

Analysis of the Level of Satisfaction of Rice Farmers towards the Performance of Agricultural Extension Workers in Muaradua Kisam District, South Oku Regency

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Abstract

Agricultural extension is an important and strategic activity that cannot be separated from development in the agricultural sector. Agricultural extension is the spearhead of development at the field level, which also determines the development of the farming system run by farmers or farmer groups. One indicator of the role of agricultural extension is the development of farmer groups, which is shown through their abilities in terms of both technical and management of the farming business being run. This research aims to analyze the level of satisfaction of rice farmers with the role of Field Agricultural Instructors (PPL) in increasing farming productivity in Muaradua Kisam District, South Ogan Komering Ulu (OKU) Regency. The research used a survey method with a simple random sampling technique, where 60 lowland rice farmers from a total population of 120 farmers were used as respondents. Data was collected through questionnaires and interviews and then analyzed using a descriptive approach. The research results show that most of the attributes of extension services have met the level of farmer satisfaction, especially in providing extension services with a friendly attitude and the application of farming technology. However, there are several attributes, such as organizing farmer groups and providing complete technological information, which do not fully satisfy farmers. This conclusion indicates the need to increase the capacity of extension workers in building effective communication and cooperation to increase farmer satisfaction and support the sustainable development of the agricultural sector in the research area.

Keywords: Agricultural Extension; Muaradua Kisam; Rice Farmers; Satisfaction Level

Introduction

In Indonesia, sustainable development of the agricultural sector is very important to be carried out as a driver of the community's economy, providing employment, sources of raw materials for consumption (food) and industry, sources of national income (foreign exchange), preserving natural resources/environment, culture and increasing agrotourism. The community needs food crop agriculture (rice) as a source of consumption and a source of income for the family. In running their farming businesses, farmers need encouragement, direction, assistance, and training from Field Agricultural Extension Workers (PPL) who can improve their knowledge or skills, use of technology, and entrepreneurship in their farming businesses (Wiranti, A., 2021).

Extension activities are one of the factors that determine success in the history of agricultural development in Indonesia. During the New Order, extension in the field of agriculture received recognition from the community, namely with the success of national rice self-sufficiency. At that time, agricultural extension institutions became objects that had to fight for farmers' rights. With limited budget availability, extension institutions have a very big task, namely increasing rice self-sufficiency. Law Number 16 of 2006 concerning the Agricultural, Fisheries and Forestry

Extension System (Indonesia), so that they are willing and able to help and organize themselves in accessing market information, technology, capital, and other resources, as an effort to increase productivity, business efficiency, income, and welfare and increase awareness in preserving environmental functions (Bahua, 2020).

Agricultural extension is an important and strategic activity that cannot be separated from development in the agricultural sector. Agricultural extension is the spearhead of development at the field level, which also determines the development of the farming system run by farmers or farmer groups. One indicator of the role of agricultural extension is the development of farmer groups, which is shown through their abilities in terms of both technical and management of the farming business being run. Agricultural extension includes activities to provide knowledge and skills to farmer groups; through farmer groups, government policy programs can be conveyed to the community. Agricultural extension workers must be competent agricultural experts, be able to communicate effectively with farmers and be able to encourage interest in cooperation. They must be oriented towards the problems faced by farmers (Batlayeri, M., Adam, F. P., & Far-Far, R. A., 2020).

Rice is one of the commodities in the food crop sub-sector; rice is a strategic commodity in South Sumatra because it is the staple food of the Indonesian people; rice is also widely used as a raw material for industry. The increasing need for rice will have an impact on increasing market demand, which will affect the opening of business opportunities and the production of rice at the rice farming level. South Ogan Komering Ulu (OKU) Regency, which is located in the South Sumatra Province, is one of the areas that has great potential for developing food crops; the main food crop production in South OKU Regency is lowland rice. Rice plants are spread across every sub-district in South OKU Regency. The following is a table showing the planting area and production of rice plants in 2024. Muaradua Kisam District is a sub-district with the largest land area and production in South OKU. The majority of the population are farmers, and it is also a center for rice production in South OKU Regency. This area is located around the lake and has agroclimatology that supports the cultivation of lowland rice plants. The following is the land area and rice production in Muaradua Kisam District, namely:

