

# The Influence of Social Networks and Trust on the Social Solidarity of Fishing Communities in Kupa Village

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## ABSTRACT

**Background:** Strong trust and extensive social networks can lead to increased social solidarity among fishers, creating an enabling environment for economic sustainability and community well-being.

**Objective:** This study aims to influence social networks and trust on the social solidarity of the Kupa Village fishing community.

**Methods:** The research method used is quantitative with survey method, using data collected from questionnaires.

**Results:** The results showed that social networks and trust have a positive and significant effect on the social solidarity of fishermen in Kupa Village. Social network has a regression coefficient of 0.125 with a significance of 0.025, while trust has a coefficient of 0.816 with a significance of 0.000. Simultaneously, these two variables also have a significant effect on social solidarity, with a significance value of 0.000.

**Conclusion:** This study concludes that social networks and trust have a positive and significant effect on the social solidarity of fishermen in Kupa Village. The higher the two factors, the stronger the social solidarity formed in the fishing community.

**Keywords:** social network; trust; social solidarity; fishing community

## INTRODUCTION

Social solidarity is a bond or sense of togetherness between community members based on shared values and norms. This solidarity encourages them to help each other, cooperate, and work together in achieving common goals. Solidarity then becomes something that is needed by a social group or community. A community is built because of the social ties between citizens or society. In people's lives, there are many communities that are built on agreements and common goals that the community wants to achieve, such as farming communities, fishing communities, art communities, and so on. The existence of this community is based on interactions between community members that arise from common beliefs in a society to cooperate with each other, both in the smallest community and the larger community. Social groups or communities as a place for the community to live together will continue to exist and survive when in the social group there is a sense of solidarity among its members.

Fishing communities, with their unique characteristics, are heavily influenced by social networks and trust in forming social solidarity. The existence of Trust (mutual trust) has differences in various contexts. In the community context, the existence of trust becomes the foundation of social values, especially in creating social solidarity. While the network is the ability of the community to associate because it is bound by a previously existing moral community, therefore individuals within it are able to work together effectively. This ability is the ability to build interactions and connections among individuals. The existence of a network in the community can facilitate communication that leads to the growth of trust that can strengthen cooperation.

The Kupa Village fishing community has strong social networks and trust, which can be utilized to create or build social solidarity. Social solidarity as a form of solidarity that refers to a state of relationship between individuals or groups based on shared moral feelings and strengthened by shared emotional experiences. This research analyzes how elements of social capital influence each other, namely social networks and trust on the social solidarity of fishing communities in Kupa Village. These elements are analyzed based on the fishing activities and daily life of fishermen in Kupa Village, namely in production activities or catching fish at sea, distribution activities of catch products, and daily life

Previous research in this case becomes one of the references when conducting research so that researchers can multiply the theories that will be used in reviewing the research conducted. The following is a table of previous research, as follows:

**Table 1. Previous Research**

Title	Research Methods	Research Results
"Social Capital Social Capital and Its Effect on Business Development and Independence of Smoked Fish Businesses in Ambon City", (1)	Quantitative Methods with Survey Techniques	1. There is a positive influence between social capital and smoked fish business development. 2. There is a positive influence between social capital and smoked fish business independence
"The Influence of Social Capital Values on the Welfare of the Millennial Generation (Case Study of Students of the Faculty of Economics and Islamic Business at UIN North Sumatera)", (2)	Quantitative Research Methods with an Associative Approach	1. There is a positive influence between social capital values and millennials' well-being. 2. There is a positive influence between trust and millennial well-being 3. There is a positive influence between norms and millennial well-being 4. There is no positive influence between network and generational well-being
"The Relationship Between Social Capital, Level Community Solidarity with the Level of Tourism Village Management in Kemuning Village Ngargoyoso District, Karanganyar Regency", (3)	Quantitative Approach Using Survey Method with Type Explanatory Research	1. There is a significant positive relationship between social capital and the level of tourism village management. 2. There is a significant positive relationship between the level of community solidarity and the level of tourism village management. 3. there is a positive influence between social capital and the level of social solidarity on the level of tourism village management.
"The Influence of Social Capital on the Welfare of Fishermen in Putat Village, Tanah Putih District, Rokan Hilir Regency According to	Quantitative Method. Using total sampling techniques (census), with simple linear regression data analysis techniques.	There is a significant positive influence between social capital and fishermen's welfare.

