
The relationship between social capital and food security in farmer households (case study: Sedayulawas Village, Lamongan Regency – Indonesia)

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Abstrak. Sedayulawas Village is one of the villages contributed to the positive growth of Lamongan Regency in the fourth quarter of 2020. It has been named the selected pilot project for eradicating extreme poverty with the target of increasing community food security. However, this program was not supported by the relationship between farmers and farmer group leaders, as the trust of farmers to the group leaders were low since they couldnot protect farmers from many conflicts within the group. To ensure the success of programs of food security, the social capital of among farmers was an alternative mechanism for the community to increase food security. This study aimed to reveal how the contribution of the social capital of farmer households to food security in the Food Self-Sufficiency Program in Sedayulawas Village, Brondong District, Lamongan Regency. Descriptive statistical analysis to determine food security conditions were done using Confirmatory Factor Analysis (CFA) followed by Structural Equation Modeling (SEM). The result showed that there is a direct and indirect relationship between social capital and food security which has a significant value at the 5% test level. The food utilization variable explained 86.6% of farmers' food security variability and the results of t-test showed that social capital has a significant effect in supporting the food security program for farmers in Sedayulawas Village.

Keywords: Farmers; Social Capital; Food Security

1. Introduction

The agricultural sector has a vital role in the issue of food security. As a buffer for food availability in Indonesia, the agricultural sector must be optimized to prevent a crisis. The agricultural sector has an excellent opportunity to continue to be relied upon in boosting the economy so that it does not suffer too much from the impact of the COVID-19 pandemic [1].

For this reason, it is necessary to develop the agricultural sector, including various government policies to maintain the existence of this sector, to meet community needs by supporting community food security. Lamongan is the regency with the highest rice production in East Java, with a total production of 0.87 million tons and an increase in production yearly [2]. Unfortunately, this achievement differs from changes in agricultural land conversion. Based on the 2020 East Java Land Data Book, Lamongan Regency has the most significant level of land conversion with details of the area of ricefields converted due to the development of the Lamongan Regency industrial area of 29.40 hectares [2]. The condition of land availability and adequate agricultural production can improve people's living standards. However, this is also not in line with the economic conditions of the community based on the Lamongan Regency [2]. The percentage of poor people in Lamongan Regency also increased from 13.85 percent in March 2020 to 13.86 percent in March 2021.

Sedayulawas is one of the villages chosen as a pilot project for alleviating extreme poverty in Lamongan Regency through the food self-sufficiency program [3]. Sedayulawas Village has the most significant agricultural land area in Brondong District or 835 ha (about 78%) of the area, with a potential annual corn harvest of 493 ha with total production reaching 4,954.65 tons and land productivity of 10.05 tons/ha [4]. Additionally, land productivity data states that Sedayulawas Village has agricultural potential in corn and cassava commodities, with the second highest production in Brondong District. However, during the Covid-19 pandemic, Sedayulawas Village experienced a 30% decline in production from 2020 to 2022.

Integration between farmer groups in Sedayulawas Village is still shallow in protecting farmers in managing agricultural products, corn, beans, and salt farmers [5]. Farmers still complain about the slow information provided by the heads of farmer groups and the uneven targeting of fertilizer assistance for farmers in Sayulawas Village [6]. Good social capital conditions can realize food security by looking at the components of food availability, food accessibility, and food utilization [7]. Social capital of trust can help farm households get jobs in farming and non-farming businesses. Existing norms can help farmers to get food when experiencing difficulties [8].

Meanwhile, social networks make it easier for farmers to distribute agricultural products so that the income they receive can come from various parties [9,10]. Social capital can contribute to food security through synergies created by linkages between community members at every stage of the food supply chain, from production to consumption [11]. An environment with poor social capital, it causes a high number of households facing the problem of lack of nutrients needed for a healthy life [12]. Involvement in an association can be used as a measure of social capital whereby the role of participating in financial associations (such as microfinance, insurance, trade, and business associations), as volunteering has a direct impact on hunger reduction, and being participatory in information associations (such as agricultural groups, air, nutrition forest) as well as efforts to improve nutritional quality and food utilization [13]. Structural Equation Modeling (SEM) is a second generation multivariate data analysis technique that can assist researchers in examining the

relationship between latent variables. approach to estimating the relationship between social capital and food security variables using PLS-SEM [14–16]. Social capital is an alternative to community modalities and brings benefits in increasing the food security of Sedayulawas Village, especially during and after the COVID-19 pandemic. Therefore, this study aims to determine how social capital supports food security in the Food Self-Sufficiency Sedayulawas Village, Brondong District, Lamongan Regency.

