Pakistan Journal of Life and Social Sciences
www.pjlss.edu.pk

https://doi.org/10.57239/PJLSS-2025-23.1.00396

RESEARCH ARTICLE

The Influence of Social Capital in the Implementation of the P4 Program to Realize Sustainable Agriculture in Central Lombok District

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ARTICLE INFO

Received: Dec 21, 2024

Accepted: Jan 29, 2025

Keywords

Social Capital

P4 Program

IPM

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ABSTRACT

Central Lombok Regency, West Nusa Tenggara Province, is one of the regencies targeted by the P4 program. The P4 program itself began in 2021 and has been running for three years until 2023. Finding out how social capital affects the P4 program in Central Lombok Regency is the first goal of this study. The second goal is to find a model for how to implement the P4 program at the farmer level using social capital. This study uses a descriptive method with a quantitative research type; the study chosen is a comparative study based on a questionnaire and submitted to respondents in order to obtain data. Data analysis uses the *Structural Equation Modeling (SEM) technique,* while the *Partial Least Squares* (PLS) analysis is assisted by SmartPLS 4 *software*. The research location was conducted in Central Lombok Regency with five villages according to the location of the P4 program. The study utilized a sample size of 80 respondents. In this study, there are several variables: the dependent variable, namely the implementation of the P4 program and the achievement of sustainable agriculture, and the independent variable, namely social capital, consisting of networks, norms, and trust. Research Results its First The influence of social capital on the implementation of the P4 program consists of two dimensions, namely networks and trust. The implementation of the P4 program in Central Lombok Regency remains unaffected by the norm dimension. And seconds One possible model is that putting the P4 program into action can change efforts to make agriculture more sustainable by giving farmer groups more power to make the P4 program and similar programs work better.

INTRODUCTION

The primary objective of Integrated Pest Management (IPM) is to create the most effective, durable, and environmentally friendly method for controlling plant pest organisms (OPTs). In Indonesia, Integrated Pest Management (IPM) is recognized as an effective control system to improve agricultural performance and reduce negative impacts on the environment and human health, especially on the negative impacts of the use of pesticides, which are currently very widespread. The use of pesticides in Indonesia is the third highest in the world, according to a report from *the Food and Agriculture Organization* (FAO) entitled *"Pesticides use and trade 1990-2021."* In the report document, it is stated that the use of pesticides in Indonesia was 283,000 tons in 2021 (FAO, 2023). Pesticides pose acute risks to human health and the environment, causing negative effects on agricultural workers and neighboring communities and triggering social conflicts when used extensively without safety measures (Rani et. al., 2020). Integrated Pest Management (IPM) is a long journey in an effort to achieve food self-sufficiency.

The initial milestone of the Integrated Pest Management (IPM) activity was initiated by the development of brown planthopper pests in 1985. This incident has threatened national rice production, which has threatened domestic food security. To overcome this, Presidential Instruction

Number 3 of 1986 concerning the Improvement of Brown Planthopper Pest Control in Plants was issued. In 1992, Law Number 12 of 1992, which was about the plant cultivation system, was updated with Law Number 22 of 2019. This law is about sustainable agricultural cultivation, especially Article 48 paragraph 1 (one), which says that protecting agriculture is done with an integrated pest management system and dealing with the effects of climate change, which is a worldwide problem right now. To implement the mandate of this law, plant protection needs to be carried out using an integrated pest control (IPM) system and paying attention to sustainable agriculture. Therefore, with the existence of this legal basis, programs related to Integrated Pest Management (IPM) have begun to emerge, including the Integrated Pest Management Field School (SLPHT), and the most recent is the Farmer Empowerment Program in IPM Socialization (P4).

