THE FACTORS THAT INFLUENCE THE FAILURE OF SIMANTRI PROGRAM IN REALIZING SUSTAINABLE AGRICULTURE

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ABSTRACT

The Integrated Agricultural System is one of the flagship programs of the Bali Provincial Government as a breakthrough effort to accelerate the adoption of agricultural technology in supporting the development of agricultural diversification in an integrated manner and with an agribusiness perspective. The development model is oriented towards the concept of zero waste production system. This program encountered various obstacles, that based on the 96 Integrated Agricultural System Groups active in Bangli Regency that it was not fully able to increase income significantly. In this study the factors that influence the failure of the Integrated Agricultural System Program in realizing sustainable agriculture are twelve factors, namely companion performance, accessibility, communication, effectiveness, coordination, transparency, technology adoption, social capital, group participation, increased income, institutional and, efficiency. It is hoped that the evaluation of the Integrated Agricultural System Program in the entire Province of Bali will be able to improve system performance so that in the future it can be a driving force in economic development.

Keywords: Evaluation, Performance, Failure, Integrated Agricultural System

INTRODUCTION

Agriculture is also a key prospective sector in efforts to support national development. Indonesia as an agrarian country, if able to collaborate agriculture with certain fields will be able to provide economic value and increase the stability of self-sufficiency in agricultural products to meet the needs of the community. In its implementation, the concept of rural agribusiness development is still partially implemented so there is a lack of business exploration that can support one another and cannot be maintained. This is due to a lack of access to capital resources, technology and markets in rural farmers.

The basic problems of agricultural business development in rural areas, namely (1) Land use for farming activities is not optimal, where the intensity of planting food crops on average <200%, this is mainly due to limited irrigation and farming capital, (2) Farming activities are not yet implemented intensively so that productivity is still relatively low (not optimal according to potential results), (3) Limited ability of human resources due to lack of intensive guidance and assistance, (4) Animal husbandry is still conventional and on a small scale, and feeding is not proportional so livestock production is not optimal, (5) Animal waste (solid and liquid) has not been managed for quality fertilizer and also for biogas, (6) Plant waste that can be used as animal feed has also not been well managed into quality food and is resistant to storage for the needs of the dry season, (7) Limited infrastructure, especially farm roads, water conservation buildings and

other infrastructure, (8) Not yet developed activities processing of agricultural products and constraints in the marketing of products, especially in the main harvest season. (Bali Province Food Crop Agriculture Service, 2010).

Kariyasa (2012) states that the pattern of integration between plants and livestock or often referred to as an integrated farming system is a system that combines animal husbandry and agriculture activities. The integrated livestock crop model developed is oriented to the concept of a zero-waste production system, where all waste from livestock and plants is recycled and reused in the production cycle (Pranadji, et al. 2012). The farming components in this model include beef cattle, food crops (rice or corn), horticulture (vegetables), plantations (sugar cane), and fisheries (catfish, gourami, tilapia). Livestock waste (cow dung) is processed into compost and granular organic fertilizer and biogas; Agricultural wastes (rice straw, corn stalks and leaves, sugarcane shoots, soy straw and peanuts) are processed into animal feed (Bali Province Food Crop Agriculture Service, 2010).

An integrated farming system (Simantri) integrates the activities of the agricultural sector with its supporting sectors both vertically and horizontally according to the potential of each region by optimizing the utilization of existing local resources. Priyanti (2007) argues that technological innovations introduced are oriented towards producing organic agricultural products with the "techno ecological agriculture" approach. The integration activities carried out are also oriented towards zero-waste agricultural business and produce 4 F (food, feed, fertilizer, and fuel). Simantri's main activity is integrating the cultivation of plants and livestock, where crop waste is processed for animal feed and feed reserves in the dry season and animal waste (feces, urine) is processed into biogas, bio urine, organic fertilizer and biopesticides.

