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Performance Study of Agricultural Extension Workers at the Agricultural Extension Center (BPP) in Salahutu District, Central Maluku Regency, Maluku Province

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Abstract

This study aims to determine the performance of agricultural extension workers and factors related to the performance of extension workers. This study used the swot analysis method. The results showed that extension performance succeeded in increasing agricultural productivity, farmer welfare, and the quality of agricultural products with environmental support factors, local governments, communities, and related institutions for agricultural extension performance.

Keywords : Extension Worker Performance; Extension performance factors; Swot.

INTRODUCTION

Agricultural extension aims to empower farmers and their families through increasing knowledge, abilities, attitudes, and independence. This will enable them to become more capable and independent, thereby increasing the competitiveness of their businesses, as well as their own and society's welfare (Zakaria, 2006).

The ability of extension workers must be improved to become independent and professional extension workers in accordance with the growth of agricultural extension services and the implementation of Law Number 16 of 2006 concerning the Agriculture, Fisheries, and Forestry Extension System (SP3K). As a result, professional extension workers act more as motivators, dynamicators, facilitators, and consultants for farmers as the main actors than as suppliers or conveyors of technology and information (Tjitropranoto, 2009).

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The success of farmers in increasing their farm productivity and household income is an illustration of the role of extension workers in helping farmers change knowledge, attitudes and skills through the performance of agricultural extension workers. Performance is an output (*output*) given according to the tasks and functions given from a particular job in a certain period. Herbenudalam Nurdyawati (2020) underlined that the performance of agricultural teachers is determined by their ability to carry out their main responsibilities in accordance with their authority, based on talent, experience, sincerity, and efficient use of time.

Previous research by Silalahi (2018) found that the performance of agricultural extension workers must be active and proficient in approaching farmer groups, this is because the performance of extension workers is closely related to the success of productivity levels, increasing income and farmers' welfare. In line with that, Jalil *et al* (2022) also added that the presence of agricultural extension workers plays an important role in providing guidance, insight, encouragement and knowledge to farmer groups about agricultural concepts.

The southern Maluku Islands of Indonesia are part of the Maluku Province, which is bordered to the north by the Seram Sea, to the south by the Indian Ocean and Arafura Sea, to the east by Papua, and to the west by Sulawesi. Ambon is the largest city as well as its capital. With a population of 1,848,923 people, Maluku Province is ranked 28th in Indonesia based on population in 2020. Since time immemorial, Maluku has been known as an area in Indonesia producing food and spices. To increase food production in Maluku, the role of supervisors is very important. Latuconsina & Santoso (2016) wrote in the journal that the responsibilities of extension workers include fostering communication, increasing farmer involvement, and increasing motivation related to farmers' perceptions. Modification of farmers' attitudes and preferences is closely related to increasing farmer motivation during extension or training.

Location and Time of Research

This research was carried out in one of the agricultural extension work areas in Central Maluku Regency, Maluku Province, namely the Agricultural Extension Center (BPP) of Salahutu District. The determination of the location of the study was based on the consideration that: (1) in quantity the number of extension workers is adequate, and (2) accessibility is located not far from the capital of Maluku Province (Ambon) as the center of regional government, in addition to adequate transportation facilities and

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infrastructure (smoothly), so there are no obstacles. The conduct of research for data collection is planned to last for one month

Population and Sample

The population in this study is all extension workers who work in Salahutu District. Based on provisional data, it shows that in Salahutu District, Central Maluku Regency, the number of extension workers is 30 people. Based on this population, the sample taken in this study was 30 people. Thus the entire population was netted as respondents in this study.

Data Collection Methods

The survey method is used in the data collection approach to obtain objective and scientifically accountable data. According to the source, primary and secondary data are the types of data used in this study. Primary data is data that researchers collect directly from observations and does not come from pre-existing data sets. In contrast, secondary data is information that has been collected by others and documented for use by researchers. Primary data in this study is in the form of data about research variables that have been determined, then constructed in the form of questions and statements described in a list of questions (questionnaires) that are closed questions. In addition to questionnaires intended for respondents, an open-ended list of questions was also created aimed at key informants who have extensive information related to the research problem. Observation or observation of researchers on conditions in the field is also a source of primary data, such as: observations in the work area / assisted by extension workers.

