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**Analysis of Sweet Corn Farmers' Satisfaction Levels With  
The Performance of Agricultural Extension Workers  
in Giripurno Village, Bumiaji District, Batu City**

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INDEXING	ABSTRACT
<b>Keywords:</b> Keyword 1; Batu City Keyword 2; Extension Keyword 3; Farmers Keyword 4; Satisfaction Level	Indonesia, as the world's largest archipelagic country located on the equator, has a significant economy, primarily through the agricultural sector. To increase agricultural yields, efforts are needed to improve the quality of human resources, particularly farmers, one of which is through extension activities. This study aims to determine the level of satisfaction of sweet corn farmers with the performance of agricultural extension services in Giripurno Village, Bumiaji District, Batu City. This study employed a descriptive quantitative approach using a Likert Scale and Importance Performance Analysis (IPA). The results indicate that farmer satisfaction is very high and that extension services play a significant role in agricultural businesses. However, extension workers still need to improve the quality of service and program effectiveness so that all farmers can optimally benefit.

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**INTRODUCTION**

Indonesia, as the world's largest archipelagic country located on the equator, has a significant economy, primarily through the agricultural sector. This sector not only provides food products for consumption but also plays an important role in foreign exchange earnings and job creation, especially in rural areas (Setiawan et al., 2022); (C. I. Gunawan et al., 2024); (Arifin et al., 2024). In many regions, agriculture is the main livelihood that absorbs substantial labor (Cahya et al., 2025). This shows that the Indonesian workforce is still dominated by workers in the agricultural sector, so agricultural extension activities are very important (Sayifullah & Emmalian, 2018). One of the vegetable crops widely developed by the community as a farming business is sweet corn. Sweet corn is a horticultural commodity favored by the community because of its sweet taste. Sweet corn has a higher sugar content compared to other types of corn, so it has a sweeter taste and suits people's preferences (Syukur & Rifianto, 2013).

To increase agricultural yields, efforts are needed to improve the quality of human resources, particularly farmers, one of which is through extension activities. Extension workers act as intermediaries and liaisons for information between farmers and farmers (Haliq, 2020). Farmers will certainly feel disappointed if the extension worker's performance does not meet expectations, satisfied if their performance meets expectations, and very satisfied if their performance exceeds expectations.

Giripurno Village is one of the villages in Bumiaji District, Batu City, East Java Province, which is a mountainous area with hilly and plain conditions that are part of the slopes of Mount Arjuno. In general, this area has fertile soil. Judging from the land use utilized by the residents of Giripurno Village, which is mostly agricultural land, it shows that the majority of the people of Giripurno Village work as farmers. Cultivated crops include horticultural crops, one of which is sweet corn. Sweet corn in Giripurno Village is one of the crops widely planted by farmers. With the presence of agricultural extension workers who work optimally, it is hoped that farmer productivity and income can increase, including for farmers in Giripurno Village, Bumiaji District, Batu City. The purpose of this study was to determine the level of importance, performance, and satisfaction with the performance of extension services in Giripurno Village, Bumiaji District, Batu City.

Several previous studies examining the same issue include Jagowali *et al.* (2021), and Saragih *et al.* (2022). However, these studies only examined performance and satisfaction with extension services and did not examine farmers' level of interest in extension services, thus indicating a lack of knowledge.

## **LITERATURE REVIEW**

Modern sweet corn relies on a range of modified alleles that interfere with starch synthesis in the endosperm, resulting in elevated sugar levels and changes in polysaccharide composition. These modifications typically stem from loss-of-function mutations, some of which can impair germination and seedling emergence, particularly under adverse environmental conditions. Additionally, the genetic diversity of temperate sweet corn germplasm is limited, shaped by several evolutionary bottlenecks and predominantly derived from the maize race (Revilla *et al.*, 2021).