Wisnuardhana (2014) states that the Simantri program integrates the activities of the agricultural sector with its supporting sectors both vertically and horizontally, especially in the plantation sector, industrial sector and others according to the potential of each region that will implement the Simantri Program. Diversification of farming horizontally basically seeks a number of commodities in an integrated manner, namely intercropping of food crops, horticulture, plantations, animal husbandry, fisheries and even forestry (agroforestry). Meanwhile, vertical farming diversification is developing production service units and microfinance institutions, conducting intensification and extensification of farming, marketing of products and utilization of by-products (bio urine, biogas, compost, feed, bio-charcoal, liquid smoke, mushrooms, honey bees, milk, soap from milk, etc.). The interrelation of the various components of the integration system is a triggering factor in driving the growth of the income of the farming community and sustainable regional economic growth (Pasandaran, et al. 2006).

According to the Bali Province Food Crop Agriculture Office (2012), Simantri's success indicator can be elaborated as follows. First, the development of

institutions and human resources both agricultural officers and farmers. Secondly, the creation of employment opportunities through the development of diversification of agricultural businesses and home industries. Third, the development of intensification and extensification of farming. Fourth, increased incentives for farming through increased production and efficiency of farming (fertilizer, feed, biogas, bio urine, self-produced biopesticides = in situ). Fifth, the creation and development of organic agriculture towards a green economy. Sixth, the development of rural economic business institutions. Seventh, increase in farmers' income (at least 2-fold).

Operationally, SEARCA in Budiasa (2010) defines sustainable agriculture as a farming system that is seen as holistically, economically viable, environmentally sound, in accordance with local culture, and can be applied by the community (technically and culturally appropriate), and socially acceptable to the community. The aim of sustainable agriculture is to improve the quality of life. This can be achieved through (a) economic development, (b) improvement of food security, (c) development and improvement of human resource capabilities, (d) freedom and empowerment of farmers, (e) guarantee of environmental stability (safe, clean, balanced, and renewable), and focus on long-term productivity goals. Sugino (2003) states that the success of sustainable agriculture is largely determined by two important factors, namely the best agricultural resource management practices and government intervention. Some of the best management practices available to build sustainable agriculture include nutrient management with the application of organic fertilizers, integrated pest management, innovative cropping systems to reduce crop damage and soil conversion, and efficiency in irrigation management.

The target of the Simantri program is the Farmers Group Association (Gapoktan) which has fulfilled the requirements, given assistance by the government to run the program in their village. However, in its implementation the majority of Simantri groups developed in all districts of Bali Province were as many as 752 Simantri groups by 2018 that were not evenly able to increase incentives from livestock waste management, create jobs, develop rural economic business institutions, or develop organic agriculture towards green economic (Department of Horticultural and Plantation Food Crops, 2018).

Thus it is necessary to study and make an evaluation model on the Simantri Bali Province program policies aimed at improving the quality of program performance so that its development is able to be carried out properly and continuously. This study aims to determine the factors of the failure of the Simantri program in realizing sustainable agriculture both simultaneously and partially.

RESEARCH METHOD

This research was conducted at the Farmers Group Lembu Nandini, SIMANTRI 113 Group, Mengani Village, Kintamani District, Bangli Regency. The population is all respondents in the study

(Sugiyono, 2018). The sample in this study were all members of the Gapoktan Lembu Nandini, Simantri 113 group. Sampling was conducted with a purposive sampling method in which all members were made into a research sample of 20 respondents. The method of data collection is done by structured interviews through questionnaires, in-depth interviews, documentation, and literature study. Data analysis in this study uses multiple linear regression analysis methods with the IBM SPSS Statistics version 20 program in order to test hypotheses through multiple linear regression analysis, correlation coefficient analysis, determinant coefficient analysis, t test, and F test in explaining the factors that influence the failure of Simantri program in realizing sustainable agriculture. There are 12 variables to be tested among others: companion performance (X1), accessibility (X2), communication (X3), effectiveness (X4), coordination (X5), transparency (X6), technology adoption (X7), social capital (X8), group participation (X9), increased income (X10), institutional (X11), efficiency (X12).

RESULTS AND DISCUSSION

Research Results

Based on research on Gapoktan Lembu Nandini, Simantri 113 Group, Mengani Village, Kintamani District, Bangli Regency, the results of testing the research hypothesis will be presented as follows. Multiple Linear Analysis The multiple linear analysis tests was carried out to measure how much the independent variable (X) affected the failure of the Simantri program to the dependent variable (Y) of sustainable agriculture. The results of the Multiple Linear Regression in this study are presented in Table 2 as follows.

