

Level Of Planning For The Program To Improve Chili Cultivation In Sapanang Village, Binamu District, Jeneponto Regency

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Abstract

The purpose of this study was to analyze the extent of farmer participation in planning chili development extension programs in Sanapang Village, located in Binamu Subdistrict, Jeneponto Regency. The study was conducted using a survey method. The research sample was taken purposively in Sanapang Village. All farmers who were members of farmer groups were included in the research population. The selection of farmer samples was carried out using a simple random method using the Slovin formula, resulting in 250 farmers as samples, 25 of whom represented 10%. For data analysis, this study used quantitative descriptive analysis and calculated the mean and percentage using the Likert scale approach. The research findings revealed that the implementation of the agricultural extension program showed the following results: the participation of member farmers in extension activities in response to planning reached 2.49%, which indicates a less active category, while the response to the preparation of the agricultural extension program scored 2.41%, which also falls into the less active category. There are several factors that influence the low participation in the planning of the agricultural extension program. Among these factors are the lack of farmer involvement in the planning process, inadequate extension infrastructure, and the mismatch between the plan and farmers' needs. In addition, geographical conditions and economic factors also make it difficult for farmers to access existing programs. Internal factors related to extension workers, such as skills and experience, as well as a lack of coordination with various local parties.

Keywords: Program Planning, Agricultural Extension, Farmers.

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INTRODUCTION

Chili peppers are a type of horticultural crop that has great economic value. Many individuals use chili peppers in everyday cooking as a spice. In addition to their function as a staple ingredient for daily needs, chili peppers are also useful in the food industry and health sector (Munthi, 2017). Chili peppers contain high levels of carbohydrates, fats, proteins, calcium, and vitamins A, B1, and C, which are essential for good health. In addition, chili peppers also contain lasparaginase, which acts as an anti-cancer agent (Agustina, 2014). As a useful plant, chili peppers have many uses. In addition to being used as a spice, chili peppers can also be processed into sauces, medicines, and are an excellent source of nutrition (Karim et. al, 2019).

Jenepono Regency is known for its ability to quickly adapt to growing cayenne pepper to meet the needs of its people. Evidence of this can be seen in the cayenne pepper production, which reached 2,406.68 quintals or the equivalent of 240.66 tons in 2022, then increased to 5, 101.70 quintals or 510.17 tons in 2023, before finally declining to 3,156.14 quintals or 315.61 tons in 2024 (BPS, 2025). The decline in cayenne pepper production in Binamu District, Jenepono, may be due to environmental factors such as extreme weather, consisting of heavy rains or prolonged droughts that can damage crops. Pest attacks and diseases that interfere with growth also play a role, coupled with a lack of nutrients in the soil and errors in farming practices, such as poor drainage or inappropriate fertilization. One of the main causes is unstable weather conditions. The agricultural sector is the most vulnerable to climate change, as yields are highly dependent on the climate. The climate in a region has a major impact on the success of chili cultivation. This is a very important factor because these conditions are dynamic and difficult to control (Nukman & Edy, 2020).

The Binamu subdistrict, particularly the village of Sapanang, is heavily dependent on chili farming as the main source of income for its residents. Therefore, a decline in chili yields in this area has an impact not only on farmers' incomes but also on the stability of the local economy. In this situation, planning agricultural extension programs is crucial to help farmers overcome various problems in the cultivation process. When facing various challenges, the existence of agricultural extension programs is greatly needed. Warnaen, (2021) states that the purpose of agricultural extension is a planned effort to improve farmers' knowledge, skills, and attitudes in managing their businesses so that the results obtained are more productive and sustainable. In addition, as stated by Marbun et., al. (2019), agricultural extension workers actively help farmers obtain information related to the market and the latest policies from the government, as well as facilitate cooperation

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among farmers. According to Suryana et., al. (2018) , agricultural extension workers act as facilitators in theory. Thus, the study entitled “The Level of Planning for the Chili Cultivation Improvement Program in Sapanang Village, Binamu District, Jeneponto Regency” is very important to analyze the quality of the extension planning that has been implemented and its effect on increasing chili productivity in the area.

