# Cattle Farmers' Participation in Rural Development Program in Bantul Yogyakarta

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**Abstract.** The purpose of this study to determine the level of participation, identify the factors that influence the participation of farmers and to analysis the effect of participation in the Scholars develop village or Sarjana Membangun Desa (SMD) program. The research was conducted on a group of beef cattle in the SMD program Bantul Yogyakarta Province. Primary data were collected by survey method using questionnaire interviews on 8 SMD groups consisting of 42 members. The result analysis shows that with regard to farmers level participation in planning; 71.43% farmers had low participation; 59.52% farmers in the implementation stage had participation that was middle level. Moreover, on the evaluation stage; 54.76% farmers had low participation whereas on sharing benefits stage; 50% farmers had low participation. Success of the program SMD viewed from population cattle declined from 184 head to 107 head, while the existing capital in the group also decreased from IDR 2,904,000,000 to IDR 1,182,000,000 seen from number of members group declined from 185 farmers being 114 farmers. Regression analysis showed that age, occupation, level of formal education, non-formal education, long became members of the group, farming experience, family income, number of dependents, land holdings, cosmopolitan, group motivation, the role of SMD, and the role of agency participation of farmers had not been able to explain the participation of farmers and the value of R<sup>2</sup> value of 0.132 (13.2%). Partially no factor capable of affecting farmers participation. Further results of the regression analysis with the participation of relationship success SMD program showed no effect with R<sup>2</sup> value of 0.01.

Key words: Participation, Success Program, "Sarjana Membangun Desa" Program

Abstrak. Tujuan penelitian ini untuk mengetahui tingkat partisipasi, mengindentifikasi faktor-faktor yang mempengaruhi partisipasi peternak dan mengetahui pengaruh partisipasi peternak dalam program SMD. Penelitian ini dilaksanakan pada kelompok ternak sapi potong program SMD di Kabupaten Bantul Provinsi Daerah Istimewa Yogyakarta. Pengambilan data primer dilakukan menggunakan metode survey dengan wawancara menggunakan kuesioner pada 8 kelompok SMD yang terdiri dari 42 anggota kelompok ternak sapi potong. Analisis tingkat partisipasi peternak menggunakan analisis diskriptif, sedangkan untuk mengetahui faktor-faktor yang berpengaruh terhadap partisipasi peternak dan pengaruh patisipasi terhadap keberhasilan program SMD digunakan analisis regresi linear berganda dengan alat bantu SPSS for windows 16. Hasil analisis menunjukkan bahwa tingkat partisipasi peternak pada tahap perencanaan, 71,43% peternak memiliki partisipasi yang rendah, 59,52% peternak pada tahap pelaksanaan memiliki partisipasi yang sedang. Pada tahap evaluasi 54,76% peternak memiliki partisipasi yang rendah, dan pada tahap menikmati hasil sejumlah 50% peternak memiliki partisipasi yang rendah. Keberhasilan program SMD dilihat dari populasi ternak mengalami penurunan dari 184 ekor menjadi 107 ekor, sedangkan dari modal yang ada pada kelompok juga mengalami penurunan dari Rp. 2.904.000.000 menjadi Rp. 1.182.000.000, dilihat dari jumlah anggota kelompok mengalami penurunan dari 185 peternak menjadi 114 peternak. Hasil analisis regresi menunjukkan bahwa secara bersama-sama veriabel usia, pekerjaan, tingkat pendidikan formal, pendidikan non formal, lama mejadi anggota kelompok, pengalaman beternak, pendapatan keluarga, jumlah tanggungan keluarga, luas lahan yang dimiliki, kekosmopolitan, motivasi berkelompok, peran SMD, dan peran dinas belum dapat menjelakan partisipasi peternak dengan nilai R2 0,132 (13,2%). Secara parsial tidak ada faktor yang mampu mempengaruhi partisipasi peternak. Selanjutnya hasil analisis regresi hubungan partisipasi dengan keberhasilan program SMD tidak menunjukkan pengaruh dengan nilai R<sup>2</sup> 0,01.

