



Evaluation of the Implementation of Government Programs in Accelerating the Development of Pregnant Beef Cattle in terms of Farmer Empowerment Stages

Tanri, G.R¹, S.T. Rohani¹, S.N. Sirajuddin¹, M. Hatta¹ and M. Darwis²

¹Faculty of Animal Science, Hasanuddin University, Makassar, Indonesia.

²Center for Research and Development of Community Dynamics, Culture and Humanities of Research and Community Service Institutions, Hasanuddin University, Makassar, Indonesia.

(Corresponding author: Tanri, G.R.)

(Received 15 September 2020, Revised 26 October 2020, Accepted 20 November 2020)

(Published by Research Trend, Website: www.researchtrend.net)

ABSTRACT: The purpose of this study was to evaluate and describe the 4 stages of farmer empowerment in accelerating the development of pregnant beef cattle that are programmed by the government, namely the special effort for fast/compulsory pregnant beef cattle to increase population, beef self-sufficiency and increase income. This research was conducted in one of the regency in South Sulawesi, Indonesia. And for the purposes of statistical analysis, data collection was carried out by conducting direct interviews using a questionnaire to 30 farmers who were determined deliberately, namely farmers who had followed and had participated in this government program. Because this research includes quantitative descriptive, for the purposes of data processing and variable measurement, the study uses a three-level Likkert scale. The results showed the stages (1) critical awareness in strengthening institutional capacity; (2) Escort/understanding/assistance; (3) Utilization; (4) Understanding/habituation of officer service. Overall, the stages are in the medium category, with each score being 1.32; 1.48; 1.46; and 1.55. This means that this program has not been completely successful, and can be successful if the empowerment stage is carried out in a totality and well.

Keywords: empowerment stages, beef cattle farmers, government programs.

I. INTRODUCTION

The Government program, namely the special effort for beef cattle to get pregnant quickly/is a government program through the Ministry of Agriculture of the Republic of Indonesia which is stipulated in the regulation of the Minister of Agriculture Number 48/Permentan/PK.210/10/2016 and the spearhead of its success is entrusted to the Department of Animal Husbandry both province and the district, which aims to accelerate population development as well as self-sufficiency in beef by improving genetic reproduction, and the expected impact is to improve the income of beef cattle farmers in South Sulawesi, Indonesia.

The success of the program for the acceleration of pregnant beef cattle can be said to be successful if this program has been cultivated among beef cattle farmers, of course, to be cultivated to show a measuring tool for the success rate of the program, and of course the success of this program is the impact of the success of four variable stages of community empowerment which are carried out in a structured manner at the level beef cattle farmers in rural areas. Empowerment is a process that is attempted to make changes, or Community empowerment means giving strength/power to groups of people who are in a state of helplessness to become empowered and independent and have strength through synergistic processes and stages.

And to get an overview of the implementation of the empowerment stages in the program initiated by the government through the accelerated pregnancy program for cows to get pregnant, which is carried out

by the government, in this case through the Department of Animal Husbandry. The Department of Animal Husbandry report provides data on its success regarding the target of artificial insemination acceptors in 2019, namely 75,000, and realization of 82,324 (109.77%). Artificial insemination target 84,000, realization 97,705 (116.32%), pregnant target 52,000, realization 55,428 (105.58%), target birth 42,000, realization 43,865 (104.44%). From the target and realization data provided by the Department of Animal Husbandry, it shows very good results. However, if we compare it to the issue that has developed among beef cattle farmers that the government program has not yet become civilized among rural cattle farmers, it is therefore necessary to conduct research for improvement and sustainability. Suprpto and Fahrianoor [1] that for farmers in the decision-making process using new ideas to adopt, they go through a mental process, namely the perceptual stages of the problem to the decision making to accept or reject the new idea or innovation. Soekartawi (1995) [2] states that if it is true that the new technology being offered provides a relatively greater advantage than the value generated by the old technology, the speed of adoption of innovation will run faster. Also related to research results [3-5], it is stated that farmers find it difficult to accept new innovations because their average education level is weak, the habit of raising cattle is carried out extensively as a result of capital and size. The land owned is very limited, the scale of the cattle business is 4 heads, using family labor, and the cattle business is only a side business, thus negatively

correlating with mastery of technology and accepting innovation and adopting technology.