Based on this background, the purpose of this study is to determine the level of farmer participation in planning extension programs for chili pepper development in Sapanang Village, Binamu Subdistrict, Jeneponto Regency.

LITERATURE REVIEW

Chili Plant

Chili peppers are plants that originate from the tropical and subtropical regions of the American continent, particularly Peru, and have spread to countries in the Americas, Europe, and Asia, including Indonesia (Baharuddin, 2016). Chili peppers are annual shrub-like plants with a taproot system (Hamid et. al, 2012). These plants have a distinctive taste, color, and aroma, partly due to the capsaicin and capsinoids they contain, which give them a spicy and warm taste when consumed (Acedo, 2014).

Level of Farmer Participation

Participation is a process in which the community consciously wants to participate and be actively involved in a regulated activity (Muniarty et al., 2021). Farmer involvement can be described as the participation of farmers, both as individuals and in groups, in agricultural development activities to achieve food security (Hutajulu, 2017). According to Koampa et al., (2015), farmer participation can be divided into three stages, namely the program planning stage, the implementation stage, and the program evaluation stage.

Agricultural Extension

Agricultural extension workers, in their role as agents of change in development, constantly provide guidance that can raise awareness among business actors (Jaya, 2018). Agricultural extension can be defined as a branch of social science that studies the methods and systems of change that occur in individuals and communities, with the aim of achieving significant progress in the agricultural sector (Vintarno et.al., 2019). Agricultural extension workers are leaders in agricultural transformation. They need to have the ability to monitor the agricultural methods being implemented in their surroundings (Sinarwati, 2020).



Agricultural Extension Program Planning

Extension program planning is a guide used by extension workers and all those involved in making decisions about the activities to be carried out. The goal is to achieve the desired development outcomes (Mardikanto, 1993). Extension program planning is an important step that needs to be taken because, in order to achieve program success, it is important to understand the facts in the field, connect them, and draw conclusions (Setiana, 2005).

RESEARCH METHODS

The research was conducted in Sanapang Village, Binamu District, Jeneponto Regency, with farmers who grow cayenne pepper as the research subjects. The location of this research was chosen deliberately (purposively) because Sanapang Village is one of the cayenne pepper producing areas in Binamu District. The research method used in this study was descriptive. The descriptive method is a research method that focuses on real problems or phenomena during the research and then describes the facts of the problems being studied with rational and accurate interpretations (Nawawi, 2005). The approach used was quantitative descriptive. The data were primary and secondary. The population of this observation was 250 chili pepper farmers, with 25 farmers selected through purposive sampling, representing 10% of the total population. Data analysis included a Likert scale and quantitative analysis. The questionnaire results were given a maximum score of 5 and a minimum score of 1.

Table 1. Data Analysis Using The Likert Scale

Category	Score
Very Poor	1
Not Good	2
Fair	3
Good	4
Very Good	5

Interpretation of Values Based on Score

The data analysis used is descriptive analysis analyzed using the Likert scale measurement scale, namely:



$$\text{Index Scale} = \frac{\text{Data Collection Score Value}}{\text{Ideal Score Value (Highest Score)}} \times 100\%$$

Where:

- 1.00 – 1.80 = Inactive
- 1.81 – 2.60 = Less Active
- 2.61 – 3.40 = Moderately Active
- 3.41 – 4.20 = Highly Active
- 4.21 – 5.00 = Very Active

