AGRISOCIONOMICS
Jurnal Sosial Ekonomi dan Kebijakan Pertanian
ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
Vol 8 (2): 363-378, June 2024

FARMER SATISFACTION WITH THE FARMER CARD PROGRAM IN KENDAL REGENCY, CENTRAL JAVA

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Submitted 11 May 2023; Approved 13 November 2023

ABSTRACT

The subsidized fertilizer distribution program through farmer card (Kartu Tani), initiated since 2016, requires evaluation and improvement in its implementation. The use of subsidized fertilizers must be precise in its dose and timing in order to increase productivity. The purpose of this study is to analyze the level of satisfaction of farmers with the farmer card program related to subsidized fertilizers. This research employs the survey method. The location was determined by purposive sampling with five urban villages based on the number of distributed cards and each of them represents three regions; lowlands, midlands, and uplands. The respondents to this study were 100 people; 20 people from each urban village were selected using the random sampling method. The data were taken using the interview method based on questionnaires distributed to farmers. The collected data was then analyzed using the Importance Performance Analysis (IPA) and Customer Satisfaction Index (CSI) methods. The results showed that most of the farmers who received the card in Kendal Regency were predominantly male, had high school education, and with an average land ownership of 0.5-1.0 hectares. The IPA analysis showed that in quadrant I (8 attributes need improvement), quadrant II (there are 16 achievement attributes that need to be maintained), quadrant III (11 low priority attributes) and quadrant IV (7 redundant attributes). Farmers' satisfaction with the farmer card program is at 71.69%, which is in the range of 61%-80.99%. In other words, the farmers are satisfied with the farmer ard services provided by the government.

Keywords: *satisfaction, farmer card, fertilizer subsidy*

BACKGROUND

Agriculture in Indonesia cannot be separated from several inputs as support for producing output in farming, such as seeds, fertilizers and pesticides. Fertilizer is one of the agricultural inputs that is veryimportant in a farming, because fertilizer will cause plat growth so that the plant is able to produce maximum output. Many farmers still rely heavily on subsidized fertilizers from the government to maximize their yields. Problems related to the distribution of subsidized fertilizer include shortages of fertilizer that is not in accordance with recomendation (Moko *et al.,* 2018). Furthermore, the shortage of subsidized fertilizer is caused by farmers' high demand for fertilizer while the fertilizer aavailable ata retailers and distributors is low, and even when farmers need fertilizer it is often not avilable so the price of fertilizer will be increasingly expenxsive. To minimize the distribution of subsidized fertilizer which is sold openly, the goverment issues farmer cards program. The farmer card program was initiated by the Ministry of Agriculture of Indonesia to

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
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increase the efficiency of subsidized fertilizer distribution, targeting smallholders. The implementation of this program began in Java.

The distribution of subsidized fertilizer with farmer ards uses six main principles, namely the right type, right quantity, right proce, right quality, right time and right place. Farmer cards are not only useful for distributing subsidized fertilizer and guaranteeing fertilizer stocks for farmer, but also for helping allocate assistance for rice production facilities and agricultural production facilities so that they are targeted towards farmers in the poor category. Therefore, through the farmer car program, farmers can get their rigts to obtain fertilizer, help develop the agricultural sector and provide welfare to farmer (Nurulfahmi and Maria, 2020). The goverment is collaborating with banks that are members of the National Bank Association (HIMBARA) in implementing the farmer card program. Banks that are members of the State Bank Association (HIMBARA) play an important role the implementation of farmer card program in the field. Starting in 2018, three state-owned banks in collaboration with the Ministry of Agriculture issued the cards, namely Bank Rakyat Indonesia (BRI) in Banten, Yogyakarta, and Central Java Provinces. Since its launch in 2016, the farmer card program has not fully shown effective impact (Ashari and Hariani, 2019).