2. Methods

This type of research is quantitative research. This is consistent with the research objective, which is to identify the factors forming social capital in Sedayulawas Village and their effect on food security which is analyzed using descriptive analysis [17]. To measure social capital, a list of statements, presented to respondents, who were asked to rate them on a five-point Likert scale (1 = strongly disagree, 5 = strongly agree) [18] calculated the frequency of answers and the percentage of respondents' answers then the mode for each parameter is obtained which is a description of the characteristics of the social capital of Sedayulawas Village. Respondents visited personally to administer the survey. The questionnaire was previously tested with 10 farmers to ensure that it was well structured and clear, especially with respect to the statements used in the section on social capital then it was limited in proportion and low while in social capital a list of statements was given to the respondent, then asked to rate it on a Likert scale. five points (1 = strongly disagree, 5 = strongly agree) by calculating the frequency of answers and the proportion of answers. respondents' answers [18]. This study uses a social research approach where research results can be applied based on existing conditions. Assessment of the validity of social capital variable indicators uses CFA (Confirmatory Factor Analysis) which if the indicator is valid if it has a loading factor $\geq 0,7$. While to determine the relationship between social capital and food security then using SEM (Structural Equation Model) analysis techniques [19]. The type used is Structural Equation Modeling (PLS-SEM) which is a nonparametric method that does not require assumptions about data distribution. PLS-SEM can be used on data that is not normally distributed because the PLS algorithm converts abnormal data through the central limit theorem [20].

2.1. Variable

The variables are divided into latent variables (construct) and indicator variables (manifest) [21]. Latent variables consist of social capital aspects, including trust, social networks, and norms [22]. Meanwhile, latent variables in food security it states that food security is a condition for fulfilling food for the state up to individuals, which displays the availability of sufficient food, both in quantity and quality, safe, diverse, nutritious, equitable and affordable and does not contradict with religion, belief, and community culture, to be able to live a healthy, active, and productive life in a sustainable manner include food accessibility, food availability, and food utilization [23].

Table 1. Latent variables and their indicators.

Latent Variable	Indicators	Sources
Social capital	<p>Trust:</p> <ol style="list-style-type: none"> 1. The level of trust in fellow local farmers (X1.1) 2. The level of trust in the village apparatus or government (X1.2) 3. The level of trust in the chairman of the farmer group (X1.3) 4. Level of trust in local religious leaders (X1.4) 5. Level of trust in farmer institutions/gapoktan (X1.5) 6. Level of communication with fellow farmer members during and after COVID-19 (X1.6) <p>Social Network:</p> <ol style="list-style-type: none"> 1. Level of willingness to build cooperation to achieve mutual success (X2.1) 2. Level of participation in religious activities (X2.2) 3. Level of participation in community social activities (X2.3) 4. The level of activity in giving opinions (X2.4) 5. The level of participation in a group or community (X2.5) <p>Norms:</p> <ol style="list-style-type: none"> 1. Level of compliance with applicable group/government regulatory norms (X3.1) 2. The level of attendance in participating in activities (X3.2) 	<ul style="list-style-type: none"> • [24–26] • [11,27]
Food security	<p>Food availability:</p> <ol style="list-style-type: none"> 1. Adequacy of food supplies in 1 harvest season (Y1.1) 2. Worries/fears about food sufficiency (Y1.2) 3. Availability of facilities (markets/stalls/shops) (Y1.3) <p>Food accessibility:</p> <ol style="list-style-type: none"> 1. Road Conditions (Y2.1) 2. Availability of transportation facilities to meet food needs far from home (Y2.2) 3. Travel costs to food source locations (markets, stalls, convenience stores) at optimal prices (Y2.3) <p>Food utilization:</p> <ol style="list-style-type: none"> 1. Indicators of the absence of children under five who have malnutrition problems/died due to illness (Y3.1) 2. The ability to buy fish, meat, eggs, tofu, and tempeh as a source of family nutritional protein (Y3.2) 3. Availability of primary drinking water sources and water for cooking (Y3.3) 	<ul style="list-style-type: none"> • [28] • [29] • [30]

2.2 Sample

The total population of farmers in Sedayulawas Village is 971 farmers. The formula for determining the sample by Krejcie and Morgan [31] will help the sample to be used as respondents in supporting this research.

$$S = \frac{3,841 \cdot 971 \cdot 0,5(1 - 0,5)}{0,05 \cdot (971 - 1) + 3,841 \cdot 0,5(1 - 0,5)}$$

$$S = \frac{932,49}{3,39}$$

$S = S = 277$ KK 479 KK farmers households

3. Result and Discussion

3.1. Characteristics of respondents

The respondents' characteristics were obtained using a questionnaire data collection technique [32]. The results of these data are in the form of primary data obtained from questionnaires on 479 farmers. This questionnaire is aimed at the farmers of Sedayulawas Village.

