp cultivation partnership between local farmers and the private sector. This partnership makes the community more helpful because the Government and the private sector are involved in the pond business, so the local economic development (LED) process is increasing.

Several previous studies have a discussion theme similar to this research. For example, LED has made human development better (Nourmalasari, 2018; Syadzali, 2020; Corona, 2021). In addition, the roles of Village-Owned Enterprise (Novandi & Adi, 2019), Local Economic Agencies (Khambule, 2018), and Nonprofit Economic Development Organizations (Hatcher & Hammond, 2018) as part of the Synergy of the LED Components provide good support in implementing LED. The approach used in studying the Synergism of LED Components is the Triple Helix (Iqbal & Anugrah, 2009; Hidayat & Safitri, 2019; Fadhil, 2020; Wilson, et al., 2020) and Hexagonal Model approaches (Mulyana, et al., 2019; Huda, 2020). Furthermore, social capital and innovation (Kusumawati, 2018), as well as linking capital (Srirahayu & Adi, 2021), also positively influence the LED process (Hamzah, et al., 2015).

Based on previous research studies, several gaps were found. First, previous studies have focused on state institutions’ role in the LED process. Some studies examine the strong synergy between stakeholders using a triple helix approach (academic, business, government) within the LED framework. However, studies like this still focus on the role of the Government. This assessment can be seen from the research findings, which conclude that the synergy is not optimal because many factors cause it. Such as the fulfillment of facilities, infrastructure, and policies, so the Government has not been maximal in realizing the LED process. Another study that uses the hexagonal model approach in the LED process tries to overcome the weaknesses of the triple helix approach. However, this research still emphasizes strengthening the institutional platform through a comprehensive management system. Thus, studies that focus on the role of local communities and their social capital in the LED process are still very minimal. This focus is vital because the LED process based on local democratic principles allows local economic development to run effectively and efficiently. In this regard, it is also recommended by several previous studies. Second, previous studies have focused more on discussing the LED process in agriculture (agropolitan) in rural communities than in fisheries, especially in areas designated as minapolitans.
Based on the description above, this study aims to determine the contribution of social capital of farmer communities in local economic development of aquaculture in Purworejo Village, Pasir Sakti Subdistrict, East Lampung Regency.

**METHOD**

This study uses a qualitative approach to understand groups of people, objects, situations and conditions, events that are currently happening, and even systems of thought (Whitney, 1960). This research was conducted in April-June 2022 in Purworejo Village. In this case, Purworejo Village is a supply area with various potentials for the economic development of ponds. In addition, this village includes the Minapolitan area in East Lampung, with the most significant area and production of ponds in East Lampung. The population in this study is the fishery cultivation group, with the number of samples as informants as many as three people who were carried out by purposive sampling. The data collection techniques of observation and interviews were used to obtain the data needed in this study. The data that has been obtained is then analyzed using qualitative inductive analysis. Inductive analysis is an approach that starts from field facts which are then analyzed based on appropriate theories and legal arguments, and then produces a conclusion (Neuman, 2003).

**RESULTS AND DISCUSSION**

Bourdieu (1986) argues that an immaterial non-economic transaction always accompanies every material economic transaction. Non-economic transactions that are immaterial are in the form of social capital, namely interpersonal relationships between transaction actors. Meanwhile, Fukuyama (2000) added the aspect of trust, where the level of trust determines the welfare, democracy, and competitiveness of a society. The values of reciprocity, moral responsibility, the obligation to society, and beliefs rooted in customs in economic transactions make economic institutions function correctly (Nasution, 2016). The existence of immaterial transactions that accompany each material transaction is indicated by mutual trust, mutual understanding, and the existence of binding shared values and norms. Without such social capital, economic cooperation is difficult to establish.

Likewise, in the context of the success of semi-intensive pond management, it cannot be separated from the role of social capital owned by the farmer community in Purworejo Village. The use of social capital in business development began to be seen since the farmer was still using traditional methods (Sudirah, et al., 2020). Traditionally constructed ponds often experience problems due to lack or absence of sewerage. In addition, the age of the pond that is getting older is also a problem for farmers. This condition impacts the management of ponds that traditionally have irregular layouts and poor irrigation systems, so permanent sewerage is unavailable. This condition makes the farmers work together to dispose of pond waste. This collaboration involves family, neighbors, or fellow farmers in the nearest location.
However, the use of social capital is still limited. It is different when the farmer starts to switch to a semi-intensive system. In the context of pond business in Purworejo Village, the use of social capital to support pond business development is more visible since the farmer formed a group, namely the Fishery cultivation group.

