



The Role of Agricultural Extension Workers in Developing Farmer Groups in Rea Village Binuang District Polewali Mandar Regency

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ABSTRACT

Agricultural extension workers are very important to encourage farmers, but their effectiveness in certain areas still needs to be studied in more depth. This study aims to analyze the role of agricultural extension workers in developing farmer groups in Rea Village Binuang District Polewali Mandar Regency. The research method uses primary data obtained through questionnaires from 30 respondents selected by purposive sampling from rice, corn, and cocoa farmer groups. Data analysis uses quantitative descriptive methods and scoring with an ordinal scale to measure the role of extension workers. The results of the study showed that the role of agricultural extension workers as motivators, facilitators, organizers, and technicians was in the good category, with a high average score in each aspect. Farmers' assessment of the role of extension workers as motivators with an average score of 2.80 in the good category, farmers' assessment of the role of extension workers as facilitators with an average score of 2.47 was in the good category and farmers' assessment of the role of extension workers as organizers with an average score of 2.47 was in the good category and farmers' assessment of the role of agricultural extension workers as technicians with an average score of 2.50.

Keywords: Agricultural Extension Workers, Farmer Groups, Role

INTRODUCTION

One type of informal education is agricultural extension process that aims to change the behavior of adults to have better attitudes, skills, and knowledge. Thus, farmers can consider various alternative knowledge available to make decisions in solving problems and improving their welfare. The development of extension programs in order to uphold the values of equality, accountability, transparency, responsibility, and cooperation, farmer groups must operate in a contribution-based manner can be the basis for empowering farmers. Currently, extension is more focused on helping farmers make their own decisions by expanding choices and providing an understanding of the consequences of each decision through regular weekly or monthly meetings. Therefore, the role of agricultural extension workers covers various aspects, including as motivators, facilitators, organizers, educators and extension workers as technicians. They are tasked with fostering farmer groups so that they can implement better agribusiness systems and increase their role in the agricultural sector (Tumbel, et al., 2024).

Agricultural extension workers function as educators for farmers by providing new information and knowledge. They must foster the enthusiasm and work spirit of farmers so that they can manage their farms more effectively, efficiently, and economically. Agricultural extension workers must have sufficient knowledge and expertise to communicate with farmers to provide explanations that can eliminate confusion, motivate and guide farmers to change the way they think and work to be more open, and then apply more efficient and productive farming methods to improve their quality of life (Bahtra, et al., 2021).

Binuang District, especially Rea Village, is an area with an agricultural business harvest area that plays a role as one of the agricultural productions in Polewali Mandar Regency. Although its productivity is still relatively

low, Rea Village has great potential to continue developing agricultural businesses, especially because the harvest area is quite significant. Farmers in this area generally plant food crops such as rice, corn, and cocoa. In addition to supporting soil and climate factors, rice, corn, and cocoa plants are also relatively easy to cultivate in Rea Village, Binuang District, Polewali Mandar Regency.

Collaboration between extension workers and farmer groups has an important role in creating superior and quality farmers. In this case, extension workers function as motivators, facilitators, organizers and extension workers as technicians by guiding farmer groups to implement agribusiness systems and increase their role in the agricultural sector. According to (Nazib and Moh 2020) the effectiveness of extension needs to be increased in order to encourage and develop active participation of farmers in agricultural development.

The problems often faced by the farmer groups of Rea Village, Binuang District, are the lack of support for facilities and infrastructure from the government. One example is the limited fertilizer subsidies for farmers and the uneven distribution of various types of assistance available. In addition, agricultural extension activities in this area have not reached all farmer groups evenly. The results of observations show that there are still farmer groups that have not received extension, assistance, or information from extension workers, which can ultimately hinder the progress of the agricultural sector.

Workers in agricultural extension have a vital role in building farmer groups because they serve as the spearhead in delivering agricultural technology, innovation, and information to farmers. Extension activities help farmers improve their knowledge, skills, and attitudes to manage farming businesses more efficiently and sustainably. Extension workers also help build solid farmer institutions, strengthen cooperation between group members, and build relationships between farmers and other parties such as markets, government, and financial institutions. Farmer groups can develop into independent, productive organizations that are able to face challenges in the agricultural sector with ongoing guidance from extension workers.

