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Strengthening of agent extension capacity in efforts to improve the empowerment of beef cattle farmers

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Abstract. Farmer empowerment is an effort to build power and provide motivation so that farmers can find out their potential and can make decisions and determine the actions they will take related to themselves, including reducing the effects of personal and social barriers to taking action through increased self-confidence through the transfer of power from the environment. To achieve farmer empowerment is closely related to the capacity of extension workers. This study aims to analyze the strengthening of the capacity of extension workers in the empowerment of beef cattle farmers. The research was conducted in Barru Regency, South Sulawesi Province with a descriptive research approach. The determination of extension agents as respondents is randomly calculated based on Slovin, with the number of respondents being 44 extension workers. The research data was collected by conducting a survey using data collection techniques, namely interviews using a questionnaire, focus group discussion, and in-depth interviews (in-depth study) to several key informants. The results showed that the capacity of extension workers in the efforts to empower beef cattle farmers with indicators of extension capacity in fostering partnerships between farmers and business actors, providing up-to-date information and technology, fostering entrepreneurship, breeder access to financial institutions, information on production and marketing facilities, ability in the technical field and the capacity of extension workers in planning programs according to needs are still in the medium category. For this reason, it is necessary to increase the quality and quantity of extension workers through strengthening the capacity of extension workers through education and training so that it can influence changes in farmers' mindsets on knowledge, attitudes and skills so that the welfare and empowerment of beef cattle farmers can be achieved.

1 Introduction

Farmer empowerment is an effort to build power and provide motivation so that farmers can find out their potential and can make decisions and determine the actions they will take related to themselves, including reducing the effects of personal and social barriers to taking action through increased self-confidence through the transfer of power from the environment. To achieve farmer empowerment is closely related to strengthening the capacity of extension workers.

Strengthening the capacity of extension workers is an effort to improve the knowledge, skills and attitudes of extension workers in order to improve the quality of extension implementation. Law of the Republic of Indonesia Number 18 of 2009 [1] states that animal husbandry and animal health counseling is one of the efforts to empower farmers with the aim of increasing knowledge, skills and changing attitudes and behavior which is carried out, among others, through non-formal education.



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Extension as a non-formal educational institution that focuses on changing the behavior of farmers and their families to be more empowered for the better, has its own challenges in carrying out its functions and roles. Agricultural extension workers who will carry out their roles and functions must be able to empower farmers and their families. Therefore, the policy of revitalizing extension is considered important in the development of animal husbandry in a region, because extension workers as agents of change and as technical implementers in the community, need extension workers who have the capacity to independently and empower farmers [2]. Having a good capacity can drive effective counseling. Good performance is the main thing for professional extension workers who are competent in the field of extension.

Given the importance of the capacity of extension workers in improving farmer behavior in an effort to independent and empower farmers, with good extension capacity, farmers will be more empowered and independent [3]. Extension workers with good capacity can be seen from the results of the counseling given to farmers. A good capacity of extension workers will have an impact on the behavior of farmers in farming livestock. Farmers who are empowered and independent will be able to improve their welfare starting from increasing the production of livestock and have an impact on increasing income and empowering farmers. For this reason, all available resources need to be directed and prioritized in order to increase the professionalism of strengthening the capacity of extension workers for empowering farmers. Based on this, the purpose of this study was to analyze the capacity of extension workers in an effort to increase farmer empowerment in Barru Regency.

2. Research method

The research was conducted in Barru Regency, South Sulawesi Province. The determination of extension agents as respondents was randomly calculated based on Slovin [4], with the number of respondents as many as 44 extension workers. The research data were collected by conducting a survey using a collection technique, namely interviews using a questionnaire. The questionnaire used is a closed and open questionnaire. In addition, focus group discussions and in-depth interviews were also conducted with several key informants. Measurement of research variables is carried out by measuring the indicators of each research variable/sub variable in question. For qualitative variable indicators, it is measured using a Likert scale which is given a score of 1, 2, and 3. Measurement of each question item is scored with the lowest level getting a score of one and the highest level getting a score of three. Data analysis was carried out through a descriptive approach including frequency and percentage which were processed with the help of using SPSS software.

3. Results and discussion

3.1 Profile of respondent extension officers

Agricultural extension agents are agents of change that are directly related to farmers. Its main function is to change the behavior of farmers through non-formal education so that farmers have a better life in a sustainable manner. Extension agents can influence farmers through their role as motivators, educators, facilitators, organizers, communicators and as farmer advisors. Limitations of extension workers in conducting extension activities are closely related to the characteristics of extension personnel. Extension characteristics are individual characteristics or characteristics inherent in extension workers. The characteristics of the extension personnel are closely related to the capacity of the extension workers, so it is an important factor that can influence the success in carrying out the learning process for empowering farmers.