On the other hand, the economic activities of farmers in Purworejo Village cannot be separated from social capital transactions. Likewise, in the context of farmer economic activities in Purworejo Village, the fishery cultivation group cannot be separated from social capital transactions. Such as forming a fishery cultivation group that aims to increase pond business results. The fishery cultivation group members have known each other for a long time because they have family relationships, neighbors, and friendships. The basis of this kind of relationship makes it easier for them to interact because they have the same values and norms and trust each other. When forming social capital like this, there are costs and social transactions. They exchange information, understand each other, and care for each other. These actions mean that the formation of a fishery cultivation group as a forum for organizing economic cooperation involves not only economic transactions but also social transactions.

Social capital contributes significantly to encouraging the cooperation of farmers through fishery cultivation groups to achieve mutual prosperity. In this collaboration, the farmers involved in managing the pond business get a more significant opportunity to get satisfactory results, both materially and non-materially. They have a habit of helping each other in the spirit of cooperation as an agreed norm, passed on in the fishery cultivation group. This habit is based on mutual trust that cooperation has social and economic functions that are collectively beneficial. Putnam (2000) describes three aspects that can be used to analyze the contribution of social capital in developing a pond business in Purworejo Village: social networks, norms, and trust.

A. Horizontal Network

Putnam (2000) explains that social networks allow coordination and communication to foster mutual trust among community members. Putnam (1993) describes that the network consists of formal social networks (starting from official membership, such as in associations) and informal networks (by building mutual sympathy, such as friendship). Social networks can also be positioned horizontally and vertically. Horizontal networks help bring together people of the same or equal status and power. In addition, it facilitates communication and increases the distribution of information about individuals’ beliefs, enabling them to meditate and increase their reputation. In contrast, the vertical network is a combination of different individuals and is in a relationship that is not symmetrical in hierarchy and dependence. In addition, vertical networks cannot maintain social trust and cooperation because vertical information flows are generally less reliable than horizontal ones.
The horizontal network is relevant in explaining the relationships built among the farmers in Puworejo Village. The basis of their relationship is kinship, neighbors, and friendship. Furthermore, due to the proximity of their respective pond areas, this relationship developed into a common profession, status, and common perception regarding the sustainability of the pond business. This social connection was then institutionalized by forming a fishery cultivation group (pond cultivation group). With the fishery cultivation group, the farmers enter a more extensive social network, namely the relationship between other fishery cultivation groups inside and outside Purworejo Village. In addition, relations with relevant government institutions and companies that provide products (feed, fertilizers, medicines, and equipment) for pond business needs are also built.

Farmers share roles and organize cooperation through fishery cultivation groups. The division of roles is regulated in the Statutes and By-Laws. In the fishery cultivation group, the farmers exchange information and knowledge, conduct evaluations, solve problems, make plans, and do other joint activities. Farmers also share information about government programs or access to cheap resources for business needs. Coordination is usually carried out through meetings held on average twice a month.

In addition to their respective fishery cultivation groups, the farmers also form an informal forum in the form of pond business group associations. This forum is intended to facilitate interaction and exchange of information between fishery cultivation groups inside Purworejo Village. There are 17 fishery cultivation groups in Purworejo Village, where the average number of members is 25. This forum also consists of fishery cultivation groups outside Purworejo Village and the Pasir Sakti Subdistrict. Meetings through the forum are often held in Purworejo Village. This condition is inseparable from the existence of the first fishery cultivation group formed. Connectedness between fishery cultivation groups is maintained because of an open attitude that facilitates communication and coordination related to many things for business development. This condition is in line with Jamaluddin statement that:

“*We are fellow farmers, always coordinating and sharing information. If we are with group members, we usually gather at Mr. Solihin’s house. Those who came were not only from inside Purworejo Village but also from outside Purworejo Village and the Pasir Sakti Subdistrict. We usually call each other to ask for news about the pond’s condition and share the latest information.*”

The farmers develop a broader network through the fishery cultivation group to support their business development. The network in question is a good relationship built with relevant government institutions and private parties.