The purpose of this study is how agricultural extension workers can help improve the capacity and independence of farmer groups in Rea Village. As a motivator, extension workers are expected to be able to encourage farmers to participate more actively in farmer group activities and become more open to agricultural innovation. As a facilitator, extension workers play a role in bridging farmers' needs with various resources, such as agricultural technology, information, and other resources related to agriculture. With this method, the study is expected to provide a comprehensive picture of how effective agricultural extension is in strengthening farmer group institutions and encouraging sustainable improvements in farmer productivity and welfare in the area.

RESEARCH METHODS

Technical and Data Sources

Primary and secondary data are the two kinds of data used in this study. Obtaining primary data involves asking direct questions of farmers and distributing a list of questions or questionnaires in the research area. Secondary data is obtained from the Agriculture and Food Service Office, journal literature, books, previous research and related agencies and government officials who have activities in farmer group activities. Primary data and secondary data are useful to support in achieving goals.

Ways of Data Collect

Three data gathering techniques are used to accomplish the goals of this study, specifically the study's focus is on the contribution that agricultural extension agents make to the growth of farmer organizations that grow rice, corn, and cocoa. Interviews are a technique that involves asking respondents directly using a prepared questionnaire in order to gather information about their identities, motivational reasons, and farmer motivation. Additionally, recording is done, which includes gathering information on respondent identification, farmer motivation-influencing elements, and supporting.

Population and Sample

In this study, the respondents were farmer groups where respondents were selected based on certain objectives and considerations. This strategy can also be called non-probability sampling or sampling based on objectives and considerations carried out by purposive sampling. Purposive sampling is a method of sampling determination based on specific considerations, but non-probability sampling does not give each element chosen as a sample equal opportunities (Maksum, et al., 2017).

However, only 30 participants members of farmer groups in Rea Village, Binuang District, Polewali Mandar Regency were sampled or interviewed for this study. Sample selection was carried out purposively, namely

based on certain considerations in accordance with the objectives of the study, especially to obtain information from farmers who are active and have experience in farmer group activities and interactions with agricultural extension workers. A sample of 30 people is considered representative to provide an overview and qualitative analysis in the local context being studied. A questionnaire was the tool utilized in this study to collect data sheet (Hasan Azad 2014).

Analysis of data

Quantitative descriptive analysis was the method of data analysis employed in this investigation. An overview of the function of agricultural extension agents in creating farmer groups is given through descriptive analysis. Furthermore, the analysis used is scoring with a good score category (3), quite good score (2), and not good score (1). This study uses an ordinal scale so that to find out the centers of tendencies is the pattern of the middle value or field (Aryawiguna, et al., 2024). A validity test is one that evaluates the questionnaire's instruments and determines what ought to be measured. Item analysis is used to test the validity of each item by comparing each item's score to the total score, which is the sum of the scores of all the items. Whether the Product Moment correlation formula is valid or not. In the event that the correlation coefficient value between the item score and the overall score is 0.3, the instrument is considered valid; if it is less than 0.3, it is considered invalid. Interpretation of r Values:

r value (Correlation Coefficient)	Relationship Interpretation
0,00 – 0,199	Very weak
0,20 – 0,399	Weak
0,40 – 0,599	Enough
0,60 – 0,799	Strong
0,80 – 1,000	Very strong

RESULTS AND DISCUSSION

Strategically, agricultural extension agents are in charge of advancing the agricultural industry, particularly by establishing farmer organizations. Extension workers serve as a link between technology, policy, and farmers. Extension workers not only provide information to farmers but also help them become better. Extension workers can help farmer groups become more independent in managing sustainable farming businesses by using a participatory approach. Therefore, it is important to gain a better understanding of how agricultural extension workers can strengthen farmer group institutions and improve the welfare and productivity of farmers as a whole. Results of Validity Test of Questionnaire on Extension Workers' Functions as Organizers, Technicians, Motivators, and Facilitators.

