# THE ROLE OF AGRICULTURAL EXTENSION WORKERS IN THE DEVELOPMENT OF FARMER GROUPS AT DESA OFALANGGA, KECAMATAN PANTAI BARU, KABUPATEN ROTE NDAO

(Perananan Penyuluh Pertanian Dalam Pengembangan Kelompok Tani Di Desa Ofalangga, Kecamatan Pantai Baru, Kabupaten Rote-Ndao)

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## **ABSTRACT**

Ofalangga Village, located in Pantai Baru District, Rote Ndao Regency, is one of the villages with significant agricultural potential in the local economy. The crops cultivated by the villagers of Ofalangga are rice, chili, and shallots. However, there are several problems often encountered by farmer groups in this village, such as a lack of government-provided facilities and infrastructure, as well as other obstacles like pests and diseases that damage farmers' crops. Therefore, this study aims to (1) determine the role of agricultural extension workers in the development of farmer groups in Ofalangga Village, Pantai Baru District, Rote Ndao Regency, and (2) identify the challenges faced by agricultural extension workers in the field in their efforts to develop farmer groups in Ofalangga Village, Pantai Baru District, Rote Ndao Regency. Research findings indicate that the role of agricultural extension workers in developing farmer groups in Ofalangga Village, Pantai Baru District, Rote Ndao Regency, is categorized as "Good" with a maximum score achievement percentage of 84.05%. The challenges faced by agricultural extension workers in their efforts to develop farmer groups in Ofalangga Village, Pantai Baru District, Rote Ndao Regency are: 1) Insufficient number of extension workers; 2) Inadequate facilities and infrastructure to support extension activities; and 3) Low participation of farmer group members.

Keywords: Extension Workers, Farmer Groups, Development

## **INTRODUCTION**

The agricultural sector is a vital part of Indonesia's economic development. The majority of the population works in agriculture, supported by favorable conditions such as soil, climate, and other agricultural resources. One of the key elements in agricultural development is the farmer. As the main actors in farming activities, farmers require guidance and support to improve their knowledge, skills, and capacity. The goal of agricultural development is to enhance the welfare of farmers and their families, while also contributing to national development (Sasmita, 2022).

Despite its importance, the agricultural sector faces various challenges. Farmers often struggle with limited access to information, technology, and capital. These limitations lead to low productivity and suboptimal farmer welfare. Therefore, agricultural extension services are needed to help address these problems and to encourage farmers to improve and expand their agricultural ventures.

Agricultural extension is a strategic activity that plays a crucial role in the development of the agricultural sector. Extension activities serve as a bridge between farmers' practices and ever-evolving agricultural knowledge and technology. Group-based extension approaches help form farmer organizations that foster synergy among farmers and farming groups. In this way, extension workers can influence farmers and groups by playing roles such as educator, consultant, supervisor, monitor, innovator, facilitator, evaluator, and advisor (Watemin, 2023).

The main role of agricultural extension is to help farmers develop sound opinions and make informed decisions by communicating and delivering information that meets their needs (Zulhafandi, 2019). Extension activities carried out by agricultural workers are a key success factor in agricultural development, as they act as catalysts. Today, extension is increasingly viewed as a process of empowering farmers to make their own

decisions by expanding their options and helping them understand the consequences of each choice through regular meetings, either weekly or monthly (Stephanie, 2023).

Farmer groups also play a critical role in extension efforts, as they are part of the agribusiness system. While extension workers cooperate with farmers and farmer groups in agricultural development, supportive government policies are still needed. Extension activities are expected to improve the quality and quantity of farmer groups, foster strong relationships with relevant institutions, and increase productivity and income for farmers. The development of farmer groups must be tailored to the farmers' characteristics and resources, aiming to improve the quality of farming operations (Putra et al., 2018).

According to Gayatri (2019), to enhance the effectiveness of extension activities and encourage greater farmer participation in agricultural development, it is essential to foster and nurture existing farmer groups. This support helps them grow into strong economic units capable of sustaining member welfare. A farmer group formed on the basis of shared interests among farmers will have the capacity to manage resources—natural, human, financial, informational, and infrastructural—for the advancement of their farming ventures. Close cooperation between extension workers and farmer groups is necessary to produce skilled and capable farmers

A farmer group is an agricultural institution formed based on shared interests, similar environmental conditions (social, economic, and natural resources), and camaraderie, aimed at improving and developing the members' farming businesses. These groups emerge from, by, and for farmers who are familiar with each other, have mutual trust, and share similar traditions, settlements, or contiguous farmland (Agricultural Extension Center, 2012).