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1 Results of an interview with the Head of the Fishery Cultivation Group of Bintang Timur Bersaudara. Jamaluddin, S.Kom., on June 11, 2022.
(companies providing feed, medicines, and equipment). The existence of good relations with related government institutions makes it easier for farmers to access various assistance programs, both in the form of physical assistance (such as feed and medicines) and non-physical assistance (such as extension workers or assistants programs). Relevant government institutions through the Department of Marine Affairs and Fisheries of East Lampung Regency are also trying to connect the fishery cultivation group with large business networks. In addition, the local Government is also seeking assistance from the Ministry of Maritime Affairs and Fisheries. The farmers are also connected with the University of Lampung through the fishery cultivation group. From this relationship, the farmers received guidance from the lecturers and researchers, especially regarding the technical cultivation of white leg shrimp. This condition is in line with Sulimin statement that:

“At my house, the leaders of the fishery cultivation group often gather. Maybe it’s because my group is the oldest, so all coordination is with me as the information center. Because if there is information from the government, campus, or friends selling food or medicine, they all contact me.”

Meanwhile, good relations with the private sector (companies providing feed, medicines, and equipment) make it easier for farmers to access various products needed in their business. Farmers also get services in the form of transporting feed to their ponds. Even with that good relationship, the company offers partnership opportunities with farmers by providing capital and developing business on a larger scale.

B. Reciprocity Norms

The essential characteristic of norms is reciprocity. Putnam (1993) emphasizes that balanced reciprocity occurs when the exchange of goods and values is equal. In contrast, general reciprocity is an ongoing imbalance of exchange relations. In addition, Putnam (2000) explains that social capital has external benefits for the whole society. In this case, the shared obligations in social networks help generate strict reciprocal social norms. On the other hand, norms regulate networks of civic engagements and determine the productivity of a community group or community.

This reciprocity norm is relevant in dividing the roles and functions of fishery cultivation group members in Purworejo Village. Norms of reciprocity are also reflected in written and unwritten rules. Statutes and By-Laws regulate the roles and functions of each farmer who is a member of the fishery cultivation group. In addition, it also regulates how the fishery cultivation group is run to support each other’s business development among members. Meanwhile, unwritten norms

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2Results of an interview with the Head of the Fishery Cultivation Group of Sido Makmur. Sulimin, on June 12, 2022.
refer to mutual agreements that every critical issue must be discussed in group deliberation. The next step is to find a solution and then work on it together. This condition is in line with M. Ansori Makmur statement that:

“All our friends will come if we have activities, meetings, and mutual cooperation. Someone will represent them if they don’t come, and that’s how we are. Besides, so far, none of my friends dared to be sneaky. If someone needs a loan, we will help, and they will definitely pay it when it is due.”

Furthermore, Jamaluddin statement that:

“Every year, all of us farmers work together to clean up waste at our pond so that the pond is not polluted by disease. In addition, so that our environment is better.”

The reciprocity norm is also a solid social capital because it has a transparent mechanism, including sanctions for members committing violations. For example, members deemed uncooperative will be removed from the group. However, from the activities of the members of the fishery cultivation group, they always carry out these norms. In addition, it can be seen from the commitment to compliance shown by the members. Each group member carries out their respective roles and functions. In the group’s routine agendas, it is agreed that meetings are held twice a month. In this case, the members are always present, and if any of them cannot attend, they will provide confirmation to be represented by their closest people. They also have rules about weekly dues. When a member is given a capital loan, the borrowing member always returns the loan on time. The same applies to unwritten agreements, such as the habit of discussing problems and working collaboratively. Commitment to compliance with these norms is built because each member realizes that group harmony is essential for the continuity of cooperation. This condition is in line with Jamaluddin statement that:

“As for the rules in that group, the point is that we have Statutes and By-Laws. Of course, just use that as a standard rule so that each member knows their respective functions and roles. In the group, we also have a fee of IDR 20,000.00/week, which we manage and use for the group’s needs. We are also there for loan assistance to members in need. So far, everyone is obedient because we have values that we strive for, start together, and finish together.”

From the informants’ descriptions above and referring to Coleman (1988) opinion that with a set of norms agreed upon and obeyed by all members of society – with clear and effective sanctions – everyone feels there is a bond with other

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3Results of an interview with the Head of the Fishery Cultivation Group of Mina Sakti Mandiri. M. Ansori Makmur, S.Pd., on June 11, 2022.
4Results of an interview with the Head of the Fishery Cultivation Group of Bintang Timur Bersaudara. Jamaluddin, S.Kom., on June 11, 2022.
5Results of an interview with the Head of the Fishery Cultivation Group of Bintang Timur Bersaudara. Jamaluddin, S.Kom., on June 11, 2022.
people and tends not to act according to their own will. In addition, the norm of reciprocity that applies in the farmer community causes role specifications and balance for its members. The farmers exchange information and other things equal, no one dominates, and no one member depends on other members other than the community. Therefore, it can be understood that the existence of norms agreed upon and carried out correctly will significantly contribute to forming and maintaining group solidarity to support business development.