the Perspective of Sharia Economics", (4)		
"Analysis of the Influence of Production Factors, Socio-Demography, and Social Capital on the Productivity and Welfare of Fishermen Households in Tabanan Regency" (5)	Quantitative Research Methods with Multiple Linear Regression Approach	There is a significant influence between Production Factors, Socio-Demographics, and Social Capital Social Capital on Productivity and Welfare Fisherman's Household
"Analysis of the Influence of Human Resources Human Resources, Environmental Awareness and Social Capital on the Performance of Lobster Fishermen in Bungo Mas District, South Bengkulu Regency", (6)	Quantitative Research Methods with Multiple Linear Regression Approach	There is a significant positive influence between Human Resources, Environmental Awareness and Social Capital on Fishermen's Performance. Social Capital on Fishermen's Performance

### PARTICIPANTS & METHODS

The approach used in this research is quantitative with a survey method strategy. The survey method is a quantitative research method used to obtain data that occurred in the past or the present(7) . In this study, researchers took all the population as respondents, in this case referred to as the census technique, namely all fishermen in Kupa Village totaling 55 people who were divided into several communities. The data in this study were obtained through a questionnaire, which contained closed or open questions/statements. The quality of data collection is determined by the quality of the instrument used. After collecting the questionnaires, data on respondents' characteristics were tabulated and analyzed to describe the demographic and socioeconomic profiles of fishermen. Furthermore, validity and reliability tests were conducted, where the questionnaire was declared valid if  $r \text{ count} > r \text{ table}$ , and reliable if the Cronbach's alpha value  $> 0.60$ (7) . To ensure the regression model is significant and representative, this study uses classical assumption tests (normality, multicollinearity, heteroscedasticity), multiple linear regression analysis, coefficient of determination ( $R^2$ ), as well as partial (t) and simultaneous (F) tests to measure the strength and direction of the influence of independent variables on the dependent variable . (8)

### FINDINGS

Based on the data obtained, respondents' answers have been summarized and analyzed to understand their assessment of the research variables. At this stage, the researcher will explain each variable based on the average value. The average value for each respondent is calculated using interval classes with a total number of classes of 5, which are formulated as follows:

$$\text{Interval} = \frac{\text{Nilai Max} - \text{Nilai Min}}{\text{Jumlah Kelas}} = \frac{5-1}{5} = 0,80$$

The categories of each interval are as follows:

**Table 2 Interval Scale**

Interval	Category
1.00 to 1.79	Very Low
1.80 to 2.59	Low
2.60 to 3.39	High enough
3.40 to 4.19	High
4.20 to 5.00	Very High

### **1. The Influence of Social Networks on the Social Solidarity of Fishermen Communities**

Based on the data obtained, the average social network assessment in this aspect reached 4.00, which falls into the high category. This shows that fishermen have a good level of social connectedness in the production process, such as sharing information related to fishing techniques, potential locations, and weather conditions. The average respondents' assessment of the social network dimension in distribution activities for fishermen in Kupa Village reached 3.96. This indicates that fishermen are highly involved in various aspects of catch distribution, including interactions with buyers, access to price information, and marketing and payment methods. The average respondent assessment of the social network dimension in daily life for fishermen in Kupa Village reached 4.30. This indicates that social ties among the fishing community are very strong, both in terms of economic and social activities, as well as participation in the community.

In fishing communities, social capital is not built by one individual, but rather grows in groups through strong values of togetherness. Social networks become the dynamic infrastructure that shapes social capital in fishermen's lives, enabling close cooperation among them. These networks facilitate communication, strengthen interactions, and foster trust, which is the main basis of social solidarity. Fishers rely on social networks to share important information, such as fish locations, weather, and effective fishing strategies. Additionally, in difficult situations, such as boat breakdowns or economic hardship, social networks act as a support mechanism where fishers help each other through labor, equipment, or financial assistance. The trust built within these networks creates a stable environment, encourages more effective cooperation, and strengthens the resilience of fishing communities to various challenges .(9)

The average respondent's assessment of the trust dimension of fishermen in Kupa Village reached 3.93. This indicates that the level of trust between fishermen in their daily lives, whether in terms of transactions, information, or cooperation, tends to be good, although there are still some concerns and experiences that affect their confidence. Fishers' trust in distribution activities in Kupa Village is reflected in the high category with an average of 3.68, indicating that most fishers have good relationships and can trust the parties involved in the distribution process of their catches, despite some differences in experiences and perceptions regarding some aspects.