Kata Kunci : Partisipasi, Keberhasilan Program, Sarjana Membangun Desa

## Introduction

Nowadays, development in farming sector is oriented to modern, efficient, and strong farming (Guntoro et al., 2013). Smallholder

farmers in Indonesia have multiple goals for their livestock enterprise. Apart from cash benefits, livestock are closely linked to the social and cultural lives of smallholder farmers for whom animal ownership ensures varying degrees of household economic stability. They are also considered a common means of wealth and social link. Therefore, farmers who attach more value to non-cash benefits, tend not to commercialize their livestock production. Sebatta et al. (2014) studied, once a smallholder farmer decides to enter the market to sell, household characteristicsand farmer endowments are the key factors that influence how much will be sold into the market. To increase technology adoption to beef cattle farmers can be conducted by executing routinely extension service and conveying technology application advantage, so that extension worker will emphasize on points related with farmers' safety motive like as savings which can be sold at any time (Guntoro and Priyadi, 2012). The farming system of beef cattle fattening is still largely traditional. The rules of economic principles have not been applied optimally in traditional system, because beef cattle farming is still positioned as sideline business by the farmer. In many agricultural production systems, the animal component is included in addition to the plant component (Prasetyo et al., 2012).

Farid et al. (2009) defines participation as playing a role or taking part in an activity usually with others. Participation also refers to involvement of individuals and groups in development processes with the aim of ensuring self-reliance and better standard of living (Nxumalo and Oladele, 2013). The important relationship between farmer's participation in agricultural projects on one hand, and economic development and poverty alleviation on the other hand, cannot be over emphasized. According to Nxumalo and Oladele (2013), without participation there would be no program and no development.For active participation and maximum impact, the study suggests that full time farmers and people whose primary occupation is farming should be the main targets of agricultural projects. It may even be desirable not to select very educated

people as lead or contact farmers. It appears that farmer's interest in agricultural projects can be permanently sustained by providing them with tangible benefits (Etwira et al., 2013). Zhu and Yang (2012) autonomous motivation produces significantly positive effects on the different participation stages, however, some controlling motivation factors have significant negative influence on the participation. The main motivation factors impacting farmers' training participation are different in the different participation stages. It is found that farmers can participate in the publicly funding training actively and effectively only when they are on their own volition. Hellin and Dixon (2008) suggested that farmer empowerment per se is best carried out by development organizations whose longer-term interaction with farmers is likely to ensure that greater numbers of farmers benefit. Issues around help, transport, access and regulation also play their part in detracting from participation. Broader issues around facilitating business creation and rural generating employment (Morales, 2009). Participation does not happen automatically, implementers should be proactive in applying a participatory approach (Guntoro and Lund, 2013).

Beef cattle farms in Indonesia are dominated by small farms in rural area that mostly small and have a low productivity. This condition creates a synergy relationship between the empowerment of farmers and livestock development as the goal of meat selfsufficiency. Government efforts in empowering farmers require an active participation of farmers in all livestock-based development programs. Livestock development requires the participation existence of of various stakeholders in the program, especially farmers. Participation is one of the indicators of the livestock development success, in which without it, livestock development programs cannot run properly. Widiati (2012) reported that sources of the venture capital in rural beef generally derived from cattle were pesonal capital, product of cattle sharing system between local people as individual and government assistance program. Government programs have been done to empower communities through various economic productive capitals in the hope that he production, productivity, and income can be increased. Therefore, in raising beef cattle, the farmers largely cultivate and develop from small-holder livestock production with patterns of cow calf operation in a small scale and it is usually integrated with other agricultural enterprises (Winarso and Basuno, 2013). The success of a livestock program can be illustrated by the high participation of farmers. Farmer participation is the farmers' involvement in action and active involvement in all activities of program planning, implementation, evaluation, and the stage of enjoying the results of the program. Livestock development cannot be separated from government support. One of the government's support in the development of animal husbandry is the implementation of the degree program to build the village, which has the main goal to; (1) Strengthen venture capital, facilities and infrastructure in developing livestock business; (2) Increase the production, productivity and income of farmers; (3) Increase autonomy and teamwork; (4) Encourage the growth and development of young and educated agribusiness in livestock business; and (5) Develop regional centers for small farm business. Scholars develop village or Sarjana Membangun Desa (SMD) program is one of the government programs, as an effort to support the achievement of national meat self-sufficiency by promoting empowerment of farmers group that was accompanied by a scholar in the field of animal husbandry. The increasing number of recipients of SMD program in 2007 to 2010 showed that the SMD program is a successful farmer empowerment program. SMD program