Ofalangga Village, located in Pantai Baru Sub-district, Rote Ndao Regency, is one of the villages with significant agricultural potential that plays a key role in the local economy. Most residents work as farmers, spread across five hamlets: Mengedanon 1, Mengedanon 2, Deaoen, Sasando, and Danokak.

The main crops cultivated by Ofalangga farmers include rice, chili (lombok), and shallots. Farmers in the village are organized into four groups: Kapitanoen, Panturo, Ngguluana, and Dene Ana, comprising 139 farmers in total. Some challenges faced by these groups include limited support from the government in terms of agricultural inputs and infrastructure. For example, the fertilizer subsidy dropped from 70% to only 30% since 2022. Additional issues include pest infestations and plant diseases that damage crops.

Agricultural extension services in Ofalangga Village are still not fully effective. Yet, these services are vital learning tools for farmers to improve their skills, knowledge, and access to innovation and technology. Observations of group members reveal the need for more impactful extension activities to help strengthen and develop farmer groups in the village.

Therefore, the presence and role of agricultural extension workers among farming communities remain crucial for improving human resources (farmers), enabling them to manage natural resources more intensively, and ultimately increasing productivity, income, food security, and economic resilience. Farmers in Ofalangga Village also expect more active and improved involvement of field extension officers to help achieve their goals and advance the development of their farmer groups.

Based on these issues, the role of agricultural extension workers is a compelling topic for research, as they serve as direct liaisons with farmers and as conduits of agricultural information.

# RESEARCH METHOD

## **Research Location and Time**

This research was conducted from June to July 2024 in Ofalangga Village, Pantai Baru Sub-district, Rote Ndao Regency.

## **Types and Sources of Data**

The study used two types of data sources:

- 1. Primary data obtained through direct field observation, interviews, documentation, and questionnaire distribution to members of farmer groups.
- 2. Secondary data collected from existing sources or related institutions, such as journals, articles, the village office, sub-district office, and other relevant agencies.

## **Data Collection Techniques**

The data collection methods used in this research were survey-based and included:

- 1. Observation direct field observations to gather data related to the research.
- 2. Interviews in which questionnaires were prepared and distributed to respondents.
- 3. Documentation involving books, reports, photos, or other records used as supporting evidence for the research.

## **Data Analysis Methods**

- 1. To address the first objective of this study, a **quantitative descriptive analysis** was conducted using a Likert scale scoring system. The scale ranged from 1 to 5, with the following categories:
  - Score 1 = Very Poor
  - $\circ$  Score 2 = Poor
  - $\circ$  Score 3 = Fair
  - $\circ$  Score 4 = Good
  - Score 5 = Very Good
- 2. To address the second objective—identifying the challenges faced by agricultural extension workers in developing farmer groups in Ofalangga Village, Pantai Baru Sub-district, Rote Ndao Regency—a qualitative descriptive analysis was used, based on interviews with agricultural extension workers.

#### RESULT AND DISCUSSION

The Role of Agricultural Extension Workers in the Development of Farmer Groups in Ofalangga Village, Pantai Baru Sub-district, Rote Ndao Regency

## 1. Overall Role of Extension Workers

Based on the data analysis, the average score for the role of agricultural extension workers in developing farmer groups in Ofalangga Village was 3.36, with a maximum score achievement rate of 84.05%, which falls into the "Good" category. Thus, it can be concluded that the role of agricultural extension workers in this context is considered "Good." Out of the total respondents: 21 respondents (61.77%) rated the role as Good and 13 respondents (38.23%) rated it as Very Good.

## 2. Role of Extension Workers as Facilitators

The average score for the facilitator role was 3.66, with a maximum score achievement of 73.38%, also in the "Good" category. Breakdown of responses: 3 respondents (8.82%) rated it as Fair, 26 respondents (76.47%) as Good, and 5 respondents (14.71%) as Very Good. Interview findings indicated that farmers appreciated the extension worker's ability not only to provide information but also to guide decision-making, problem-solving, and fostering an environment for shared learning.

