

Implementation of extension program planning on cattle farmers in Padang City West Sumatra

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Abstract. The study aimed to identify the implementation of extension program planning on cattle farmers in Padang City, West Sumatra. It conducted with a survey method. The respondent was the cattle farmers who had already received transfer innovation related to raising cattle by Extension Officers. It determined sixty farmers from six districts in Padang City. The data obtained with the questionnaire then analysed descriptive quantitatively and presented in percentages. The result showed the implementation of extension program planning of data collecting 11.67% implemented, state analysis 61.67% implemented, problems identification 61.67% implemented, goal formalisations 36.67% implemented, plan formation 50.00% implemented, activities conducted 100% implemented, activities progress evaluation 95.00% implemented, and reconsideration 36.67% implemented. It concluded that the implementation extension program planning on cattle farmers in Padang City are not implemented well.

1 Introduction

Padang city is the capital of the province of West Sumatra. Even though it is predicated as the centre of the provincial government, most citizens living in the countryside still raise beef cattle, both as the main business and as a side business. According to data from the Central Bureau Statistics (BPS) [1], in 2021, this area had a beef cattle population of 21,979 heads and some "*Rumah Tangga Peternak*" (RTP) or Farmer Households of 9,254 people. Padang City also has Field Agricultural Extension officers (PPL), as many as 39 people spread over several Agricultural Extension Work Areas.

A beef cattle farming business close to the centre of government will provide benefits for Extension Officers, such as the availability of information, completeness of facilities and the excess competence possessed, so that the livestock business could improve. Following Sriroso's statement [2], exposure to information from a variety of sources is one of the key indications of the viability of the livestock industry. However, the reality in the field is not following the various supporting factors above because, during the last three years, the population of beef cattle in Padang city has only increased by 4.35%.

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One of these requirements is inseparable from Extension Officers' ability to make plan extension programs because practical and well-targeted extension activities determined by the planning model prepared by Extension Officers. Rejeki [3] defines extension program planning as a decision-making process that produces a written statement regarding the situation, problems, goals, and ways to achieve goals to change people's behaviour toward a better life.

Planning a good extension program will undoubtedly be formed if the Extension Officers understand and follow the stages of formulating the extension program well. The Extension Officers must be able to transform the step of the formulation of the extension program planning. It starts from data collecting, situation analysis, problem identification, formulation of objectives, preparation of activity plans, implementation of activity plans, following up on activity progress, and reconsideration of the implementation of activities. Based on the above conditions, the research aims to identify the level of implementation of the extension program planning in disseminating innovation in beef cattle farming in Padang City, West Sumatra.

2 Material and methods

2.1 Research location

The research was conducted in a centre farm in Padang City, Wes Sumatra Province, which is Kuranji District. It was determined purposively because Kuranji District has farmers who raise cattle intensively and get information and or innovation related to raising beef cattle from Extension Officers.

2.2 Research approach

The research approach was the survey method. Wirartha [4] defined survey method as one that uses observation, data collection, and deductive reasoning to provide a broad picture of the subject under investigation and reliable information about the problem's subject.

2.3 Data collecting

Primary data were obtained from the observations and in-depth interviews with farmers and respondent extension officers as key informants (key informants). The primary data collected is the stages in the formulation of the extension program.

2.4 Research population and sample

The population was "*Rumah Tangga Peternak*" (RTP) or Beef Cattle Farmers' Households in Kuranji District, Padang City, which has received an extension program. The population is homogeneous, so the number of samples is determined using the Quota Sampling technique. As many as fifty farmers were determined from three sub-districts in Kuranji District. At the sub-district, samples were taken proportionally from the highest, middle and lowest populations.

2.5 Data analysis

The data analysis refers to the Pesson model [5] which every step of extension program planning needs to identify and measure in percentage (see figure 1) [6].

Implementation rate percentage = $\frac{\text{total of implementation by respondents}}{\text{total of ideal score}} \times 100\%$ [6]

The percentages of implementation extension programme planning are categorised into three categories: Good, Poor, and Very poor [7].