implementation requires the participation of farmers in the livestock business activities within the group. Participation in a group is needed so that each member contributes to the progress of the group. Until now SMD program is still running, but to assess its success, it required a thorough analysis of the farmers' participation level in the program and determined factors that influence it. The study area of this research is in Bantul district where since the SMD program started until now, the number of SMD recipients, especially beef cattle, is the highest than the other districts in the province of Yogyakarta. SMD group in Bantul district is a group that still runs and shows progress in farm management, so that this region according to researchers is the suitable area to be used as the research location. This study is necessary to determine farmers' participation in SMD program. Based on the background of the problem, the problem can be formulated as follows: "What is the level of farmers' participation in livestock business of scholars develop village program in Bantul?"

The objectives of the research are to analyze the level of farmers' participation in the phases of SMD program; and to identify the factors that influence the participation of beef cattle farmers' in SMD program.

#### **Materials and Method**

This research has been carried out for four (4) months in October 2012 to January 2013. The research was conducted in Bantul, Yogyakarta. Location of the study was a group of cattle who received SMD program from 2007 until 2010 and was still running until the research was conducted. Bantul is the highest number of recipients of SMD program for beef cattle commodity than those other districts in the Province of Yogyakarta. The sampling method was purposively taken on a farmers' group that still runs and has cattle from SMD program, and has been running at least 1 year.

Samples were taken in 8 groups with the number of respondents 42 farmers.

Data were analyzed quantitatively. Measurement factor of farmers' participation in SMD program was conducted by describing and interpreting phenomena existed in the field. Statistical testing began with the validity and reliability testing of questionnaires. Validity is used to ensure the ability of a scale to measure a concept with the theory underlying. Concept validity was measured with convergent validity that were fulfilled if the scores obtained showed a high correlation. The validity of the test was obtained from each value in each of the questions correlated with the total value of all the questions for a variable by using product moment correlation formula. Reliability Test was conducted by using Cronbach Alpha technique, in which it can be said to be a reliable instrument (reliable) when reliability coefficient or alpha of 0.6 or more. In this study, the reliability was calculated by using SPSS 16.0 for Windows. The analysis used to determine the effects of farmers' participation towards their characteristics were analyzed with multiple linear regression analysis, with the following models:

 $Y = a + b1X1 + b2 X 2 + b3 X 3 + \dots b14 X14,$ 

In which:

Y = Farmers' Participation (Interval Score )

a = constants

b1, b2, b3,- b14 = regression coefficient

X = Independent variabel

X1 = Age (Year)

X2 = Main Occupation (interval Score)

X3 = Formal Education (Year)

X4 = Non-formal Education (interval Score)

X5 = Member period (Year)

X6 = Farming experience (Year)

X7 = Income(IDR/month)

X8 = Number of dependents (Person)

 $X9 = Land owned(m^2)$ 

X10 = Perception (interval Score)

X11 = Groups motivation (interval Score)

X12 = family relationships (Person)

X13 = Role of SMD (interval Score)

X14 = The role of the government (interval Score)

Meanwhile, simple regression formula was used to determine the effect of participation to the success of the program:

 $Y = a + b_1X$ 

in which:

Y = Success of SMD Program (Score)

a = Constants

 $b_1$  = regression coefficient

X = Farmers' Participation (Score)

Calculation of regression analysis in this study is assisted by using SPSS 16.0 for Windows.