Central Lombok Regency, West Nusa Tenggara Province, is one of the regencies targeted by the P4 program. The P4 The program started in 2021 and has been in operation for three years. 2023. There are 5 (five) villages that are the loci of P4 program activities. These villages are Setanggor, Aik Berik, Gapura, Bebuak, and Pengembur Villages. In the P4 program, there are stages of activities that must be carried out and completed by the farmer groups receiving the program. The steps are (1) preparation activities, (2) activity planning, (3) exploration of biological control agents, (4) multiplication of biological control agents, (5) application of biological control agents, and (6) evaluation of utilization of biological control agents (Winda, 2023).

The implementation of the P4 program for 3 (three) years in Central Lombok Regency has gone quite well. Initial observations in this study found that most of the farmer groups receiving the P4 program carried it out carefully and in accordance with the program's technical guidelines. Because this program makes farmers both the subject and the object of the program, social community approaches have certainly been applied in the implementation of the P4 program in the field. One of the social approaches is the approach using community social capital. According to Santoso (2020), social capital *is* something that refers to the relationship between individuals through social networks and the norms of reciprocity and trust that arise from them. Social capital plays a crucial role in bolstering the community. Elements such as mutual trust, norms, and networks play an important role in solving collective community problems. This P4 Program, by implementing integrated pest control in accordance with applicable laws and regulations, can facilitate farmers' realization of sustainable agriculture.

Integrated Pest Management (IPM) is an important element in national agricultural policy, with an emphasis on the importance of preserving crops in the most environmentally friendly manner. IPM guarantees food availability and a fairly safe, even, and stable ecosystem balance and increases agricultural profitability due to lower costs for pest control (Angon et. al., 2023). The groups of small farmers provide the basis for further progressive change towards sustainable policies and behaviors, with opportunities to help mitigate the advance of some global environmental challenges (Pretty et al., 2020). When added to the fact that there is social capital among farmers, it can be called a deciding factor in following the technical instructions for the P4 program. Therefore, it is important to conduct research to see the influence of social capital in the implementation of the P4 program in Central Lombok Regency. The goals of this study are (1) to find out how social capital affects the P4 program in Central Lombok Regency and (2) to come up with a way to use social capital to implement the P4 program at the farmer level. The benefits of this study are (1) to increase the treasury of scientific knowledge, especially those that examine agricultural policy issues related to pests and plant diseases, and (2) to provide input for policymakers to be able to design better programs by paying attention to social aspects of society.

RESEARCH METHODS

This study uses a descriptive method with a quantitative research type. The selected study is a comparative study, utilizing a questionnaire to guide respondents and collect data. According to Nazir (2017), comparative study is a type of descriptive research that wants to answer fundamentally about cause and effect by analyzing the factors causing a particular event or phenomenon. There will be both quantitative and qualitative data used in the study. The results will then be analyzed using structural equation modeling (SEM) and partial least square (PLS). so that in the end a comprehensive picture will be obtained regarding the influence of social capital on the implementation of the P4 program to realize sustainable agriculture in Central Lombok Regency.

The data sources consist of primary data obtained from direct interviews with respondents, namely farmers who run the P4 program. The second data source is secondary data in the form of documents, either reports or archives from institutions related to this study. The data collection technique uses interview techniques based on *the questionnaire* (questionnaire). It uses the Slovin formula to determine the number of samples.

$$n = \frac{N}{1 + N(e)^2}$$

With :

n = number of samples
N = population size
e = error rate (5%)
So the number of samples is as follows:

With the population, namely per group of farmers receiving the P4 program, there are twenty farmers. Therefore, we can consider five groups of farmers, totaling a population of one hundred farmers. Then the sample obtained based on the *Slovin formula* is as follows:

$$n = \frac{100}{1 + 100\,(0.05)^2}$$

$$= \frac{100}{1 + 0.25}$$

$$= \frac{100}{1.25} = 80$$

For further details on determining samples, they are available at each P4 program location, as shown in Table 1 below.