The secondary data used in this study were sourced from BPP's annual report, as well as planning documents for extension programs in the extension sector in Central Maluku Regency.

RESEARCH RESULTS

Characteristics of Respondents

To characterize the potential of farmers in Salahutu District (BPP), respondents were selected based on factors such as gender, age, education, and land area of farmers.

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Table 1 Number of Respondents by Gender

No	Respond	Gender		Total
		Law - Law	Woman	
1	BPP Salahutu	1	1	2
2	Farmer	21	9	30
Sum		**22**	**10**	**32**

Sex is the biological difference between women and men from birth. Based on Table 1 as a whole, the majority of respondents are men (22 people), while the number of women is 10 people. Thus, the gender distribution of respondents indicates the presence of women in the category of farmer respondents, which can provide a more inclusive representation in the studies or analyses conducted.

Table 2 Number of Respondents by Address

No	Address	Sum	Presentase (%)
1	Liang	5	16,67
2	Julie	9	30,00
3	Tulehu	8	26,67
4	Wind	3	10,00
5	Waiyari	5	16,67
Sum		**30**	**100,00**

Based on Table 2 the distribution of respondents by address shows the variation in participation of Suli 9 respondents (30.00%), Tulehu 8 respondents (28.57%), Liang and Waiyari 5 respondents each (16.67%) and Waai 3 respondents. Suli had the highest contribution with a percentage of 30.00% of the total respondents, highlighting the central role of the location in this study.

Table 3 Number of Respondents by Education Level

No	Education	Sum	Presentase (%)
1	SD	4	13,33
2	SMP	9	30,00
3	SMA	17	56,67

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Sum	**30**	**100,00**

Based on Table 3 Distribution of respondents based on the education level of SD 4 respondents (13.33%), SMP 9 respondents (30.00%) and SMA 17 respondents (56.67%). Senior high school became the education category with the largest contribution, accounting for 56.67% of the total respondents.

Table 4 Number of Respondents by Age

No	Age (Years)	Sum	Presentase (%)
1	30 – 40	8	26,67
2	41 – 50	18	60,00
3	51 – 60	4	13,33
Sum		**30**	**100,00**

From Table 4 it can be seen that the distribution of respondents based on the age of 30 - 40 years 8 respondents (26.67%), age 41 - 50 years 18 respondents (60.00%) and age 51 - 60 years 4 respondents (13.33%). Ages 41 - 50 years have the highest contribution by contributing 60.00% of the total respondents. Respondents aged 51 - 60 years contributed 13.33%.

Table 5 Number of Farmer Respondents Based on Land Area Owned

No	Land Size (hectares)	Sum	Presentase (%)
1	0,10 - 0,50	20	66,67
2	0,51 - 1,00	10	33,33
Sum		**30**	**100,00**

The area of land tenure is the entire area of land cultivated by farmers, either privately owned or rented. Judging from Table 5 that the distribution of respondents based on land area 0.10 - 0.50 hectares 20 respondents (66.67%) and 0.51 - 1.00 hectares 10 respondents (33.33%). Overall, the majority of respondents (66.67%) have a land area between 0.10 to 0.30 hectares, while 33.33% have a land area between 0.31 to 0.60 hectares

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Environment Support Variables.