#### 3. Role as Innovators

The average score here was 2.87, with a maximum score achievement of 57.5%, which places it in the "Fair" category. Response breakdown: 15 respondents (44.12%) rated as Fair, 14 respondents (41.18%) as Poor, and 5 respondents (14.71%) as Good. Most farmers found that while extension workers provided useful agricultural insights, their limited expertise in up-to-date technology and constrained budgets hindered effective innovation and training.

#### 4. Role as Motivators

Average score: 3.70, Score achievement: 73.82% – "Good" category. Response breakdown: 27 respondents (79.41%) said Good, 5 respondents (14.71%) said Fair, and 2 respondents (5.88%) said Very Good. Interviews revealed that extension workers positively impacted farmers, especially in times of crop failure, by offering motivational support and practical guidance, which encouraged farmers to continue improving their practices.

## **5.** Role as Catalysts (Dynamisators)

Average score: 3.31. Score achievement: 66.32% – "Fair" category. Response breakdown: 27 respondents (79.41%) said Fair and 7 respondents (20.59%) said Good. Interviews suggested that limited manpower and

infrastructure made it difficult for extension workers to act as effective agents of change, especially with limited technological proficiency and support tools.

# 6. Farmer Group Development

The goal of farmer group development is to create dynamic, responsible, and collaborative farmer groups. Development aims to: Strengthen group function, Build agribusiness capability, and Foster independent farmer organizations.

## 7. Administrative Completeness

Analysis showed: 20 respondents (58.82%) rated it as Poor and 14 respondents (41.18%) as Fair. This suggests that administrative management is a major issue, largely due to time constraints and improper handovers between group leaders, resulting in lost or incomplete records.

## 8. Group Organizational Structure

Analysis revealed: 24 respondents (70.59%) rated it as Fair and 10 respondents (29.41%) as Good. Most respondents agreed that leadership quality was adequate, communication was open, and group activities were well-planned and transparent.

## 9. Capital

Analysis showed: 24 respondents (70.59%) rated capital as Poor and 10 respondents (29.14%) rated it as Very Poor. Interviews revealed that funding relied heavily on internal member contributions. There was also a general lack of financial literacy and awareness of available financial programs or how to access them.

## 10. Challenges Faced by Extension Workers

a. Insufficient Manpower

There is only one extension worker for four farmer groups, making individual attention and consistent support difficult.

b. Inadequate Facilities and Infrastructure

Lack of tools and materials makes practical field demonstrations difficult, which reduces engagement and learning effectiveness.

c. Low Farmer Participation

Farmer turnout during extension activities is inconsistent due to scheduling conflicts or personal obligations.

This detailed overview highlights both the contributions and the constraints faced by extension workers in developing farmer groups in Ofalangga Village. Improving training, resources, and farmer engagement will be key to advancing agricultural development in the region.

## **CONCLUSION**

Based on the results of data analysis, the following conclusions can be drawn:

- 1. The role of agricultural extension workers in the development of farmer groups in Ofalangga Village, Pantai Baru Sub-district, Rote Ndao Regency falls into the "Good" category, with a maximum score achievement of 84.05%.
- 2. The challenges faced by agricultural extension workers in their efforts to develop farmer groups in Ofalangga Village include: Insufficient number of extension personnel, lack of facilities and infrastructure to support extension activities, and low participation of farmer group members

## Recommendations

Based on the conclusions above, the following recommendations are proposed:

- 1. To the local government: It is recommended to provide adequate facilities and infrastructure needed to enhance the role of agricultural extension workers in the development of farmer groups.
- 2. To the extension workers: It is encouraged that they act as liaisons between farmers and relevant stakeholders who can support them. Farmers should be involved in decision-making and program implementation. Training sessions that spark farmers' interest should be organized, and extension workers should demonstrate strong commitment and dedication in fulfilling their duties.

3. The number of agricultural extension workers should be increased so that they can carry out their roles more effectively in guiding, assisting, and mentoring farmers, as well as in providing education to enhance farmers' knowledge, attitudes, and skills for more advanced farming practices.

4. Future researchers are encouraged to conduct further studies on the issue of low farmer participation in agricultural extension activities.

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