

Exit Strategy of People's Farm Center for Beef Cattle Program (A Case of Rural Social-Economic Institutional Development)

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Abstract

The study aims to 1) analyze the socio-economic performance of beef cattle breeders, and 2) formulate an exit strategy for institutional strengthening of beef cattle breeders. Data collection techniques using the method of observation, interviews and indepth study. While the data analysis is descriptive and verification analysis using partial least square. The location of the study is the Subang district, selected with consideration of representing SPR Beef Cattle in West Java Province, while the sampling technique is Purposive Sampling. The unit of research analysis was individual beef cattle breeders at the Cinagarabogo SPR. Determination of respondents in this study using the census method. The sample of this research is Poktan Sarimulya Mandiri and Poktan Bina Insani. The study was conducted for 8 months, starting from May to December 2019. The results showed the performance of beef cattle breeders as follows: 1) The level of socio-economic performance of the average breeder in the sufficient category. Characteristics of respondents include age, education, knowledge, number of livestock ownership, experiences, income, trust, needs, satisfaction, self-adjustment, cosmopolitanism, participation, entrepreneurship, gender equality and welfare. 2) The Exit Strategy Program, including the designation of facilitators, training of facilitators and an action plan workshop.

Keywords: adoption, innovation, diffusion, socio- economic performance

1. Introduction

During the 2015-2019 period, the Ministry of Agriculture has set priority policies for agricultural development with the main goal of achieving strong, sustainable, and environmentally friendly food independence. Until now not all strategic commodities have been able to meet the needs of the community, even to the point of having to import. The strategic commodity is beef, because most of it is managed by community farms on a household scale.

According to [1], the weak of farmer institutional structure is caused by the inequality in the mastery of science and technology, land, capital and market access between actors. [2], identified that the determinant factors that influence the development of farmer institutions are the characteristics of farmers, the nature of innovation, supporting factors and government policies.

Performance of beef cattle farms according to [3], is the population of beef cattle and buffaloes totaling 16.7 million. The beef cattle were raised mostly by farmers household (98%) as a part-time business with an average number of beef cattle is 1-2. The method of raising livestock is 11.44% released; 22.60% are kept in cages and released, and 65.96% are kept in cages. Most of the formal education of farmers is elementary school and does not graduate from elementary school which is 78%. While most of the age is 51.23% above 50 years.

As a result of these conditions, the supply of meat sourced from beef cattle is experiencing shortages. Based on the results of the supply-demand analysis, the supply of beef to national needs in 2018 reached only 60.9%, the rest was imported.

Special efforts have been made by the Directorate General of Livestock and Animal Health through the program of Community Livestock Center (SPR) for beef cattle. This program was carried out for 3 (years), starting in 2013 and ending in 2016. One of the developing SPR is in West Java Province, namely the SPR Cinagarabogo which is located in the Subang district. Subang district is a district in West Java which has a very strategic location. Beside of being a buffer zone for the national capital city which is the center of food consumption, this district is a center of beef cattle production.

Cipunagara sub-district and Cibogo sub-district are located at the easternmost of Subang District, which is adjacent directly with Indramayu District. The population in both sub-districts is 93 thousand people with an area of 154.44 Km² with the majority of the residents' livelihoods being farmers and breeders. In addition, Cipunagara and Cibogo are adjacent to the sugar cane plantation area of PT. RNI Sugar Factory which covers an area of 5,669 hectares, where the factory waste is used as a source of animal feed. This has become an incentive for people in the area to raise cow, especially beef cattle.

The SPR Cinagarabogo was formed to become an integrated business center for beef cattle farms in Cipunagara and Cibogo. This SPR consists of 20 farmers groups with an average ownership of 2-3 beef cattle. The problem SPR Cinagarabogo facing is the continuity of supervision, especially the development of the farmer groups dynamics. So that research in the framework of exit strategy for the development of farmer economic institution is interesting.

From the problems identified in the background, the research questions are 1) How is the social economic performance of beef cattle farmers? 2) What is the exit strategy in developing the economic institutions of farmers? This study aims to 1) to assess the socio-economic performance of beef cattle farmers, 2) to draw up an exit strategy planning to strengthen the economic institutions of beef cattle farmers.