C. Principle of Trust

Putnam (2000) explains that trust has positive implications in social life, as evidenced by how the relationship of people who have mutual trust in a social network strengthens norms regarding the necessity to help each other. Putnam emphasizes the importance of trust, that social capital is formed from the trust. Social trust in the modern world will strengthen the norm of reciprocity and the citizen participation network.

Trust is crucial in economic transactions, like a lubricant that accelerates volunteer activity and participation in production and trade. For members of the organization to uphold the agreements made together to foster mutual trust, four things must be fulfilled, namely:

1. Members of the organization care for each other;
2. Members are respected, and they know they are respected;
3. These agreements are strengthened by imposing a sanction on members whose behavior deviates; and
4. Involvement of third parties to enforce agreements.

Overall, trust is an essential non-material element in local economic development. In the context of a pond business, many jobs require collaboration between farmers, from business planning to implementation in the field. Running a pond business semi-intensively requires much energy and thought. Without mutual trust, farmers will find it challenging to accommodate the desire to cooperate, prepare pond ponds, solve various problems encountered, access assistance amid limited financial capital, supervise amid lack of knowledge, to develop their business. This condition is in line with Jamaluddin statement that: ⁶

“The group was formed because we all have mutual trust. The group was formed from the beginning with a vision and mission. If someone gives kindness of all kinds, it is mutual cooperation. If someone helps us, surely we will help them more. If we can, we move together, advance together, and make it to the finish together.”

⁶Results of an interview with the Head of the Fishery Cultivation Group of Bintang Timur Bersaudara. Jamaluddin, S.Kom., on June 11, 2022.
In addition, M. Ansori Makmur statement that:  

“If you trust each other, it is from ancient times, especially in the pond business. My friends trust me to be the head of the fishery cultivation group, and I also really trust my friends. It is the same in groups, if there is a product for assistance, we will discuss it, and there will be a priority scale. We prioritize those who need it the most.”

Furthermore, Sulimin statement that:  

“Yes, in essence, we trust each other. That’s because apart from being friends for a long time, everyone has known each other for a long time. Most importantly, that’s because we’re all talking about it. We are transparent in explaining the group situation, and if there are products and programs for assistance, I leave it to my friends what to do with the help so that everyone feels comfortable and valued.”

This principle of trust is very relevant and has an enormous contribution to the development of the pond business in Purworejo Village. This principle is present in most of the activities and relations of the farmers. Based on mutual trust, the farmers then form a network of attachment in the form of a fishery cultivation group. They are starting from the process of group formation and group management to routine activities at the pond location. The fishery cultivation group from the beginning was formed based on mutual trust that cooperation within the group has social and economic functions that are very important for business development. Farmers believe in each other and that when helping others, the other person will also help. This trust encourages fellow farmers to help each other. Starting from helping with closest friends, then growing and helping each other in many ways.

**CONCLUSIONS AND SUGGESTIONS**

Based on the results and discussion above, it can be concluded that the social capital of farmer communities in local economic development in Purworejo Village gave a substantial contribution. The contribution can be described in three aspects of social capital: horizontal network, reciprocity norms, and the principle of trust. Horizontal networks impact the farmers to develop a broader network through the fishery cultivation and pond business group associations. With the fishery cultivation group, the farmers enter a more extensive social network, namely the relationship between other fishery cultivation groups inside and outside Purworejo Village. Reciprocity norms impact role specification and balance for members of fishery cultivation groups, as well as forming and maintaining group solidarity to support business development. The principle of trust impacts strengthening the norm of reciprocity and the citizen participation network to support local business economic

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7Results of an interview with the Head of the Fishery Cultivation Group of Mina Sakti Mandiri. M. Ansori Makmur, S.Pd., on June 11, 2022.

8Results of an interview with the Head of the Fishery Cultivation Group of Sido Makmur. Sulimin, on June 12, 2022.
development in Purworejo Village. Based on the description of these conclusions, it is recommended that the fishery cultivation group looks at the opportunities and challenges of utilizing social capital in local economic development in Purworejo Village. In this case, they position good relations with the government and the private sector as a horizontal network. It is also suggested that reciprocity norms can take the form of formal rules, for example, village regulations regarding pond waste disposal management as a form of environmental protection. Thus, local economic development will further improve the welfare of the people of Purworejo Village in the future.

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