Sevaral factors hinder the implentation of the farmer card program, namely planning for fertilizere use use by farmer groups that exceed the dosage, fertilizer sellers being far from farmers' location, constraints on the availability of the type of fertilizer needed, and inefficient transportation compared to the amount of fertilizer purchased. The fact that many farmers were not aware and did not understand the use of the card also contributes to the low effect of this program's roll out. The lack of effective socialization and promotion of the program to target farmers by stakeholders is thought to have also contributed to the low utilization of this card. The impact of the support of related agencies and cooperation with the banks (HIMBARA) tasked with implementing the farmer card application proved to be less than optimal. These problems pose questions related to the dissemination of information to farmers, understanding the benefits of the farmer card program among the target population, and the efficiency of implementation of this program. The farmer card program is used to realize equal distribution of fertilizer, supervison and control of subsidized fertilizer to farmers who can obtain it. Therefore, it is appropriate that the concurrently running program needs an evaluation related to user satisfaction. Based on the formulation of these problems, this study analyzes farmer satisfaction in the farmer card program in Kendal Regency. This study attempts to analyze the level of satisfaction of farmers with the program in terms of the availability and ease of access to subsidized fertilizers. The output of this study is expected to provide information and data on the farmer card program in terms of the effectiveness of subsidized fertilizer distribution to farmers as input to policy makers, especially the government or other relevant stakeholders.

RESEARCH METHODS

The survey method is used in collecting and analyzing data on the level of farmer's satisfaction with the farmer card program. Kendal regency was chosen as the location for the study, which included five urban villages. The urban villages were chosen by purposive sampling method based on the number of farmer's card distributed. Each urban village represents three regions; lowland, midland, and upland. The lowland area includes Kendal Regency, Ngampel and Gemuh urban villages. The midland is represented by Singorojo urban village. Sukerjo urban village represents the upland. The respondent population was 100 farmers consisting of 20 farmers from

ISSN 2580-0566; E-ISSN 2621-9778
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each urban village selected by random sampling method. Data and information used as input for the study came from primary and secondary sources. Primary data were collected through interviews based on questionnaires. Primary data include respondents' identity, farm characteristics, planting patterns, types of fertilizers received, farmer card acquisition and land area, agricultural production and productivity, farmer card interests and expectations. Secondary data are collected from various sources (results of existing related research, reports, literature, and other relevant sources). Before using the questionnaire at the research location, validity and reliability test were carried out on the questions in the questionnaire. The validity test results show valid results marked by a sig value <0.05 for each question. The Cronbach alpha value is > 0.6, so the question in the questionnaire were reliable.

Data Analysis Method

***Importance Performance Analysis* (IPA)**

The Importance Performance Analysis (IPA) method is used with the aim of measuring the realtionship between consumer perceptions and priority of improving the quality of products/services also known as quadrant analysis (Latu and Everett, 2000). The Importance Performance Analysis (IPA) method are used in various fields of study because of its ease of application and apperance analysis results that facilities suggestions for improvements performance (Martinez, 2003). According to Alam (2020), The Importance Performance Analysis (IPA) method is used for measure the level of consumer satisfaction overall performance of the attributes instructur. The Importance Performance Analysis methode is used to obtain information on satisfaction level of farmers with the farmer card program. Importance Performance Analysis method is a multiattribute analysis model. The application of Importance Performance Analysis method begins with identify attributes that are relevant to observed choice situations. List of attributes can be developed with reference to literature and conducting interviews. Importance Performance Analysis method is an application technique for measuring attributes of importance level and performance level. Data processing stages include editing, tabulation and analysis. The level of importance of performance and satisfaction is presented in Table 1.