## **Results and Discussion**

#### Profile of SMD program recipients in Bantul

SMD program admission was conducted since 2007, started with beef cattle commodity. The number of applicants and recipients of SMD programs nationwide increased significantly. So, in 2009 the government began to open up to other commodities oncattle, dairy cows, buffaloes, goats and sheep, rabbits, and birds. Tight competition to get SMD program makes each region did not get the same proportion, only groups and SMD that has a good assessment would be accepted to obtain SMD program. Number of SMD program recipients in Bantul for beef cattle commodity has decreased every year. In 2007, the number of recipients was only 1 group, 7 groups in 2008, and then declined again into 2 and 1 group in 2009 and in 2010. Number of SMD program recipients cannot be ascertained each year, because the admission process required the selection of candidates for SMD and farmers' groups that would get funding from SMD program.

# Establishment period of a farmers' group

SMD program was given to selected farmer groups based on the selection results. The establishment period before proposing the SMD program shows the quality of the group. Most of the farmer groupsreceiving SMD program. Bantul were relatively newly established group that managed to get the SMD program.

Tabel 1. The establishment of farmer group

Establishment	Number of	Percentage
Period (Year)	Groups	(%)
0	5	62.5
1 – 3	0	0
3.1 - 6	3	37.5
Total	8	100

Table 1 shows that 62.5% of the group receiving SMD program was newly established in the same year when proposing the programs and 37.5% had established from 3.1 to 6 years before the SMD program. Ease of newly established groups to get SMD program became a big question, why it can be. Government

stated a condition that groups who can apply for the SMD program is a group that has been registered at the local office. This shows the lack of oversight and guidance to the groups. Ease in accessing the SMD program was not assisted by satisfactory results. The evidence was that many groups broke up after getting the funds. The results of this study indicated that the level of farmers' participation in group activities was low. It indicated that the farmers' participation was false and tended to be a people mobilization to form a group of farmers. Manipulation indications of SMD program can be seen at the time of group formation.

Table 2. Farmers'internal characteristics

Internal Characteristics	Numbers of Farmers	Percentage
Farmers' Average Age (Years)	45.42 ± 12.06	
Occupation		
- Farmers	17	41
<ul> <li>Land worker/labour</li> </ul>	19	45
<ul> <li>Non-government</li> </ul>	6	14
Formal Education Level		
<ul> <li>Higher education</li> </ul>	1	3
<ul> <li>Senior/vocational high school</li> </ul>	14	33
<ul> <li>Junior high school</li> </ul>	6	14
<ul> <li>Elementary school</li> </ul>	21	50
Non-formal Education		
- Yes	15	36
- No	27	64
Membership average period (Year)	$6.88 \pm 4.40$	
Average farming experience (Year)	15.38± 11.12	
Family income (Rp./month)		
< Rp. 1.000.000,-	29	69
Rp. 1.000.001,- Rp. 2.000.000,-	12 29	
> Rp. 2.000.001,-	1 2	
Average Family Dependant (person)	3.19 ± 1.56	
Average land owned (m <sup>2</sup> )	1,588.09 ± 3,117.15	
Perception		
- High	31	74
- Low	11	26
Grop Motivation		
- Additional income	4	10
<ul> <li>Farming progress</li> </ul>	10	34
- SMD funding	22	52
- Family ties	6	14

It was evident that the majority of the new groups (62%) were established at the time of the SMD program. Establishment of famers' groups was led by members and local agencies, so the ease of groups in proposing the program was the responsibility of the related department (district/city), but the SMD program, related department has weak function in supervising recipient group of the SMD program. Weak function of the related agencies can lead to various irregularities in the groups of SMD, even they get less attention from the agencies so that they who received substantial funding had a chance to conduct irregularities which led to the failure of the SMD program.