Table 1: Number of samples based on research location

No	Farmer Group Name	Village	Total Population	Number of Respondents	Caption
1	Forward Shoots	Setanggor	20	16	Person
2	Stokel Thread	Aik Berik	20	16	Person
3	Prosperous I	Gate	20	16	Person
4	Young Farmers	Flushing	20	16	Person
5	Bebuaq	Bebuaq	20	16	Person
Total			100	80	Person

Source: Processed primary data

This study encompasses several variables, with the dependent variable being the implementation of the P4 program (Y1) and the achievement of sustainable agriculture (Y2), and the independent variable being social capital, which is comprised of networks (X1), norms (X2), and trust (X3). For data analysis using the *Structural Equation Modeling (SEM) technique, while the Partial Least Squares* (PLS) analysis According to Jogiyanto (2011), it is a *multivariate statistical technique* that compares multiple dependent variables and multiple independent variables using the SEMPLS Version 4 application. For weighting in respondent answers, it is measured using a *Likert scale.* With the category, strongly agree point 5, agree point 4, disagree point 3, disagree point 2, and strongly disagree, getting the point 1.

The hypotheses in this study are:

1. Ho: ρ = 0 (there is no influence between networks in farmer groups on the implementation of the P4 program in Central Lombok Regency)

   Ha: ρ ≠ 0 (there is an influence between networks in farmer groups on the implementation of the P4 program in Central Lombok Regency).

2. Ho: ρ = 0 (there is no influence between norms in farmer groups on the implementation of the P4 program in Central Lombok Regency)

   Ha: ρ ≠ 0 (there Farmer groups' norms influence the P4's implementation. program in Central Lombok Regency)

3. Ho: ρ = 0 (there is no influence between trust in farmer groups on the implementation of the P4 program in Central Lombok Regency)

   Ha: ρ ≠ 0 (there There is a relationship between trust in farmer groups and the implementation of the P4. program in Central Lombok Regency.

4. Ho: ρ = 0 (there is no influence between the implementation of the P4 program on efforts to realize sustainable agriculture in Central Lombok Regency)

   Ha: ρ ≠ 0 (there There is no influence between the implementation of the P4 program and efforts to realize sustainable agriculture in Central Lombok Regency.

   The framework of thinking in this research is presented in Figure 1 below:

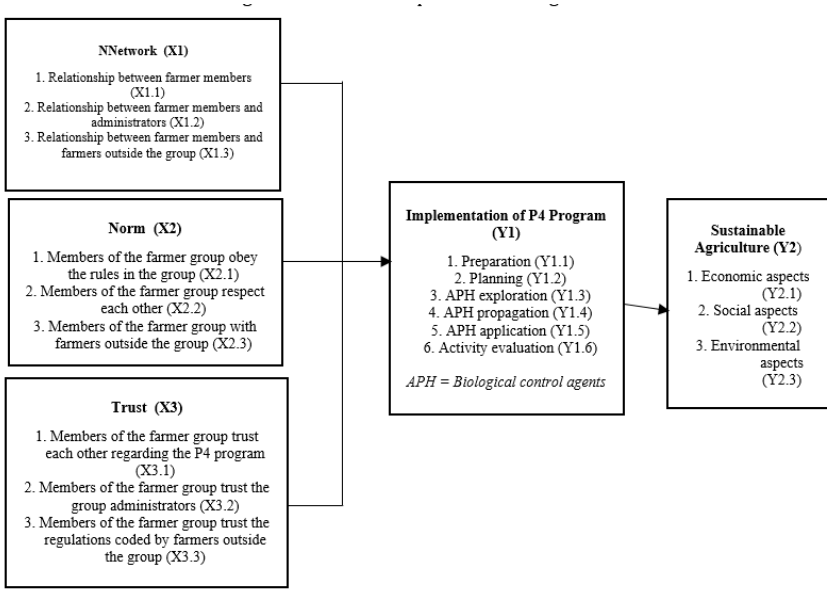

Figure 1: Research thinking framework

RESULTS AND DISCUSSION

General conditions of the research area

Administratively, Central Lombok Regency consists of twelve districts, one hundred and twenty-seven villages, and twelve sub-districts. The five villages that comprise the research locations span various topographies, with some situated in the highlands and others in the lowlands. The following is the distribution of research locations:

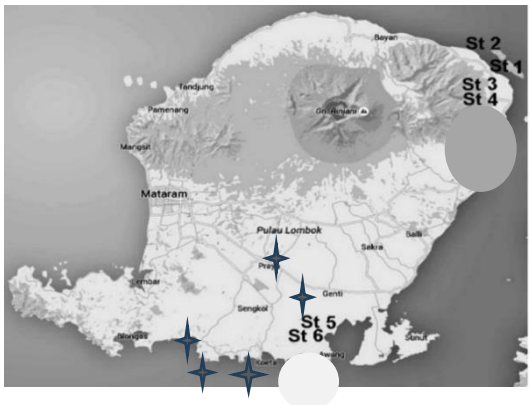

Figure 2: Distribution of research locations

In Figure 2, it can be seen that 2 (two) locations are in locations that have relatively highland topography, and 3 (three) other locations are in lowlands. Of course, this will affect the type of pest attack, the type of agricultural commodities cultivated, how about plant protection techniques, and so on.

Data analysis results

The structural equation modeling partial least squares (SEMPLS) method is used to find out how the performance of social capital (networks, norms, and trust) impacts the implementation of the P4 program in Central Lombok Regency. It applies the partial least squares method within the framework of structural equation modeling. In analyzing data, especially in using SEM analysis, 2 (two) types of analysis are needed, namely outer model and inner model evaluation.

Outer model evaluation or measurement model

In the evaluation of the outer model, this measurement is used to evaluate the validity of the construct and can verify its validity (instrument reliability). A validity test is used to test and determine the ability of the instrument to obtain data so that the measurement in measuring social capital variables and their indicators in this study can be carried out properly. Reliability tests are carried out with the intention of measuring the consistency or constancy of the measuring instrument in measuring research indicators using question guides *(questionnaires).* After calculating using the SmartPLS 4 application, the following results are obtained:

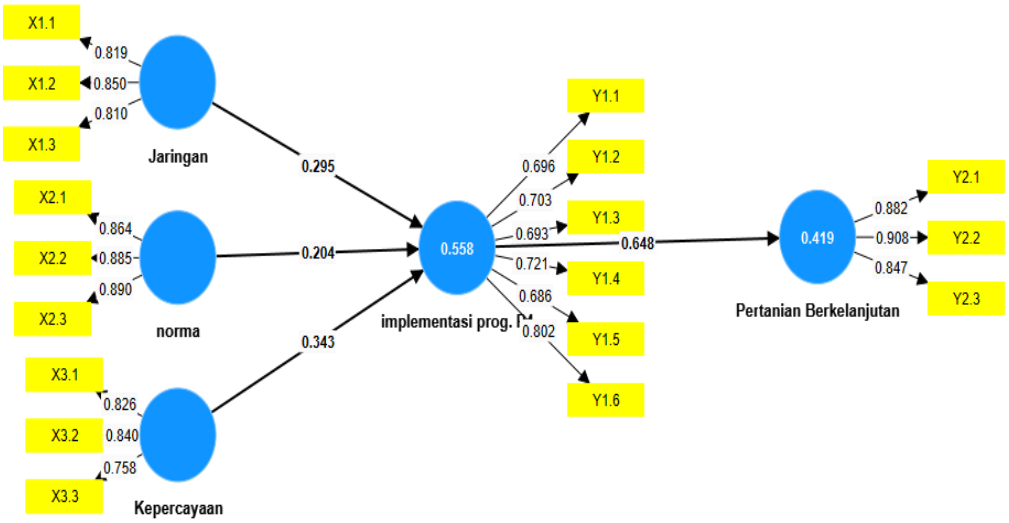

Figure 3: Research measurement model and *loading factor values*

In Figure 3, it can be seen that all *loading factor values* are above 0.50. According to Haryono (2016), the *loading factor value* of each construct value against its indicator can be said to be significant if the value is above 0.50 (> 0.50). So it can be said that the model has good convergent validity. The initial stage is to determine the *outer loading value* of each indicator against the construct. For more details, the results of the *loading factor calculation* can be seen in table 2 below.