Tabel 1. The Level of Importance and Performance

Likert Scale (Score)	Importance (Y)	Performance (X)
1	Not important	Not good
2	Less important	Less good
3	Quite important	Quite good
4	Important	Good
5	Very important	Very good

Source: Sugiyono (2012)

In this research there were two variables, X is the level of performance of the farmer card and Y is the level importance farmer card.

$$TKi = \frac{Xi}{Yi} \times 100\%$$

Information:

Tki : Index suitability level

Xi : Performance assessment score

Yi : Importance assessment score

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This research focuses on the 6 (six) right principles, namely the principles of procurement and distribution of subsidized fertilizer which include the right type, quantity, price, place, time and quality. The 6 (six) right principles are according to Mufidah and Prabawati (2018). The Importance Performance Analysis methode combine attribute measurements, level of satisfaction and performance in graph two dimensions divided into four quadrants. Quadrant analysis is carried out by calculating the average score of performance and importance assessments, which are formulated as follows and presented in Figure 1.

$$\bar{X}i = \frac{\Sigma Xi}{n} \text{ and } \bar{Y}i = \frac{\Sigma Yi}{n}$$

Information:
$\bar{X}i$: Average performance assessment
$\bar{Y}i$: Average importance assessment
n : Number of respondents

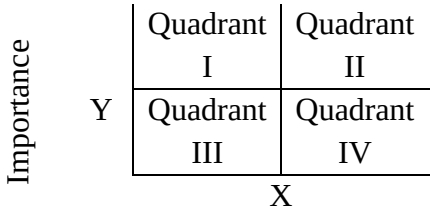

Figure 1. Cartesian Diagram
Source: Minarni and Nurhadi (2016)

Future strategies can be determined based on the position of each attribute in the four quadrants, namely as follows (Astuti, 2007).

1. Quadrant I (Main Priority)
   Includes factors that in farmers' perceptions are considered important but in reality have not met expectations.
2. Quadrant II (Maintain Achievements)
   Includes factors that in the perception of farmers are considered important and in reality have met expectations.
3. Quadrant III (Low Priority)
   Includes factors that in farmers' perceptions are considered less important and in reality have not met expectations.
4. Quadrant IV (Exceeding)
   Includes factors that in farmers' perceptions are considered less important but in reality have been met or exceeds expectations.

Customer Satisfaction Index* (CSI*)

Customer satisfaction index (CSI) is used to determine overall service user satisfaction by observing the level of performance and the level of importance or expectations of the focus attribute (Umam dan Hariastuti, 2018). The following steps are performed in a CSI analysis:

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1. Determining Mean Importance Score (MIS) and Mean Satisfaction Score (MSS).
2. Calculating Weight Factor (WF), which is the percentage of MIS value per indicator to the total MIS of all indicators.
3. Calculating Weight Score (WS). This is determined by multiplying the WF and the mean satisfaction score.
4. Determining the Weight Total (WT). Total weight is a function of the total 1st to nth of WS.
5. Determining the Customer Satisfaction Index (CSI).

$$\text{CSI} = \frac{WT}{maximum\ scale} \text{ x } 100\%$$

Table 1. Customer Satisfaction Index (CSI) Scale

Index Score (%)	Indicator	Note
81 - 100	Very satisfied	The performance exceeds expectations
61 - 80.99	Satisfaction	The performance meets expectations
41- 60.99	Quite satisfied	The performance almost meets expectations
21- 40.99	Less satisfied	The performance mostly does not expectations
0 - 20.99	Not satisfied	The performance completely fails to meet expectations

Source: Sugiyono (2012)

RESULT AND DISCUSSION

General Descriptions of Farmer Card Program in Kendal Regency

The subsidized fertilizer distribution program through the use of farmer cards was initiated on the legal basis of Ministry of Agriculture Regulation Number 47 of 2017 on the Allocation and SRP of Subsidized Fertilizers for the Agricultural Sector for Fiscal Year 2018. A farmer card, as defined in the Regulation of the Minister of Agriculture Number 47/Permentan/SR.310/12/2017 on the Allocation and SRP of Subsidized Fertilizer, is a card specifically issued to farmers by banks. The card can be used to redeem subsidized fertilizer through Electronic Data Capture (EDC) machines at designated retailer kiosks. This program aims to ensure transparency and accountability in the distribution of subsidized fertilizers to farmers or farmer groups, the realization of subsidized fertilizer distribution in accordance with the principle of 6 (six) appropriateness (in quantity, in type, in delivery time, in distribution of availability, in quality, and in price), and improve the provision of banking services for farmers in terms of ease of access to financing. The Agriculture and Food Office of Kendal Regency became one of the stakeholders in the implementation of the socialization of the farmer card program starting in 2017. The socialization of this program is scheduled to start in 2017 throughout the regency, along with 12 other regencies in Central Java province. The success of socialization by field extension officers has further expanded the use of farmer cards. With this success, Kendal regency recorded a very significant increase in the use of farmer cards in subsidized fertilizer transactions throughout 2017 to 2022. The farmer card program is expected to make it easier for farmers to gain access to quality fertilizers, help develop the agricultural sector, and improve farmers' welfare.