#### Farmers' internal characteristics

Farmers' internal characteristics including age, the main occupation, formal education, non-formal education, membership period, farming experience, family income, dependents, extensive land holdings, perception, and groups' motivation can be seen in Table 2.

The greatest motivation groups in the cattle business of SMD program due to the aid of SMD was52%, while for reasons of group progress was 24%, 14% of respondents claimed to be motivated because of family ties, and 10% because of the additional income. Farmers' motivation determined the participation level in the success of the group, which in turn can affect the productivity performance and the

achievement of the goals set in the group. Motivation of the groups in SMD program was more influenced because of the aid, and it can cause the performance of farmers less than the maximum.

#### Farmers' external characteristics

The external characteristics of the farmers' participation in the SMD program can be affected by several things including the role of the SMD and the role of the agencies. SMD and agencies roles were part of SMD program but they are outside the group system, so that SMD and agencies were included in the external characteristics. SMD and agencies roles were shown in Table 3.

#### The role of SMD

SMD role in farmers' groupof beef cattle was high. SMD role in the group was implemented in various acts. One of which was the intensity of the presence and participation of SMD in group activities. SMD was useful in providing solutions to the problems faced by the group, and provide information about technology into the group. The intensively of SMD role in the group only lasted in the first year. In the first year, SMD still get paid for the development of a group that has been budgeted in SMD activity, so that in the first year, SMD has a responsibility for the activities that have been proposed. SMD and farmers' groups were the practitioners of the SMD program.

Table 3. Farmers' external characteristics

External Characteristics	Score Range	Number of Farmer	Percentage (%)
SMD role			
- High	4.1 - 6	23	54.76
- Intermediate	2.1 - 4	5	11.90
- Low	0 – 2	14	33.30
Agencies Role			
- High	3.4 - 5	4	9.52
- Intermediate	1.7 - 3.3	12	28.57
- Low	0 - 1.6	26	61.90

# The role of government agencies

Table 4 shows that 61.9% of farmers stated that the role of government agencies was low. The role of agencies can be shown in monitoring the activities of SMD, assistance for the group, technical guidance and assistance from the local extension. Farmers stated that the agencies' role is still very low. It is due to the lack of monitoring of services, lack of official assistance to farmers, and lack of assistance from the local extension. Extension existed nearby generally provide assistance to farmers, and still low in providing assistance to farmers in particular SMD program, even some of them did not know the location of SMD receiver. Assistance from the agencies usually only given to SMD program for reporting activities, while assistance for farmers was still very low. District and provincial agencies lacked of authority in monitoring SMD activities because the selection process of SMD was decided in the ministerial level. Lack of official authority in SMD activities led to the lack of official role in supporting the success of SMD. In the SMD program activity, government agencies became an information mediator between the central government and SMD, so the attention of the agencies towards the farmers' group and SMD was low. It was reflected in the lack of monitoring conducted by the local agencies.

# Farmers' participation in beef cattle farm business of SMD program

Planning stage. Program planning stage can be seen from some aspects of the activities carried out by the group along with the SMD including farmer attendance in group formation meeting, proposal formation, proposals of program activities, deciding the program activities, budget planning, and introduction to SMD program.

Table 4 shows that 71.43% of farmers stated that farmers' participation in the planning stage is still low. The low participation of farmers in the planning stage showed that the SMD program submission did not involve all members. Lack of knowledge of farmers towards the SMD program can also lead to low