The assessment of the role of agricultural extension workers is emphasized on the questionnaire data collection technique distributed to the respondent farmer groups, namely 30 samples were taken. From the results of the tabulation of respondent values on the role of agricultural extension workers in the development of farmer groups, it can be seen in the scoring of the role of agricultural extension workers in the development of farmer groups measured by values that include the role of extension workers as motivators, facilitators, organizers and technicians.

The role of agricultural extension workers as facilitators in developing farmer groups

Extension agents must be able to help farmers locate or employ the right agricultural production facilities and equipment, as well as demonstrate how to cultivate a crop. Extension agents must be able to observe changes in farmers' demands from connected agencies and advise farmers on where to find credit money to expand their agricultural operations. Table 2 below explains the use of extension agents as motivators in Rea Village, Binuang District, Polewali Mandar Regency.

Table 1. Validation test of the role of extension workers as motivators.

Motivator	Indicator	r count	r table	Description
1	Extension workers provide motivation to group members to strengthen their self-confidence in farming activities.	0,368	0,045	Valid
2	Extension workers encourage group members to actively participate in group activities.	0,298	0,110	Valid
3	Extension workers provide encouragement to group members to strive to achieve the goals desired by the group.	0,923	0,018	Valid
4	Encourage farmers to accept and apply new agricultural technologies and methods.	0,649	0,011	Valid
5	Provide motivation so that farmers are confident in implementing agricultural innovations.	0,438	0,016	Valid
6	Help farmers make decisions independently in managing agricultural businesses.	0,673	0,080	Valid
7	Agricultural extension workers are able to raise farmers' enthusiasm to increase productivity.	0,724	0,001	Valid

Source: Primary data after processing in 2025

The Table 1 displays the findings of the "Motivator" variable's validity test measured through seven question indicators. The calculated r value shows the correlation between each indicator and the total score of the variable, and all questions are deemed legitimate since the computed r-value exceeds the reference table's r-value. Indicator 3 with a calculated r value of 0.923 and indicator 7 with a calculated r value of 0.724 have the strongest influence in measuring the motivator of extension workers. While indicator 2 with a calculated r value of 0.298 has the weakest correlation, but still meets the validity requirements. Consequently, it may be said that all question indicators used in measuring the "Motivator" variable are valid and are able to measure the intended construct accurately and consistently. Research shows that the motivation of extension workers has a positive and significant effect on the performance of agricultural extension workers (Vol et al. 2023). The right motivation measurement tool is very important to ensure that research results are reliable.

Table 2. The role of extension workers as motivators.

Indicator	Score	Category
Extension workers provide motivation to group members to strengthen their self-confidence in farming activities.	2,80	Good
The instructor encourages group members to actively participate in group activities.	2,50	Good
The instructor provides encouragement to group members to strive to achieve the goals desired by the group.	2,27	Pretty good
Encourage farmers to accept and implement new agricultural technologies and methods.	2,43	Good
Providing motivation so that farmers are confident in implementing agricultural innovations	2,87	Good
Assisting farmers in making independent decisions in managing agricultural businesses.	2,70	Good
Agricultural extension workers are able to raise the enthusiasm of farmers to increase productivity	2,40	Good

Source: Primary Data 2025

According to Table 2, the respondents' responses to Extension workers' role as motivators with an average score of 2,80 are in the good category. This value can be seen from the scoring results, Extension agents' function in supplying motivation to group members, including with a score of 2,80, in the good category. With a score of 2.50, the job of motivating group members to actively participate remains in the good category. The role of extension workers in providing encouragement to group members to strive to achieve the goals desired by the group is still in the fairly nice category with a score of 2,27. This is because extension activities to farmers are only carried out once a month, both individually and in groups. The function of extension agents with a score of 2.43, encouraging farmers to embrace and use technology falls into the positive category. The role of extension workers in providing motivation so that farmers are confident in implementing agricultural innovations is included in the good category with a score of 2,87. The role of extension workers in helping farmers make decisions independently in managing agricultural businesses is included in the good category with a score of 2,70. The role

of agricultural extension workers is able to raise farmers' enthusiasm to increase productivity with a score of 2,40. This is in accordance with what was stated by (Setiyo et al. 2017). Agricultural extension workers as mentors have very good performance because extension workers have high ideas and are able to provide guidance to farmers through non-formal education to overcome obstacles and capital assistance.