Table 1. Area of Rice Fields and Production in South OKU Regency, 2024

No	Subdistrict	Produktion (Tons)	Planted Area (Ha)
1	Mekakau Ilir		380,72
2	Banding Agung		308,01
3	Warkuk Ranau Selatan		326,17
4	BPR Ranau Tengah		752,6
5	Buay Pemaca		994,15
6	Simpang		520,92
7	Buana Pemaca		210,62
8	Muaradua		594,93
9	Buay Rawan		255,91
10	Buay Sandang Aji		419,71
11	Tiga Dihaji		211,81
12	Buay Runjung		595,25
13	Runjung Agung		133,58
14	Kisam Tinggi		245,13
15	Muaradua Kisam		1062,85
16	Kisam Ilir		275,13
17	Pulau Beringin		835,9
18	Sindang Danau		554,48
19	Sungai Are		127,663
Total			8.805,53

Source: South OKU Regency Agriculture Service, 2024.

Table 1 shows that the central area of rice production in South OKU Regency is Muaradua Kisam District. Muaradua Kisam District is one of the supporters in fulfilling rice needs in South Sumatra Province. Muaradua Kisam District in 2024 produced 9,428.5 tons with an area harvest of 1062.85 ha. Based on the data above, each sub-district in South Sumatra Regency has an average productivity of almost the same, namely 5.33 percent. Subejo (2020) stated that fulfilling food needs is a problem that will continue to be faced by the Indonesian nation because the population growth is increasing like a series the size and capacity of the food supply are growing like an arithmetic series. Muaradua Kisam District is one of the areas where the majority of the population are farmers and is also a rice production center in South OKU Regency. This district has an area of 1062.85 ha with an agricultural area utilized of 3,376 ha. As one of the rice production centers in South OKU Regency, in meeting the population's food consumption, especially rice, of course, there are no obstacles (TPH Service of South OKU Regency, 2024).

Muaradua Kisam District is one of the districts in South OKU Regency with very good potential for paddy farming. Paddy farming in Muaradua Kisam District is supported by land potential that is in accordance with the needs of paddy farming. The problems farmers feel are related to current extension activities, especially in Muaradua Kisam District, and are extension materials that are not in accordance with farmers' expectations. This problem is a reflection of the failure of PPL to provide maximum satisfaction to farmers, where PPL has not been able to understand and capture what farmers need. Extension activities have not been able to carry out their role optimally; this can be caused by the very low participation of farmers in agricultural extension activities; this is a result of the quality of service not being in accordance with farmers' expectations.

Based on the background above, the researcher is interested in researching "Analysis of the Level of Satisfaction of Rice Farmers on the Performance of Agricultural Extension Workers in Muaradua Kisam District, South OKU Regency."

Literature Review

Author	Research Title	Analysis Tools	Result
Kristian (2022)	Analysis of Rice Farmers' Satisfaction Levels Towards Agricultural Extension Services in Panca Agung Village	Metode Analisis Customer Satisfaction Index (CSI)	The research results obtained in this study are, (1) the attributes of agricultural extension services in Panca Agung Village, namely (reliability, alertness, assurance, empathy and physical evidence), with the average response being that farmers felt satisfied, (2) the level of satisfaction of rice farmers with agricultural extension services in Panca Agung Village, the results of CSI it was found that the level of farmer satisfaction in the category of satisfaction

			with agricultural extension services with a CSI value of 75.34%. This value is in the range between 60% < CSI ≤ 80%.
Iswahyu (2019)	Analysis of the Level of Satisfaction of Rice Farmers on the Performance of Field Agricultural Extension Workers in Miau Baru Village, Kongbeng District	Metode IPA (Importance Performance Analysis) dan CSI (Customer Satisfaction Index).	The results of the study showed that the level of conformity between farmers' interests and extension worker performance was 88.74%, which means very appropriate, and the level of farmer satisfaction with extension worker performance was 59.4%, which means quite satisfied.
Setiawan (2021)	Level of Satisfaction of Rice Farmers On Performance with Agricultural Extension Workers in the Field at BPP, Palas District, South Lampung Regency	Metode IPA	The results of the study showed that the level of satisfaction of rice farmers with the performance of agricultural extension workers in the field at the BPP Palas District was in the very good category for each indicator, namely education, dissemination, facilitation, and consultation. Extension workers have provided extension that is very much in accordance with what is expected by farmers. Factors related to the level of farmer satisfaction rice on performance. agricultural extension workers. field at BPP Palas District, namely, farmer motivation, extension techniques, and extension materials.
Saragih et., al (2022)	Analysis of the Level of Satisfaction of Rice Farmers on the Performance of Field Agricultural Extension Workers	Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI)	The results of the calculation using the IPA method showed that the level of conformity of farmers' expectations regarding the performance of extension

in Pandawal
 District, East Sumba
 Regency

analysis
 methods.