The trust of fishermen in their daily lives in Kupa Village shows a high category with an average score of 4.01, which reflects a fairly strong trust in various aspects of their lives, although there is one item that has a lower score that needs further attention. In fishing communities, trust is the main foundation in building social relationships and cooperation. This trust is reflected in the fishermen's courage to take risks in their interactions, with the belief that fellow fishermen will act according to mutual expectations and not harm the group. Trust allows fishers to share strategic information, such as favorable catch locations or risky weather conditions. Moreover, in difficult situations, such as boat breakdowns or low catches, they support each other with equipment loans, labor assistance or financial support. This pattern of mutually supportive actions strengthens social solidarity, ensures livelihood sustainability, and creates a more harmonious working environment. (9)

The results showed that there was a positive regression coefficient of 0.125 between the influence of social networks on fishermen's social solidarity. This means that an increase in social network will be followed by an increase in fishermen's social solidarity. Conversely, a decrease in social network will lead to a decrease in fishermen's social solidarity. In addition, the significance value of 0.025, which is smaller than 0.05, indicates that the alternative hypothesis ( $H_a$ ) is accepted, meaning that social networks have a positive and significant influence on the social solidarity of fishing communities in Kupa Village. Social networks are part of social capital, which in sociological studies is considered an important aspect related to how individuals and groups utilize their social relationships to access various resources. This concept explains that social interactions can provide a variety of benefits, such as emotional support, ease of obtaining information, and wider opportunities in various aspects of life .(10)

Social networks influence fishermen's social solidarity because through close relationships between individuals in the community, fishermen can build trust, cooperation, and a sense of interdependence. In daily life, social networks allow fishers to share important information, such as fish locations, weather conditions, or more effective fishing strategies. This creates strong bonds and increases the sense of community among them. Moreover, in difficult situations, such as boat breakdowns or economic hardship, social networks serve as a support mechanism where fishers can help each other, whether in the form of labor, equipment loans or financial assistance. Continuous interaction within the community also reinforces social values that promote solidarity, such as mutual cooperation, mutual respect, and safeguarding common interests.

Furthermore, social networks strengthen solidarity through involvement in fisher groups or organizations, such as cooperatives or fisheries associations. Through these platforms, they can fight for their common interests, overcome external challenges such as fluctuating fish prices or unfavorable policies, and ensure their collective welfare. Therefore, the stronger the social network owned by fishers, the higher the level of social solidarity within their community.(11) .

## **2. The Effect of Trust on the Social Solidarity of the Fishing Community**

The social solidarity of fishermen in production activities in Kupa Village shows a high category with an average score of 3.89, although there are two items (items 9 and 10) that have low scores compared to other items. Overall, social solidarity in production activities indicates a high level of cooperation and mutual assistance among fishermen in various aspects of their production activities, although some areas still need further attention. Fishers' trust in distribution activities in Kupa Village is reflected in the high category with an average of 3.68, indicating that most fishers have good relationships and can trust the parties involved in the distribution process of their catches, despite some differences in experience and perception regarding some aspects

Fishers' social solidarity in distribution activities showed a high category with an average score of 3.82, although there were two items that showed a lower level of solidarity, namely items 1 (fixing the price of fish before sale) and 2 (cooperation in maintaining fish quality). Overall, this level of social solidarity reflects the existence of strong cooperation among fishermen in their catch distribution activities, although there are some areas that need improvement.

Social solidarity refers to the strong bonds between group members created through a sense of interdependence, cooperation and concern for the common welfare. In fishing communities, social solidarity is very important because it creates an environment that supports collaboration in facing common challenges, whether they are economic, social or cultural in nature. Social solidarity also strengthens social values within the fishing community, such as honesty, mutual respect and understanding. When social solidarity is strong, they are better able to deal with external challenges, such as fish price fluctuations, weather changes, or government regulations that impact their work. Thus, social solidarity not only reduces the potential for conflict, but also serves as a social protection mechanism that ensures that fishing communities can survive and thrive under conditions of uncertainty.