Table 2: Outer loading values

	Network	Norm	Trust	Implementation P4 Program	Sustainable Agriculture
X1.1	0.819				
X1.2	0.850				
X1.3	0.810				
X2.1		0.864			
X2.2		0.885			
X2.3		0.890			
X3.1			0.826		
X3.2			0.840		
X3.3			0.758		

Y1.1				0.696	
Y1.2				0.703	
Y1.3				0.693	
Y1.4				0.721	
Y1.5				0.686	
Y1.6				0.802	
Y2.1					0.882
Y2.2					0.908
Y2.3					0.847

Source: Processed primary data (2024)

From table 2, the *outer loading* value obtained for all question items is above 0.6, in accordance with *the rule of thumb* for convergent and discriminant validity tests and the opinion of Haryono (2016). Especially for confirmatory research, the loading factor value must be more than 0.7. So it can be concluded that all indicators that make up the variables or outer models in this study have high validity (declared convergent valid).

Furthermore, to find out whether the model has met the requirements for discriminant validity, it is necessary to test it with the same application, namely SmartPLS 4. The following are the results of the discriminant validity calculation. In testing the discriminant validity, what is considered the correlation value between the indicator and its construct is greater than the indicators and constructs in other blocks. So that there is cross loading between the indicator and the related variables. For more details, it will be presented in the following table 3:

Table 3: Cross loading values

	Network	**Norm**	**Trust**	**Implementation of P4 Program**	**Sustainable Agriculture**
X1.1	0.819	0.481	0.608	0.548	0.423
X1.2	0.850	0.475	0.566	0.592	0.437
X1.3	0.810	0.570	0.573	0.494	0.37
X2.1	0.559	0.864	0.606	0.586	0.551
X2.2	0.513	0.885	0.579	0.515	0.513
X2.3	0.536	0.890	0.590	0.518	0.497
X3.1	0.516	0.646	0.826	0.561	0.648
X3.2	0.484	0.531	0.840	0.488	0.493
X3.3	0.681	0.455	0.758	0.603	0.455
Y1.1	0.572	0.400	0.483	0.696	0.413
Y1.2	0.617	0.425	0.508	0.703	0.328
Y1.3	0.538	0.272	0.420	0.693	0.273
Y1.4	0.434	0.591	0.498	0.721	0.396
Y1.5	0.319	0.397	0.459	0.686	0.607
Y1.6	0.425	0.525	0.577	0.802	0.672
Y2.1	0.442	0.576	0.563	0.569	0.882
Y2.2	0.391	0.521	0.624	0.542	0.908
Y2.3	0.475	0.468	0.556	0.593	0.847

Source: Processed primary data (2024)

According to Haryono (2016), the correlation between indicators and their constructs is greater than the correlation with other block constructs. From table 3, it can be seen that the values produced meet the requirements to achieve good discriminant validity.

Reliability test

We can evaluate the model's reliability by measuring its consistency. Budhiasa (2016) asserts that a model exhibits excellent reliability if its Cronbach's alpha value surpasses 0.60. According to Hamid and Anwar (2019), a composite reliability value surpassing 0.70 indicates excellent reliability. The Cronbach's alpha value measures the lower limit of the reliability value of a construct, and composite reliability is useful for measuring the real value of the reliability of a construct. The study used the SmartPLS 4 app to do the calculations, and all of the values for Cronbach's alpha and composite reliability are above the needed level. Table 3, below, provides further details.