Tabel 2. Respondent characteristics.

Demographics	N	Demographics	N
Gender		Primary School	249
Male	372	Pre-primary School	10
Female	107	Main Occupation	
Age		Farmers and farm workers	403
Young age (0-14)	0	Laborer	22
Productive age (15-64)	348	Civil Servant	7
Elderly (>65)	131	Entrepreneur	3
Education Level		Trader	7
Bachelor's degree	76	Fisherman	10
Master's degree	1	Breeder	21
Not going to school	28	Pedicab driver	3
Postgraduate Degree	2	Income based UMR	
Senior High School/Equivalent	10	Below UMR	426
Junior High School/Equivalent	103	Above UMR	53

Most people are of productive age or 15-64 years, with 348 people or 73% of the total respondents. Most respondents were male, with 372 people or 78% of the total. Male residents make up the majority of respondents because, generally, people actively or passively involved in agricultural development are male.

About 6%, or 28 respondents, were uneducated, 52%, or 249 respondents, were elementary school graduates, 22%, or 103, were junior high school graduates, and 2%, or 10, were senior high school graduates. Meanwhile, the rest were associate program graduates and bachelors. The level of education shows that the respondent's education level in Sedayulawas Village is still relatively low. The level of education significantly influences the economy of the people, the majority of whom work in the agricultural sector. A high level of education can influence the way of thinking of farmers, namely skills in cultivating agriculture will be more effective and efficient.

The majority of respondents' occupations are farmers, with a total of 76 respondents who have side jobs in the form of teachers, laborers, traders, and fishermen. Breeders are farmers' most common side jobs in Sedayulawas Village, with a percentage of 28%, followed by laborers at 25%. As many as 426 people, or 89% of the total respondents, had income below the district minimum wage, i.e., less than 2,501,977 rupiahs. The respondent's occupation, where farmers dominate, made the income uncertain. The farmers' revenue depends on the harvest season, especially during the COVID-19 pandemic, with several respondents stating that it was challenging to market their agricultural products.

3.2. Characteristic of social capital and food security

In the existing conditions, social capital can be seen that the relationship between the communities in Sedayulawas Village has a close kinship in realizing food security, where the trust between farmers that has been built long ago can help in solving regional food security problems. Meanwhile, if viewed based on trust in the form of agricultural potential, the community tends to trust higher institutions and leadership such as Gapoktan compared to the heads of farmer groups. The network formed in the social structure of the community in Sedayulawas Village, such as community participation in social activities, community, religious formations, builds associations in the provision of food, distribution of materials, utilization of food and problems that arise in Sedayulawas Village. Social networks and trust are aspects that really dominate community activities to support food security.

The food security of Sedayulawas Village as a whole is categorized as high food security. However, there are still aspects that are categorized as sufficiently food secure, such as food availability to meet carbohydrate needs, where there are still people who have not been able to meet carbohydrate sources according to daily calorie needs, and are concerned about not being able to meet household food needs and aspects of food accessibility which include road damage where access to energy sources such as markets/stalls is included in the category of minor road damage but if repairs are not carried out will slowly damage the community's access to food. These conditions have a strong influence on the social network of the community in Sedayulawas Village. Opportunities for association such as regular meetings can be a way of evaluating and conducting problem-solving discussions. The condition of sufficiently defined food security is where there is suboptimality from both the community and the efforts of the government in achieving regional food security and it is necessary to plan for realizing food security in all aspects so that it can be guaranteed.

3.3. Confirmatory factor analysis (CFA)

In this study, the use of CFA aims to determine valid and significant indicators of social capital, including norms, trust, and social networks. Therefore, the first step of CFA Social capital of Sedayulawas Village was carried out on indicators for each social capital variable entirely, including trust (K) with 6 indicators, social network (J) with 5 indicators, and norms (N) with 2 indicators.