workers based on the
 service extension worker
 attributes reached
 77.02%, where the
 attribute with the highest
 level of conformity was
 the extension worker
 attribute preparing
 reading materials, food
 and drinks for extension.
 with during The lowest
 level of conformity
 attribute was the
 extension worker
 attribute helping
 farmers/farmer groups in
 preparing business
 activity plans. farming.
 The results of the CSI
 analysis of the level of
 satisfaction of rice
 farmers with the
 performance of
 agricultural extension
 workers in Pandawai
 District were 0.66. This
 value is in the range of
 0.66-0.80. These results

identify that The level of
 satisfaction of rice
 farmers with the
 performance of extension
 workers is in the satisfied
 category.

Research Method

The research method in this study is a survey. Survey research is a data collection technique that involves asking questions to respondents to obtain information relevant to the research objectives. Surveys are used to collect data from a large number of respondents in a relatively short time. Several techniques were used to obtain in-depth and relevant information for data collection in this study.

The data collection techniques in this study are as follows:

1. Questionnaire: In this study, the questionnaire was conducted by giving a set of written questions to respondents to answer, which can be given directly, via post, or via the internet. There are two types of questionnaires, namely closed and open.
2. Interviews: Interviews in this study were conducted directly with the research objects, namely rice farmers who are members of farmer groups. Interviews with respondents

were conducted with the help of questionnaires directly by researchers and digging for in-depth information in order to obtain results in accordance with what is desired in this study; researchers directed respondents to provide answers to questions asked by researchers in accordance with the contents of the questionnaire.

Results and Discussion

Location and Administrative Area Boundaries

Muaradua Kisam District is a District located in South Ogan Komering Ulu Regency. Muaradua Kisam District has an area of 261.95 square kilometers with a percentage of 3.39. The distance from the district capital to the District is approximately 25 kilometers. Administratively, Muaradua Kisam District borders:

1. West: Bordering Semendo Darat Ulu District and Lubai District, Muara Enim Regency
2. East: Bordering Buay Sandang Aji District and Buay Ranjung District
3. South: Bordering Kisam Tinggi District
4. North: Bordering Muara Dua District

Geographical and Topographical Conditions

Muaradua Kisam District is located at an altitude of less than 67 meters above sea level with flat land conditions. The type of soil in this village is sandy loam with an acidity of 5 to 8. Muaradua Kisam District is broadly influenced by two seasons, namely the rainy season and the dry season, with an average temperature of 28 degrees Celsius. The main commodities cultivated in this District are coffee and rice.

Social Conditions of the Population

Population and Livelihood

Based on the results of the 2024 population census, according to data from the Central Statistics Agency of Ogan Komering Ulu Selatan Regency, Muara Dua Kisam District has 9,810 families and a total population of around 20,487 people. The population, classified according to age and gender, can consist of 10,243 men and 10,244 women.

The livelihoods of the residents of Muaradua Kisam District are very diverse. However, the main occupation of the population is as farmers.

Characteristics of Responding Rice Farmers

The characteristics of rice farmers were obtained through interviews conducted at the research location in Muaradua Kisam District. The characteristics of farmers describe the general characteristics of rice farmers in Muaradua Kisam District as follows:

Age of Example Farmers

Based on the results of interviews with 60 sample rice farmers, most of the rice farmers in Muaradua Kisam District are known to be aged between 30 and 65 years, with an average age of 40 years and above.