The following is the frequency distribution of the list of respondents' answers to the Environmental Support Variability:

Table 6 Farmer Respondents' Answers About Environmental Support

No	Statement		STS		TS		S		SS		Total	
			1		2		3		4			
			F	%	f	%	F	%	F	%	f	%
1	Government Support Level	P1	0	0	0	0%	7	23%	23	77%	30	100%
2		P2	0	0	0	0%	9	30%	21	70%	30	100%
3	Community Support Level	P3	0	0	0	0%	10	33%	20	67%	30	100%
4		P4	0	0	0	0%	12	40%	18	60%	30	100%
5	Related Institution Support	P5	0	0	0	0%	10	33%	20	67%	30	100%
6		P6	0	0	0	0%	8	27%	22	73%	30	100%
7	Access to Agricultural Resources	P7	0	0	0	0%	6	20%	24	80%	30	100%
8		P8	0	0	1	3%	11	37%	18	60%	30	100%
9	Resource Support and Training	P9	0	0	10	33%	12	40%	8	27%	30	100%
10		P10	0	0	10	33%	13	43%	7	23%	30	100%

Table 6 describes each respondent's response to environmental support variables as can be seen in Table 6. Likert scales consisting of strongly disagree (STS), disagree (TS), agree (S), and strongly agree (SS) are used to measure answers. Table 6 shows that 77% and 70% of respondents chose the "Strongly Agree" option for the "Government Support Level" item, respectively. This shows the high level of confidence of most respondents in the quality of support received by farmers from local governments in the form of seeds and tractor technology used in cultivation. In addition, the instructor responded that the support provided—whether in the form of mentoring, training, IT resources, and increasing the number of BOPs—was adequate but not ideal

Regarding the "Community Support Level" statement, 67% and 60% of participants chose the "strongly agree" option, respectively. This shows that most respondents believe that communities have a high level of support, with members actively taking part in extension initiatives and helping each other in the future development process of agriculture. In the statement "Support of Related Institutions" respondents who

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voted "Strongly Agree" were 67% and 73%, respectively. This shows that most respondents think that the support provided by related institutions is very good. The support is in the form of encouragement and implementation of programs in the field of counseling.

In the statement "Access to Agricultural Resources" respectively 80% and 60% of respondents answered "Strongly Agree". This shows that most respondents agree with access to agricultural resources. However, some respondents nevertheless stated that they disagreed with access to agricultural resources including seeds, fertilizers, and adequate equipment to meet their needs. This is due to limitations in accessing extension services due to unstable network conditions.

On the "Resource Support and Training" statement, 60% and 60% of respondents answered "Disagree" respectively. This shows that most respondents disagree that training programs are available to improve their agricultural capabilities.

Service Quality Variables

The frequency distribution of respondents' responses to Service Quality Variables is presented below. 60% and 60% of respondents voted "Disagree" for the "Resource Support and Training" statement, respectively. This shows that the majority of respondents surveyed do not agree if training programs are offered to improve their agricultural expertise.

Table 7 Service Quality Variables

No	Statement		STS		TS		S		SS		Total	
			1		2		3		4			
			f	%	f		f	%	F	%	f	%
1	Availability of Information	P1	0	0	0	0%	10	33%	20	67%	30	100%
2		P2	0	0	0	0%	10	33%	20	67%	30	100%
3	Community Support Level	P3	0	0	0	0%	9	30%	21	70%	30	100%
4		P4	0	0	0	0%	12	40%	18	60%	30	100%
5	Responsive Response to Complaints	P5	0	0	0	0%	12	40%	18	60%	30	100%
6		P6	0	0	0	0%	10	33%	20	67%	30	100%
7	Support and Guidance	P7	0	0	0	0%	7	23%	23	77%	30	100%
8		P8	0	0	0	0%	9	30%	21	70%	30	100%

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9	Government Program Compatibility	P9	0	0	7	23%	15	50%	8	27%	30	100%
10		P10	0	0	5	17%	15	50%	10	33%	30	100%

Table 7 shows that 67% and 67% of respondents chose the "Strongly Agree" option for the "Availability of Information" item, respectively. This shows that most respondents have a high level of confidence in the quality of knowledge conveyed by agricultural teachers about how to grow crops, agricultural technology, and air assistance.

Regarding the "Community Support Level" statement, 70% and 60% of participants chose the "strongly agree" option, respectively. This shows that most respondents think that the community is very supportive, where members actively participate in extension activities and provide mutual assistance in the process of agricultural growth in the future.