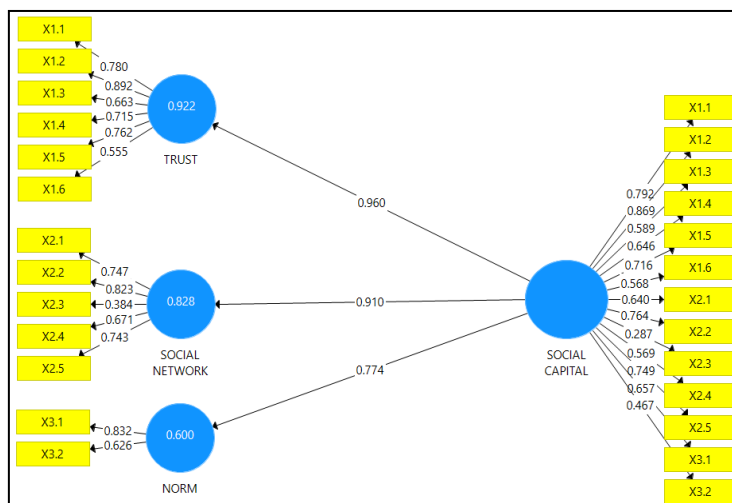


Figure 1. The first step of CFA.

The indicator is valid if it has a loading factor $\geq 0,7$. Indicators that are eliminated or dropped in the CFA, namely indicators that are not significant and are not valid.

Table 3. Loading factors of social capital in the first step of CFA.

Variable	Indicators	Loading Factor (≥ 0.70)	Validity
Trust	X1.1	0.780	Valid
	X1.2	0.892	Valid
	X1.3	0.663	Not Valid
	X1.4	0.715	Valid
	X1.5	0.762	Valid
	X1.6	0.555	Not Valid
Social Network	X2.1	0.747	Valid
	X2.2	0.823	Valid
	X2.3	0.384	Not Valid
	X2.4	0.671	Not Valid
	X2.5	0.743	Valid
Norm	X3.1	0.832	Valid
	X3.2	0.626	Not Valid

The indicators eliminated in the trust variable include trust in the farmer group chairperson (X1.3), with a loading factor value of 0.663, and the communication level of farmers during and after the COVID-19 pandemic (X1.6), with a loading factor value of 0.555. In the social

network variable, the eliminated indicators consist of availability to participate in social activities (X2.3) with a loading factor value of 0.384 and availability to participate in joint meetings (X2.4) with a loading factor value of 0.671. Finally, the indicator norm variable eliminated is the level of participation in traditional activities or events (X3.2).

The next step is the composite reliability test. If the composite reliability value is higher than 0.7, all constructs in this research model can explain more than half of the variance of the indicators.

Table 4. Composite reliability of social capital in first step of CFA.

Variable	Composite Reliability	AVE (Average Variance Extracted)
Trust	0.813	0.477
Social Network	0.874	0.540
Norm	0.699	0.542

Not all composite reliability values meet the reliability value limits. For example, the highest composite reliability value in social networks is 0.874. On the other hand, the value of the composite reliability variable does not meet the norm indicator of 0.699. Furthermore, if the invalid indicators in stage 1 have been eliminated, then the CFA model stage one has been completed, and proceed to the second stage CFA to recalculate the new model.

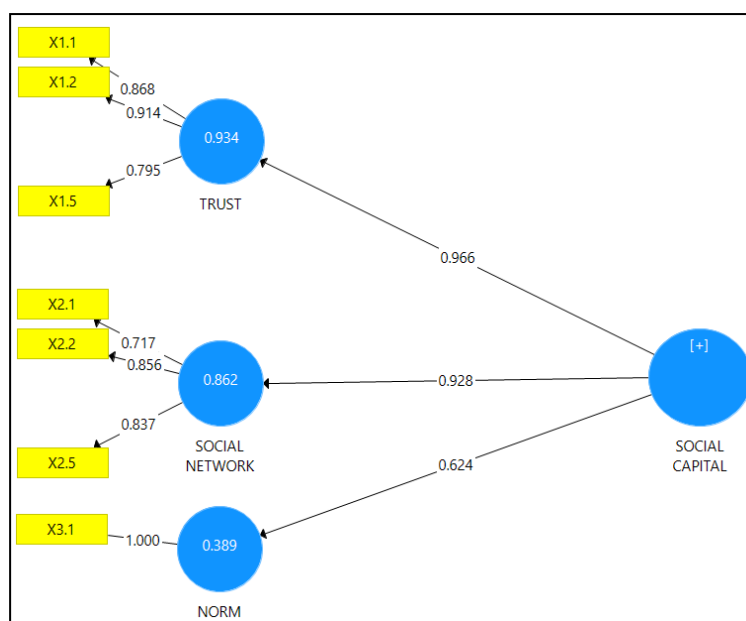


Figure 2. The second step of CFA.