Table 12. Number of Sample Rice Farmers Based on Age in Muaradua Kisam District, 2024

No	Age Group (years)	Amount (people)	Percentage (%)
1	25-35	21	35,00
2	36-50	25	41,67
3	51-60	10	16,67
4	60 +	4	6,67
Amount		60	100,00

Based on Table 12 above, the dominant age of the sample rice farmers is the 30 to 35 age group, which is 21 people or 35%; the 36 to 50 age group is not much different, which is 25 people or 41.67%, while the 51 to 60 age group is 10 people or 16.67% and the 60 and above age group is the least, which is only 4 people or 6.67% of the total number of sample rice farmers. This shows that rice farming activities are mostly carried out by people of productive age, where in this farmer group, they have adequate physical and high spirits so that they can carry out rice farming activities well; the age of 51 and above tends to have limited physical abilities.

Level of Satisfaction of Lowland Rice Farmers with the Performance of Agricultural Extension Workers in Muaradua Kisam, South OKU Regency, 2024.

Assessment of the Level of Importance and Performance of Rice Farmers

The assessment of the level of importance and level of satisfaction was carried out through a questionnaire on all respondent rice farmers using the Importance Performance Analysis (IPA) Calculation. The initial step in analyzing the level of consumer preference and satisfaction with attributes was carried out by analyzing the level of importance and level of performance of the attributes perceived by rice farmers towards the performance of extension workers. The level of importance is an attribute that is important for rice farmers. In contrast, the level of performance is closely related to the assessment of rice farmers and the performance of agricultural extension workers in Muaradua Kisam District, South OKU Regency.

The assessment is carried out on 5 attributes divided into 16 items. The first attribute is the Responsiveness Attribute, consisting of 3 items; the second attribute is the Reliability attribute, consisting of 4 items; and the third attribute is Empathy, consisting of 3 items. The fourth attribute is Assurance, consisting of 3 items, and the last attribute is Tangibles (direct evidence), consisting of 3 items of the level of importance and level of performance of rice farmers. The explanation of the things that affect the satisfaction of gaharu farmers/rice farmer groups is analyzed as follows:

Responsiveness Attribute (Attribute A)

Based on the research included in the Responsiveness Attribute in the context of service, including public or business services, it refers to the ability of agricultural extension workers to respond to requests, questions, complaints, or needs of rice farmer customers quickly and effectively. The strategy is formulated based on the strengths and weaknesses of the rice farmers.

Reliability Attribute (Trustworthiness) (Attribute B)

In the reliability attribute, there are only three items. Namely, extension workers invite farmers to attend farmer group meetings; officers create cooperation between farmer groups and other parties, and the suitability of extension materials. Table 16 shows the importance score and performance score of the reliability attribute on each item; rice farmers consider that the reliability

item at the level of importance is in the very important category while the level of performance is in the very low category, which can be seen in the table below.

Table 19. Rice Farmers' Assessment of Reliability (Trustworthiness) Attributes

No	Atribut	Level of importance			Performance Level		
		Total Skor	Rata-rata	Ket	Total Skor	Rata-rata	Ket
1	Extension workers invite farmers to attend farmer group meetings (B1)	225	3,50	P	220	3,66	T
2	Extension workers create a collaborative relationship between farmer groups and other parties. (B2)	210	1,16	TP	68	1,13	STT
3	Suitability of the extension materials offered and what is needed by farmers (B3)	221	3,68	P	230	3,83	ST
Total		659			518		
Rata-rata		10,98		P	8,63		ST

Information:

SO/ST : Very important High

P/T : Important High

TP/TT : Not Important/Not High

STP/STT : Very Important/Very Low

Based on the results of farmers' assessments of the importance level and performance level attributes on the Reliability (Trustworthiness) Attribute (B), for the interval value per indicator, a score of 10.98 was obtained, which means it is included in the important category. In contrast, for the performance level of the Reliability (Trustworthiness) attribute, a score of 8.63 was obtained and included in the Very High category. For the interval value per question of the level of importance, B1 had a score of 3.50, B2 of 1.16, B3 3.68, while for the interval value per question for the performance level, B1 had a score of 3.66, B2 of 1.13. This shows that the interval value per question for attribute B is considered very important, and its performance is Very High.

Based on the results of this study, it is caused by rice farmers feeling dissatisfied with the extension workers, creating a network of cooperation between farmer groups and other parties. There are several reasons why farmers might consider the network of cooperation created by the extension workers between farmer groups and other unimportant parties. Farmers may not understand the benefits that can be obtained from this collaboration.