RESULTS AND DISCUSSION

Extension Program Planning

Program planning must be able to identify future prospects, challenges, and community needs. Sometimes plans need to try to formulate a problem or hope that the desired change will come about. Simply put, the problem lies between the expected conditions. The expected changes are behavioral and non-behavioral. Things to consider in an extension program are that changes in plans are managed, clear, and lead to behavioral change (Aminah, 2013). The preparation of a program plan for changes in individual attitudes, habits, and ideas means that the program design must include the behavioral actions of farmers in cultivation, as shown in Table 2 below, which illustrates the level of planning in participating in extension activities targeting farmer members to actively engage in agricultural extension, including in the sustainable farming process developed jointly by extension workers and the farming community. Extension planning from the description above can turn extension into the spearhead of the government, so that farmers only become objects in the agricultural development process, which describes the current situation in terms of the goals to be achieved. As an information planning program, it can be implemented based on existing facts combined with assumptions that will be made (Setiana, 2005).

Respondents' responses to the planning aspect of the chili farming extension program can be seen in Table 2 below:



**Table 2. Responses to Planning in Participating in Extension Activities
for Farmer Members**

No	Description	Score	Percentage (%)	Category
1.	Always be informed by extension workers about the planning of extension programs to be implemented	2.40	19.23	Less Active
2.	Always follow the program planning carried out by local extension workers	2.44	19.55	Less Active
3.	Frequently providing input during the planning stage of agricultural extension programs	2.48	19.87	Less Active
4.	Providing ideas or suggestions to extension workers in the planning of agricultural extension programs	2.56	20.51	Less Active
5	Supporting the planning of programs to be implemented by agricultural extension workers	2.60	20.83	Less Active
Total		12.48	100	
Average		2.49		Less Active

Source: Primary Data After Processing, 2025

Table 2 above shows that the interview responses regarding always being provided with information by extension workers about extension program planning amounted to 19.23 percent, ideas or suggestions provided by extension workers in planning extension programs amounted to 19.55 percent, frequently providing input at the extension program planning stage at 19.87 percent, supporting the planning of programs to be implemented by agricultural extension workers at 20.51 percent, and always participating in program planning carried out by local extension workers at 20.83 percent. The things that extension workers can do to involve farmers' awareness in all stages of agricultural extension program planning are considered to be less active. The reason is that these activities have a real impact on daily life, and the decision to implement the program does not represent the interests of farmers. Extension workers must have an appropriate work plan and be able to consider the interests of farmers. It is important that a participatory approach has an impact on local government program plans. Theoretical planning, according to Ibrahim



et.al, (2003), explains that the elements of the agricultural extension planning process include situation analysis, identification of target needs, mapping of resources at the farmer level, selection of extension methods and tools, program implementation, and evaluation of processes and results.

Theoretically, this study is in line with Mardikanto, (1993) view that changes in farmers' behavior in agriculture can be achieved through participatory learning and presentation of results so that farmers are interested in adopting agricultural extension technologies. The presentation of results will provide psychomotor understanding to farmers so that they can easily accept changes in agricultural technology. The results of this study are in line with the results of research by Zeweld et al., (2017), which explains that the availability of extension services and infrastructure as well as agricultural extension encourages extension workers to visit farmers because farmers' knowledge and skills regarding planting techniques require the role of agricultural extension workers, especially in providing examples in plot presentation. The findings of this study are in line with the opinion of Reza, (2016) that the approach used in formulating the agricultural extension program does not use a participatory approach. The approach used is limited to involving farmers in several stages of the planning process. In addition, extension workers use an approach that combines individual preparation, editing of previous year's records, and data validation with many farmers.