Table 5. Loading factor of social capital in second step of CFA.

Variable	Indicators	Loading Factor ($\geq 0,70$)	Validity
Trust	X1.1	0.814	Valid
	X1.2	0.895	Valid
	X1.5	0.781	Valid
	X1.4	0.694	Not Valid
	X1.6	0.684	Not Valid
Social Network	X2.1	0.747	Valid
	X2.2	0.823	Valid
	X2.5	0.743	Valid
Norm	X3,1	1.000	Valid

The indicators eliminated in the trust variable include trust in Gapoktan institutions (X1.5), with a loading factor value of 0.694, and farmers' communication level during and after the COVID-19 pandemic (X1.6), with a loading factor value of 0.684.

Table 6. Composite reliability of social capital in second step of CFA.

Variable	Composite Reliability	AVE (Average Variance Extracted)
Trust	0.847	0.650
Social Network	0.857	0.603
Norm	0.899	0.532

All composite reliability values meet the reliability value limits. The highest composite reliability value is found in the norm, which is 0.899. The lowest composite reliability value is the confidence indicator, with a value of 0.699. Meanwhile, the results of the AVE (Average Variance Extracted) value for each construct or latent variable can be seen in evaluating discriminant validity. If the AVE value is >0.5 [33], it can be concluded that the convergent validity of each construct is good. If the invalid indicators in stage 2 have been eliminated, the second stage of the CFA model has been completed, followed by the third stage of CFA to recalculate a new fit model.

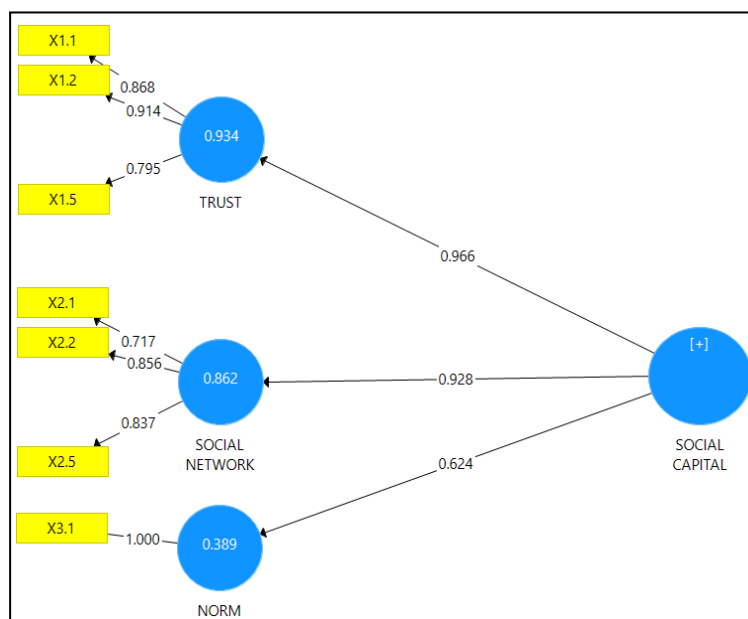


Figure 3. The third step of CFA.

Based on the results of the third stage of CFA, there is no need to eliminate indicators because they are valid and significant. The indicator forming the variable of farmer trust in Sedayulawas Village is formed by the level of trust in fellow farmers (X1.1), the level of trust in the government/village apparatus (X1.2), and the level of trust in Gapoktan institutions (X1.5). In the social network variable, the indicators that make up this variable are willingness to work together in achieving mutual success (X2.1), willingness to participate in religious activities (X2.2), and willingness to participate in groups and activities within them (X2.5). Furthermore, the norm variable with its forming indicator is the willingness to follow group/government regulations, both written and unwritten (X3.1). Therefore, these indicators can measure social capital variables well.

Table 7. Loading factor of social capital in third step of CFA.

Variable	Indicators	Loading Factor ($\geq 0,70$)	Validity
Trust	X1.1	0.928	Valid
	X1.2	0.929	Valid
	X1.5	0.897	Valid
Social Network	X2.1	0.716	Valid
	X2.2	0.854	Valid
	X2.5	0.840	Valid
Norm	X3.1	1.000	Valid

Table 8. Composite reliability of social capital in third step of CFA.