They may feel inadequately explained about the partnership's benefits and objectives. Past negative experiences with external parties or unsuccessful partnerships may make farmers skeptical of new initiatives. Lack of trust in extension workers or partnership partners may also be a factor. Some farmers prefer to work independently and feel they can manage their farms without outside help. They may feel more comfortable with methods they are familiar with.

The partnership process may be perceived as too complicated or too bureaucratic, making farmers reluctant to get involved. They may see the partnership as an additional administrative burden, so

a score of 1.16 indicates that this attribute is considered unimportant. The performance of the price agreement attribute obtained a score of 1.13, meaning that overall performance falls into their Very Low category.

Atribut Emphati (Atribut C)

Based on the results of farmers' assessments of the importance level and performance level attributes on the empathy attribute (C), for the interval value per indicator, a score of 9.25 was obtained, which means it is included in the Not Important category. In contrast, for the performance level of the empathy attribute, a score of 11.04 was obtained, and it was included in the Not Important category. For the interval value per question of the level of importance, C1 had a score of 3.33, C2 of 3.33, C3 of 2.58, and while the interval value per question of the level of performance, C1 had a score of 3.90, C2 of 3.83 and C3 of 3.66. These scores indicate that the overall assessment of the level of performance of the empathy attribute is important for rice farmers. These scores indicate that the performance of this attribute is considered very high, meaning that the performance has worked very well for the performance of the established extension workers.

Based on research, the assessment of rice farmers' empathy attributes is very important in the context of agricultural extension for several main reasons, namely that empathetic extension workers can better understand the needs, problems, and challenges faced by farmers. This understanding allows extension workers to provide more appropriate solutions and, in accordance with the specific conditions of farmers, more relevant and effective extension, which can increase agricultural yields and productivity. In addition, empathy from extension workers can increase farmers' motivation and involvement in extension programs because they feel heard and appreciated. Active participation of farmers in various extension activities and the application of new techniques.

Calculation of Importance Performance Analysis (IPA)

IPA analysis is a method used in application techniques to measure attributes of importance and performance. It is conducted to obtain information on rice farmers' assessments of agricultural extension workers' performance. The results of this study are expected to be useful for extension workers, who will know what needs to be done to increase rice farmer satisfaction.

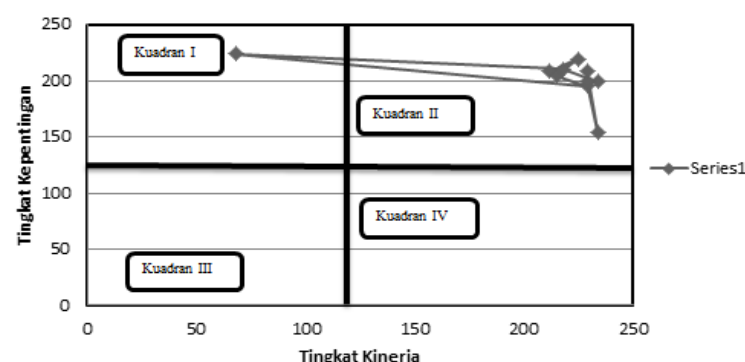


Figure 2. Plot of Importance and Performance Scores

In the IPA analysis, a Cartesian diagram consisting of four quadrants is used, namely quadrant I (top priority), quadrant II (maintain performance), quadrant III (low priority), and quadrant IV (excessive). Based on the results of the IPA analysis using the Cartesian diagram, it can be seen that the attributes in quadrant I are attributes that are considered important by rice farmers, but

their performance level is still low. The attributes included in quadrant II are attributes that are considered important by rice farmers, and extension workers have provided services according to the wishes of rice farmers. According to rice farmers, the performance of the attributes in this quadrant is considered very good. So, extension workers must maintain the performance of the attributes in this quadrant. Quadrants III and IV do not contain attributes, meaning that there are no attributes that are considered less important by rice farmers; all attributes are considered important for rice farmers to meet farmer satisfaction.

Conclusion

Based on the analysis of the level of satisfaction, it was concluded that some attributes had met the level of satisfaction of rice farmers. While the attributes of Extension workers include inviting farmers to attend farmer group meetings, extension workers creating cooperation between farmer groups and other parties, Providing extension services & technology application to farmers with a polite and friendly attitude, Providing extension services & technology applications to farmers with a polite and friendly attitude and Extension workers conveying various information and farming technologies completely and clearly have not been able to meet the level of satisfaction of rice farmers.

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