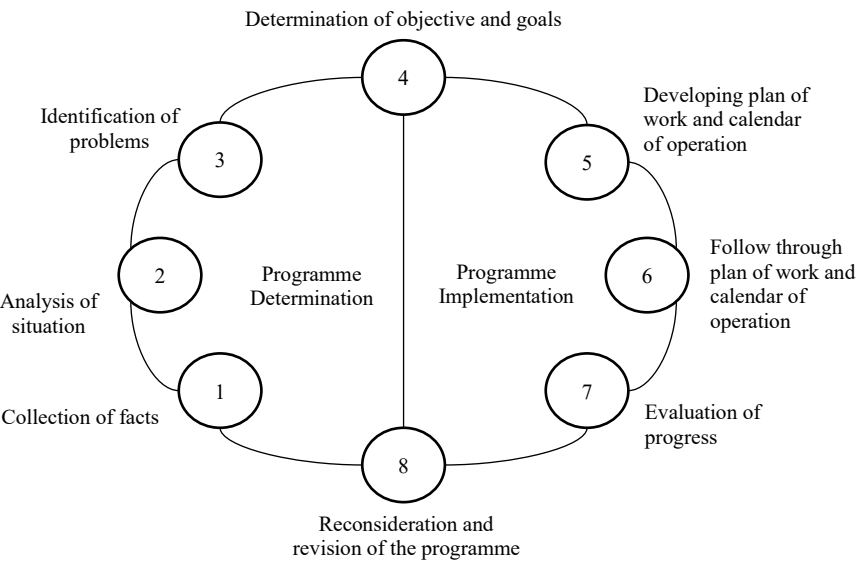


Fig. 1. Step in extension programme planning (pesson model).

3 Result and discussion

The result of the implementation of extension program planning on cattle farmers in Padang City showed in Table 1.

Table 1. Implementation of extension program planning.

No	Variables	Percentages (%)	Categories
1	Collection of facts or data	11.67	Very poor
2	Analysis of situation	61.67	Poor
3	Identification of problems	66.67	Poor
4	Determination of objectives and goals	36.67	Very poor
5	Developing a plan of work and calendar of operation	50.00	Very poor
6	Follow through with a plan of work and calendar of operation	100	Good
7	Evaluation of progress	95.00	Good
8	Reconsideration and revision of the programme	36.67	Very poor
Average of percentage		57.29	Poor

3.1 Collection of facts

The stages of collecting facts or data in extension program planning had not been carried out properly (very poor category). It will affect negatively because the extension cannot be conducted well without complete and accurate data. According to Cohen and Uphoff [8], high community involvement in planning decision-making is a crucial activity point. This preliminary information must be gathered to identify a target group's requirements and potential and then determine what innovations are appropriate to implement. So these innovations can solve farmers' problems.

3.2 Analysis of situation

The programme planning was not based on an analysis of the situation under the facts. This situation shows that the planning of extension programmes in this research does not incorporate the farmers as the activity's target. According to Bahua [9], agricultural extension contributes to community empowerment by involving farming communities in all phases of extension implementation. The farmers' poor involvement in this analysis stage also results from the farmers themselves. The farmers have participated on multiple occasions, but for a variety of reasons that makes they do not want to go or contribute. According to Reza [10], the greatest barrier to the successful planning of agricultural extension programmes is the low level of farmer involvement.

3.3 Identification of problems

The identification of problems was not focused on the requirements of the farmers and was not based on the circumstances that led to the problems. In identifying problems with farmers, extension officers only rely on field observations. It affects a lack of sense of responsibility and ownership for the long-term viability of these activities. According to Ife and Tesoriero [11], problem identification, problem-solving, and participatory use of the resources contribute to a greater sense of ownership and accountability for the sustainability of the extension programme. According to Rustiadi et al. [12], farmer involvement might be used as a method to coordinate the consent and support of both individuals and farmer groups in decision-making. Therefore, when people participate in making decisions that are in their best interests, their capacity to research, evaluate, and plan issues will rise [13].

3.4 Determination of objectives and goals

The phases for determining objectives and goals were into very poor categories. It is impossible to expect farmers to respond as best they can if the extension's goals were developed without their input. The low participation of farmers in the preparation of extension program planning arises because the extension officers do not carry out the coordination function. This situation is in line with Baba's opinion [13], which says that extension officers must provide the broadest opportunity for farmers to design their needs so that the implementation of the extension will be in line with the needs, potential, and problems faced. Pitt [14] added that extension officers need to have managerial skills and technical competence so that in planning extension programs with farmers, they can determine extension goals and goals that suit the needs of farmers.