Table 2. Results of Multiple Linear Regression

Coefficiets[a]						
	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Eror	Beta		
1	(Constant)	4,294	2,537		2,223	,405
	X1	,347	,093	,320	3,412	,001
	X2	,223	,047	,200	2,116	,004
	X3	,101	,311	,115	1,501	,221
	X4	,378	,097	,353	3,689	,000
	X5	,242	,053	,212	2,311	,003
	X6	,268	,068	,235	2,541	,003
	X7	,160	,302	,172	1,985	,011
	X8	,132	,319	,149	1,712	,037
	X9	,273	,071	,241	2,902	,003
	X10	,205	,050	,193	2,089	,004
	X11	,289	,079	,272	3,119	,002
	X12	,321	,081	,297	3,201	,002

Source: Processed Data, 2021

The results of the multiple regression equation are:

$Y=\alpha+\beta_1X_1+\beta_2X_2\ \beta_3X_3\ \beta_4X_4\ \beta_5X_5+\beta_6X_6+\beta_7X_7+$

$\beta_8X_8+\beta_9X_9+\beta_{10}X_{10}+\beta_{11}X_{11}+\beta_{12}X_{12}+ \varepsilon$

$= 4{,}294 + 0{,}347X_1+ 0{,}223X_2 +0{,}101X_3 +0{,}378X_4 +0{,}242\ X_5+ 0{,}268X_6+ 0{,}160X_7+ 0{,}132X_8+ 0{,}273X_9+ 0{,}205X_{10}+ 0{,}289X_{11}+ 0{,}321X_{12}+ \varepsilon$

Based on the results of the study, the constant (α) of 4,294, indicated that the factors affecting this study consisted of companion performance (X1), accessibility (X2), communication (X3), effectiveness (X4), coordination (X5), transparency (X6), technology adoption (X7), social capital (X8), group participation (X9), increased income (X10), institutional (X11), efficiency (X12). Next, each variable will be discussed as follows.

1. The coefficient (β1) of 0.347 on the companion performance variable (X1) towards sustainable agriculture (Y) shows that if there is an increase in companion performance (X1) by 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.347.
2. The coefficient (β2) of 0.223 on the accessibility variable (X2) for sustainable agriculture (Y) shows that if there is an increase in accessibility (X2) by 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.223.
3. The coefficient (β3) of 0.101 on the communication variable (X3) towards sustainable agriculture (Y) shows that if there is an increase in communication (X3) by 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.101.
4. The coefficient (β4) of 0.378, on the variable of effectiveness (X4) on sustainable agriculture (Y) shows that if there is an increase in effectiveness (X4) of 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.378.
5. The coefficient (β5) of 0.242 on the coordination variable (X5) for sustainable agriculture (Y) indicates that if there is an increase in coordination (X5) of 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.242.
6. The coefficient (β6) of 0.268 on the transparency variable (X6) on sustainable agriculture (Y) indicates that if there is an increase in transparency (X6) of 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.268.
7. The coefficient (β7) of 0.160 on the variable technology adoption (X7) on sustainable agriculture (Y) indicates that if there is an increase in technology adoption (X7) of 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.160.
8. The coefficient (β8) of 0.132 on the variable social capital (X8) towards sustainable agriculture (Y) shows that if there is an increase in social capital (X8) of 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.132.
9. The coefficient (β9) of 0.273 on the group participation variable (X9) on sustainable agriculture (Y) indicates that if there is an increase in group participation (X9) by 1 (one) unit, the value

of sustainable agriculture (Y) will increase by 0.273.

10. The coefficient (β10) of 0.205 on the variable of increasing income (X10) for sustainable agriculture (Y) indicates that if there is an increase in income (X10) of 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.205.
11. The coefficient (β11) of 0.289 on the institutional variable (X11) for sustainable agriculture (Y) indicates that if there is an institutional increase (X11) of 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.289.
12. The coefficient (β12) of 0.321 on the efficiency variable (X12) for sustainable agriculture (Y) shows that if there is an increase in efficiency (X12) of 1 (one) unit, the value of sustainable agriculture (Y) will increase by 0.321.