The capacity of extension workers in carrying out extension activities is a reflection of the implementation of extension duties in carrying out the extension process at a certain period of time. [5] states that individual characteristics are traits that an individual has throughout his life, including cognitive factors and other characteristics of the individual, which determine the learning process carried out. The success of learning on changes in farmer behavior is very dependent on the circumstances of the individual who carries out learning activities for farmer empowerment. The characteristics of the

extension agents include age, work experience, gender and education. Age is a psychological factor that influences the learning process and the efficiency of learning directly or indirectly, while gender is a biologically determined difference in a person's physical condition. And the work period in this study is the expertise or ability of an extension worker obtained by studying within a certain period of time which is of course seen from the intelligence abilities, both experiences that come from outside and from within the organization.

Based on the survey results, the description of the profile of the respondent instructor can be seen in the general condition of the respondent extension worker, namely the age of the extension worker, education level, gender and experience, as shown in figure 1.

Figure 1 showed respondents in the study indicated that the extension workers with a relatively young age were 31-40 at 22.7% and those over 50 years old were 47.8%, and the age range of respondents 41 years to 50 years was 29.5%. This shows that on average, respondent extension agents are categorized in productive age so that in carrying out extension activities they are more innovative and receptive to new innovations [6]. The age factor is usually more identified with work productivity, and if someone is of a productive age there is a tendency for their productivity to be high.

The education levels of the respondent extension agents varied from completing high school to university. Of the total extension agents, the majority were in the tertiary education category, namely 84.1% of the extension agents completed tertiary education, as many as 15.9% had graduated from high school. According to Syafaat et al (1995), the level of education has a huge effect on the absorption of new ideas, because the effect of education on someone will provide a broad insight [7]. So the level of education is one of the aspects that affect one's mindset in making decisions, because higher education level is expected to be able to think better and easily absorb agricultural innovations related to the development of a learning process for empowering farmers.

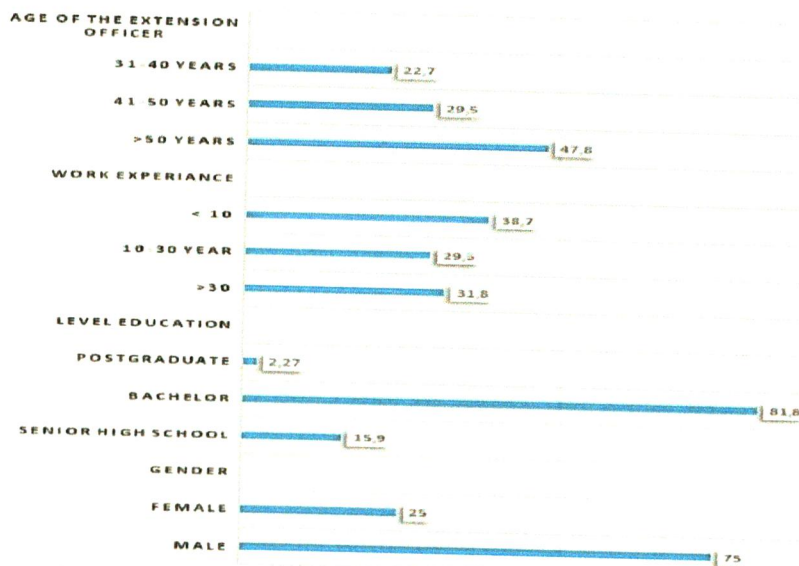


Figure 1. General condition of respondent extension officers.

Work experience showed the extent of one's mastery of the field of work that he has been engaged in. In general, work experience is measured by looking at how long the workforce is spent in a particular field of work [8]. Figure 1 presents data that most respondents (38.7 percent) have work experience of less than 10 years, while 31.8% have more than 30 years of experience and the rest are 10-30 years of

experience (29.5%) From this, based on work experience, it is still low, but if it is related to the age of extension workers, most of whom are old, then this age is spread with high work experience.