Variable	Composite Reliability	AVE (Average Variance Extracted)
Trust	0.847	0.649
Social Network	0.927	0.862
Norm	0.902	0.611

All composite reliability values meet the reliability value limits. The highest composite reliability value is found in social networks, namely 0.927. The lowest composite reliability value is the confidence indicator, with a value of 0.847. Based on the results that have been obtained, all AVE values have met the standard. In the next stage, the goodness of fit feasibility test can be carried out.

Table 9. Results of the CFA goodness of fit test for social capital in Sedayulawas Village.

<i>The goodness of the fit index</i>	<i>Cut Of Value</i>	First Stage CFA		Second Stage CFA		Third Stage CFA	
		Result	Explanation	Result	Explanation	Result	Explanation
SRMR (Standardized Root Mean Square)	<0.10	0,072	good fit	0.065	good fit	0.049	good fit
d_ ULS	>0.05	10,417	good fit	3.692	good fit	1.669	good fit
d_ G	-	4,771	good fit	4.345	good fit	3.889	good fit
Chi-Square	>0.05	63,80	good fit	150.85	good fit	256.67	good fit
NFI (Normed Fit Index)	>0.9	0,449	poor fit	1.733	good fit	1.648	good fit
rms Theta	<0.12	0,301	poor fit	0.251	poor fit	0.101	good fit

Based on the goodness of fit assessment for each social capital CFA, it was found that in the third stage all indicators were said to be goodfit and could be continued to the SEM modeling stage.

3.4 Structural equation modeling (SEM)

The first model's feasibility test identifies the outer model of the influence of social capital and food security. The indicators in the social capital variable are the result of the CFA. Meanwhile, for the food security indicator, all indicators are shown to be tested for the inner model with a determination based on the limit value of the loading factor.

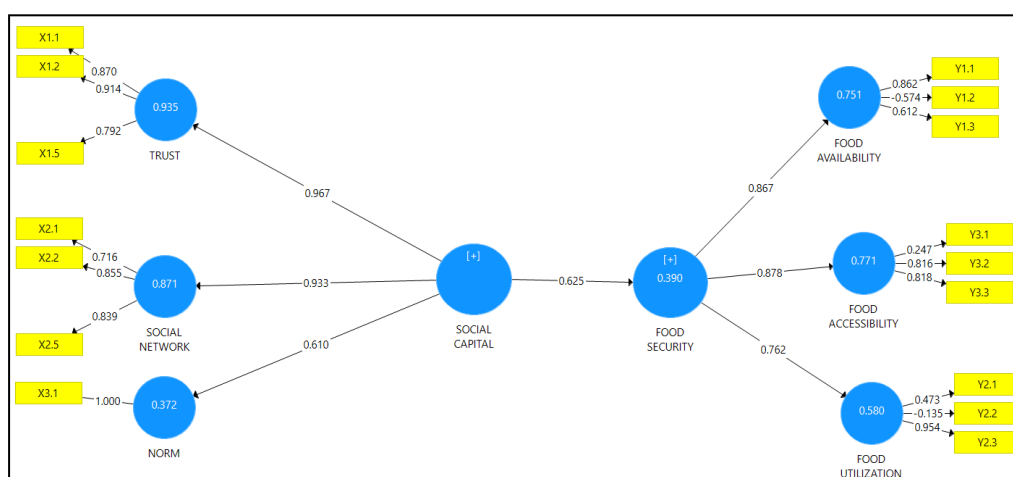


Figure 4. Outer model 1.

Figure 4 shows that through the path coefficients, the latent variable social capital directly correlates with the latent variable, food security. The results of the instrument feasibility test show that there are still several indicators that must be eliminated because they have a loading factor value of <0.70 [33].

Table 10. Loading factors on the indicators forming social capital and food security variables.

Variable	Sub Variable	Indicators	Loading Factor (≥0,70)	Validity
Social capital	Trust	X1.1	0.928	Valid
		X1.2	0.929	Valid
		X1.5	0.792	Valid
	Social Network	X2.1	0.716	Valid
		X2.2	0.854	Valid
		X2.5	0.840	Valid
Food security	Norm	X3.1	1.000	Valid
		Y1.1	0.862	Valid
		Y1.2	-0.574	Not Valid
	Food Availability	Y1.3	0.612	Not Valid
		Y2.1	0.473	Not Valid
		Y2.2	-0.135	Not Valid
	Food Accessibility	Y2.3	0.954	Valid
		Y3.1	0.247	Not Valid
		Food Utilization	Y3.2	0.815
Y3.3	0.841		Valid	

The indicators eliminated in the food availability variable included worry/fear of not being able to meet food needs (Y1.2) with a value of -0.135 and availability of trade facilities (Y1.3) with a value of 0.612. In the food accessibility variable, the eliminated indicators include road access conditions (Y2.1) with a value of 0.473 and availability of transportation facilities (Y2.2) with a value of -0.135. Meanwhile, based on the food utilization variable, the only indicator issued is the availability of under-nourished/stunting toddlers (Y3.1) with a value of 0.247. Therefore, proceed with the second after conducting the outer model 1 feasibility test.