Therefore, for cattle farmers to accept a new idea, new technology needs to be empowered starting from the awareness stage, escorting through mentoring, utilization and making cattle farmers adept with new innovations. This is in line with explaining that there are four stages in community empowerment that must be carried out if a project or program can be successful and sustainable, namely the critical awareness stage, the understanding stage, the utilization stage, and the habituation stage. It is further stated that understanding/escorting/mentoring activities in the development of institutional capacity strengthening based on critical awareness of the individual community, which at the implementation level in the community includes the process of socialization, training and implementation of the empowerment cycle. In its implementation, the three processes must run continuously and sustainably because what is expected from empowerment is the habituation/understanding of the community in participatory development. Meanwhile, the habituation stage is the last stage in the empowerment process, where the community is accustomed to being actively involved in development in their environment. Sumaryadi (2005) [7] states that participatory development is closely related to community empowerment, where participatory development requires efforts and steps to prepare the community to strengthen community institutional capacity so that they are able to realize progress, independence, and prosperity in an atmosphere of justice, trust, openness sustainable to enhance their dignity and to be able to escape from the trap of poverty and underdevelopment. This effort is a concrete manifestation of community empowerment. Therefore, [8] state that new innovations given to cattle farmers in order to quickly get responses and decisions must have technological characteristics including providing financial economic benefits, having suitability or technicality that is easy to implement, easy to observe and measurable or observability.

The government program, in this case the acceleration of beef cattle pregnancy, is a solution for genetic improvement, the acceleration of the increase in the population of beef cattle, the occurrence of self-sufficiency in meat and of course, it is expected to have an impact on increasing income for farmers. This program is a new innovation for beef cattle farmers at the rural level, and this is this. which is a challenge for the government as the originator of the idea and must be carried out because it has been included in government policies on the other hand, based on the results of the research, it shows that it is difficult to change the habits of farmers in developing beef cattle farming as expressed by [3], that the very factor is difficulty in changing the behavior of farmers is a habit that has been carried out for years and is considered to be safe for him. Therefore, the strategy that must be carried out so that beef cattle farmers can accept and carry out new innovations sourced from the government in the form of programs, according to [9], is that community development must touch on economic issues, technology or infrastructure. [6] added that the success of government programs is largely determined

by the community empowerment approach, and can be measured through 3 stages of the community empowerment cycle, including: (1) motivation to participate in the program, including the stage of strengthening institutional capacity based on critical awareness; (2) focus of work on program activities including the escort/understanding/mentoring stage; and (3) institutional responsibilities in program activities including the utilization and habituation stages. And all of this is also up to the totality of the implementation of the stages of empowerment of beef cattle farmers which are carried out systematically. As stated by [6] there are four stages in community empowerment that must be carried out if a project or program can be successful and sustainable, namely the critical awareness stage, the understanding stage, the utilization stage, and the habituation stage.

The four stages of empowerment are used as the basis for measuring variables of government programs which are used as research targets. In order for this research to be meaningful and can contribute to the success of future programs, then as a reference for this research is the theory expressed by [6], that if these four stages of empowerment are carried out completely and carried out systematically, then the effect will arise on this government program is carve an achievement and satisfaction for actors who are beef cattle farmers, as well as for actors who come up with ideas or policy actors in order to be empowered and independent and have strength through synergistic processes and stages.

From a combination of theories, research results and issues developing in rural communities regarding the program to accelerate pregnant beef cattle in order to increase farmer income, through increasing population and self-sufficiency in meat, this research can provide a solution as a solution for improvement while contributing to the improvement of the government program and as a solution is a research that focuses on the aspect of empowerment by using the 4 stages of empowerment variables expressed by [6]. So that the questions posed in this study in order to get answers are:

1. Is the empowerment model for beef cattle farmers run by the government, in this case the Department of Animal Husbandry is focused or not focused on strengthening critical awareness-based institutional capacity?
2. Does the government, in this case the Department of Animal Husbandry, in empowering beef cattle farmers carry out understanding/escorting starting from socialization, training and mentoring and focus on critical awareness factors on institutional actors of beef cattle farmers.
3. Does the government, in this case the Department of Animal Husbandry, in empowering beef cattle farmers based on the principles of technological character benefits provided to farmers include financial economic benefits, technical compatibility can be achieved by farmers, in a measurable and observable progress, especially providing certainty of business results. achieved in a sustainable manner.
4. Does the government, in this case the Department of Animal Husbandry, in empowering beef cattle farmers, can provide habitual satisfaction of the officers' responsibility to beef cattle farmers including the

willingness to speed up communication services for officers if the farmer needs assistance for his livestock, the availability of inseminator service officers, the availability of infrastructure in the form of straw frozen cement.