The distribution of the characteristics of extension workers based on gender shows that most of the agricultural extension agents are male (75 percent) and female (25%). The results of this study are also not so different from the results of [9] study, where the number of male extension agents is greater than female extension agents, consisting of 83 percent of men and 17 percent of women. The fact that the number of male extension personnel is greater than the number of female extension officers, this indicates that the work as extension personnel is still dominated by men compared to women. This is because extension workers interact a lot with farmers in the field. In addition, the job of extension workers requires high activity in charge of several farmer groups with scattered locations, so that this makes male extension workers more flexible and freer in their activities compared to female extension workers. However, conditions like this do not become an obstacle for extension workers in Indonesia, because male extension workers or female extension workers are the same, not differentiated by gender, but measured by competence and performance.

3.2 Capacity of extension officers for empowerment of farmers/raisers

Strengthening the capacity of extension workers is an effort to increase the knowledge, skills and attitudes of extension agents in improving the quality of extension implementation through training to improve skills in technical fields that are inventoried through programs. The results showed that most of the capacity of extension workers in Barru District were in the good category. The assessment of each indicator is described in figure 2.

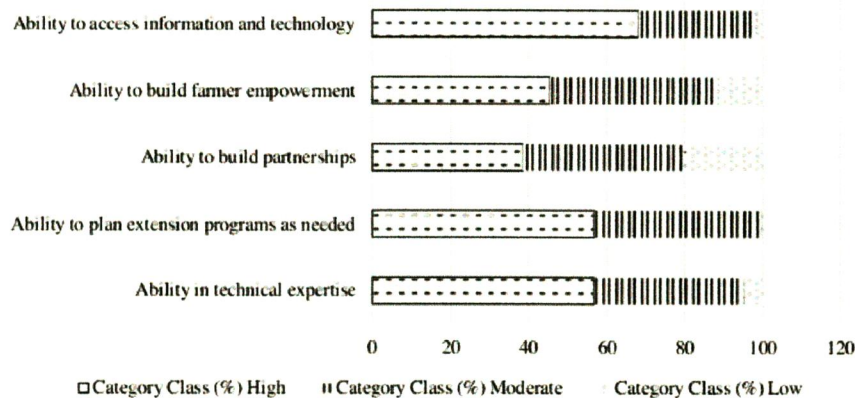


Figure 2. Capacity of extension workers in empowering farmers/farmers

In figure 2, it can be seen that the capacity of extension workers in the technical sector and capacity in planning extension programs according to farmer needs shows a capacity of 56.81%, this shows that the capacity of extension workers in Barru Regency is generally still in the good category. The results of the interview with the extension agents stated that for the preparation of extension programs, the extension workers did not do it alone but involved farmers and farmer groups, so the extension workers did not only do something for farmers, but did something with the farmers. Farmers participate in providing input in the preparation of extension programs, especially regarding the needs, desires and problems they face in managing the farm. Farmers' participation in activities in the agricultural extension program causes farmers to feel they own the program; thus the planned program is expected to be realized effectively. This is in accordance with Suparta (2004) which states that extension can change

the attitude and behavior of farmers if extension activities are carried out professionally through preparation of farmer needs before conducting extension. For the ability of extension workers to access information and technology, the capacity is in the good category with a score of 68.18%. However, the capacity of extension workers in building partnerships and capacity of extension workers in building farmer empowerment is in the medium category with a score of less than 50% [10]. This shows that the capacity of extension workers in conducting partnerships is still not optimal, even though according to Law Number 16 of 2006 (2006) and Van den Ban (2003) that the social function of extension is to strive for easy access to the main actors and business actors, in this case extension agents as a liaison between farmers and information, markets, capital and other resources, including accessing farmers to business actors, agencies and other institutions that encourage the growth of partnerships [11, 12]. For this reason, building partnerships is essential for an extension worker, given the role that must be played as the front guard in providing assistance to farmers, so that farmers know, want and are able to help themselves in solving any problems.

For this reason, an extension agent needs to have the capacity to make partnerships by opening access to farmers to information, technology and other resources needed in order to increase productivity, income, welfare and empowerment of rural farmers.

4. Conclusion and recommendation

From the results of the discussion, it can be concluded that the capacity of extension workers in the technical field, the capacity of extension personnel in planning extension programs according to farmer needs, the capacity of extension personnel in accessing information and technology shows a fairly good capacity, but the capacity of extension workers in building partnerships and empowerment of farmers is still not optimal. In doing so, the capacity of agricultural instructors is generally still in the good category, but there is still a need to increase the capacity of extension workers in developing partnerships by collaborating with various stakeholders to open farmers' access to information, technology and other resources needed to increase farm productivity, livestock, income and empowerment of rural farmers.

Acknowledgments

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