The food crops sub-sector is a vital part of agriculture, producing essential staples for human survival. Agricultural development, particularly in this sub-sector, focuses on boosting food production to achieve self-sufficiency, especially in rice, corn, and soybeans. Corn plays a dual role in meeting household consumption needs, serving as both food and livestock feed. It is also a key ingredient in poultry feed, and the rapid growth of the poultry industry continues to drive up demand for corn-based feed (Yudiarini and Pratiwi, 2021).

## **RESEARCH METHOD**

This study involved all sweet corn farmers in Giripurno Village, Bumiaji District, Batu City, who had received services from agricultural extension workers. The sample was selected using purposive sampling, with the criteria being that farmers actively grow sweet corn in Giripurno Village. The data analysis technique used in this study was a descriptive quantitative approach using the Likert Scale and Importance Performance Analysis (IPA) methods. After obtaining the average value of each indicator, an analysis was conducted using the Importance Performance Analysis (IPA) method. The IPA method was used to compare the level of importance and the actual performance of agricultural extension workers as assessed by farmers. The Importance-Performance Analysis (IPA) model and explores its effectiveness as a managerial tool for evaluating satisfaction levels, as well as described by McLeay *et al.* (2017), and also Lai and Denholm (2024).

## RESULT AND DISCUSSION

The results of the analysis using the Importance Performance Analysis (IPA) method are shown below.

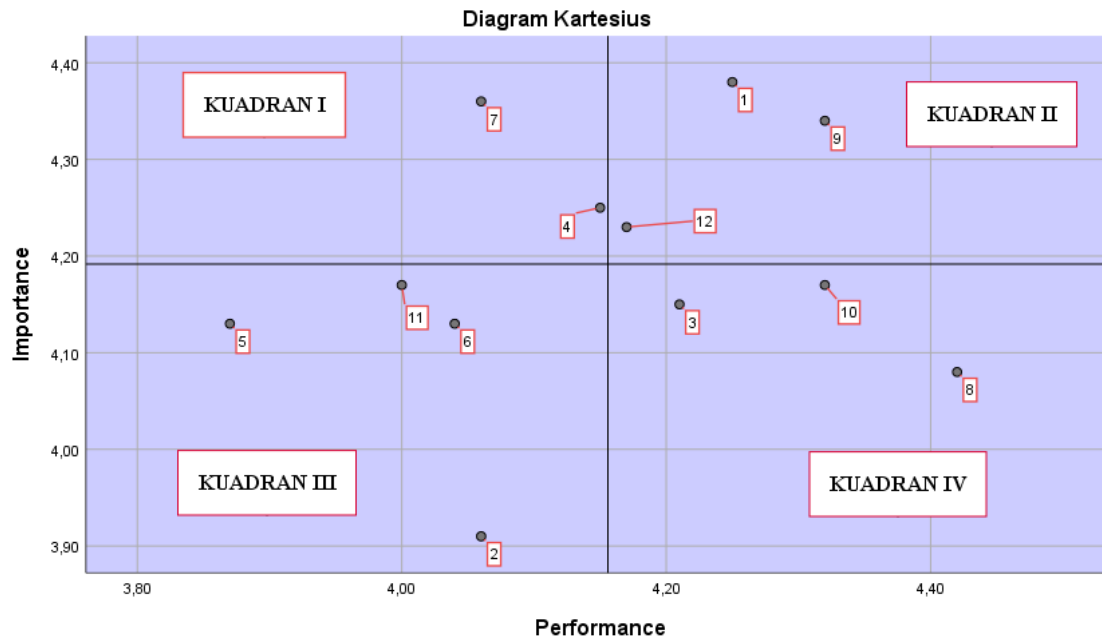
**Table.1 Importance Performance Analysis (IPA)**