2. Method

Cipunagara sub-district was chosen as the location of the study because it is the location of the SPR Cinagarabogo, which is an SPR that performs well in Subang District. The study was conducted for 8 (eight) months starting from May - December 2019.

Samples were obtained using the purposive sampling technique with unit of analysis of individual farmers. Determination of respondents using the census method. The sample of this research is Sari Mulya Mandiri farmers group located in Tanjung Cibogo village and Bina Insani farmers group located in Wanasari village. Sari Mulya Mandiri is a beginner group which consists of 12 people, while Bina Insani is an advanced group which has 18 members. Total of respondents in this study amounted to 30 beef cattle farmers. The sampling technique uses census refers to [4].

Interviews with respondents were conducted to obtain primary data, while secondary data were obtained from literature studies, books and reports from the Livestock Agency of Subang District. Statistical analysis uses Partial Least Square (PLS) referring to [5].

3. Result and Discussion

3.1. General condition of agriculture in Subang District

The main support of the economy of the Subang district is agriculture. Subang district is the third largest paddy field area in West Java after Indramayu district and Karawang

district and as the third largest contributor to rice production in West Java Province. The area of paddy fields in Subang in 2016 was 84,503 hectares. Some of the main production increased, maize increased from 513.53 tons in 2015 to be 528.76 tons in 2016. Cassava increased from 11,263.91 tons in 2015 to be 11,729.74 tons in 2016.

The most widely produced vegetable is chili, which in 2016 reached 2,882 tons. The fruits produced such as banana reached 2,279,779 tons in 2016, followed by pineapple of 95,266.34 tons, and mango at 2,279,799 tons [6]. Commodity of smallholder plantations is quite good including rubber, coconut, oil palm, coffee, and pepper. In addition, there is also large plantation owned by PT Perkebunan Nusantara VIII which consists of Jalupang, Tambaksari, Wangunreja and Ciater estates, and a sugar factory located in Purwadadi sub-district [6].

Livestock population in 2016 consisted of 1,086 dairy cows, 33,232 beef cattle, 2,940 buffaloes, 303 horses, 27,445 goats and 254,891 sheep. While for poultry in 2016 there were 1,319,001 native chickens, 61,900 layer chickens, 47,756,220 broilers and 542,203 ducks [6].

3.2. Beef Cattle Development Program in Subang District

Livestock sector are demanded to continue to grow and increase its productivity following the dynamics of a society that continues to grow. Year 2016 is the first year of the SPR program. The basic principle of the SPR program is to promote management unity, organizational unity and empowerment unity.

The policy related to beef cattle development in Subang is implemented in 6 (six) subdistricts namely Kasaliang, Cinagara, Cibogo, Sagalapanjang, Peundeuy and Cupukada. However, according to the potential of natural resources, institutional and supporting infrastructure, the subdistricts which are ready to develop SPR are Kasaliang, Cinagarabogo and Sagalapanjang. In 2016, there were 2 (two) SPR pioneer have been developed, namely 1). SPR Kasaliang that covers Kasomalang, Cisalak and Tanjungsiang, and 2) SPR Cinagarabogo that covers Cipunagara and Cibogo. Among the SPRs, SPR Cinagarabogo is the best SPR.

Cipunagara and Cibogo are the easternmost sub-districts of Subang districts which are directly bordered by Indramayu districts. The number of residents in both subdistricts is 93 thousand people with an area of 154.44 Km² with the majority of the population's livelihood is farmer and breeder. In addition, Cipunagara and Cibogo are adjacent to the sugar cane plantation area of PT. Pabrik Gula RNI which covers an area of 5,669 hectares. So that people in this area have the potential to rise livestock, especially ruminants.

SPR Cinagarabogo is an SPR that has been growing as an integrated beef cattle business center, located in Cipunagara sub-district and Cibogo sub-district. SPR Cinagarabogo consists of 20 livestock farmer groups with the livestock ownership in household scale. The problem SPR Cinagarabogo is facing is the farmers' institutional economy has not yet developed. For that reason, an exit strategy program is needed.