Table 4: Cronbach's alpha and Composite reliability values

Variables	Cronbach's Alpha	Composite Reliability (rho_a)	Composite Reliability (rho_c)	Average Variance Extracted (AVE)
Network	0.769	0.774	0.866	0.683
Trust	0.735	0.733	0.850	0.654
Sustainable Agriculture	0.853	0.853	0.911	0.774
Implementation of program P4	0.813	0.821	0.864	0.515
Norm	0.854	0.857	0.911	0.774

Source: Processed primary data (2024)

3.2.3 Inner model (structural model)

The purpose of the inner structural model test is to evaluate the structural model and predict the causal relationship between latent variables. The R Square (R2) value and the path coefficient value, also known as the t-statistic value, for each path are used in this test to figure out how different changes in the independent variable are from changes in the dependent variable. To be able to find out the R Square (R2) value in this study, it is presented in the following table 5:

Table 5: *R Square Value* (R ²)

	R-square	R-square adjusted
Sustainable Agriculture	0.419	0.412
Implementation of program P4	0.558	0.541

Source: Processed primary data (2024)

In Table 5, the Sustainable Agriculture variable has an R-square value of 0.419. This means that the P4 program variable can explain the sustainable agriculture variable by 41.9%. The value of 0.419 falls into the moderate category according to the R Square assessment standard (Haryono, 2016). The implementation of the P4 program variable has an R Square value of 0.558. Social capital, which includes networks, norms, and trust, can explain 55.8% of how the P4 program variable was implemented, which is moderate. For more details, it is depicted in Figure 4 in the calculation result model from the SmartPLS 4 application below.

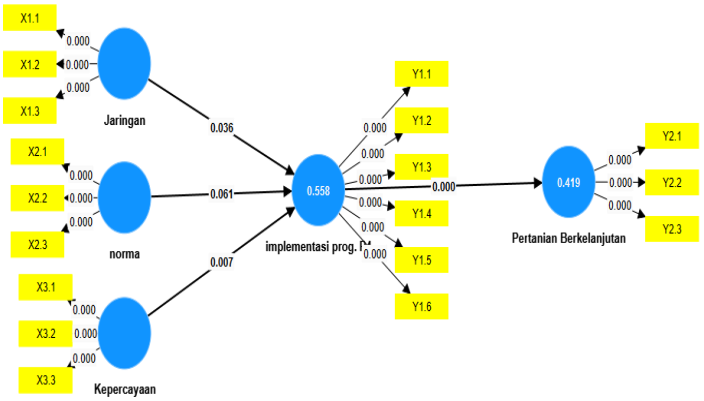

Figure 4: Structural model related to *inner model*

The next step is to see how each independent variable influences the dependent variable through payment. Table 6 presents the effect size value we obtained.

Table 6: Effect size value (f^2)

	Network	Trust	Sustainable Agriculture	Implementation prog. P4	Norm
Network				0.093	
Trust				0.109	
Sustainable Agriculture					
Implementation of program P4			0.723		
Norm				0.048	

Source: Processed primary data (2024)

Table 6 displays the F Square value, which follows Haryono's (2016) recommendation as a general guideline for measuring F-Square. This value of 0.093 means that network variables have a weak effect on the P4 Program Implementation variable. Farmers' trust in the P4 program's implementation is influenced by 0.109, placing it in the moderate category. Norms have a weak influence of 0.048 on the implementation of the P4 program. Furthermore, the implementation of the P4 program has a 0.723 influence on the realization of sustainable agriculture, placing it in the strong category.

3.2.4 Significance test (hypothesis test)

After testing convergent validity and discriminant validity, the research then undergoes reliability and significance testing. The value of the path coefficient or inner model indicates the significance level of the hypothesis test. We will use the bootstrapping method in this study to test significance. The following table 7 will present the results of the hypothesis test using the value.