On the "Responsive response to complaints" statement of those surveyed, 60% and 67% voted "Strongly Agree". This shows that most respondents think the response to their complaints including the high cost of fertilizer and the easing of air restrictions due to the El Niño phenomenon has been good. 77% and 70% of respondents voted "Strongly Agree" for the "Support and Guidance" statement, respectively. This suggests that most respondents felt that support and direction from training centers, including seeding, fertilizer, and instruction to increase agricultural productivity, was beneficial.

Factors for Improving Extension Performance

Frequency distribution of respondents' responses to factors contributed by the government, farmer groups, actions of extension agencies, and the following is a list of relevant agency support believed to be related to the performance of agricultural extension workers.

Table 8 Factors Associated with Improved Extension Performance

No	Statement		STS		TS		S		SS		Total	
			1		2		3		4			
			F	%	F	%	F	%	f	%	f	%
1	Government Contributions	P1	0	0%	16	53%	13	43%	1	3%	30	100%
2	Farmer Group	P2	0	0%	0	0%	6	20%	24	80%	30	100%

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3	Actions of Extension Agencies	P3	0	0%	0	0%	7	23%	23	77%	30	100%
4	Related Agency Assistance	P4	0	0%	20	67%	9	30%	1	3%	30	100%

An explanation of each respondent's response to environmental support variables can be seen in Table 8. Answers are measured using a Likert scale which has four categories, namely strongly disagree (STS), disagree (TS), agree (S), and strongly agree (SS).

Table 8 shows that 53% of respondents chose the "Disagree" option for the "Government Contributions" item. This shows that most respondents strongly disapprove of government contributions as they consider them substandard compared to the support provided, including IT facilities, mentoring and training programs, and an increasing number of BOPs.

Of these respondents, 80% chose "strongly agree" with the statement "Farmer Group". This shows that most farmer group programs have been well implemented and implemented according to respondents' responses, with the average respondent agreeing.

On the statement "Extension Agency Action" 77% of respondents answered "Strongly Agree". This shows that most respondents agree that the response given is good where the rerpon is and the provision of information on services needed by farmers.

On the statement "Related Agency Assistance" by 67% of respondents answered "Not agree". This shows that most respondents strongly disagree due to the lack of assistance from the relevant agencies.

In Table 8, it can be seen that Extension Performance Improvement Factors such as government contributions, farmer groups, actions of extension agencies and related service assistance to respondents are in a low position with a percentage of 54%. Respondents who have high loyalty are only 1%.

Based on hasl research conducted using the SWOT analysis strategy, the following data can be taken. With the title of Study of the performance of agricultural extension workers at the agricultural extension center (BPP) in Salahutu District, Central Maluku Regency, Maluku Province.

Fahmi (2013) stated that to conduct a more thorough SWOT analysis, it is necessary to consider internal and external aspects. These considerations include: These external factors have an impact on the development of opportunities and threats (O and

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T) related to external environmental conditions; While internal factors will have an impact on the development of strengths and weaknesses (S and W) related to internal environmental conditions.

The SWOT matrix can explain how a company's strengths and weaknesses are combined with opportunities and threats from its external environment. The following is an explanation of each SWOT matrix strategy;

1. **Strenght-Opportunity (SO) strategy**. This strategy is developed in accordance with the philosophy of the Organization, which is to achieve goals and make the best use of possibilities by using all the strengths possessed.
2. **Strenght-Threath (ST) strategy**. To estimate current risks, this plan is developed based on the strengths of the Organization.
3. **Weakness-Opportunity (WO) strategy**. The application of this strategy is based on maximizing existing strengths and exploiting existing possibilities.
4. **Weakness-Threath(WT) strategy**. This tactic centers on defensive measures, which aim to reduce organizational vulnerabilities while avoiding danger.