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Respondent Profiles

The survey results on 100 farmers receiving Farmer Cards in five urban villages in Kendal regency, Central Java showed that respondents were dominated by male farmers (88%). Women farmers were also present, although in fewer numbers at 12%. This is inseparable from the normative gender role of men as the head of the family, who is responsible for providing for the family. This is in accordance with Prasekti's opinion (2017) which states that the distribution of duties in farmer households is carried out so that household and farm business needs can be fulfilled properly. Male's role as a father figure and the backbone of the family that supports her home life is different from that of a mother. Women as wives and mother figures will divide their time, which is generally more devoted to taking care of the household.

Table 2. Sex Distribution of Respondents

Sex	Percentage (%)
Male	88
Female	12

Source: Primary Data (2022)

Most respondents had graduated high school (33%). In contrast, the number of undergraduates among the population was the least, at 1%. The higher the education level of farmers, the more likely they are to participate in the farmer card program. This attitude is directly proportional to the progressive mindset formed by the formal education of farmers. This is in accordance with the opinion of Yuliana and Nadapdap (2020), who wrote that a person's formal education affects understanding and analytical skills in adoption, innovation, and behavior, starting from mindset, skills, and creativity in farming.

Table 3. Education Background Distribution of Respondents

Education Background	Percentage (%)
Did not finish primary education	7
Primary school	25
Secondary school	32
Highs chool	33
Associate	2
Undergraduate	1

Source: Primary Data (2022)

Respondents whose main occupation was farmer were 79%. This shows that agricultural business activities are the main economic support of the community in Kendal regency. Table 5 also shows that 21% of respondents made agriculture a secondary occupation. Farmers as the majority of the main occupation indicate the natural resource potential of Kendal regency, where the majority of land is designated for agricultural use. Educational background also influenced the choice of the main profession among the respondent population. Respondent farmers were indicated to have secondary jobs in various fields, including retailers, construction workers, farm hands, drivers, employees, and self-employed. Furthermore, 57% of respondent farmers do not have secondary jobs. In other words, approximately half of the respondent population has farmers as the only job. This is in line with the

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opinion of Norfahmi *et al*. (2017), which explains that farmers who cannot meet household needs from farming alone are more motivated to take up secondary work, regardless of wages, as long as the income earned from that work can fill the gap.

Table 4. Main Occupation Distribution of Respondents

Main Occupation	Percentage (%)
Farmer	79
Village administrator	6
Employee	5
Self-employed	2
Health care professional	1
Construction worker	1
Civil servant	1
Store clerk	1
Garage employee	1
Retailer	1
Farm hand	1
Retired	1

Source: Primary Data (2022)

Table 5. Secondary Occupation Distribution of Respondents

Secondary Occupation	Composition (%)
No secondary occupation	57
Farmer	21
Retailer	9
Farm hand	4
Construction worker	4
Driver	2
Self-employed	2
Employee	1

Source: Primary Data (2022)

The amount of fertilizer provided to the farmers is directly proportional to the land area registered in the farmer card program. Based on the data in Table 6, land ownership of 45% of respondents was in the range of 0.50 –1.00 hectares. The next are land ownership that followed was 0.50 hectares, which was registered by 31% of respondents. The land is used to grow food crops such as rice and corn, as well as horticultural crops such as watermelon. The area of land owned by farmers affects the allocation of subsidized fertilizers received by farmers. This was mentioned by Jorgi *et al* (2019) which writes that each farmer registered for the Farmer Card program gets a share of subsidized fertilizers according to their land area as proposed through the Rencana Definitif Kebutuhan Kelompok/RDKK, (Lit: Group Needs Definitive Plan/GMDP).

