THE ROLE OF FIELD AGRICULTURAL EXTENSION OFFICERS IN EMPOWERING MEMBERS OF "SARI MAKMUR" WOMEN FARMERS GROUP IN ALASMALANG VILLAGE, KEMRANJEN DISTRICT, BANYUMAS REGENCY

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Abstract. Field Agricultural Extension Officers play a strategic role in enhancing the capacity and independence of farmer groups, including the Women Farmers Groups. This research aims to evaluate the role of Field Agricultural Extension Officers in empowering the members of the "Sari Makmur" Women Farmers Group in Alasmalang village, Kemranjen District, Banyumas Regency. A descriptive qualitative and quantitative approach was employed, using a census technique involving all 31 group members. The results indicated that the Field Agricultural Extension Officers played important roles as motivators, educators, diseminators, supervisors, and evaluators, with scores categorized as "functional." However, their role as facilitators is still categorized as "less functional." These findings suggest that, in general, the Field Agricultural Extension Officers have performed their duties well, but there is a need to strengthen their role in facilitating access to business networks for Women Farmers Group members to optimize empowerment efforts.

Keywords: field agricultural extension officers, empowerment, women farmers group

1. Introduction

Empowerment originates from the word "power" which means authority or capability, as the essence of empowerment is closely related to power itself [1]. Empowerment is implemented through collaborative and voluntary activities. The purpose of empowerment is to seek sustainable measures that can increase the capacity of disempowered communities. In line with the view of [2] empowering group is the responsibility of extension officers to ensure that farmer groups become empowered and independent to accommodate the concerns of their members in cooperating, solving problems, and fulfilling the needs of farmers and communities in their environment. Farmer groups are considered as one of the forms of farmers' empowerment that aims to increase their productivity, income, and standard of living, thus enabling them to independently organize all their potential resources [3].

Agricultural extension functions as a means of empowering farmers and their family members, and agribusiness communities, through non-formal education programs focusing on economic, social and political fields, enabling them to increase their income and improve their quality of life [4]. In addition, the extension officers need to focus on the issues encountered by farmers or farmers' group [5]. From a policy perspective, one agricultural extension officer is assigned to each village, in accordance with Law Number 19 of 2013 concerning the Protection and Empowerment of Farmers, Article 46, which mandates that the provision of extension officers shall be at least one (1) extension officer per village.

In Kemranjen district, Alasmalang Village, there is the oldest Women Farmers' Group called "Sari Makmur", which was established in 2004. This group plays a crucial role in rural women's empowerment programs, with the primary objective being the optimal utilization of local resources to enhance the economic value and overall well-being of its members. Formed due to similarities in the type of agriculture business they undertake, geographic proximity, also aligned perceptions and motivations to improve their economic livelihoods [6]. In addition, the Women Farmers' Group is an effective and beneficial platform for the association to support the management and marketing of agricultural goods produced by various improvements or innovations so it is expected that the Women Farmers' Group become more innovative and beneficial for farmers [7]. Based on the explanation above, the objective of this study is to explore in greater depth the role of field agricultural extension officers in empowering the "Sari Makmur" Women Farmers' Group in Alasmalang Villages, Kemranjen District, Banyumas Regency.

The study conducted showed that the agricultural extension officers played a significant role in supporting the Women Farmers' Group in Nyanglan Village, particularly in the processing of *kace* nuts. The roles

of Agricultural extension officers included education, information dissemination, facilitation, consultation, supervision, monitoring, and evaluation, with an overall average score of 3.90 which fell into the "good" category [8].

2. Research Method

This research was conducted in Alasmalang Village, Kemranjen District, Banyumas Regency. The research location was deliberately selected using a purposive sampling method, which is a sampling selection technique based on specific considerations. The research began with proposal development from October to December 2024, followed by data collection in January 2025, and the writing phase from February to May 2025. This research employed both qualitative and quantitative descriptive methods [9].

The types of data used in this research were primary and secondary data. The methods used to collect primary data included observation, interviews, and questionnaires. Secondary data refer to information obtained from other parties, not from the original sources. These data were collected indirectly using intermediaries.

The population of this research consisted of the members of "Sari Makmur" Women Farmers' Group in Alasmalang Village, Kemranjen District, Banyumas Regency. The sampling technique used in this study was the census technique, in which the entire population is included as the research sample. The total number of members in the "Sari Makmur" Women Farmers' Group was 31 individuals.