Table 9 SWOT Matrix

From the identification results, it can be seen in the following table:

Internal / **External**	**Strength**	**Disadvantages (*weakness*)**
	1. Formal Education 2. Work Motivation 3. Work Experience 4. Training Activities 5. Clear extension program	1. Minimal monitoring of extension performance 2. There is still a lack of manpower in the field of agricultural extension. Lack of funding for extension activities 3. Limited means of extension
Opportunity(*Opportunity*)	**SO Strategy**	**Strategy WO**
1. Support from the local Government 2. Relevant agencies that cooperate.	1. Improve the quality of extension workers by encouraging the self-competence of extension	1. 1. Greater collaboration of finance, facilities, and infrastructure with relevant institutions for

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3. Infiltrators have access to training programs offered by other organizations. 4. The development of technology in agriculture to increase the capacity of farmers to access market information, infrastructure, and financing	workers through trainings. 2. Channeling the latest data, progress, and technology. 3. Increase extension related activities. Improve the functional skills of extension workers 4. Improve the welfare and career path of extension workers 5. Expanding organizational responsibilities and roles	extension initiatives. 2. Improved coordination between internal divisions. 3. Utilize technology to disseminate information, such as pamphlets, brochures, billboards, etc
Ancaman(*Threats*)	**ST Strategy**	**WT Strategy**
1. Shift in administrative management 2. Organization for lasting policy change 3. Farmers benefit from cultural diversity 4. Varying meteorological conditions 5. Various geographical work environments 6. Instructor performance is rewarded by the system	1. 1. More instructions to help extension workers solve various problems that arise when implementing the program. 2. Utilize the role of extension workers in accordance with their responsibilities and main roles in implementing extension programs	1. Increasing the number of prosperous and independent farmers in Salahutu District, Central Maluku Regency. 2. Motivate local governments to consider every aspect of priority policy changes.

The ST approach seeks to use existing strengths to mitigate the impact of existing threats. This tactic also shows how instructors function in dealing with various occupational hazards and how their strengths can be leveraged to alleviate those

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concerns (Arbi, 2017). Strategies to address strengths and challenges include providing more training to teachers to help them overcome various obstacles that arise when conducting extension programs and allocating instructor roles more effectively based on their primary responsibilities.

ST's strategy is to increase training for extension workers in overcoming various problems during program implementation, based on research findings using SWOT strategy analysis to identify the performance of agricultural extension workers at the Agricultural Extension Center (BPP), Salahutu District, Central Maluku Regency, Maluku Province. Advising and utilizing the role of extension workers in accordance with their primary responsibilities when implementing the expansion program.

Factors related to the performance of agricultural extension workers at the Agricultural Extension Center (BPP) Salahutu District, Central Maluku Regency, Maluku Province, can be divided into internal factors and external factors. Internal factors include, gender, education, and land area of farmers. Meanwhile, the availability of facilities and infrastructure used, reward systems, the number of assisted villages, distance to work areas, information technology, the degree of active participation of farmers, organizational relations, coaching support, and supervision are external factors. This research shows that the implementation of the ST strategy in managing the performance of agricultural extension workers at the Agricultural Extension Center (BPP) of Salahutu District, Central Maluku Regency, Maluku Province, has brought positive results. The focus on improving coaching to extension workers and optimizing roles according to the tupoksi is an effective foundation to overcome various challenges during the implementation of the extension program. This strategy not only empowers extension workers in facing work threats, but also optimizes their contributions in accordance with their duties and responsibilities.

CONCLUSION

Based on the results and discussion of the research, it can be concluded that:

1. Environmental Support: Most respondents expressed high levels of support for government, communities, related institutions, access to agricultural resources, and resource support and training. However, there are differences in perception in some aspects. Qualityof Service: Respondents gave a positive assessment of the availability of information, the level of community support, responsiveness to

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complaints, support and guidance, and the suitability of government programs in agricultural extension services.

2. Extension Performance Improvement Factors: The contribution of the government and farmer groups received a low rating from respondents, while the actions of extension agencies and related agency assistance received a high rating.

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