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Table 6. Distribution of Land Ownership among Respondents

Land Holding	Percentage (%)
<0.50 Ha	31
0.50-1.00 Ha	45
1.01-2.00 Ha	22
>2.00 Ha	2

Source: Primary Data (2022)

Importance Performance Analysis (IPA)

The results of the average importance and performance scores are presented in Table 7. Table 7 showed that the average of importance was higher than performance.

Table 7. Average Score of Importance and Performance

Variables	Importance (score)	Performance (score)
X1 (right type)	4.407	3.512
X2 (right quantity)	4.522	4.040
X3 (right price)	4.385	3.760
X4 (right place)	4.480	3.793
X5 (right time)	3.885	3.242
X6 (right quality)	4.333	3.393
Y (satisfaction)	4.415	3.227
average	4.347	3.567

Source: Primary Data (2022)

The results of mapping performance scores to attributes and attribute importance scores are presented in the IPA diagram (Figure 2).

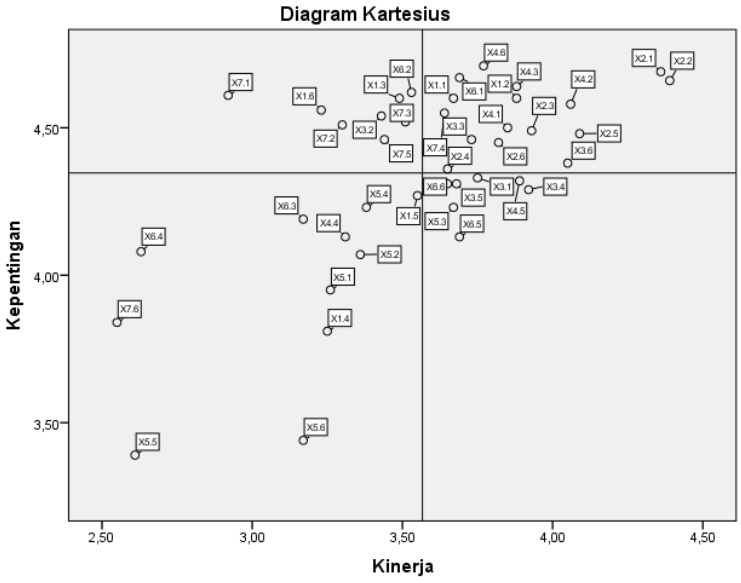

Figure 2. Cartesian Diagram of IPA

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Quadrant I (Main Priority)

Quadrant I is a quadrant that indicates user satisfaction, but its performance has not been in line with expectations. The content of this quadrant is a top priority for improvement. The attributes in Quadrant I (Table 8).

Table 8. Quadrant I Attributes (Main Priority)

Code	Indicator
X1.3	The distribution of farmer cards has been evenly distributed to farmers according to the criteria in the program.
X1.6	Farmers believe that it is easier to obtain fertilizers.
X3.2	Farmers don't have to go through long queue to obtain the card.
X6.2	Farmers save money on the purchase of fertilizers.
X7.1	The issuance and distribution of farmer's card do not take long.
X7.2	The stock of fertilizers (Urea, SP-36, ZA, NPK) are always available in the appointed retailers.
X7.3	The pricing of fertilizers do not exceed the Suggested Retail Price/SRP.
X7.5	The EDC machines are always operational.