Table 7: Path coefficient values

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T-statistics (|O/STDEV|)	P-values
Network -> prog implementation. P4	0.295	0.297	0.141	2,096	0.036
Trust -> program implementation. P4	0.343	0.345	0.128	2,685	0.007
Implementation of P4 program -> Sustainable Agriculture	0.648	0.662	0.073	8.902	0
norm -> prog implementation. P4	0.204	0.203	0.109	1,872	0.061

Source: Processed primary data (2024)

Table 7 displays the results of the hypothesis testing. The values shown are t-statistics, p-values, the original sample (O), the sample mean (M), and the standard deviation. The following are the results of the research hypothesis testing:

1. There is an influence of network variables on the implementation of the P4 program in Central Lombok Regency. The t-statistic value of 2.096, which is greater than 1.96 (with a margin of error of 5%), provides an explanation. And the p-value is 0.036, which is smaller than 0.05. The decision is Ha is accepted.
2. There is an influence of trust variables on the implementation of the P4 program in Central Lombok Regency. With an explanation of the t-statistic value of 2.685, which is greater than 1.96 *(margin errors 5%)*. And the *p-value* is 0.007, which is smaller than 0.05. The decision is Ha is accepted.
3. There is no influence of norm variables on the implementation of the P4 program in Central Lombok Regency. With the explanation of the t-statistic value of 1.872, which is smaller than 1.96 *(margin errors 5%)*. And the *p-value* is 0.061, which is greater than 0.05. The decision is Ha is rejected.

4. There is an influence of the implementation variable of the P4 program on sustainable agriculture in Central Lombok Regency. With an explanation of the t-statistic value of 8.902, which is greater than 1.96 *(margin errors 5%)*. And the *p-value* is 0.000, which is less than 0.05. The decision is Ha is accepted.

DISSCUSION

Relationship between social capital and implementation P4 program

Table 3 shows a cross-loading value of higher than 0.7, which indicates a strong level of relationship and mutual influence between the proposed variables and factors. Thus, these variables provide a significant contribution in explaining certain factors in this research. Furthermore, Cronbach's Alpha, rho_A, and composite reliability all obtained values above 0.7, which means the measurement model has good reliability. This also implies that the instruments used to collect data are reliable in measuring the constructs studied, and the measurement results can be considered accurate and consistent (Arli & Bakpayev, 2023). Therefore, the results of the statistical analysis are reliable and provide sufficient confidence in the research findings. The AVE (Average Variance Extracted) value is above 0.5, meaning that the construct studied is able to explain more than half of the variance of the indicators (Nasution, Fahmi, Jufrizen, Muslih, & Prayogi, 2020), which illustrates that the construct studied has high convergent validity. Good. Therefore, it is considered a valid and reliable variable for further analysis.

In theory, several studies have been carried out regarding the relationship between social capital and farmer performance in carrying out farming business. One piece of evidence in the Gahana case in Wuepper, D., & Sauer, J. (2016) is that social capital originating from local community culture is able to influence farmer performance, farmer performance in the agricultural supply chain, and in rural development. Reinforced by research from Xiong, F., & You, J. (2019), which found that social relationships (social networks) can increase the effectiveness of improving farmers' economies through microfinance. Apart from that, according to Han et al. (2022), the impact of social capital on farmers' willingness to adopt new agricultural technology has a significant positive effect. Additionally, social networks, social trust, and social participation play a significant role in the study of farmers' willingness to adopt new technology.

This study found that farmers who received the P4 program in Central Lombok Regency in carrying out the implementation of the P4 program in the field were influenced by social capital. One aspect of social capital that does not affect it is norm. In accordance with the data and information collected and analyzed, the normative aspect has not become a determining factor in program implementation. Researchers attribute this to the differences in dimensions. When implementing the P4 program, a formal implementation pattern is used, with a focus on administrative reporting. In the meantime, society has institutionalized the norm aspect, making it a common guideline and good habit. As for several indicators of social norm capital, first, members of the farmer group obey the rules in the group. Second, members of the farmer group respect each other, and third, members of the farmer group interact with farmers outside the group. Farmers who run the P4 program feel that even without it, normal relations will run well. Usually the farmer group continues with other agendas.