Correlation Coefficient (R)

Correlation analysis aims to determine the relationship between variables and the direction of the relationship of each of these variables. Correlation test results will be presented in Table 3 as follows.

Table 3. Correlation Test Results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of The Estimate	Durbin-Watson
1	,865[a]	,743	,719	,821	2,763

a. Predictors: (Constant): x12,x11,x9,x10,x8,x7,x6,x5,x3,x4,x2,x1

b. Dependent variable : Y

Source: Processed Data, 2018

Based on the research results, the value of the correlation coefficient is 0.865 or 86.50%, which means that the level of relationship between the variables of the Simantri program's failure affects the independent variable (X), namely the performance of companions (X1), accessibility (X2), communication (X3). , effectiveness (X4), coordination (X5), transparency (X6), technology adoption (X7), social capital (X8), group participation (X9), increased income (X10), institutional (X11), efficiency (X12) towards dependent variable (Y) sustainable agriculture at the Lembu Nandini Gapoktan, SIMANTRI 113 Group, Mengani Village, Kintamani District, Bangli Regency.

Coefficient of Determination (R^2)

Testing the coefficient of determination (R^2) aims to measure how far the model's ability to connect the independent variable to the dependent variable. Table 3 shows that the coefficient of determination (R^2) is 0.743 or 74.30% which simultaneously relates the changes in the independent variable (X) to the dependent variable (Y), while the remaining 0.257 or 25.70% is influenced by other variables outside research variable.

F Test (Simultaneous)

The F test is used to test whether changes in the independent variable (X) have a significant effect on the dependent variable (Y), by comparing the F count with the F table with a confidence level of 95% (α = 0.05). The results of the F Test will be presented as follows.

Table 4. F Test Results

ANOVA[b]

Model		Sum of Square	df	Mean Square	F	Sig
1	Regression	42,779	6	7,729	19,373	,000[b]
	Residual	46,882	93	,599		
	Total	89,661	99			

a. Predictors: (Constant): x12,x11,x9,x10,x8,x7,x6,x5,x3,x4,x2,x1

b. Dependent variable : Y

Source: Processed Data, 2018

Based on the calculation of the F table, the result is 2.470, while the F count is 19.373. Test results F count> F table with a significance level obtained results <0.005. These results indicate that the independent variables of the success factors of the Simantri program (X) are companion performance (X1), accessibility (X2), communication (X3), effectiveness (X4), coordination (X5), transparency (X6), technology adoption (X7), social capital (X8), group participation (X9), increased income (X10), institutional (X11), efficiency (X12) together (simultaneously) have a significant effect on the dependent variable (Y) sustainable agriculture on Gapoktan Lembu Nandini, SIMANTRI 113 Group, Mengani Village, Kintamani District, Bangli Regency. Thus it can be stated that the hypothesis is accepted.

T-Test (Partial)

The t-test aims to test the effect of each independent variable (X) on the dependent variable (Y). To test the partial effect, it can be done based on a significant value (probability). If the significant value is less than 0.05 or 5%, the proposed hypothesis is accepted or can be said to be significant. However, if the significant value is greater than 0.05 or 5%, the proposed hypothesis is rejected or it can be said to be insignificant, the results of the t-test of this study are presented in Table 5.

Table 5. t test results in the study

Coefficiets[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std, Eror	Beta		
1	(Constant)	4,294	2,537		0,553	0,705
	X1	0,347	0,093	0,32	3,412	0,001
	X2	0,223	0,047	0,2	2,116	0,004
	X3	0,101	0,311	0,115	1,501	0,221
	X4	0,378	0,097	0,353	3,689	0
	X5	0,242	0,053	0,212	2,311	0,003
	X6	0,268	0,068	0,235	2,541	0,003
	X7	0,16	0,302	0,172	1,983	0,111
	X8	0,132	0,319	0,149	1,712	0,337
	X9	0,273	0,071	0,241	2,902	0,003
	X10	0,205	0,05	0,193	2,089	0,004
	X11	0,289	0,079	0,272	3,119	0,002
	X12	0,321	0,081	0,297	3,201	0,002

a. Dependent variable: Y

Source: Processed Data, 2018

Based on the research results in Table 5, it will be explained in detail as follows.