The results showed that there was a positive regression coefficient of 0.816 between the effect of trust on fishermen's social solidarity. This means that an increase in trust will be followed by an increase in fishermen's social solidarity. Conversely, a decrease in trust will lead to a decrease in fishermen's social solidarity. In addition, the significance value of 0.000 which is smaller than 0.05 indicates that the alternative hypothesis ( $H_a$ ) is accepted, meaning that trust has a positive and significant influence on the social solidarity of the fishermen community in Kupa Village. One aspect of social capital in the fishing community is the trust that exists among group members, both with fellow fishermen, the surrounding community, other groups, and community leaders. This trust plays an important role in building effective cooperation and creating a harmonious social life. In the context of social capital, trust includes several main indicators, such as the intertwining of social relationships, the intensity of interactions, and the expectations arising from these relationships.(12) .

Trust has a significant influence on fishermen's social solidarity because it is the basis for building strong relationships and effective cooperation among them. In fishing communities, activities such as sharing information about fish locations, helping each other with boat repairs, and sharing capital or fuel can only happen if there is mutual trust. Trust creates security in social interactions, so fishermen feel comfortable to share resources and work together for the common good. In addition, trust also strengthens social cohesion within fishing groups. When trust is high, fishers are more likely to support each other in the face of challenges, such as weather changes, market competition or policies that affect their livelihoods. This encourages the creation of closer social solidarity, where each individual feels they have a responsibility to the common welfare.

Furthermore, trust also reduces the potential for conflict and increases stability within fishing communities. With trust in place, fishers can resolve disagreements more peacefully and productively, for example through deliberation or group discussions. This creates a more harmonious social environment and encourages the sustainability of the cooperation system within the fishing community. Thus, trust is the main foundation in building fishermen's social solidarity. Without trust, cooperation will be difficult to realize, communication will be limited, and the risk of unfair competition or conflict increases, which can ultimately weaken social cohesion within the fishing community .(13)

### 3. The Influence of Social Networks and Trust on the Social Solidarity of Fishermen Communities

The research shows that social networks have a positive influence on fishermen's social solidarity with a regression coefficient of 0.125 and a significance of 0.025. Social network as part of social capital allows fishermen to share information, build trust, and strengthen cooperation in daily life<sup>(10)</sup>. Social solidarity increases through close relationships within the community, sharing resources, and involvement in organizations such as fisheries cooperatives<sup>(11)</sup>. Trust also plays a significant role on social solidarity with a regression coefficient of 0.816 and a significance of 0.000. Trust allows fishermen to cooperate in sharing information, economic assistance, and resolving conflicts peacefully<sup>(12)</sup>. High trust strengthens social cohesion, reduces the risk of unfair competition, and creates stability in the community.<sup>(13)</sup>

The simultaneous test results in the Anova table output show that the significance value of 0.000 which is smaller than 0.05 indicates that the alternative hypothesis ( $H_a$ ) is accepted, which means that social networks and trust simultaneously or jointly have a positive and significant influence on the social solidarity of fishing communities in Kupa Village. Social capital in fishing communities is mainly supported by two main components, namely trust and social networks. These two aspects play an important role in shaping social solidarity among fishermen, which ultimately has an impact on their welfare.<sup>(14)</sup> Trust is the basis of relationships between fishermen, both in economic cooperation and daily social life. With trust, fishermen are more apt to share information about profitable fishing locations, effective fishing techniques, and fair market prices. Trust also reduces the potential for conflict and improves coordination in the management of fisheries resources, such as in a profit-sharing system or the practice of gotong royong.<sup>(14)</sup>

Meanwhile, social networks expand relationships among fishers and increase access to resources. Through social networks, fishers can build cooperation in terms of catch distribution, obtain assistance when experiencing difficulties, and strengthen their bargaining position in the market. Strong networks also enable them to adapt to changes in economic conditions or policies that affect the fisheries sector.<sup>(14)</sup> With strong trust and extensive social networks, social solidarity among fishers increases, creating a favorable environment for the economic sustainability and well-being of their communities.

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