II. RESEARCH METHODS

This study evaluates and describes the success of government programs, in this case the Department of Animal Husbandry for the acceleration of pregnant beef cattle for the development of the beef cattle population through the empowerment of beef cattle farmers based on four stages, namely critical awareness or social capital to strengthen the institutional capacity of beef cattle farmers, escort/understanding program, utilization based on the character of technology, and habituation, in this case carrying out the responsibility of the program provider, this research determines the location of the research, namely in one of the regency in South Sulawesi Indonesia, with the pre-research approach method used is a survey and focused group discussion (FGD), while the aspect studied was community empowerment by determining research variables, namely strengthening the institutional capacity of beef cattle farmers, and the measured indicator was critical awareness based on the assessment criteria, namely the level of justice, openness, trust and cooperation. While the second variable is the program escort process, with the indicators used are the implementation of socialization, training, mentoring and control, for the third variable the principle of benefit based on the character of the technology developed includes providing financial economic benefits, the programs technical suitability does not burden farmers, the program has business certainty sustainable. And the fourth variable is the habituation stage in terms of the responsibility of government officials in carrying out program assistance so that farmers get used to it and become a habit of running the program, which includes communication speed, availability and service of inseminators, availability of infrastructure, availability of straw or frozen semen. The type of research used is descriptive quantitative, and for the purposes of research disclosure, and data processing and analysis, 30 respondents who come from beef cattle farmers who have participated in and participated in empowerment carried out by the Department of Animal Husbandry are determined deliberately, and data collection techniques are carried out by interviews. Directly using a questionnaire or questionnaire tool. The data that has been collected is processed using descriptive statistics, and to make it easier in terms of data analysis, a Likkert scale of 3 levels of categorization is used, namely high = score 3, medium = score 2, and low = score 1. After the data is collected and analyzed, the results are obtained. As well as research conclusions discussed in terms of theory and policy implications [10-13]. Then for further information to determine the category range, the value used moves from a score rating of 0.00 to 1.00, meaning the low category, the score rating of 1.00 to 2.00 is in the medium category, and the score rating is 2.00 to 3.00 is in the high category. This means that if the value obtained is smaller than 2.00 then empowerment is far from perfect, and if the score rating

is more than 2.00 then empowerment is close to 100% perfection.

This research is looking for solutions to the problems faced by beef cattle farmers in carrying out the government program, in order to get answers to improving government programs, a theory is needed as a research reference, namely through the stages of empowerment expressed by Wilson [6], in which are critical awareness, and guarding/understanding, utilization and habituation. So that this program is expected to increase pregnant beef cattle, increase the population and self-sufficiency in meat, and improve the income of beef cattle farmers. In connection with the empowerment stage to provide corrective answers to the government program, there are 4 problems that must be disclosed and find the answers, namely (1) Is the empowerment model for beef cattle farmers implemented by the government, in this case the Department of Animal Husbandry, is focused or not focused on strengthening critical awareness-based institutional capacity; (2) Does the government, in this case the Department of Animal Husbandry, in empowering beef cattle farmers, carry out guarding / understanding starting from socialization, training and mentoring, focusing on critical awareness factors on institutional actors of beef cattle farmers; (3) Does the government, in this case the Department of Animal Husbandry, in empowering beef cattle farmers based on the principle of technological character benefits provided to farmers include financial economic benefits, technical suitability can be achieved by farmers, in a measurable and observable progress, mainly to provide certainty for business results that are achieved by sustainable; (4) Can the government, in this case the Department of Animal Husbandry, in empowering beef cattle farmers, can provide satisfaction with the responsibility of officers to beef cattle farmers, including the willingness to speed up communication services for officers if farmers need assistance for their livestock, availability of inseminator service officers, availability of infrastructure in the form of straw or frozen cement.

The basis of the test or grand theory in this study is based on Wilson [6], who has successfully conducted research in the field of animal husbandry. As a novelty, this research is to compare this research with previous research. It is hoped that this research can contribute to policy makers and beef cattle farmers, as well as self-evaluation for the purpose of sustainability in developing a beef cattle business in a sustainable manner based on strengthening institutional capacity and critical awareness or social capital, the principles of understanding / guarding, benefits and habituation in the future. The program is more perfect in implementation.

As an operational conception for the first problem, that is, if the empowerment model for beef cattle farmers focuses on strengthening the institutional capacity based on critical awareness carried out by the government, in this case the Department of Animal Husbandry, then the farmer institutions run by internal actors of beef cattle farmers are getting stronger and accelerating the achievement of goals together, that is many farmers are interested in participating in the program, and it has an impact on the development of beef cattle, and meat self-sufficiency.

For the operational conception of the second problem, namely if the government, in this case the Department of Animal Husbandry, conducts empowerment for beef cattle farmers by means of escort, starting from socialization, training and mentoring, control that prioritizes or focuses on critical awareness factors for institutional actors of beef cattle farmers, the farmers in carrying out beef cattle development activities and accelerating the achievement of common goals, namely that many farmers are interested in participating in the program, and have an impact on the development of beef cattle, and meat self-sufficiency.