1. The companion performance variable (X1) has t count (3,412)> t table (1,985), with sig = 0.001 <α 0.050, it can be concluded that Ho is accepted. This means that the companion performance variable (X1) partially has a significant effect on sustainable agriculture (Y).
2. The accessibility variable (X2) has t count (2.116)> t table (1.985), with a sig = 0.004 <α 0.050, it can be concluded that Ho is accepted. This means that the accessibility variable (X2) partially has a significant effect on sustainable agriculture (Y).
3. The communication variable (X3) has t count (1.501) <t table (1.985), with a sig = 0.221> α 0.050, it can be concluded that Ho is rejected. That is, the communication variable (X3) partially does not have a significant effect on sustainable agriculture (Y).
4. The effectiveness variable (X4) has t count (3.689)> t table (1.985), with a sig = 0.000 <α 0.050, it can be concluded that Ho is accepted. This means that the effectiveness variable (X4) partially has a significant effect on sustainable agriculture (Y).
5. The coordination variable (X5) has t count (2,311)> t table (1,985), with a sig = 0.003 <α 0.050, it can be concluded that Ho is accepted. That is, the coordination variable (X5) partially has a significant effect on sustainable agriculture (Y).
6. The transparency variable (X6) has t count (2.541)> t table (1.985), with a sig = 0.003 <α 0.050, it can be concluded that Ho is accepted. This means that the transparency variable (X6) partially has a significant effect on sustainable agriculture (Y).
7. The technology adoption variable (X7) has t count (1.983) <t table (1.985), with a sig = 0.111> α 0.050, so it can be concluded that Ho is rejected. That is, the transparency

variable (X6) partially has no significant effect on sustainable agriculture (Y).

8. The variable social capital (X8) has t count (1,712) <t table (1,985), with sig = 0.337> α 0.050, then it can be concluded that Ho is rejected. This means that the social capital variable (X8) partially does not have a significant effect on sustainable agriculture (Y).
9. The group participation variable (X9) has t count (2.902)> t table (1.985), with a sig = 0.003 <α 0.050, it can be concluded that Ho is accepted. This means that the group participation variable (X9) partially has a significant effect on sustainable agriculture (Y).
10. The variable income increase (X10) has t count (2.089)> t table (1.985), with a sig = 0.004 <α 0.050, it can be concluded that Ho is accepted. That is, the variable income increase (X10) partially has a significant effect on sustainable agriculture (Y).
11. The institutional variable (X11) has t count (3.119)> t table (1.985), with a sig = 0.002 <α 0.050, it can be concluded that Ho is accepted. This means that the institutional variable (X11) partially has a significant effect on sustainable agriculture (Y).
12. The efficiency variable (X12) has t count (3.201)> t table (1.985), with a sig = 0.002 <α 0.050, it can be concluded that Ho is accepted. This means that the efficiency variable (X12) partially has a significant effect on sustainable agriculture (Y).

The Simultaneous Influence of The Failure Factor of Simantri Program on Sustainable Agriculture

Based on the research in Table 4, the independent variable (X) that affects the success of the Simantri program (X) is the performance of the companion (X1), accessibility (X2), communication (X3), effectiveness (X4), coordination (X5), transparency (X6), technology adoption (X7), social capital (X8), group participation (X9), increased income (X10), institutional (X11), efficiency (X12) simultaneously have a significant effect on the dependent variable (Y) sustainable agriculture on Gapoktan Lembu Nandini, SIMANTRI 113 Group, Mengani Village, Kintamani District, Bangli Regency. This is because F table is 2.470 while F count is 19.373. The test results Fcount> Ftable with a significance level of <0.005. Thus it can be stated that the hypothesis is accepted. This is in line with Puspita's (2012) research entitled: Effectiveness and Impact of the Bali Manadara Integrated Agricultural System Program on Income and Job Opportunities for Poor Farmers Households in Antap Village, Selemadeg District, Tabanan Regency. In this study, it is stated that in increasing the effectiveness of the Simantri program, it is necessary to increase the input variables, namely socialization, more improved program target accuracy, the variable rate of response to complaints and monitoring by officers is maintained, and output variables related to income and job opportunities of poor farmers through the program Simantri will continue to be

improved and developed in the future.