Table 4. Farmers' Participation in SMD Program Stages

Participation Stage	Category	Score Range	Number	of Percentage
			Farmer	(%)
Planning	High	22.1 – 30	2	4.60
	Intermediate	14.1 – 22	10	23.81
	Low	6 – 14	30	71.43
			42	100.00
Implementation	High	18.5 – 25	8	19.05
·	Intermediate	11.8 - 18.4	25	59.52
	Low	5 – 11.7	9	21.43
			42	100.00
Monitoring dan evaluation	High	11.2 – 15	6	14.29
-	Intermediate	7.1 – 11.1	13	30.95
	Low	3 – 7	23	54.76
			42	100.00
Sharing benefits	High	11.2 – 15	7	16.67
	Intermediate	7.1 – 11.1	14	33.33
	Low	3 – 7	21	50.00
			42	100.00

participation of farmers. The planning stage is the initial stage of the farmers' participation in the SMD program. Low participation of farmers led to low participation of farmers at the next stage. The low participation of farmers is also visible in the preparation of the budget. This is due to the preparation of the business plan of the group is only done by the chairman of the group, SMD and accompanying agencies. According to the group members, proposal was only formulated by several members of SMD program without involving other members. It showed that in the planning stages, the types of participation was manipulation participation in which most of the members just as the party who gave consent and used as a tool to be able to access the SMD program.

Program implementation stage. **SMD** program implementation stage can be seen from some aspects that farmers have participated in the group, involved in the purchase of cattle breed, animal husbandry, livestock sales and financial management of the group. Table 5 shows that 59.52% of farmers stated that their participation in the implementation stage in the program was moderate. Farmers' participation in implementation stage of the program is evident from their participation of to raise cattle. Farmers in the SMD program were a recipient of the program so that they were forced to engage in the program. This led to the participation that did not optimal and make farmers burdened by SMD program. The intermediate farmers' participation was shown on some activities that did not involve all members, including the purchase of cattle. Cattle purchase involved only a few members, so that only several members receive livestock to raise. Budget management of the SMD program has been made previously also simply involve the main committee and SMD. So that the farmers' participation in the program implementation will be more in the form of energy, and became the recipient of the program.

Evaluation phase. SMD program evaluation stage can be seen from some aspects including internal evaluation group, make suggestions for the improvement of the group, and evaluation budget. Table 5 shows that 54.76% of farmers stated that farmers' participation in the evaluation phase of the program was low. Evaluation stage is the stage where the group was still making progress so that farmers can do the evaluation. In fact, evaluation stage often did not involve all members, and this led to low participation. In the evaluation stage of the program, we can find a lot of discontent members, and then those who are not satisfied simply resign without any solution. SMD program evaluation phase was dominated by the main committee and SMD, so it did not provide an opportunity for members to participate and improve the group. Itwas because the SMD and the main committee feel they had a greater role in getting the program, so they had the right to set the members. The budget evaluation also did not involve all of members, so that budget management were not transparent, and caused a lot of members who were not satisfied choose to resign from the group.

Sharing benefits stage. Sharing benefits stage was assessed based on some aspects, including when the farmers can get the economic benefits, obtain new knowledge and increased motivation after the SMD program. Table 5 shows that 50% of farmers stated that their participation in the sharing benefits stage are still low. The low participation of farmers in this stage shows that farmers did not feel the improvement in their economy after the SMD program. They also did not acquire new knowledge and less motivated towards SMD program.

#### Factors affecting farmers' participation

The analysis used to determine what factors are affecting the farmers' participation of in the

SMD program was multiple linear regression analysis by using SPSS 16.0 for Windows. This analysis was used to determine the regression equation between farmers' participation (Y) with age (X1); occupation (X2); formal education level (X3); non-formal education level (X4); membership period (X5); farming experience (Xs); income levels (X7); number of family dependents (X8); land area (X9); perception (X10); motivation (X11); family relationship (X12); the role of SMD (X13) and the role of agencies (X14).