For the operational conception, the third problem is if the government, in this case the Department of Animal Husbandry, in empowering beef cattle farmers based on the principle of the benefits of the technological characteristics provided to farmers include financial economic benefits, technical suitability can be achieved by farmers, in a measurable and observable progress, mainly providing certainty of sustainable business results, beef cattle farmers have a critical awareness and become interested and interested in participating in the program, and have an impact on the development of beef cattle and beef self-sufficiency.

For operational conception, the fourth problem is if the government, in this case the Department of Animal Husbandry, is empowering beef cattle farmers. And can provide services and good examples in the form of officers responsibilities to beef cattle farmers including the willingness of service speed of communication for

officers if the farmer needs assistance for his livestock, the availability of inseminator service officers, the availability of infrastructure in the form of straw or frozen cement, then beef cattle farmers have critical awareness and became interested in running a program of activities to accelerate female cows to become pregnant, which has an impact on the development of beef cattle, and meat self-sufficiency.

III. RESULT AND DISCUSSION

A. Empowerment model for beef cattle farmers implemented by the government, in this case the Department of Animal Husbandry is focused or not focused on strengthening institutional capacity based on critical awareness

Based on the results of research with data collected on 30 respondents of beef cattle farmers who have participated and are currently participating in the empowerment carried out by the government, in this case the Department of Animal Husbandry with a method of strengthening institutional capacity that focuses on critical awareness (justice, openness, trust, and cooperation) which is carried out by beef cattle farmers in the internal scope of the institution with the hope that the institution of beef cattle farmers will be stronger and beef cattle farmers will increase their interest in the government program and have an impact on the development of beef cattle, and meat self-sufficiency can be seen in Table 1.

Table 1: The empowerment model for beef cattle farmers implemented by the government, in this case the Department of Animal Husbandry, is focused or not focused on strengthening critical awareness-based institutional capacity.

Aspect	Variables and Indicators	Value Response			Rating Score	Category
		1	2	3		
The empowerment model run by the government or the Department of Animal Husbandry	Strengthening institutional capacity based on critical awareness:				1,32	Medium
	a. justice	22	4	4		
	b. openness	25	3	2		
	c. trust	24	4	2		
	d. cooperation	20	6	4		
	e. honesty	24	4	2		

From Table 1 It appears that the empowerment model applied by the government, in this case the Department of Animal Husbandry for beef cattle farmers, has not led to strengthening institutional capacity based on critical awareness for internal actors of beef cattle farmer institutions (justice, openness, trust, cooperation, honesty). This is indicated by the score rating score of 1.32 or medium category, meaning that from the description above, it can be evaluated that scientifically empowerment is still far from perfect. So that this empowerment model will not be able to solve the problem of developing beef cattle population and self-sufficiency in meat, because empowerment has not been rooted in critical human values and this has an impact on the unsustainability of the program to accelerate pregnant beef cattle. In other words, this empowerment factor has not been strong or has not been touched, so that it has not resulted in a strengthening of institutional capacity based on critical awareness for cattle farmers as actors who are internal to the institution or the main actors of the program as

the spearhead of the success of the program. This is in line with Sumaryadi [7], which states that participatory development is closely related to community empowerment, where participatory development requires efforts and steps to prepare people to strengthen community institutions so that they are able to realize progress, independence and prosperity in an atmosphere of justice, trust, openness, honesty, sustainable cooperation to enhance one's dignity and be able to escape from the trap of poverty and underdevelopment. This effort is a concrete manifestation of community empowerment.[14] also states that if the problem of social capital is weak then the expected sustainability of empowerment cannot be achieved because the problem of powerlessness is a complete circle, namely a system that is interconnected with one another and can have an impact on the occurrence of other social problems. Community participation in the formulation of the program makes the community not only as a consumer of the program, but also as a producer because they have been involved in the process of making and formulating it, so

that the community feels that they share the program and are responsible for its success and have more motivation for participation at the -the next stage [15]. Empowering other people is essentially a cultural change, so empowerment will not work if there is no fundamental change in the entire organizational culture. Cultural change is needed to be able to support attitudes and practices for more effective empowerment [7]. Similarly, stated by Fujikake (2008) [16], that if following a program run by the government is achieved or not, it is necessary to evaluate the stages of the empowerment cycle which can be used as a form of analysis tool that can be used to measure the degree of empowerment of a community. The analytical approach used by Fujikake (2008) [16] in evaluating empowerment is by using a qualitative and quantitative approach, which is trying to understand the relationship between community responses and the goal of empowerment itself to be translated into pictures and certain concept schemes in empowerment.