The Partial Influence of the Failure Factor of Simantri Program on Sustainable Agriculture

The results of the research in Table 5 state that of the 12 variables on the unsuccessful factors of the SIMANTRI program, three factors that do not have a significant effect are communication (X3), technology adoption (X7), social capital, while the other nine factors have a significant effect, including companion performance (X1), accessibility (X2), communication (X3), effectiveness (X4), coordination (X5), transparency (X6), technology adoption (X7), social capital (X8), group participation (X9), increased income (X10), institutional (X11), efficiency (X12). For more details, it will be presented as follows.

a. Companion performance variable (X1)

In the t-test results, the companion performance variable (X1) partially plays a role in the failure of the Simantri program which has a significant effect on sustainable agriculture (Y). This is due to the role of assistants in providing guidance, monitoring and evaluation of programs. However, in this Simantri, there is a lack of a companion role in fostering, supervising, and intensively evaluating Gapoktan in producing products that are applied to their farming business and sold to other consumers. After two years of running, there is no visible routine program activities such as processing livestock waste into compost, bio-urine, biopesticides, and biogas.

b. Accessibility variable (X2)

In the t-test results, the accessibility variable (X2) partially plays a role in the failure of the Simantri program which has a significant effect on sustainable agriculture (Y). This is because the poor road access in Mengani Village results in less time efficiency for simply feeding livestock to the pen. The distance between the farmer group's house and the colony's stable is relatively far, so that the Simantri members are not enthusiastic about carrying out their routine. Apart from the considerable distance, time and energy required, the members also have other side jobs, so that activities at the Lembu Nandini Gapoktan, SIMANTRI 113 Group are less productive.

c. Communication variable (X3)

In the t-test results, the communication variable (X3) partially does not play an important role in the success of the Simantri program, so it does not have a significant effect on sustainable agriculture (Y). This is due to the lack of intensive communication between each member. The job at Simantri is only done as a side job. The group members are more focused on managing the land.

d. Variable effectiveness (X4)

In the results of the t test, the effectiveness variable (X4) partially plays an important role in the failure of the Simantri program, so that it has a significant effect on sustainable agriculture (Y). Program effectiveness affects the success

rate. However, the ineffectiveness of this group in managing livestock waste into Simantri products which have a high selling value as a basis for increasing additional income for both groups and individuals. Routine activities that should have been carried out every week as a source of additional income were not effectively carried out, so this Simantri experienced a significant setback in its management.

e. Coordination variable (X5)
In the results of the t-test, the coordination variable (X5) partially plays an important role in the failure of the Simantri program, which has a significant effect on sustainable agriculture (Y). This is because the head of Gapoktan has an important role to coordinate activities with group members in advancing a program. However, at Simantri, the group leader was considered less able to coordinate well, because of his less assertive attitude, there was no picket pattern or other efforts to streamline the role of members in Simantri waste management activities. Everything is done only based on the awareness and loyalty of Simantri members.

f. Variable transparency (X6)
In the results of the t test, the transparency variable (X6) partially plays a role in the unsuccessfulness of the Simantri program which has a significant effect on sustainable agriculture (Y). This is due to the lack of transparency of the head of Gapoktan in managing Simantri funds, thus making group members reluctant to participate in Simantri activities. Because it is felt that the program being implemented is less profitable for the members as a whole.

g. Technology adoption variable (X7)
In the t-test results, the technology adoption variable (X7) partially does not play an important role in the unsuccessfulness of the Simantri program, so it does not have a significant effect on sustainable agriculture (Y). This is because not all members in the group are able to adopt the technology from Simantri's livestock waste. The Simantri products that are produced have not been able to be fully applied in the land owned by Simantri members.

h. Social capital variable (X8)
In the results of the t-test, the social capital variable (X8) partially does not play an important role in the unsuccessfulness of the Simantri program, so it does not have a significant effect on sustainable agriculture (Y). This is because social capital only occurs in the customary village environment which has not been fully implemented in the Simantri group as a basis for loyalty in increasing livestock waste management activities into Simantri products.