The role of agricultural extension workers as facilitators in developing farmer groups

Extension agents operate as intermediaries, offering advice, assistance, and support to farmers through examples of work or demonstrations in farming endeavors to address any issues encountered (Ramadani, et al., 2020).

Table 3. Validation test of the role of extension workers as facilitators.

Facilitator	Indicator	r count	r table	Description
1	The extension worker supports each group meeting held and provides demonstration aids through his/her personal efforts.	0,401	0,0159	Valid
2	The assistants provide assistance to the members of the farmer group in gathering and finishing the administration of the farmer group.	0,911	0,021	Valid
3	Extension workers help members of farmer groups obtain information from various sources.	0,783	0,052	Valid
4	Agricultural extension workers connect farmers with resources such as technology, information, and government assistance.	0,827	0,042	Valid
5	Extension workers are responsible for providing technical guidance, training, and demonstrations of more effective farming methods.	0,978	0,005	Valid
6	Motivate farmers to be active in farmer groups, cooperatives, or community-based agricultural activities.	0,343	0,179	Valid
7	Helping farmers gain access to markets, capital, and government policies that support the agricultural sector.	0,335	0,182	Valid

Source: Primary data after processing in 2025

The table 3above shows the results of the validity test on the items in the Facilitator variable. This validity test uses the item-total correlation (r count) which is compared to the r table value as the minimum validity limit. Because all indicators of the r count value are greater than the r table, all indicators in the Facilitator variable are declared valid. In addition, conducting a validity test on the facilitator role variable. This is done by using the product moment correlation formula for each indicator, according to the research of (Indonesia 2017) at the Indonesian Education University. The results show that all statements of the facilitator variable have a calculated r value greater than the r table, which means that all indicators are valid. According to this study, a valid tool is very important to ensure that the data collected truly describes the structure being measured.

Indicator 5, namely extension workers providing technical guidance, training, and demonstrations, has a very strong correlation with a calculated r value of 0.978. The calculated r value confirms that technical assistance is the main function of extension workers. Meanwhile, indicator 2 (administrative assistance, calculated r of 0.911) and indicator 4 (resource liaison, calculated r of 0.827) also contribute greatly. This shows the role of extension workers in accessing information and institutions. This means that each item can be used to measure the facilitator aspect in research well. Each indicator in this table measures the facilitation aspect in research. In general, the role of a facilitator in a research context can include aspects such as supporting, guiding, and assisting the process in a group or organization. Table 4 below describes the facilitatory role of extension workers in Rea Village, Binuang District, Polewali Mandar Regency.

Table 4. The role of extension workers as facilitators.

Indicator	Score	Category
The extension worker supports each group meeting held and provides demonstration aids through his/her personal efforts.	2,77	Good
The assistants provide assistance to the members of the farmer group in compiling and completing the farmer group administration.	2,47	Good
Extension workers help members of farmer groups obtain information from various sources.	2,53	Good
Agricultural extension workers connect farmers with resources such as technology, information, and government assistance.	2,90	Good
Extension workers are responsible for providing technical guidance, training, and demonstrations of more effective farming methods.	2,67	Good
Motivate farmers to be active in farmer groups, cooperatives, or community-based agricultural activities.	2,43	Good
Helping farmers gain access to markets, capital, and government policies that support the agricultural sector.	2,47	Good

Source: Primary Data 2025

According to the above Table 4, the respondents' average score of 2.47 for their answers about the facilitatory role of extension workers falls into the positive category. This value is demonstrated by the scoring results, which include the good category with a score of 2.77, the contribution of extension workers to each group meeting, and the provision of demonstrative aids through their individual efforts. With a score of 2.47, the accompanying extension worker's participation in helping farmer group members gather and finish the group's administration falls into the good category. With a score of 2.53, agricultural extension agents' assistance to farmer organizations in gathering information from multiple sources falls into the good category.