Developing Agricultural Extension Programs

The implementation of agricultural extension program development activities is carried out in a participatory manner according to needs and interests. In preparing the development, it is necessary to formulate the conditions, activity plans, objectives, and approval of the farmer group program. This activity involves various planning or preparation of action plans for chili farming development activities. To find out the respondents' responses regarding the active role of farmers in preparing chili cultivation extension, see Table 3 below:

Table 3. Responses to The Development of Agricultural Extension Programs

No	Description	Score	Percentage (%)	Category
1.	The preparation often involves farmers in the planning of programmed agricultural	2.32	19.20	Less Active



	extension.			
2.	The preparation often involves farmers in the delivery of agricultural extension materials or content	2.36	19.53	Less Active
3.	The preparation of this plan will help farmers address the issues and expectations that they want to include in the agricultural extension program activity planning document	2.40	19.86	Less Active
4.	Participatory Rural Appraisal (PRA) is used in the preparation of this plan, but this does not put farmers in a better position to participate	2.48	20.52	Less Active
5	Supporting the preparation of a program to implement the work plan of farmer groups	2.52	20.86	Less Active
Total		12.08	100	
Average		2.41		Less Active

Source: Primary Data After Processing, 2025

Table 3 above shows that participants in preparatory interviews often involve farmers in agricultural planning with extension programs at a rate of 19.20 percent, involve farmers in the delivery of agricultural extension materials or content at a rate of 19.53 percent, this plan will help farmers overcome problems and expectations that farmers want to include at 19.86 percent, participatory rural appraisal (PRA) is used in planning at 20.52 percent, and supports the preparation of agricultural work plan implementation programs for farmer groups at only 20.86 percent. This is achieved through the preparation of less active agricultural extension programs. Initially, program development was not carried out in a participatory manner with farmer groups, so that what farmers needed was not reflected in the subsequent program. Based on previous studies, it can be said that the level of participation of farmer group members in Melati Jaya is relatively inactive in five

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aspects due to the lack of knowledge and initiative of farmer group members (Maleba, 2015). The results of the study show that the participatory principle was not used in the preparation of the village-level RDK/RDKK. Farmer participation in the preparation of the RDK/RDKK is still very low, especially in terms of the implementation variable. Meanwhile, the role of Agricultural Extension Workers as facilitators and innovators shows maximum results in the implementation variable (Anis et al., 2020).

Program Evaluation Level

In accordance with the extension program, farmers naturally observe the activity of extension workers and often conduct evaluations. In this evaluation, the extent to which agricultural extension activities can be implemented is determined by changes in the behavior of farmers who participate in extension activities, which can be used as a basis for extension programs, field data, and field data acquisition. The evaluation can also provide strong evidence and input to influence broader policies and support for agricultural extension programs. The results of the extension program evaluation are shown in Table 4 below:

Table 4. Program Extension Evaluation Response Indicators

No	Description	Score	Category
1.	Level of planning in participating in farmer extension activities	2.32	Less Active
2.	Developing agricultural extension programs	2.41	Less Active

Source: Primary Data After Processing, 2025

Table 4 shows that the indicators for evaluating the extension program in Sapanang Village, Binamu District, Jeneponto Regency are still not very active. This indicates limited support from the local government for expansion activities and a lack of expansion facilities and infrastructure. There is a lack of adequate resources and infrastructure to support extension workers' ability to develop their skills, but their availability is still relatively limited and extension workers are not always able to utilize them when needed. The results of research observations by Zeweld et al., (2017) explain that the availability of extension opportunities and infrastructure, as well as agricultural extension workers, encourages extension workers to visit farmers, because farmers' knowledge and skills in rice cultivation



presuppose the role of agricultural extension workers, especially in providing examples through demonstrations in the field.

CONCLUSION

Based on the observations described above, it can be concluded that the planning of extension program activities in Sapanang Village, Binamu District, Jeneponto Regency has not been running well or has been lacking in activity. In addition, the level of planning in participating in extension activities for farmer members and developing agricultural extension programs is very important. They need to plan a design and create an observation program agenda and then apply it to chili cultivation practices. Group agricultural plans belong to the business actors for the common good, so they must be prepared in groups. The results of this exploration provide recommendations to relevant government agencies, with the hope of increasing farmer participation in cooperating and participating in work program activities and supporting the implementation of work programs so that the expected goals can be achieved.

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