3.3. Socio-Economic Characteristics of Farmers

3.3.1. Age of Respondents

In average, respondents are in the productive age (41-50 years), which is as much as 53.33%. This fact illustrates that the opportunity for farmers to conduct business is very good, because it can provide opportunities to work better and will facilitate the learning

process of strengthening group capacity.

3.3.2. Formal Education Level

The average respondent's education level is elementary school (SD) as much as 36.67%, some 26.67% of respondents did not finish elementary school and 13.33% did not go to school. This fact illustrates the lack of integration of the mentoring program of the Ministry of National Education, particularly those related to Package A, B and C.

Pringgospaputro (1986) in [2], said that the level of formal education influences how to respond and act in making decisions for his/her progress.

3.3.3. Knowledge of Group Purpose and Benefit

Most respondents, which is as much as 66.67%, have a sufficient level of knowledge about the purpose and benefit of forming a group, meaning that in average the group feels it is not optimal in understanding the goals and benefits of the group.

The knowledge of the benefits of something will cause someone to be positive about it (Ancok, 1997 in [2]). In this connection, socialization about the aims and benefits of the group must be carried out earlier, along with coaching the prospective group members.

3.3.4. Level of Livestock Ownership

Most of the farmers (90%) have an average number of 10-15 cows. This fact illustrates that their efforts have led to economic scale. The research results of Dwijayanti A, et al (2016) in [2], illustrate that the break even point level of beef cattle breeding business is 1.9 Animal Unit (AU) which is equivalent to 1 cow or 7 calves or 1 cow and 3 calves.

3.3.5. Duration of being a Farmer

Most respondents (80%) have been farmer over 27 years. This fact shows that the level of experience in livestock is very good, generally this business is carried out from generation to generation. Thoughts and feelings are not the cause of behavior. Instead, behavior is caused by past behavior [7]. Someone who works in a particular field for a relatively long time will gain more and more experience. [8] argues that experience is the result of the accumulation of a person's natural processes which further influences the response he receives in order to decide on something he receives.

3.3.6. Level of Respondents' Income

The average level of income of respondents, which is as much as 60% in the medium category. But there are still group members with low incomes and very low. This income level is a stimulus to the respondent's business activities, so that it will affect their adoption in institutional development program.

Institutional development begins with pre-cooperative guidance. According to Herman Soewardi (1972) in [2], in its implementation it is necessary to pay attention to the following matters: (1) institutional development is carried out participatory and based on the interests of farmers; (2) implementing coaching together/integrated; (3) coaches to stimulate democratic election of group chairman; and (4) not related to official vested interests.

This institutional development effort needs to be arranged systemically and sustainably while building the paradigm of smallholder farmers to think far ahead. The mentality of small-scale entrepreneurs is still oriented to meeting their daily needs, not prioritizing business needs.

3.3.7. Level of Confidence in Groups

Most respondents, which is as much as 60% put enough trust in the group, meaning that on average group members quite believe that the group can solve the business problems of members. But there are still respondents who put a low level of trust in groups in the category.

3.3.8. Level of Respondent Needs for Groups

As many as 40% rated it sufficient, meaning that on average group members thought that the group was sufficient to help the business needs of members. But there are still respondents who rate the group as insufficient to help members. This performance will be a good stimulus that is the growth of motivation and influence on group capacity building programs.

3.3.9. Level of Satisfaction to the Group

A total of 66.67% have a sufficient level of satisfaction with group services, meaning that group members rate quite satisfied with group services related to business development. But there are still respondents who have less satisfaction. In general, the groups in the study sample can provide adequate services to their members.

3.3.10. Level of Adjustment to the Social and Physical Conditions of the Group

As many as 83.33% have a fairly easy level of adjustment to the group environment, meaning that most group members are quite able to adjust themselves to the physical and social environment of the group. But there are still respondents who have a difficult category in adjusting themselves. This condition is a stimulus that affects the implementation of group capacity building programs.