3.5 Developing plan of work and calendar of operation

The extension officers did not adequately formulate the extension plan for cattle farming (very poor category). The impact of unclear steps to achieve the goals of a program will make a program ineffective. Dirlanudin [15] stated that planning an extension program is a decision-making process that produces a written statement regarding the situation, the problem of goals and how to achieve the goal to change the target's behaviour toward a better life. The effectiveness of the extension program plan can be measured by the behavioural changes in the target farmers after the extension activities. Aminah [16] said that extension planning must be able to answer local development needs, which should be a guideline for extension activities directed to changing behaviour.

3.6 Follow through with a plan of work and calendar of operation

The stages of implementing extension activities have been well conducted. The extension officers have adjusted the farmers' availability time in preparing the implementation schedule. Also, the extension was conducted with methods that were relevant to the target conditions. Makatita et al. [17] stated that the effectiveness of extension measured by several indicators, including the ability of the extension officers, the extension method, the condition of the extension tool, the suitability of the time and place of the extension, and the extension material provided.

3.7 Evaluation of progress

The results show that the extension officers have followed up on the extension activities that have been carried out well. The goal is to measure the information, messages and innovations introduced at the extension adopted by farmers. The progress of these activities monitored through evaluation and monitoring. For extension officers, it uses as a basis for the next decision-making. Aminah [16] stated that evaluation is an act of evaluating activity and emphasizing behavioural changes that occur in the targets to find deviations from the plan, appropriate steps can be taken to anticipate deviations.

3.8 Reconsideration and revision of the programme

The stage of reconsideration did not go well, even though this stage intended to review the program formulation, including the implemented activities. All aspects of the program's planning, implementation and evaluation are carried out regarding field conditions and community needs. In that case, it predicted that the program has the effect of changing attitudes in the community in achieving the extension goals.

4 Conclusion

The implementation of extension program planning in the beef cattle business in Padang City, West Sumatra, is in the poor category. The percentage of implementation of the planning stages of the extension program obtained was 11.67% collection of facts or data; 61.67% analysis of the situation; 67.67% identification of problems, 36.67% determination of objective and goals, 50.00% developing plan of work and calendar of operation, 100% follow through the plan of work and calendar of operation, 95.00% evaluation of progress, and 36.67% reconsideration and revision of the programme.

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References

1. BPS (Badan Pusat Statistik), *Kota Padang Dalam Angka 2020* (Padang, 2021)
2. S. Sriroso, K. A. Santosa, and S. S. Hariadi, *Jurnal Pertanian Agros* (2013)
3. N. S. Rejeki, *Perencanaan Program Penyuluhan* (Universitas Atmajaya, Yogyakarta, 1998)
4. I. M. Wirartha, *Metode Penelitian Sosial Ekonomi* (CV. Andi Offset, Yogyakarta, 2006)
5. L. L. Pesson, *Extension Program Planning with Clientele Participation. The Cooperative Extension Service* (Englewood Cliffs: Prentice-Hall, Inc., New Jersey, 1966)
6. A. D. J. Landasan, M. J. Memah, and M. M. Sendow, *Agrirud* **3**, 451 (2022)
7. U. Narimawati, *Metodologi Penelitian Kualitatif Dan Kuantitatif, Teori Dan Aplikasi*. (Agung Media, Bandung, 2008)
8. J. M. Cohen and N. T. Uphoff, *World Dev* **8**, 213 (1980)
9. M. Ikbah. Bahua, *Kinerja Penyuluh Pertanian* (Deepublish Publisher, Sleman, Yogyakarta, 2016)
10. M. Reza, *Jurnal Menara Ilmu* **10**, 109 (2016)
11. J. W. Ife and F. Tesoriero, *Community Development : Community-Based Alternatives in an Age of Globalisation*, 3rd Editio (Frenchs Forest, N.S.W, Pearson - Australia, 2006)
12. E. Rustiadi, S. Saefulhakim, and D. R. Panuju, *Perencanaan Dan Pengembangan Wilayah* (Yayasan Pustaka Obor Indonesia, Jakarta, 2018)
13. S. Baba, *Jurnal Ilmu Dan Teknologi Peternakan* **2**, 39 (2012)
14. H. Pitt, *J Rural Stud* **85**, 59 (2021)
15. D. Dirlanudin, *Jurnal Niagara* **2**, 81 (2011)
16. S. Aminah, *Buletin Ekonomi Perikanan* **V**, 1 (2003)
17. J. Makatita, Isbandi, and S. Dwidjatmiko, *AGROMEDIA: Berkala Ilmiah Ilmu-Ilmu Pertanian* **32**, 64 (2014)