B. An overview of the empowerment of the understanding/guarding stage carried out by the government, in this case the Department of Animal Husbandry to beef cattle farmers, starting from socialization, training and assistance

Based on the results of research with data collected on 30 respondents of beef cattle farmers who have participated and are currently participating in the empowerment carried out by the government, in this case the Department of Animal Husbandry with the method of escorting / understanding the acceleration program for pregnant beef cattle with the hope that farmers can understand in depth the program so that Many beef cattle farmers follow the target and the realization in the future prospective beef cattle population growing rapidly and meat self-sufficiency occurs. The understanding / escort stage of the program is carried out including socialization, training, mentoring and control activities, for more details on the research results can be seen in Table 2.

Table 2: Overview of the empowerment of the understanding/escort stage carried out by the government, in this case the Department of Animal Husbandry for beef cattle farmers, starting from the socialization, training, assistance and control.

Aspect	Variables and Indicators	Value Response			Rating Score	Category
		1	2	3		
Government-run empowerment model	The implementation / escort process				1,48	Medium
	a. socialization	7	8	15		
	b. training	26	0	4		
	c. accompaniment	26	2	2		
	d. control	26	2	2		

From Table 2 it appears that the empowerment of the phase of escorting/understanding the program of accelerating pregnant beef cattle farmers implemented by the government, in this case the Department of Animal Husbandry for beef cattle farmers, has not led to the correct empowerment stage, meaning that it still needs to get improvements in terms of empowerment methods, because of this. Indicated by the results of the study are still far from perfect, namely obtaining a score of 1.48 or medium category. This is indicated by several facts in the research location that the program was limited to socialization carried out at the village office, where the content of the discussion in the socialization was introducing the program with all its supporting devices then giving an idea to the farmer that the future prospective if he joined the program, the beef cattle owned by the farmer growing rapidly because of the existence of an inseminator and its facilities can help productive female cattle if estrus, then it can report to extension officers and local veterinarians for immediate insemination. And it was also explained that the impact that would arise if following the program the beef cattle population could develop and have an effect on improving the income of beef cattle farmers, but it is only unfortunate that beef cattle farmers are not accompanied by training, mentoring and control and other support, which can be fully entrusted to farmers. So that the effect on these program activities cannot be maintained as expected or is not sustainable because it creates full dependence on farmers on government officials who are at the research location or in the field. Thus it can be stated that the need for an acceleration program for pregnant beef cattle must be properly guarded starting from the critical awareness stage so

that the institutional capacity of the farmers becomes strong, through the process of socialization, training, mentoring and control stages must be strictly guarded, thus the empowerment model carried out by the agency livestock must be totality and comprehensive. This is in line with [6], explaining that there are four stages in community empowerment that must be carried out if a project or program can be successful and sustainable, namely the critical awareness stage, the understanding / escort stage, the utilization stage, and the habituation stage. So thus if a government project or program in this case is not strengthened by the stage of escort, then the hope of the government and farmers in increasing the population, beef self-sufficiency and beef cattle farmer income is difficult to materialize or in other statements the program is right on target but cannot continue or not. successful as a result of the empowerment model method that is not in accordance with the science of empowerment, such as one of the missed escort cycles, namely livestock reproduction training, making cheap and nutritious feed, so that with this condition it can be said that this program has not touched or provided critical awareness for beef cattle farmers as a basis strengthening institutional capacity, thus the empowerment effect has not been able to provide meaningful results because it does not achieve the expected common goals. Another effect due to the weakness in escorting the empowerment of beef cattle farmers is that program followers return to their beef cattle business as a side business, and return to focus on farming in the fields of food and horticulture. This is what is always emphasized in the science of empowerment in order to always maintain oversight in the process of mentoring the community and in

implementing empowerment socialization, training, monitoring, evaluation and control must be the main instruments as a priority for facilitators or field officers. This is always emphasized in the science of empowerment because the average farmers have low education, then the culture of farmers is always looking for things that are technically easy to do and profitable for them, so that the farmers statement appears that they are more likely to breed their cows naturally. Because he considers that joining the program is quite time consuming to wait for the results of artificial insinuation cattle, which is quite long, namely 9 months and 10 days, and the maintenance requires a large amount of feed capital.

The hope of farmers is that understanding/guarding can run, so through this research beef cattle farmers are provided through training on artificial insinuation, recognizing the signs of female cows who want to mate then straws are stored/focused on institutional groups of cattle farmers participating in the program. And also this research hopes that participants in the program of accelerating pregnant beef cattle farmers can entrust their productive female cattle to farmer group institutions to be accommodated in productive cattle breeding shadows that are ready to be artificially inseminated by inseminators from farmers so that they can be well coordinated, and depend on inseminators from representatives government can be minimized [17], cycles in the community empowerment process can be interpreted in language as a process, way, action to empower, namely the ability to do something or the ability to act in the form of reason, effort or effort. Foy [18] states that community empowerment is often interpreted as an effort to give power so that their voices are heard in order to contribute to planning and decisions that affect the community. Sumaryadi [7] argues that community empowerment always involves community participation in both planning and

implementation. In implementing community empowerment programs, training activities are an integral element of physical development efforts. In connection with the not optimal program run by the government in this case the Department of Animal Husbandry in empowering beef cattle farmers, the contribution given by this study is in implementing programs in the science of empowerment in terms of escort carried out by the government or the Department of Animal Husbandry to beef cattle farmers as followers, the program should be adjusted to the theory of empowerment through the empowerment cycle because by fully involving beef cattle farmers in each project escort cycle the main project or program, namely training and mentoring, has an effect on success, because this empowerment is educational, of course the dependence on officers is minimized so that the effect is that farmers can be independent in implementing the program.