3.3.11. The Level of Cosmopolitan

As many as 50% have a sufficient level of cosmopolitanism, meaning that on average group members are actively looking for information related to business development. But quite a number are passive in searching for information. This condition affects the group's capacity building program and efforts to raise awareness of the importance of information that can increase the group's independence to be free from dependence on companions.

3.3.12. Level of Participation in Group Activities

As many as 50% of group members have a low level of participation and 50% in the sufficient and high categories, meaning that some members cannot plan, implement, evaluate and utilize the results of group activities properly.

Adjid (1985) in [2] states that the participation of farmers in implementing group programs is influenced by farmers' wise perceptions of the values of various aspects of group life, such as the benefits of group work plans, group recognition of member work, the truth (consistency) of norms that measure, the benefits of information received, and the support and recognition of fellow group members.

3.3.13. The Nature of Entrepreneurship

The fact shows that the average respondent has the nature of entrepreneurship in the category of poor, meaning that (1) there is insufficient effort in calculating the advantages and disadvantages of business and anticipate the business failure through intensive

guidance from agricultural instructors; (2) there is insufficient effort to utilize the time with actions related to business development with intensive guidance from agricultural instructors; (3) lack of confidence in developing business with intensive guidance from agricultural instructors; and (4) there has been no attempt to find new ways to develop businesses with intensive guidance from agricultural instructors.

These characteristics if developed can act as a stimulus in making adoption decisions. These characteristics according to [9] can accelerate the process of innovation diffusion. Whereas Pekerti (2001) in [2] views entrepreneurship as a response to business opportunities that are revealed in a set of actions and produces results in the form of an institutionalized, productive and innovative business organization. This fact is reinforced by Mc Cleland (1987) in [2] that entrepreneurship can act as a source of mobilization to obtain high needs, namely the need for achievement.

3.3.14. Gender Equality

The results of the analysis of the gender equality of the average respondents in the category are sufficient. This gender learning can be used as a stimulation for the district government in implementing Law Number 7 of 1984 concerning Ratification of the Convention on the Elimination of All Forms of Discrimination against Women. At the macro scale, it is hoped that the district government can form a host agency as a leading sector in empowering women in the context of poverty alleviation. During this time, according to Ani Hendriani (2004) in [2] women have not contributed significantly to economic growth and national productivity.

3.3.15. Welfare of Respondents

In average, respondent has a moderate level of welfare. This fact provides information that as many as 41% - 60% of group members are able to increase group member awareness to consider building their own house, repairing the roof of the house to make it more robust, plastering house floor, meeting the needs of radio / television / home furnishings / bicycle / jewelery / goat / sheep / other valuable objects, awareness to check health at Puskesmas / Health Posts, awareness of checking pregnant women to Posyandu (integrated health service units), increasing opportunities to obtain non-formal education through Package A and Package B, increasing opportunity for children / family members to continue formal education to junior high school, senior high school and university, participation in public recitation, recitation at houses, frequency of recitation, awareness of saving, awareness of paying charity (*zakat*, *infaq* and *sodaqoh*), awareness to pay PBB (tax on land and buildings); and awareness to pay / spend social funds.

3.4. Diffusion Scheme of Farmers' Economic Institutional Development

The adoption decision covers three sides, namely the ability of cognition, affection and psychomotor. The results of the descriptive analysis of the level of adoption of group capacity building programs are still in the poor until fair, or in other word at the level of stimulation. The results of different indicators on the level of adoption test showed that the program of Strengthening of Associated Group Capacity and program of Farmers Institution Pre- Development did not differ in the types of advanced or beginner groups. The facts show that the two class groups have not received intensive guidance on this aspect.

From the results of the PLS analysis of the two groups obtained information on the diffusion scheme of farmers' economic institutional development innovation, which is a causal relationship between the factors that influence the adoption of institutional economic development of farmers, as shown in Figure 1. The results of the analysis illustrate that overall four exogenous variables able to influence the adoption rate of

79.9% ($R^2 = 0.799$), where government policy is the most influential variable on the adoption rate ($R^2 = 0.298$), followed by farmer characteristics ($R^2 = 0.198$), and the smallest one influencing the adoption rate is the supporting factor ($R^2 = 0.115$).