Table 5 shows the regression analysis result had a determination coefficient (R²) of 0.132, which means that fourteen factors used, only be able to explain 13.2% of farmers' participation in the SMD program, while the remaining of 86.8% was explained by other factors that were not in this research. This could be due to the high number of the correlation coefficient between variables were not correlated with F value of 0.294 with great significance of 0.990. Thus, the variation of the variables showed that the factors used had not

been able to explain the farmers' participation in the SMD program. Based on Table 5, it can be made the following regression equation:

$$Y=5.274-0.003X_1+0.469X_2-0.450\ X_3+\\ 4.111X4+0.012X_5-0.022Xg+9.689X_7-\\ 0.974X_8-6.645E^{-5}\ X_9-3.057X_{10}+0.172X_{11}\\ +17.764X_{12}-0.885X_{13}-0.242X_{14}$$

The results of the regression equation cannot be used as a predictive tool because it has the significant value of more than 0.05.Farmers' age does not affect their participation (P>0.05). The results of this study showed that farmers' age did not affect their participation in the SMD program. Farmers' average age on the SMD programwas 45.42 years of reproductive age and should be able to participate in the program. Age had not been able to influence the farmers' participation in the program since the farmers consider that SMD program was a side business that had not been their priority. In the SMD program, age difference becomes an obstacle to participate in the implementation of the program, due to SMD members were younger than the average

Tabel 5. Regression analysis results of factors affecting farmers' participation

Independent Variabel	Regression Coefficient	t	Significant
(Constants)	5.274	0.124	0.902
.Age (X1)	-0.003	-0.010	0.992
Main Occupation (X <sub>2</sub> )	0.469	0.144	0.886
Formal Education Level (X3)	-0.450	-0.453	0.654
Non-Formal Education Level(X <sub>4</sub> )	4.111	0.625	0.537
Membership period (X5)	0.012	0.017	0.987
Farming experience (X6)	-0.022	-0.082	0.935
Income level (X7)	9.689	1.549	0.133
Numbers of family dependants (Xs)	-0.974	-0.627	0.536
Land area (X9)	-6.645E <sup>-5</sup>	-0.084	0.934
Perception (X <sub>10</sub> )	-3.057	-0.494	0.625
Motivation (X <sub>11</sub> )	-0.172	-0.062	0.951
Relationship with SMD (X12)	17764	10.105	0.279
The role of SMD (X <sub>13</sub> )	-0.885	-0.399	0.693
The role of agencies (X <sub>14</sub> )	-0.242	-0.131	0.897
$R^2 = 0.132$			
F hit = 0.294 Sig = 0.990			

Remark:

<sup>\*</sup>Significant at the level of P<0.1

<sup>\*\*</sup> Significant at the level of P<0.01

age of farmers, resulting in substandard communication between members and a lot of information from SMD was not conveyed to the farmers. The farmers' main occupation did not affect their participation (P>0.05). It is clear that employment in agriculture cannot necessarily affect the participation of farmers in the farm business, although their agriculture business can be integrated with the farm business management. Occupation did not affect the farmers' participation in the SMD program because they had more important work that is quite time consuming and there was no relationship with SMD program, although their work still engaged in agriculture. Most of farmerswere working in the fields agriculture, but it had not been able to influence their participation. This indicated that an agricultural business was not integrated with the farm business.

Formal education Level did not affect the farmers' participation (P>0.05). Their education level cannot influence their participation in SMD program since they generally they had low level of education and it did not affect their participation in the group. Education is a driving factor for someone to participate. The low level of education makes their participation cannot be seen or bias. Their low level of education can be easily used to set in motion as the continuation of particular interest, including for SMD program budget. Non-formal education did not affect the farmers' participation (P>0.05). This can be explained because most of the farmers (64%) had never participated in a non-formal education. Non-formal education can improve their knowledge so that they would be expected to participate. But the small numbers of farmers who had attended nonformal education made this variable did not affect their participation. The lack of non-formal education of the farmers showed that during SMD program, they had not been able to transfer knowledge through training. Since SMD

never conducted training to improve the ability of farmers, their non-formal education had not been able to influence their participation in program.