To examine the role of field agricultural extension officers in empowering members of the "Sari Makmur" Women Farmers Group in Alasmalang Village, Kemranjen District, Banyumas Regency, a Likert scale was utilized. The Likert scale, or measurement scale, is a standardized agreement used as a reference to define how long or short each interval is within the measuring instrument. Thus, This instrument is used to generate quantitative data [10]. The assessments of the roles of field agricultural extension officers consists of 6 variables: such as motivator, educator, disseminator, facilitator, supervisor and evaluator.

In applying the Likert scale, each indicator of the role of the Field Agricultural Extension Officers is assigned a score [11]. The scores for each question under the research variables are as follows:

Not Functional = score 1
Fairly Functional = score 2
Functional = score 3
Highly Functional = score 4

The total scores are then calculated using the following formulas:

Maximum score = Highest score × Number of respondents × Number of questions

Minimum score = Lowest score × Number of respondents × Number of questions

Afterward, the interval is calculated using the following formula:

= 93

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i = \frac{\textit{Highest score-Lowest score}}{\textit{total number of categories}} (1)
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Hence, to measure the level of the role of field agricultural extension officers in empowering the "Sari Makmur" Women Farmers' Group in Alasmalang Village, Kemranjen District, Banyumas Regency, the following formula is used:

Maximum Score $= 4 \times 31 \times 4 = 496$ Minimum Score $= 1 \times 31 \times 4 = 124$ Then, the interval $= \underline{496 - 124}$ 4

3. Results And Discussion

The "Sari Makmur" Women Farmers' group in Alasmalang Village, Kemranjen District, Banyumas Regency was established in 2004 and has been active for 20 years to date. The group's formation originated from the establishment of the District-Level Association of Superior Durian Farmers which is headquartered in Alasmalang Village. The group consists of 31 members, including 13 administrators, and 18 active members. The administrative team plays an active role in organizing various activities, ranging from training on the production of organic fertilizer that is useful for supporting plant growth in home gardens to post-harvest processing activities aimed at adding value to agricultural products.

The empowerment program in Alasmalang Village, Kemranjen District, Banyumas Regency is an initiative carried out by agricultural extension officers in empowering the Women Farmers' Group and the farming business it initiated. This program is implemented with the purpose of improving farmers' behavior and giving them a more independent livelihood compared to previous conditions. Based on the results of interviews with field agricultural extension officers and the secretary of the "Sari Makmur" Women Farmers Group, several extension activities have been implemented in the "Sari Makmur" Women Farmers Group as follows; routine meetings and processing of agricultural products such as the production of durian *dodol* and durian sticks, mung bean (*wajik*), and butterfly pea (telang) flower syrup.

Field Agricultural extension officers encounter various obstacles in the implementation of extension programs, which include the following:

Internal Challenges

a. Limited Number of field agricultural extension officers

The total number of field agricultural extension officers in Kemranjen District remains relatively limited, with only six officers available. Each extension officer is responsible for assisting two to three villages, with each village comprising approximately three to nine farmers' groups. This situation demands that extension officers possess strong time management skills to ensure that extension activities in each village are implemented effectively. It is concluded that the insufficiency of extension workers causes low levels of competence among extension officers due to the large number of farmer groups that must be assisted. As a result, extension officers do not have sufficient time and opportunity to improve their own competencies [12].

b. Lack of Interest and Motivation Among Members

According to field agricultural extension officers, members of the Women Farmers' Group exhibit a low level of interest and motivation in participating in extension activities. This is reflected in the poor attendance at each session. The limited participation may be attributed to several factors, such as a lack of understanding of the benefits of extension activities or members being busy with other activities. A study concluded that the low attendance rate of farmer group members in socialization sessions is due to the difficulty in coordinating free time among members to participate in the extension activities conducted by the extension officers [13].

c. Schedule Adjustment

Another challenge in conducting extension activities is coordinating schedules between members and extension officers. Although the group has a regular monthly meeting schedule, it is not uncommon for various issues to arise that require changes. Factors such as members' commitments to household duties or agricultural work, as well as the busy schedules of the extension officers, are often the main reasons why it is difficult to find a mutually convenient time for all parties involved. Field research shows that extension officers conduct meetings with farmers' groups at tentative times, making it difficult for the groups to adjust their schedules to attend [14].