i. Group participation variable (X9)
In the t test results, the group participation variable (X9) partially plays a role in the failure of the Simantri program which has a significant effect on sustainable agriculture (Y). This is because member participation greatly affects the success of the

program being implemented. However, in practice, in this group, the participation of group members is very poor in carrying out simantri activities. This is because in Mengani Village, most group members have their main job not as farmers. Most of the farmer groups have different professions, such as construction workers and agricultural laborers. This will eventually affect their performance in carrying out Simantri activities.

j. Income increase variable (X10)
In the t-test results, the variable income increase (X10) partially plays a role in the failure of the Simantri program which has a significant effect on sustainable agriculture (Y). This is because the increased income will affect the farmer's spirit in implementing the Simantri program intensively in agricultural activities. However, in this group, there was no significant increase in income. This is due to the lack of focus on routine activities to produce Simantri products and the inapplicability of member farmers who use Simantri products on agricultural land, so they have not been able to realize sustainable agriculture.

k. Institutional Variable (X11)
In the t-test results, the institutional variable (X11) partially plays a role in the failure of the Simantri program which has a significant effect on sustainable agriculture (Y). This is because institutions play a role as a means of strengthening capital and products produced by groups as the basis for continuous implementation of activities. However, in this group institutional strengthening has not played a significant role in influencing this simantri activity. This is because, in the coordination, transparency, and participation of members who have not been effective in managing Simantri.

l. Variable efficiency (X12)
In the t-test results, the efficiency variable (X12) partially plays a role in the failure of the Simantri program which has a significant effect on sustainable agriculture (Y). This is because the efficient use of Simantri products in agriculture will be able to reduce the use of farming costs, realize sustainable agriculture, and increase agricultural income significantly. However, in practice, this group does not fully use Simantri products on their agricultural land, they are more focused on other professions as their main occupation.

CONCLUSION

Based on the results of this study, things that can be suggested include the following.

1. Simultaneously, 12 independent variables (X) have a significant effect on the failure of the Simantri program (X), namely the performance of the companion (X1), accessibility (X2), communication (X3), effectiveness (X4), coordination (X5), transparency (X6).), technology adoption (X7), social capital (X8), group participation (X9), increased income (X10), institutional (X11), efficiency

(X12) on the dependent variable (Y) sustainable agriculture at Lembu Nandini Gapoktan, Group Simantri 113, Mengani Village, Kintamani District, Bangli Regency. This is because the calculation of F table obtained a result of 2.470 while F count was 19.373. The test results F count (19.373)> F table (2.470) with a significance level of <0.005. Thus it can be stated that the hypothesis is accepted.

2. The results of the research in Table 5 states that of the 12 variables in the Simantri program failure factors, three factors do not significantly influence namely communication (X3), technology adoption (X7), social capital (X8), while the other nine factors have a significant effect among others: companion performance (X1), accessibility (X2), communication (X3), effectiveness (X4), coordination (X5), transparency (X6), technology adoption (X7), social capital (X8), group participation (X9), increased income (X10), institutional (X11), efficiency (X12).

Things that can be suggested for evaluating the Simantri program are as follows.

1. For the government to be more intensive in motivating farmers to improve Simantri products, not only processing livestock waste but also superior commodities which are the potential of the village, by providing farm markets or product exhibitions on a regular basis in each district, so as to be able to arouse the enthusiasm of farmers effectively.
2. For Simantri assistants, to increase loyalty in fostering, supervising and evaluating, so that program activities are routinely carried out, helping groups to increase institutional roles in capital circulation and marketing, and educating farmers on a regular basis to apply simantri products in their agricultural land so as to reduce production costs, increase income, and realize sustainable agriculture as the basis for the success of the Simantri program.
3. For farmers to further increase their role in developing Simantri, to coordinate with each other, transparency of funds and activities carried out on Simantri products, and to actively participate in simantri activities so that they have a twofold increase in income in terms of selling Simantri products to consumers, as well as the effective use of Simantri products on agricultural land.

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