No	Attribute	X	Y
1.	Extension workers invite farmers to attend farmer group meetings.	4,25	4,38
2.	Extension workers for cooperative relations between farmer groups and other parties.	4,06	3,91
3	The extension materials offered are in accordance with what farmers need.	4,21	4,15
4.	Extension workers visit farmer groups.	4,15	4,25
5.	Extension workers teach various farming skills and provide guidance and implementation.	3,87	4,13
6.	Extension workers who receive questions can immediately answer and are able to answer farmers' questions.	4,04	4,14
7.	Extension workers attend meetings/deliberations organized by farmer groups.	4,06	4,36
8.	Extension workers involve farmers in agricultural business development training held by extension institutions.	4,42	4,08
9.	Providing extension services & technology implementation to farmers with a polite and friendly attitude.	4,32	4,34
10.	The ability of extension workers to use local languages.	4,32	4,17
11.	The ability of extension workers to provide written explanations.	4,00	4,17
12.	Completeness and readiness of extension demonstration tools	4,17	4,32
Average		46,7	46,17

Source: Processed primary data, 2025

The results of the calculation in Table 1 will then be plotted in an importance performance analysis graph, where the importance variable is at point Y and the satisfaction variable is at point X, as shown in the following figure:

## Importance analysis – Performance Analysis (IPA)



**Figure 1. Importance Performance Analysis (IPA)**  
Source : Data Analysis (2025)

Based on the graph in Figure 1, the twelve attributes are spread across four quadrants. The first quadrant covers attributes 7 and 4. This indicates that the three attributes in this quadrant are considered very important by farmers, but their current performance is unsatisfactory, requiring extension workers to improve their performance. Attributes in this quadrant are prioritized for improvement.

In the second quadrant, attributes in this quadrant are considered supporting attributes for farmer satisfaction, so extension workers are obligated to maintain current performance. In this study, the attributes in the second quadrant were attributes 1, 9, and 12.

The third quadrant is low priority (low importance & low performance) the attributes contained in this quadrant are attributes 2, 6, 7, 8 and 16 which are contained in this quadrant because basically the priority level is low and at the same time they are considered not too important for farmers so that the extension workers do not place too much importance on attributes 2, 5, 6, and 11 especially in the third quadrant.

The fourth quadrant tends to be excessive. The attributes in this quadrant are attributes 3, 8, and 10. These attributes tend to be excessive and are not really liked by farmers, which means that the extension workers do not really prioritize these attributes in the fourth quadrant.

In detail, if we look at the Cartesian diagram, extension workers are expected to be able to improve their performance, especially in the attributes in quadrant one, namely:

1. Extension workers attend meetings/deliberations held by farmer groups.  
Extension workers attending meetings held by farmer groups is very important because the function of extension workers is to act as leaders for farmers and also as extension workers can provide input or solutions to farmers when there are problems in the field. This can be seen from the value of the level of farmer importance at 4.36,

which means that extension workers are important to attend meetings held by farmer groups. For farmer satisfaction with the performance of agricultural extension workers on this attribute, it is at 4.06, which means that farmers are less satisfied with the presence of extension workers at meetings held by farmer groups. In this case, extension workers must visit frequently when there are meetings held by farmer groups so that farmers are satisfied with the presence of extension workers.

2. Extension workers visiting farmer groups and attending their meetings is crucial. The role of extension workers as leaders for farmers and providing input and solutions to problems in the field is crucial. This is evident from the farmer importance score of 4.25, indicating that it is crucial for extension workers to attend farmer group meetings. However, farmer satisfaction with extension workers' performance for this attribute was only 4.15, indicating that farmers are dissatisfied with the presence of extension workers at farmer group meetings. Therefore, extension workers should visit farmer groups more frequently and actively attend meetings to increase farmer satisfaction and support. This is consistent with research by Arifin et al., 2022, which found that farmer groups are expected to actively follow the direction of extension workers.

## **CONCLUSION**

Based on the results of research regarding the level of importance, performance, and satisfaction of farmers towards agricultural extension workers in Giripurno Village, Bumiaji District, Batu City, the following conclusions can be drawn:

1. The majority of farmers consider extension services to be important in supporting their farming businesses.
2. The majority of farmers assess the performance of extension workers as meeting expectations.
3. This indicates that the level of farmer satisfaction in the area is quite high.

However, extension workers still need to improve the quality of service and program effectiveness so that all farmers can optimally benefit.

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