2. External Challenges

a. Extension Costs

One of the external challenges faced by field agricultural extension officers in implementing extension programs is the lack of government funding. The absence of financial support often poses a significant barrier, particularly when extension officers seek to carry out programs that involve costs, such as activities related to the processing of agricultural products. Findings from a study show that limited access to motor vehicles, fuel, and operational funds during meetings with farmers made it harder for extension officers to visit frequently and reach a wider audience. This also limited the variety of methods they could use for extension activities. Additionally, without a budget for training and capacity building, extension officers' knowledge tends to stay confined to their immediate work environment and the materials they already have [15].

This solution addresses problems encountered in the empowerment of the "Sari Makmur" Women Farmers' Group, both from internal and external challenges. The following are the proposed solutions by field agricultural extension officers to overcome obstacles in empowering the Women Farmers' Group "Sari Makmur":

1. The Solution of Internal Challenges

a. Limited Number of field agricultural extension officers

This fundamental challenge is commonly encountered by the field agricultural extension officers, who are responsible for supporting multiple groups across several villages. The viable solution to this challenge involves implementing a more structured scheduling strategy and enhancing collaboration among extension officers to assist one another in empowering the farmer groups under their supervision. For instance, one extension officer may support a colleague during the implementation of extension activities.

b. Lack of Interest and Motivation Among Members

To address the issue of low interest and motivation among members, The field agricultural extension officers continuously strive to provide ongoing education to members of both farmer groups and women farmer groups. This education is delivered through a gradual yet consistent approach, enabling members to develop a better understanding of the importance of participating in agricultural activities and group empowerment.

c. Schedule Adjustment

Therefore, to overcome the issue of schedule adjustments, a more effective communication system is needed between members and the agricultural extension officers to ensure that any changes in the schedule are properly communicated. An alternative method, such as the use of communication technology, for example, messaging groups, can also help minimize obstacles and ensure that extension activities continue to run optimally.

2. The Solution of External Challenges

a. Extension Costs

To tackle this problem, a more sustainable and strategic solution is required. One such strategy involves establishing collaboration with the private sector, social organizations, or institutions that are concerned with the agricultural sector. Additionally, agricultural extension officers can seek funding opportunities through government sponsored programs.

The Role Of Field Agricultural Extension Officers

Filed agricultural extension officers serve as the frontline personnel who interact directly with farmers. This role implies that they possess a diverse set of skills to effectively support their duties and functions. Consequently, agricultural extension officers are expected to employ a variety of approaches to assist in resolving farmers' issues.

The role of field agricultural extension officers as motivators is to provide guidance to farmers' groups, particularly the women farmers' group under their supervision. For example, the field agricultural extension officers guide members of the Women Farmers' Group in the development and management of land and its production.

Table 1. Assessment of the Role of Field Agricultural Extension Officers as Motivators

Statement on the Role of Agricultural Extension Officers as Motivators	Score
Field agricultural extension officers provide guidance related to development to members of the Women Farmers' Group	93
Field agricultural extension officers enhance the potential and abilities of Women Farmers' Group members in extension activities	89
Field agricultural extension officers encourage Women Farmers' Group members to actively participate in extension activities	61
Field agricultural extension officers guide Women Farmers' Group members in land management and its production	94
Total Score	337
Level of Agricultural Extension Officers' Role	Functional

Source: Primary Data Processed, 2025

Based on Table 1 above, it can be concluded that the role of field agricultural extension officers as Motivators is functional, with a total score of 337. This is especially evident in their guidance to members of the Women Farmers' Group regarding land management and production.

The measurement of the role of field agricultural extension officers as educators is the assessment of their performance in educating members of the Women Farmers' Group regarding new ideas.

Table 2. Assessment of the Role of Field Agricultural Extension Officers as Educators Statement on the Role of Agricultural Extension Officers as Educators Score The Field Agricultural Extension Officers provide training to members of the Women 99 Farmers' Group. The Agricultural extension officers demonstrate proper local resource processing 96 techniques to members of the Women Farmers' Group. The Agricultural extension officers provide materials tailored to the issues faced by 63 members of the Women Farmers' Group. The Agricultural extension officers enhance members' knowledge of new ideas within 85 the Women Farmers' Group. **Total Score** 343 Level of Agricultural Extension Officers' Role **Functional**

Source: Primary Data Processed, 2025

Based on Table 2 above, The role of the field agricultural extension officers as educators is functional with a total core of 343. Particularly in providing training to members of the Women Farmers' Group.