With a score of 2.90, the function that agricultural extension agents play in helping farmers access resources including government support, knowledge, and technology falls into the good category. With a score of 2.67, the position of agricultural extension agents, who are in charge of offering technical advice, instruction, and examples of more efficient farming practices, falls into the good category. With a score of 2.43, extension agents' contribution to encouraging farmers to participate in farmer groups, cooperatives, or community-based agricultural endeavors falls into the good category. With a score of 2.47, the contribution of agricultural extension agents to farmers' access to money, markets, and government policies that assist the agricultural industry falls into the good category. According to study (Koampa et al. 2015), extension plays a part in assisting farmers in resolving their own issues in a way that is both satisfactory and effective, hence raising their standard of living.

The role of agricultural extension workers as organizers in developing farmer groups

In organizing extension activities, field since it is unlikely that extension agents will be able to visit every farmer, farmers must be encouraged to organize into farmer groups and help them grow into social and economic organizations that contribute to the betterment of the neighborhood. Extension agents serve as farmer organizers in the establishment and growth of farmer groups. extension workers are unlikely to be able to visit each farmer, so farmers must be invited to form farmer groups and develop them into economic and social institutions that have a role in developing the surrounding community. In the formation and development of farmer groups, extension workers act as farmer organizers. The criteria for extension workers who act as organizers are to grow farmer groups, grow the administrative and management capabilities of farmer groups, and be able to improve the quality of farmer groups from being intermediate and then becoming main farmer groups (Mubarak 2021).

Table 5. Validation test of the role of extension workers as organizers.

Organisatoris	Indicator	r count	r table	Description
1	The head of the farmer group gives clear directions to the members	0,810	0,046	Valid
2	Agricultural extension workers help improve the leadership capacity of farmer groups.	0,542	0,002	Valid
3	At the meeting, every farmer group member had the chance to voice their opinions.	0,241	0,200	Valid
4	Extension workers are able to form, foster, and coordinate farmer groups to be more productive.	0,578	0,106	Valid
5	Extension workers collaborate with the government, private sector, and agricultural communities to support agricultural programs.	0,281	0,203	Valid
6	Extension workers prepare and implement work plans that suit farmers' needs.	0,843	0,040	Valid
7	Extension workers help improve farmers' skills through training and mentoring.	0,316	0,190	Valid

Source: Primary data after processing in 2025

The validity test results for the items in the organizational variable are displayed in the Table 5 above. The item-total correlation (r count), which is compared to the r table value as the minimal validity limit, is used in this validity test. Because the r count value for all indicators is greater than r table, all items in the Organizational variable are declared valid. This means that each question can be used to measure the organizational aspect in this study accurately. The explanation of the indicators from questions 1, 2, 3, 4, 5, 6, and 7 of these indicators refers to specific questions or statements in the research instrument that measure the Organizational aspect.

Indicator 1, namely the head of the farmer group provides clear direction (r count = 0.810) and indicator 6, namely the extension worker prepares and implements the work plan (r count = 0.843) have a very strong correlation. This correlation confirms that structured planning and leadership are key aspects in managing farmer groups. On the other hand, indicator 3 (opportunity to express opinions, r count 0.241), indicator 5 (collaboration with stakeholders, r count 0.281), and indicator 7 (improving farmer skills, r count 0.316) have relatively low correlations. According to (Hendri and Sasmi 2019) research, indicators of planning, leadership, and management of farmer groups have a strong correlation. Other indicators, such as member involvement and external cooperation, have a lower correlation. This shows that aspects of member participation, collaboration, and training need to be considered in order to strengthen the organizational role of extension workers. The role of extension workers as farmer organizers in Rea Village, Binuang District, Polewali Mandar Regency is explained in Table 6 below:

Table 6. The role of extension workers as organizers.