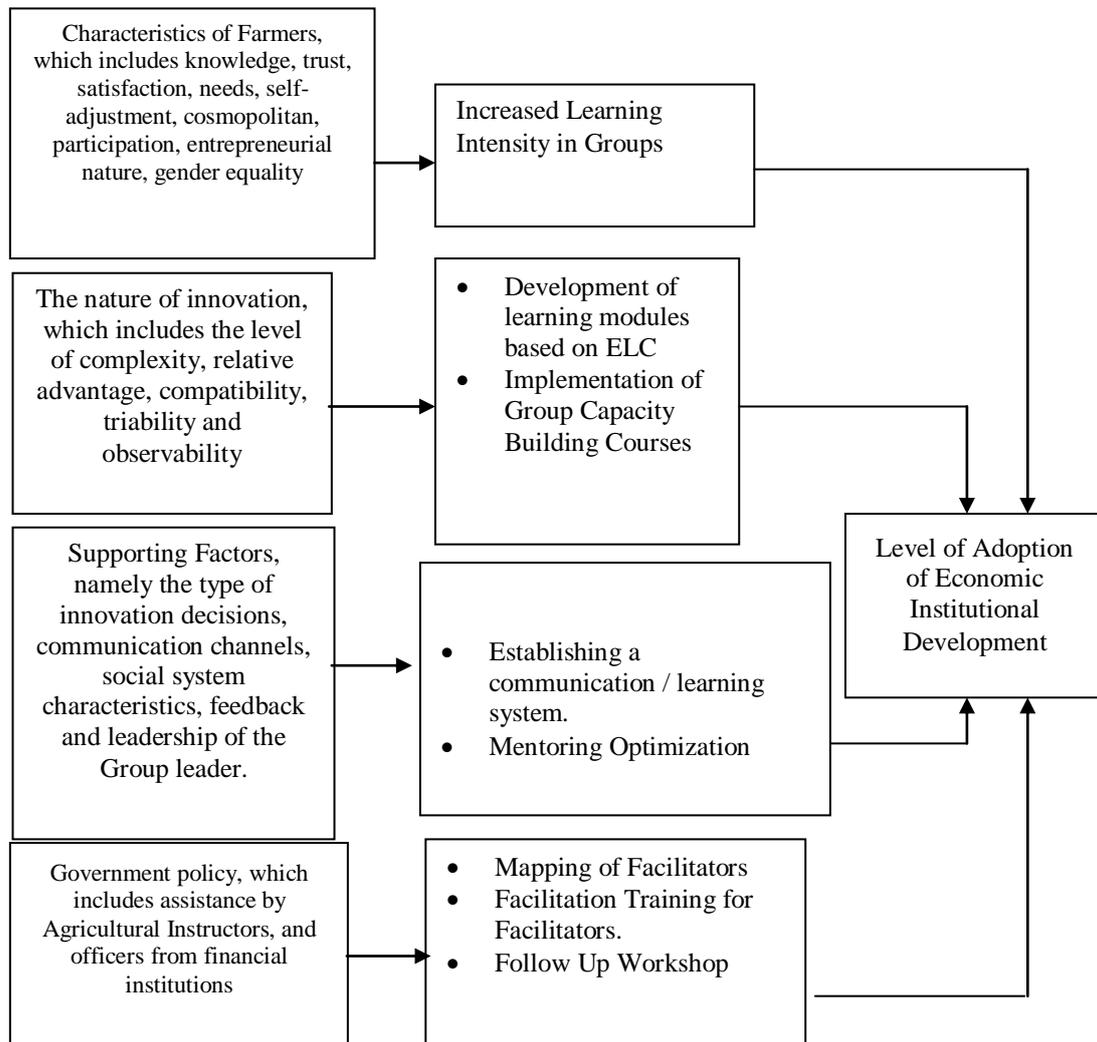


Figure 1. Diffusion Scheme of Farmer Economic Institutional Development Innovation

3.5. Exit Strategy Program

The Exit Strategy Program is a termination program, which is a transition period between the SPR program and the development of farmer economic institutions by providing treatment based on 1) the strongest contribution in influencing the level of farmer adoption in the development of farmer economic institutions, namely government policy variables and 2) less optimal dimensions in forming the characteristics of farmer variables.