Membership period in a group does not affect the farmers' participation (P>0.05). Most of the farmers are new members, even some of the newly established group also causing long membership did not affect their participation. Farming experience did not affect the farmers' participation (P>0.05). Farmers SMD program had an average of 15.8 years of experience in farming. It indicated that they had a long enough experience to run the farm. But in fact, experience did not affect their participation in the program because they felt had been experienced. So they actually worked individualism, and less contributedin the SMD program group. Family income did not affect the participation of farmers (P>0.05). Those who had low income tended to participate by using man power while those with high income would participate by using money. Their low income level raises hoped to earn extra income, so they should be participating. In this study, the most of the farmers income was still low, less than IDR 1,000,000 but farm business of SMD program group considered to be not profitable for farmers. Farmers' expectation discrepancy with the results obtained make the farmers' income factor was not able to influence their participation SMD program as what was expected. Farmers' family dependant did not affect their participation (P>0.05). The average number of farmers' dependents was three people. It can be explained that the number of family dependents did not affect the farmers' participation, because they spent most of their time for working outside the group, so they would be less participated. Therefore, the number of family dependents did not affect their participation in the SMD program. Land ownership did not affect farmers' participation (P>0.05). The wider land owned by the farmers,

they should be more participating in the farm. However, as we know that the land owned by farmers is not used for livestock and agricultural businesses. So, the land has not been able to influence their participation in the SMD program.

Farmers' perception did not affect their participation (P>0.05). Information mastery was needed to foster participation. However, in this study, farmers who seek information outside of the group were very rare, causing perception was not been able to influence farmers participation in the SMD program. In addition to information about the SMD program was limited, they felt that seeking information from another group requires substantial time. Group motivation did not affect farmer participation (P>0.05). Most of the farmers are motivated because they expected in getting a grant of the SMD program. However, the fact was that the farm business managed by group members of SMD suffered losses, static, and did not in line with their expectations. This was what made motivation factor had not been able to influence the farmers' participation in the SMD program.

The role of SMD did not affect the farmers' participation (P>0.05). According to them, SMD role in the program was important (high). SMD was essential in getting this program because without it, SMD group would not get this program. But in the implementation, many SMD programs were only a tool to access the program either for SMD or groups interest. This was why the role of SMD did not affect the participation of farmers, since SMD have interests that were not in line with the interests of the group. Less strong correlation between the group and SMD can scrape togetherness and reduced the members' participation in the group. The role of agencies did not affect farmers' participation (P>0.05). The role of agencies in the group according to the farmers was still low. This was why the role of the agencies did not affect farmers' participation in

the SMD program. Agencies should be able to motivate farmers to improve, providing information, and livestock extension. But the fact was that the role of agencies in the group was less than optimal, and rarely provided services and guidance towards the group. This was why the role of agencies did not affect farmers' participation, since the agencies rarely came into contact with the group. Farmers' participation in the SMD program can occur because of the opportunity to participate, the willingness of farmers, and their ability to participate. The results showed that the factors used as variables had not been able to influence farmers' participation in the SMD program, because their participation can be classified into pseudo participation. It means that their participation positioned as the only party who gives approval to get SMD program. Such pseudo participation in government programs is very harmful because the results of this study indicate that the SMD program of a group cannot run properly and tend to fail.

# **Conclusions**

The level of farmers' participation in planning, evaluation, and sharing benefits stages were low, while at the stage of implementation of the program was at a moderate level. The low of farmers' participation was due to most of the groups were established at the time of proposing of the program. The number of cattle from SMD program decreased because of death and pregnant females Brahman Cross (BX) that are required by the government failed to be maintained. The failure of pregnant females Brahman Cross (BX) to be maintained makes some groups suffered losses due to cattle infertility and death. The low participation of farmers can also caused by the decrease in the number of members due a conflict in their relationship with the SMD groups and creates more conflict in the SMD management rights.

Regression analysis result showed that the factors used as variables in this study had no effect on farmers' participation in the SMD program. While the results of simple regression analysis stated that the participation of farmers had noinfluence on the success of the SMD program. It indicated that the farmers' participation in the program was manipulative or they just want to get the program budget. This is proved by the large number of groups who are less successful in managing the SMD program.

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