Source: Primary Data (2022)

There are eight user satisfaction indicators in Quadrant I, indicating top priorities for urgent improvement. There was an assumption that still many farmers, eligible recipients of the card, had not been covered by this program. Not all farmers in Kendal regency were provided with and could use the card. A number of farmers were still waiting for their cards to be issued, some had waited as long as one year. These farmers raised concern on the time it takes to issue the card, which meant that they could did not have access to the subsidized fertilizers. The government's policy to reduce subsidies as of July 1st, 2022 also limit the type subsidized fertilizers available, leaving only Urea and Phonska (NPK). The crop commodities that are required for eligibility are also more restricted, to only nine main commodities. After the new policy, only rice, corn, soybean, chili, onion, garlic, sugarcane, coffee, and cocoa farms were given subsidized fertilizer allocations. Respondent farmers voiced their dissatisfaction with subsidized fertilizer pricing at the government-appointed Kios Pupuk Lengkap/KPL (lit: Complete Fertilizer Kiosk). This indicates that there are still authorized retailers selling subsidized fertilizers above the official SRP. Another concern raised by respondent farmers was the operational consistency of EDC machines used in subsidized fertilizer transactions. The respondents indicated that these eight indicators have not met their expectations. The government and relevant stakeholders must improve the performance in these areas promptly to achieve maximum results.

Quadrant II (Maintain Achievements)

Quadrant II represents the user's expectations and performance that is assessed according to these expectations, so the attributes in this quadrant must be maintained (Table 9).

ISSN 2580-0566; E-ISSN 2621-9778
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Table 9. Quadrant II Attributes (Maintain Achievements)

Code	Indicator
X1.1	The flow and procedures for making cards are easy to understand and complete.
X1.2	Card application requirements are easy to obtain and can be met.
X2.1	Field extension officers disseminate information about the Farmer Card program.
X2.2	Field extension officers assist in the preparation of GMDP and data collection on the *Sistem Informasi Manajemen Pangan Indonesia*/SIMPI (Lit: Indonesian Food Management Information System/IFMIS) mobile application.
X2.3	BRI provides good service in the process of issuing farmer cards.
X2.4	Capable and competent EDC machine operators.
X2.5	Farmer group management actively assists in the preparation of the GMDP and redemption of fertilizers.
X2.6	EDC machine operators are friendly and informative in serving fertilizer redemption.
X3.3	Access to BRI banking services is easy, in terms of saving and borrowing funds, and especially the redemption of subsidized fertilizers.
X3.6	Administrative fees for Kartu Tani savings account are not expensive.
X4.1	Redemption of subsidized fertilizer is made easy by simply swiping the card on the EDC machine.
X4.2	Subsidized fertilizers can be redeemed directly at appointed kiosks/retail shops.
X4.3	Easy access to appointed retail outlets/stores.
X4.6	Farmer cards can function (actively) in the redemption of fertilizers without any problems.
X6.1	Farmers can redeem subsidized fertilizer according to the quota listed in the GMDP.
X7.4	Uninterrupted internet connection supports EDC machine operation in kiosks/retail shops.

Source: Primary Data (2022)

Quadrant II has 16 indicators that are considered to have met or exceeded farmers' expectations. Farmers consider these indicators to simplify the card application process, such as requirements, flow and application procedures. Field extension officers, Bank BRI, EDC machine operators, and farmer groups are also considered to be helpful in disseminating information, issuing and using the card. Farmers feel that they have easy access to banking (Bank BRI) to make savings, loans, and redemption of subsidized fertilizers with low administrative fees. The process of redeeming subsidized fertilizer is also considered easy, you only need to bring your farmer card to swipe it on the EDC machine available at the nearest Complete Fertilizer Kiosk. Farmers can take advantage of the subsidized fertilizer quota according to the GMDP based on land area and crop commodities. The convenience provided by Complete Fertilizer Kiosk when farmers make transactions by swiping the farmer's card is supported by uninterrupted internet connection. The attributes in this quadrant must be maintained because they are perceived as advantages by farmers.

Quadrant III (Low Priority)

Quadrant III contains attributes that are less important in the perception of farmers and whose performance is considered unsatisfactory to consumers (Table 10).