3.3.2 Relationship between implementation P4 program and sustainable agriculture

It is common knowledge that, throughout the world, there is a need to increase food production as a result of the increase in the world's human population. To meet current food demands and the development of ever-increasing population trends, agricultural intensification must be carried out as soon as possible. We must engage in a systematic endeavor to enhance both the quantity and quality of agricultural output. However, a number of factors, including pests, influence the goal of increasing food production. According to Sawicka and Egbuna (2020), Pests are organisms that cause severe damage to the plants cultivated by farmers on their planting land. The potential damage can range from 10% to 15% of the total number of plants that farmers cultivate. Failure to receive proper prevention and treatment can lead to fatal and widespread damage in certain cases. One step in dealing with pests is specific use. According to Begum and Uddin (2017), the widespread use of pesticides is to inhibit or control pests such as insects, diseases, and weeds, and other pathogens in order to reduce or eliminate crop yield losses and maintain high product quality.

The use of pesticides over a long period of time will cause a decrease in environmental quality by destroying biodiversity, threatening the survival of birds, aquatic organisms, and animals (Mahmood, 2016). Therefore, it is very necessary to implement integrated pest management (IPM) in agricultural activities. Integrated pest management (IPM) activities, such as planning seed and nursery systems, growing plants without chemicals, and finding ways to make pesticides work on resistant plants, can lessen the bad effects of chemicals and make farming more sustainable (Barzman et al., 2015). In Indonesia itself, there is currently a special program to reduce the use of pesticides to reduce pest attacks, namely the P4 program. Furthermore, the P4 program has been operating in the Central Lombok district for the past three years, experiencing various dynamics within the industry. In this study, an in-depth analysis has been carried out regarding the relationship between the implementation of the P4 program and sustainable agriculture. In this study, it was found that there was a variable influence of the implementation of the P4 program on sustainable agriculture in Central Lombok Regency. The higher the P4 program's implementation, the better agricultural ecology will be for sustainable agriculture. Implementing the P4 program involves using vegetable pesticides to protect soil, air, and plant microorganisms. Next is the use of natural enemies, which is the right step in controlling pests. By restoring local wisdom that existed in ancient times before the use of pesticides, it will restore the biodiversity that existed before. Not only that, but a study by Pretty and Bharucha (2015) also supported this idea. They discovered that integrated pest management (IPM) projects in Asia and Africa could lead to an average 40.9% increase in crop yields and a 30.7% drop in pesticide use, with 35 of the 115 crop combinations switching to using no pesticides at all. This is one good step toward realizing sustainable agriculture.

CONCLUSION AND RECOMMENDATION

From the findings of the research results, several conclusions can be drawn, including: (1) The influence of The social capital involved in implementing the P4 program is comprised of two individuals. dimensions, namely networks and trust. The implementation of the P4 program in Central Lombok Regency is not influenced by the norm dimension. (2) The model that can be proposed is that the implementation of the P4 program can influence efforts to realize sustainable agriculture by increasing the norm aspect in empowering farmer groups to improve the implementation of the P4 program and similar programs. Meanwhile, the recommendation that can be given are: (1) For policy makers, they can increase the role of norms in farmer groups again. This approach could potentially expedite the implementation of agricultural development programs, specifically the P4 program. (2) For further researchers, they can deepen the aspects related to the implementation of programs in agricultural development so that they can help stakeholders *to* formulate better programs.

Authors' contributions: IGAA: Conceptualization of ideas, data collection, formal analysis, writing, review, and editing preparation; IDPOS: Conceptualization of ideas, adviser, supervisor of data collection and analysis as well as riviewed, the manuscript; IKBS and IGSAP : Advisers, supervisors of data collection and riviewed the manuscript.

Conflict of interest: The authors declare no conflict of interest.

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