Indicator	Score	Category
The head of the farmer group gives clear directions to the members	2,90	Good
Agricultural extension workers help improve the leadership capacity of farmer groups.	2,77	Good
Each member of the farmer group gets the opportunity to express their opinion in the meeting.	3,00	Good
Extension workers are able to form, foster, and coordinate farmer groups to be more productive.	2,83	Good
Extension workers collaborate with the government, private sector, and agricultural communities to support agricultural programs.	2,47	Good
Extension workers prepare and implement work plans that suit farmers' needs.	2,43	Good
Extension workers help improve farmers' skills through training and mentoring.	2,67	Good

Source: Primary Data 2025

With an average score of 2.47, the respondents' answers to the role of extension workers as facilitators fall into the good category, according to the chart above. This value can be seen from the scoring results on Table 6, the role of agricultural extension workers as heads of farmer groups providing clear direction to members is included in the good category with a score of 2,90. With a score of 2.77, the contribution of agricultural extension agents to strengthening farmer groups' leadership capabilities falls into the good category. Each farmer group member, including those in the good category with a score of 3,00, has the chance to voice their ideas during

meetings thanks to the involvement of agricultural extension workers. Extension agents can help farmer groups, including the good category with a score of 2.83, form, support, and coordinate to increase productivity. With a score of 2.47, extension agents' contribution to fostering collaboration between the public and private sectors as well as agricultural communities in order to promote agricultural initiatives falls into the good category. With a score of 2.43, extension agents' contribution to creating and carrying out work plans that meet farmer needs falls into the good category. With a score of 2.67, extension agents' assistance in enhancing farmer abilities via mentorship and training falls into the good category.

Through interviews with farmers as the main respondents or samples in this study, it was stated that extension workers had carried out their roles as much as possible for the farmers they were mentoring, this can be seen from the extension workers helping farmers in forming farmer groups, providing input and decision-making facilitating the preparation of Definitive Group Needs Plan (RDKK) and Definitive Group Plan (RDK). The findings above support the assertion made by (Djellabi et al. 2020) that extension workers always carry out their role as organizers, meaning that extension workers always provide guidance and development for farmer groups.

The role of agricultural extension workers as technicians in developing farmer groups

Agricultural extension agents in doing their tasks also act as technicians in approaching farmer groups. Extension workers must first pay attention to how to communicate so that the theory conveyed is heard clearly and can be understood by the farmer group and can adjust the material to the abilities of the farmer group members who will be influenced, so that the material delivered can be well received by the farmer group. However, sometimes extension workers cannot deny that not all members of the farmer group can accept what has been conveyed so far and it becomes an obstacle for the extension workers themselves due to the limitations of farmers.

Table 7. Validation test of the role of extension workers as technicians.

Technician	Indicator	r count	r table	Description
1	Extension workers are able to apply the latest technology in cultivation, fertilization, and pest control.	0,426	0,151	Valid
2	Providing information on efficient and sustainable farming techniques.	0,334	0,183	Valid
3	Providing training and demonstrations on the use of modern agricultural equipment.	0,963	0,090	Valid
4	Assisting farmers in adopting new innovations to increase productivity	0,946	0,012	Valid
5	Providing solutions to technical problems faced by farmers in agricultural production.	0,660	0,340	Valid
6	Conducting trials of agricultural methods to ensure their effectiveness before widespread implementation.	0,232	0,225	Valid

Source: Primary data after processing in 2025

The Table 7 displays the findings of the validity test of the technician research instrument, along with an analysis of the computed r value in relation to the table r. Since each of the six question indicators' computed r values is higher than the table r, they are all deemed valid. Indicator 3 on modern tool training (calculated r = 0.963) and indicator 4 on innovation adoption (calculated r = 0.946) show a very strong correlation. The correlation value indicates that the aspect of training and application of new technology is an important role of extension workers. While indicator 6 agricultural method trials (calculated r 0.232) show the weakest correlation although it remains valid. This study found similar results to (Agustian et al. 2023) study on how effective the role of extension workers is in developing the competence of agricultural technicians. Each indicator of the research instrument used, including modern tool training, innovation adoption, and agricultural method trials, was proven valid if the calculated r exceeded the table r. In addition, the study found that the indicators of modern tool training and adoption of technological innovation had a significant correlation with the total score of the variable. This shows that training and application of technology.

The following is an assessment Table 8 below, which shows the farmer group's perspective on the function of extension agents as technician trainers for farmer groups:

Table 8. The role of extension workers as technicians.