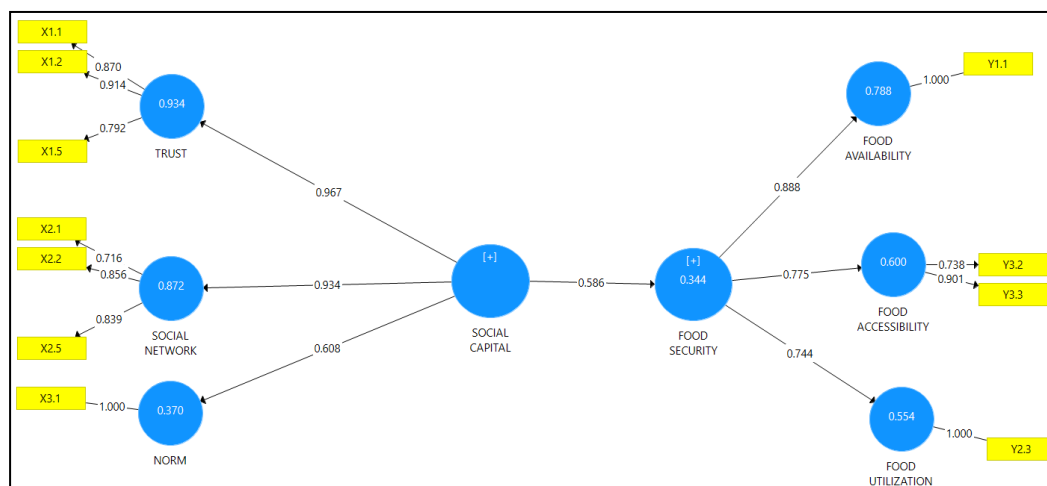


Figure 5. Outer model 2.

The instrument feasibility test results showed that no indicators were removed from the model because it had a loading value above 0,70.

Table 11. Loading factors on the indicators forming social capital and food security variables.

Variable	Sub Variable	Indicators	Loading Factor (≥0,70)	Validity
Social capital	Trust	K1	0.928	Valid
		K2	0.929	Valid
		K5	0.792	Valid
	Social Network	J1	0.716	Valid
		J2	0.854	Valid
Food security	Norm	J5	0.840	Valid
	Food Availability	N1	1.000	Valid
		S1	1.000	Valid
	Food Accessibility	A3	1.000	Valid
	Food Utilization	M2	0.815	Valid
M3		0.841	Valid	

Indicators for forming food security on the food availability variable include the ability to meet the family's carbohydrate needs (Y1.1) with a value of 1,000. In addition, food accessibility is formed by the availability of transportation costs to food sources (markets/convenience stores/shops) (Y2.3) with a value of 1,000. Meanwhile, food utilization is formed by indicators of the ability to buy fish, meat, eggs, tofu, and tempeh as a source of family nutritional protein (Y3.2) with a value of 0.815 and the availability of primary drinking water sources and water for cooking (Y3.3) with a value of 0.841.