C. Stages of empowerment in terms of benefits received by farmers from the acceleration program for beef cattle to pregnant which is carried out by the government through the Department of Animal Husbandry to beef cattle farmers

The third stage of empowerment of farmers is the benefits received by beef cattle farmers in carrying out the program of accelerating beef cattle breeding to become pregnant in order to increase the beef cattle population and self-sufficiency in danging and increase the income of farmers. In this study, the variable benefits received by beef cattle farmers by using measurement indicators include financial economic benefits, technical suitability can be reached by farmers, providing definite, sustainable results. From the results of research on 30 respondents the data collected and after being analyzed are as shown in Table 3.

Table 3: An overview of the empowerment stage of benefits received by beef cattle farmers in the program for the acceleration of mother cattle to become pregnant by the government, in this case the Department of Animal Husbandry, starting from financial benefits, technical suitability, business certainty and sustainability.

Aspect	Variables and Indicators	Value Response			Rating Score	Category
		1	2	3		
Government-run empowerment model	Benefits obtained by farmers:				1,46	Medium
	a. financial gain	22	4	4		
	b. technical suitability	24	2	4		
	c. business certainty	12	13	5		
	d. continuity	24	2	4		

From Table 3 it can be seen that the rating score shows a value of 1.46 in the medium category, which means that the empowerment carried out by the Government through the Department of Animal Husbandry has not reached the totality of the benefits received by farmers from the acceleration program for pregnant broodstock. It can be seen that both financially and technically suitability and sustainability are still dominated by pessimistic farmers, but farmers are still optimistic in terms of business certainty. This means that basically if this program is preceded by training on how to do artificial insinuation, recognizing and knowing reproductive diseases, and being able to accommodate semen using an artificial vagina and be able to increase

semen for use in estrous or lusting broodstock cattle, and reduce dependence on sufficient enzymes. It takes time to wait as well as waiting for straws, nutritious animal feed is also available, helps in obtaining business capital, intercropping activities while waiting for the birth of a calf which is 9 months 10 days. Soekartawi (1995) [2] states that if it is true that the new technology being offered provides a relatively greater advantage than the value generated by the old technology, the speed of adoption of innovation will run faster.

With the ownership of technology knowledge obtained from the training, the farmers will feel confident or receive the benefits of the program so that the program becomes useful for them. Because farmers have the

intention of reducing their dependence on the officers in order to anticipate if the beef cattle are immediately given artificial insimination treatment. Wilson [6] that if in the implementation of empowerment to the community and it provides benefits to it, then the community will run it according to the knowledge they get from training. Rogers [19] which adds that a process of disseminating the uptake of new ideas or things in an effort to change a society that occurs continuously from one place to another, from one field to another to a group of members of the system social must provide benefits to the recipient. The contribution of this research is that if this program can be maximally successful, the principle of benefit in the science of empowerment, which is to provide financial benefits to beef cattle farmers, must match expectations and reality concrete evidence of the results of the pilot project activities carried out by the government, and the success of the project is technically affordable and not burdensome for beef cattle farmers both in financial and operational aspects, thereby having an impact on providing business certainty and sustainability of program activities.

D. An overview of the empowerment of the habituation stage of government officials through the Department of Animal Husbandry in carrying out responsibility for the acceleration program activities for beef cattle broodstock to pregnant

The fourth stage of empowerment of farmers is to familiarize the responsibilities of officers in carrying out the program of accelerating beef cattle breeding to become pregnant in providing assistance to beef cattle farmers in order to increase beef cattle population and self-sufficiency in danging as well as increase farmers income. In this study, the variable is the habituation of the officers responsibilities in carrying out their activities, and as an indicator used includes the timeliness of officers in providing services to farmers as participants in government programs, the ratio of inseminator officers to program followers of beef cattle, availability of straw or frozen semen. From the results of the study of 30 respondents the data collected and after being analyzed are as shown in Table 4.

Table 4: An overview of the empowerment phase of the habituation of government officials, in this case the Department of Animal Husbandry carries out the responsibility of assisting beef cattle farmers in the program of accelerating beef cattle breeding to become pregnant.