Based on the analysis of the variables and critical dimensions, an exit strategy program is arranged as shown in Table 1.

Through observation of critical variables / levers, as well as critical dimensions on the characteristics of farmers' variables, it is necessary to refine the approaches that have been implemented so far, namely reformulating government policies through mapping and

increasing the competence of field facilitators.

Learning patterns of farmers need to be done in a participatory and problem solving-oriented. Learning for farmers must change to a new paradigm. According to Rhoades (1990) and Leuwis (2009) in [10], the new paradigm of farmer learning is the change from linear top-down to communicative interventions characterized by participatory communication through dialogue. In addition to a changing learning approach, the government must continue to strive to improve the competency of extension workers and supporting institutions. According to [11], improving the quality of counseling covers three aspects, namely the competency of instructors, approaches and supporting institutions.

Table 1. Exit Strategy Program

Critical Variables / Levers	Critical Dimensions of Farmer Characteristic Variables	<i>Exit Strategy Program</i>
Government policy	Socio-Economic Characteristics	1. Determination of the Companion Facilitator 2. Training of the Companion Facilitator 3. Follow-up Workshop

4. Conclusion and Suggestion

The average performance level of farmers is in the fair category, and 2) Partially and simultaneously between the characteristics of farmers; nature of innovation; supporting factors and government policies significantly affect the adoption of farmers in economic institutional development programs; The contribution of each farmer characteristic influence to the adoption of farmer economic institutional development is 19.8%. The level of socioeconomic performance is related to the level of reformer. This condition affects the ability to respond the lessons, so that it becomes an effective stimulus in decision making for the adoption of a group capacity building program. 3) The contribution of the influence of the innovative nature of the farmer economic institutional development program to the adoption of the farmer economic institutional development program is 18.8%. The level of performance of the nature of the innovation shows the farmer's assessment of the level of complexity, relative profitability, suitability and ease of trying. The better in assessing the nature of innovation, the easier it will be for farmers to learn learning materials so that it will have more influence on the decision on the adoption of the farmers for the farmer's economic institutional development program. The contribution of the influence of supporting factors to the adoption of a farmer economic institutional development program is 11.5%. This condition illustrates that the involvement of group leaders in decision making adoption of innovation, the involvement of group leaders and group administrators as a communication channel in learning, learning materials that are quite adaptive, the involvement of farmers in carrying out evaluations of the program, and the requirements and abilities of group leaders as group leaders is a stimulus. So, this facilitates the adoption decision process. The better this condition will be followed by better adoption rates. 4) The contribution of the influence of government policy is 29.8%. This illustrates that government policies implemented through the intensity of visits and the suitability of learning materials by agricultural instructors are quite effective in creating a learning process in groups, so a good level of learning will have a better influence on the level of decision on adopting a group capacity building program. The contribution of each influence between the characteristics of farmers, the nature of innovation, supporting factors and government policies amounted to 79.9%. These conditions reflect that these variables together as an effective stimulus affect the adoption decisions of farmers.

Based on an analysis of the lever variables, namely government policy and critical dimensions on the variable of the farmer characteristics, an exit strategy program is arranged, namely 1). Determination of the Companion Facilitators, 2). Training for Companion Facilitators and 3). Follow up plan workshop. Through the role of agricultural extension workers or companion facilitators, it is hoped that there is a synergy of coaching in building rural agribusiness systems, namely the linkages of upstream and downstream aspects. Agricultural counseling focuses on the alignment of perceptions and attitudes about vision, mission, business ethics, goals, targets, and joint work plans among agribusiness actors [12].

Causality relationship schemes built on empirical and theoretical studies of causality relationships between factors that influence the level of adoption of farmers' economic institutional development consisting of farmer characteristics, nature of innovation, supporting factors and Subang district government policies can be used as a model in empowering farmers, especially in grow economic institutions.

Need to immediately realize an exit strategy that involves stakeholders. The role of the Subang district government in facilitating the development of farmer economic institutions is crucial to the success of the development of farmer economic institutions.

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