Indicator	Score	Category
Extension workers are able to apply the latest technology in cultivation, fertilization, and pest control.	2,40	Good
Providing information on efficient and sustainable farming techniques.	2,90	Good
Providing training and demonstrations on the use of modern agricultural equipment.	2,90	Good
Assisting farmers in adopting new innovations to increase productivity	2,33	Pretty Good
Providing solutions to technical problems faced by farmers in agricultural production.	2,50	Good
Conducting trials of agricultural methods to ensure their effectiveness before widespread implementation.	2,87	Good

Source: Primary Data 2025

With an average score of 2.50, the respondents' answers to the question about the role of extension workers as facilitators fall into the good category, according to the Table 8. The ability of extension workers to use the newest technologies in pest management, fertilization, and horticulture is demonstrated by this value in the score results. scored 2,40, placing it in the good category. With a score of 2.90, the function of extension agents in disseminating knowledge about sustainable and effective farming methods falls into the good category. With a score of 2.90, the function of extension agents in offering instruction and demonstrations on the use of contemporary agricultural equipment falls into the good category. With a score of 2.33, the function of extension agents in assisting farmers in implementing new technologies to boost production falls into the "fairly good" category. With a score of 2.50, the contribution of extension agents to the resolution of technical issues that farmers encounter in agricultural production falls into the good category. With a score of 2.87. This is in line with research conducted by (Kasus and Kecamatan 2024) Extension workers are very important to teach effective and sustainable agricultural techniques and to teach the use of modern agricultural tools.

The effectiveness of extension workers as facilitators averaged 2.8 (scale 1-3), included in the very good category. the contribution of agricultural extension agents to farmers' adoption of new innovations to boost production falls into the good category. Workers in agricultural extension play a crucial part in helping farmers boost their output and farmer welfare in addition to providing information on good agricultural practices, agricultural extension workers can also act as technician trainers. Agricultural extension workers generally have in-depth knowledge of good agricultural practices, as well as understanding local conditions, types of crops, and livestock that are most suitable for their area. This makes agricultural extension workers a valuable resource as technician trainers Agricultural extension agents can assist farmers in identifying technical issues or challenges. They can collaborate with technicians to identify the best course of action.

These findings suggest that farmers appreciate extension agents' contributions more in terms of training and implementation of innovation compared to trial activities or theoretical delivery of information.

Table 9. Variable reliability test.

Variable	Reliability		Information
	Alpha Coefficient	Critical figures	
Motivator	735	0,60	Reliable
Facilitator	735	0,60	Reliable
Organizer	730	0,60	Reliable
Technician	716	0,60	Reliable

Source: Primary data after processing in 2025

The reliability test results are displayed in the Table 9 for several variables, namely Motivator, Facilitator, Organizer, and Technician. This reliability test uses the Cronbach Alpha Coefficient, which is used to measure A research instrument's internal consistency. In the Table 9, the Alpha Coefficient value for each variable, namely Motivator: 0.735, Facilitator: 0.735, Organizer: 0.730, Technician: 0.716. According to (Sanaky 2021) research, the motivator, facilitator, organizer, and technician variables each have a Cronbach's Alpha value above 0.70. This shows that the research tool is consistent and can be used to analyze more complex data. The critical number used as the minimum limit of reliability is 0.60. Since all Alpha Coefficient values are higher than the critical number, all variables are declared reliable. Thus, the instrument used in this study is considered to have a good level of consistency in measuring each variable.

CONCLUSION

In Rea Village, Binuang District, Polewali Mandar Regency, agricultural extension workers have been effectively serving as organizers, technicians, motivators, and facilitators for the growth of farmer groups that grow rice, corn, and cocoa. The role of agricultural extension workers as technicians falls into the good category with an average score of 2,50. Farmers' evaluations of the role of extension workers as facilitators, organizers, and motivators all fall into the good category with an average score of 2,80, 2,47, and 2,80, respectively. This can demonstrate how crucial extension agents are to the growth of farmer groups. This case study also shows that future extension programs must be more inclusive by involving young farmers and women to ensure that the extension process continues to improve and has a real impact at the field level, the performance of extension and the development of farmer groups can be monitored by conducting regular monitoring and evaluation.

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