Aspect	Variables and Indicators	Value Response			Rating Score	Category
		1	2	3		
Government-run empowerment model	Habits of government officials in carrying out responsibilities:				1,55	Medium
	a. Timeliness of providing services.	21	5	4		
	b. Ratio of inseminator officers to cattle program participants being served.	24	2	4		
	c. availability of straw or cement.	16	4	10		

Table 4 shows that the habituation of officers in carrying out their responsibilities is still not optimal, this is shown by the score score of 1.55 and is in the medium category. This means that on average, government officials in providing excellent service to participants in the acceleration program for beef cattle to become pregnant still need to be improved for the success of the program, especially in the indicator of the timeliness of officers providing insemination services to cattle that require immediate injection or artificial insimination, because of the service sometimes it is on time and sometimes the cycle time of the cows in heat is passed, this happens due to slow communication factors, the distance between the inseminators residence and the location of the farm relatively takes a long time, the ratio of inseminator officers to program participants being served, this is also due to the busyness of the farmers in seeking a life in food crop and horticultural farming, it is quite time consuming or the farmers have not completely focused on the activities of this program because cattle raising is only an odd job.

Therefore, for the success of the programs activities, the highest priority is to strengthen the institutional capacity that specifically manages acceptors or program followers and accommodates them in a certain room which is commonly known as sorum livestock, and it is hoped that with this model the government at the beginning of the program up to 3 times the calving period for beef cattle, the job of the government or the

Department of Animal Husbandry is to supply reinforcing food to farmers whose cows are involved in the program, or in other words they still have to be the responsibility of the government or budget, as well as the monitoring and evaluation and control factors must be very strict, and as a consequence the inseminator, straw or frozen cement officers should be in the location where the beef cattle farmer institution is located, this means that the officers are always on guard. With this condition after 3 times of calving and continuous sedation carried out by officers to farmers participating in the program, it has the effect of becoming a habit for the farmers so that farmers become skilled and adept at handling broodstock for artificial insimination, and within a certain period of time farmers can handle their own livestock without depending on the inseminator or animal health officers and livestock extension workers. And the next effect after the farmer can carry out these activities, the cattle business originally as a side business turned into a main business.

About the ratio of inseminator officers to the cattle they handle in the program is not yet comparable, and this is one of the reasons that inseminator officers find it difficult to reach the whole cow that will be mated by artificial insimination, and the consequences are livestock naturally mated cows whose effect is inbreeding crosses and have not yet produced superior cattle, they can also skip the daring cycle so that pregnancy does not occur. And as a solution to the

solution so that farmers reduce their dependence on inseminators and reduce failure of breeding due to passing cycles of heat or inbreeding crosses, it is better if a cadre of beef cattle farmers is ready to be trained in learning by doing until the farmers are skilled, proficient and the farmers become representatives of the government in this case the Department of Animal Husbandry and as partners of field officers such as extension workers and animal health workers or veterinarians at the program participant location level.

Also in Table 4, it shows that the availability of straw or cement according to the program participating farmers is in the satisfactory category, but many have not been used because the ratio of the inseminator staff to the program participants cattle is not yet comparable. The farmers opinion is added that although straw or frozen cement is always available and widely available, the inseminators limited service to acceptors means that many cows fail to do artificial insemination, and consequently a lot of straw or frozen cement has not been used optimally. In order to distribute the responsibility of officers to beef cattle farmers who follow the program, it is better to strengthen the capacity as stated by [20], which states that there are five main elements in capacity building as follows: (a) Building knowledge, including increasing skills, accommodating research and development, and learning assistance; (b) Leadership; (c) Building networks, including efforts to form cooperation and alliances; (d) Respect the community and invite the community to jointly achieve goals; (e) Information support, including the capacity to collect, access and manage useful information.

Thus, as a contribution of this research, so that government programs, in this case the acceleration of beef cattle to become pregnant, require careful planning starting from upstream to downstream levels based on the stages and cycle of empowerment. If this empowerment is well packaged according to the theory of [6, 19], then many enthusiasts who are interested in the accelerated program for pregnant beef cattle brooders from the government are willing to sincerely participate in the program, and the effect is at the rural level. There is an accelerated increase in the beef cattle population, and the farmers become prosperous and accelerate the occurrence of meat self-sufficiency. Thus food sourced from beef cattle farms is strong at the rural level. Hafsah [21] states that the progress of a country if the development of food in rural areas is strengthened, and vice versa if the food in rural areas is weak, the country will be fragile. Then it was further stated that 60% to 70% of the Indonesian population lives in rural areas with their livelihoods working in the agricultural sector including the livestock sub-sector.