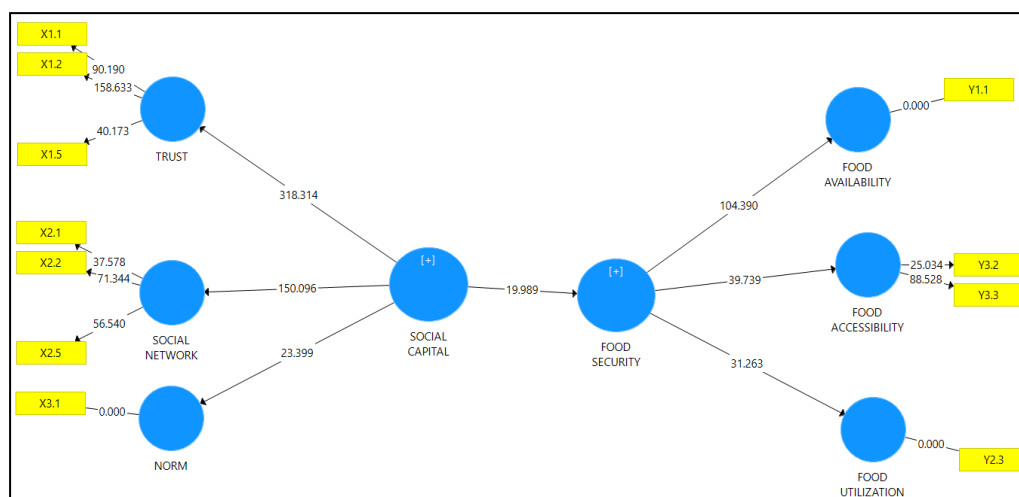


Figure 5. SEM model and t statistic.

Table 12. R square model.

Variable	R Square	Strength
Social Capital	1.000	Strong
Trust	0.914	Strong
Social Network	0.911	Strong
Norm	0.315	Moderate
Food Security	0.462	Moderate
Food availability	0.775	Strong
Food accessibility	0.367	Moderate
Food utilization	0.492	Moderate

The next stage is the identification of R Square. **Table 12** shows that the R Square value of social networks is 0.911. This can be interpreted that the social network variable can be as much as 91%, while other variables outside those studied explain the rest. In addition, the R Square value of social capital is 1.000, indicating that exogenous latent variables can be explained by variables of trust, social networks, and norms of 100%. Furthermore, the endogenous variable of food security shows an R Square value of 0.496, which indicates that food security can be explained by social capital of 49.6%. Finally, the variables of food availability, food accessibility, and food utilization each have an R Square value of 0.775, 0.367, and 0.492, which indicates that:

1. The food availability variable that the endogenous variable of food security can explain is 77.5% of variables outside the research explain the rest.
2. Food accessibility variables that endogenous variables of food security can explain are 36.7%, and variables outside the research explain the rest.
3. Variables of food utilization that endogenous variables of food security can explain by 50%; variables outside the research explain the rest.

3.5. *The relationship between social capital and food security*

In this case, trust between farmers has the most important role in determining joint decisions when there are problems. In addition, the trust between farmers in Sedayulawas Village forms a sense of family in meeting their daily needs. One example is the existence of rice barter activities with agricultural products so that the ability to fulfill carbohydrates for farmers in Sedayulawas Village can be guaranteed. On the indicator of trust in the government or village apparatus, they have a role in guaranteeing the fulfillment of water sources in Sedayulawas Village. It is well known that an indication of the election of Sedayulawas Village as a Food Independent Village is the availability of ready-to-drink water produced by the village as a source of drinking water for the majority of the community, especially farmers, at affordable prices. Or it could be said that the role of trust in the government is to get easy access to drinking water that is cheap and easy to get. The role of trust in Gapoktan institutions has a role in increasing cooperation between farmer groups in Sedayulawas Village in order to improve the welfare of farmers in Sedayulawas Village. This can be seen based on the work plan that has been carried out, namely by procuring a farmer cash program which in this case aims to continue meeting agricultural needs in Sedayulawas Village as well as emergency

funds that can be loaned to farmers when harvest conditions are uncertain to fulfill primary needs such as side dishes. Of course, the program will not be able to run smoothly if there is no mutual cooperation in achieving the success of a program. In the aspect of food accessibility, the role of social capital that is very clear is the willingness to work together when the access road to the market is clogged with puddles, people flock to help clean up or make repairs. Farmers' food security in Sedayulawas Village will increase in all aspects if it is driven by an increase in good social capital, especially in the willingness to follow group/government regulations both written and unwritten, to participate in activities, and express opinions. This will greatly help improve the economy of Sedayulawas Village and form peaceful and just farmer groups.

4. Conclusions

On the value of the relationship between variables, it is known that social capital has a significant effect both directly and indirectly on the food security of farmers in Sedayulawas Village. Based on direct relationships. In the direct relationship, the t-statistic test shows that indirectly the relationship between social capital and food security (food utilization) has a significant value at the 5% test level ($t\text{-statistic} > 1.96$), with a path coefficient value of 0.554. Meanwhile, in the causal relationship between food security and its latent variables, it was found that there was a significant correlation with the path of the largest coefficient, namely food security and food utilization in Sedayulawas Village or equal to 0.866. Social networks have an important role in the non-optimality of food availability by building associations in the supply of food, distribution of materials, food utilization and problems that arise in Sedayulawas Village. Social networks and trust are aspects that really dominate community activities to support food security.

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