The measurement of the role of field agricultural extension officers as disseminators refers to the dissemination of information and innovations carried out by the officers to farmers.

Table 3. Assessment of the Role of Field Agricultural Extension Officers as Disseminators	
Statement on the Role of Agricultural Extension Officers as Disseminators	Score
The field agricultural extension officers convey information/innovation regarding extension	110
programs	

The field agricultural extension officers provide information/innovation about the prices of	66
agricultural products	
The field agricultural extension officers deliver information on the importance of joining the	87
Women Farmers' Group	07
The field agricultural extension officers shared information/innovation related to local	98
resource management	96
Total Score	361
Level of Agricultural Extension Officers' Role	Functional

Source: Primary Data Processed, 2025

Based on Table 3, the role of field agricultural extension officers as disseminators can be concluded to be functional, with a total score of 361, particularly in conveying information or innovations related to the extension programs.

The role of agricultural extension officers as facilitators refers to the support provided by the officers to ensure the successful implementation of extension activities.

Table 4. Assessment of the Role of Field Agricultural Extension Officers as Facilitators

Statement on the Role of Agricultural Extension Officers as Facilitators	Score
The field agricultural extension officers provide supporting tools for extension activities.	59
The field agricultural extension officers facilitate members of the Women Farmers' Group in accessing information.	55
The filed agricultural extension officers assist members of the Women Farmers' Group in program development.	104
The field agricultural extension officers connect members of the Women Farmers' Group with relevant stakeholders.	88
Total Score	306
Level of Agricultural Extension Officers' Role	Less Functional

Source: Primary Data Processed, 2025

Based on Table 4, the role of field agricultural extension officers as facilitators is considered less functional, with a total score of 306. Their primary contribution lies in assisting members of the Women Farmers' Group in program development.

The measurement of the role of field agricultural extension officers as supervisors is the role of the officers together with members of the Women Farmers' Group in conducting self-assessments, followed by providing alternative suggestions for improvement or problem-solving.

Table 5. Assessment of the Role of Field Agricultural Extension Officers as Supervisors

Statement on the Role of Agricultural Extension Officers as Supervisors	Score	
The field agricultural extension officers provide alternative solutions to problems faced by	84	
members of the Women Farmers' Group.	04	
The field agricultural extension officers offer suggestions related to programs with	85	
problems		
The field agricultural extension officers give guidance on preventing potential problems	86	
The field agricultural extension officers provide guidance on issues encountered by	84	
members of the Women Farmers' Group		
Total Score	339	
Level of Agricultural Extension Officers' Role	Functional	

Source: Primary Data Processed, 2025

Based on Table 5, the role of field agricultural extension officers as supervisors can be concluded to be functional, with a total score of 339, primarily in providing direction for the prevention of problems.

The role of field agricultural extension officers as evaluators includes the assessment of their performance by evaluating activities carried out in the previous stage, during implementation, and after completion.

Table 6. Assessment of the Role of Field Agricultural Extension Officers as Evaluators

Statement on the Role of Agricultural Extension Officers as Evaluators	Score	
The field agricultural extension officers monitor and evaluate the implementation of	110	
programs conducted by members of the Women Farmers' Group		
The field agricultural extension officers monitor and evaluate the utilization and mastery of	47	
technology by members of the Women Farmers' Group		
The field agricultural extension officers supervise and assess all activities carried out by	404	
the Women Farmers' Group	104	
The field agricultural extension officers propose alternative strategies for the future	00	
development of programs for members of the Women Farmers' Group	88	
Total Score	349	
Level of Agricultural Extension Officers' Role	Functional	

Source: Primary Data Processed, 2025

Based on Table 6 above, the role of field agricultural extension officers as evaluators can be concluded to be functional, with a total score of 349, primarily in monitoring and evaluating the implementation of programs among members of the Women Farmers' Group.