IV. CONCLUSION

The results showed that the implementation of the program to accelerate pregnant beef cattle that is run by the government through the livestock service is based on the empowerment stages of beef cattle farmers including critical awareness stages in strengthening institutional capacity, escorting/understanding/mentoring programs, benefiting programs received by beef cattle farmers, up to the cognition stage/habituation of services and responsibilities carried out by program officers towards beef cattle farmers. Overall, these

Tanri et al.,

International Journal on Emerging Technologies 11(5): 596-604(2020)

stages are categorized as medium, with each score having a score of 1.32, 1.48, 1.46 and 1.55. This means that this program can be successful if the empowerment stages are carried out in totality following the cycle, likewise the diffusion process is accelerated if the empowerment process has been carried out correctly or perfectly. Then by implication the policy so that the accelerated program for the acceleration of fast pregnant beef cattle farmers can be successful, it is necessary to improve in terms of stages and cycles of empowerment for beef cattle

ACKNOWLEDGMENT

The author would like to thank the Directorate of Research and Community Service (DRPM) Ministry of Research and Technology/National Innovation Research Agency of the Republic of Indonesia for providing research funding assistance with the Leading Higher Education Basic Research scheme. The Hasanuddin University Research and Community Service Institute and the Hasanuddin University Faculty of Animal Science have given the author the confidence to carry out this research.

REFERENCES

- [1]. Suprpto, T., & Fahrianoor (2004). Extension Communication in Theory and Practice. Meaning of Earth Intaran. Yogyakarta.
- [2]. Soekartawi (1995). Agricultural Development to Alleviate Poverty. Jakarta. UI-Press. 110 p.
- [3]. Hidayah, N. (2016). The Effect of Compensation on Employee Performance through Job Satisfaction as an Intervening Variable (Case Study in Employees of Finance and Accounting at Yogyakarta State University).
- [4]. Nusantari, D. K. (2001). Adoption and Diffusion of Technology. Thesis: Gajahmada University, Yogyakarta.
- [5]. Boediyana, T. (2008). Welcoming Prospective Agribusiness in Indonesia. Trobos, No. 108. September 2008. Year VII.
- [6]. Wilson, T. (1996). The Empowerment Manual, London: Grower Publishing Company.
- [7]. Sumaryadi, I. N. (2005). Autonomous Regional Development Planning and Community Empowerment, Jakarta: Main Image Publisher.
- [8]. Herman, M., P. Hutagaul, & Surjono (2006). Analysis of Factors Affecting the Adoption of Cocoa Borer Pest Control Technology: Case Study in West Sulawesi. *Pelita Perkebunan*, 22(3), 222-236.
- [9]. Jimu, M. I. (2008). Community Development. Community Development: A Cross-Examination of Theory and Practice Using Experiences in Rural Malawi. *Africa Development*, 33(2), 23-33.
- [10]. Riduwan (2007). Measurement Scale of Research Variables. Alfabeta, Bandung.
- [11]. Creswell, J. (2008). Research Design: Qualitative and Quantitative Approach. Oslo: Sage Publications.
- [12]. Silalahi, U. (2012). Social Research Methods. PT. Refika Aditama, Bandung.
- [13]. Rianse, U., & Abdi (2014). Socio-Economic Research Methodology, Theory and Application. Alfabeta, Bandung.
- [14]. Istan, M. (2017). Poverty Alleviation through Empowerment of Peoples Economy according to

Islamic Perspective. *Al Falah: Journal of Islamic Economics*, 2(1).

[15]. Soetomo. (2006). *Community Development Strategies*, Yogyakarta: Publisher Pustaka Pelajar.

[16]. Fujikake, Yoko (2008). Qualitative Evaluation: Evaluating Peoples Empowerment, *Japanese Journal of Evaluation Studies*, 8(2), 25–37.

[17]. Ministry of Education (2003). *Big Indonesian Dictionary*, Third Edition, Jakarta: Publisher Balai Pustaka.

[18]. Foy, N. (1994). *Empowering People at Work*, London: Grower Publishing Company.

[19]. Rogers, E. M. (1995). *Diffusion of Innovations* (Fourth Edition). The Free Press. New York.

[20]. McGinty P.M, Sue (2003). The literature and theories behind community capacity building, In *Sharing Success: an Indigenous perspective*. VIC, Australia: Common Ground Publishing, 65-93.

[21]. Hafsah, M. J. (2000). *Business Partnership: Conception and Strategy*. Jakarta: PT. Pustaka Sinar Harapan.

How to cite this article: Tanri, G. R., Rohani, S. T., Sirajuddin, S. N., Hatta, M. and Darwis, M. (2020). Evaluation of the Implementation of Government Programs in Accelerating the Development of Pregnant Beef Cattle in terms of Farmer Empowerment Stages. *International Journal on Emerging Technologies*, 11(5): 596–604.