4. Conclusion And Recommendation

The role of field agricultural extensions in performing their duties was found to be functional in several aspects, with the following scores: as motivators (337), as educators (343), as disseminators (361), as supervisors (339), as evaluators (349). However, their role as facilitators was found to be less functional, with a score of 306.Furthermore, the average role of the field agricultural extension officers in empowering The "Sari Makmur" Women Farmers' Group in Alasmalang Village, Kemranjen District, Banyumas Regency can be considered functional across the six roles, motivator, educator, disseminator, facilitator, supervisor, and evaluator with a total cumulative score of 2.016.

Based on these findings, it is recommended that the role of the field agricultural extension officers as facilitators be further enhanced. For example, they connect members of the women farmers' group with relevant stakeholders. This is particularly important because some members work as traders and require access to broader market opportunities. In this regard, the role of the field agricultural extension officers as facilitators is crucial to supporting the group's development and addressing their needs.

References

- [1] Kusmana, E., & Garis, R. R. Community Empowerment in Agriculture by Field Agricultural Extension Officers in the Fostered Area of Buniseuri Village, Cipaku Subdistrict, Ciamis Regency. Moderat: Scientific Journal of Government Science, 5(4), 460-473. (2019)
- [2] Ergina, G., Maad, F., & Suwarnata, A. A. E. The Role of Agricultural Extension Officers in Advancing Farmer Groups in Cipelang Village, Bogor Regency. Agrisintech (*Journal of Agribusiness and Agrotechnology*), 3(1), 22-31. (2022)
- [3] Darajat, S. Farmers' Groups as the Vanguard of Future Agriculture. Directorate General of Livestock. Jakarta. (2011)
- [4] Ministry of Agriculture. Academic Manuscript on Agricultural Extension. Jakarta. (2002)

- [5] Mardikanto, T. Building Modern Agriculture. Surakarta: Cooperation of the Educational Development Institute and the Publishing and Printing Unit of Sebelas Maret University (UNS Press), Universitas Sebelas Maret. (2009)
- [6] Seftiani, T., Aprianto, D., & Gabrienda, G. The Role of Extension Officers in the Development of Women Farmers' Groups in Selupu Rejang District. *Journal of Plant Science Research Cluster*, 1(1), 70–81. (2022)
- [7] Susilowati, dkk. Empowerment of Women Farmer Groups to Foster Entrepreneurial Interest. AMMA: *Journal of Community Service*, 1(02), 36–42. (2022)
- [8] Suwarningmas, N. P. W., Suardi, I. D. P. O., & Putra, I. G. S. A. The Role of Agricultural Extension Officers in the Development of Women Farmers' Groups (Case Study of Kacang Kace Canavalia Processing in Karang Sari WFG and Merta Sari WFG in Nyanglan Village, Banjarangkan District, Klungkung Regency). *Journal of Agribusiness and Agritourism*, 433-440. (2017)
- [9] Moleong, Lexy J. Qualitative Research Methods. Revised Edition. PT. Remaja Rosdakarya, Bandung. (2013)
- [10] Sugiyono. Quantitative Research Methods, CV Alfabeta, Bandung. (2016)
- [11] Akdon, Riduwan. Formulas and Data in Statistical Applications. Alfabeta. Bandung. (2012)
- [12] Pramono, Herry, Anna Fatchiya, and Dwi Sadono. "Competence of Daily Temporary Extension Workers as Assistant Agricultural Extension Workers in Garut Regency, West Java." Journal of Extension, 13.2: 194-209.(2017)
- [13] Sundayana, Rita Fitria. "Effectiveness of Agricultural Program Implementation by Agricultural Extension Officers in Efforts to Improve Farmers' Welfare in Cintaratu Village, Parigi District, Pangandaran Regency." Moderat: Scientific Journal of Government Science, 4.4: 103-113. (2018)
- [14] Lubis, Ricky Amelfi. "Efforts to Develop Farmer Groups Based on the Role of Field Agricultural Extension Officers in Kutalimbaru District, Deli Serdang, North Sumatra." Scientific Journal of Agricultural Students [JIMTANI] 2.2 (2022)
- [15] Sugihono, Chris, Sunarru Samsi Hariadi, and Sri Peni Wastutiningsih. "Integration of Information and Communication Technology Utilization to Improve Agricultural Extension Services." Journal of Extension, 20.02: 178-190.(2024)