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Table 10. Quadrant III Attributes (Low Priority)

Code	Indicator
X1.4	Refilling the tani card balance must be done by depositing cash at the Bank BRI office.
X1.5	Fertilizer distribution kiosks encourage and promote the use of farmer cards.
X4.4	There is more than one appointed retail shop in close proximity.
X5.1	The SINPI application always works well/no errors occur.
X5.2	Information on the allocation of subsidized fertilizers can be seen in the SINPI application.
X5.4	Easily make changes to farmer's GMDP data related to land area, ownership, planting commodities.
X5.5	Farmers receive sales reports from PT Bulog (formerly Indonesian Logistic Affairs Agency) via short telephone messages.
X5.6	Farmers can access the SINPI application at any time.
X6.3	Official government assistance programs (Ministry of Finance, Ministry of Agriculture, Ministry of Cooperatives) are easily accessible.
X6.4	Price takers buys crops at an agreeable rate.
X7.6	It is easy to sell the harvest directly (facilitated by PT Bulog).

Source: Primary Data (2022)

Quadrant III lists 11 indicators that are considered less important and their performance is unsatisfactory according to farmers. Farmer card balance refills are not made directly by farmers to Bank BRI, but by cash to designated kiosks/shops. The transaction is carried out by the kiosk/shop, which transfers the funds to the Farmer Card ATM, so that farmers can redeem directly by bringing cash and Farmer Cards. The promotion of the farmer card program by designated shops is also considered to be less extensive but the impact is not so significant. The distance between the shops and the farmer's house is considered less important but unsatisfactory. Access to personal vehicles makes it easier to travel long distances, making the difficulty from travel distance and time less significant factors. Farmers can access information on fertilizer management through the SIMPI mobile app. SIMPI provides information on farmer data in each farmer group, commodities cultivated, fertilizer needs, and history of fertilizer redemption transactions. Despite its potential benefit for farmers, this mobile app has not been used extensively. The research found that most farmers consist of older population and they are not as responsive as the younger population when it comes to the use of new technologies. In selling crops, Bulog does not take part in buying farmers' crops. Most of the farmers' crops are used for self-consumption, and if there is excess stock, they will be sold directly to the market, or collectors. Attributes in this quadrant have a relatively low level of importance and farmers' perceptions of satisfaction with the indicators are low.

Quadrant IV (Exceeding)

Attributes in quadrant IV are seen as unimportant to consumers, but whose performance is considered very satisfying from the perception of farmers. The attributes in Quadrant IV (Table 11).

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Table 11. Quadrant IV Attributes (Exceeding)

Code	Indicator
X3.1	Bank BRI's location is easily accessible from home.
X3.4	Payment uses a card integrated with ATM debit card.
X3.5	Farmers can apply for capital assistance to Bank BRI through Kredit Usaha Rakyat/KUR (SME business credit line).
X4.5	Information on the remaining subsidized fertilizer allocation can be seen immediately after redemption.
X5.3	Ease of GDMP application prcess and in validating data in e-RDKK (lit: electronic GDMP)
X6.5	Subsidized fertilizers can only be redeemed by holders of farmer cards.
X6.6	Smallholders receive preferential allocation for the subsidized fertilizer available.

Source: Primary Data (2022)

This study found seven indicators that can be pinned on excessive attributes. Farmers consider that the distance to the BRI bank is not important, because of the ease of access to the location of the bank from the farmer's residence. The ease of using a farmer's card apart from being a redeemer for subsidized fertilizers is also used as a debit ATM, as well as getting convenience in capital assistance. The target users for the Kartu Tani are smallholders who own no more than two hectares of land. In the process of issuing farmer cards, it begins with submitting a GMDP proposal. The preparation of the GMDP is accompanied by extension workers who only need data on the area of land and commodities cultivated. Subsidized fertilizer can only be redeemed by farmer card holders because it can be monitored through the application. Information on the allocation and transactions of subsidized fertilizers can also be found after the farmer's card is swiped on the EDC machine. The seven indicators are considered less important but have a very satisfying performance, in other words exceeding expectations.

Customer Satisfaction Index (CSI).

Measuring the level of user satisfaction is very important to do to find out how much the government's performance can meet farmers' expectations. The Customer Satisfaction Index (CSI) is determined based on the average score of the level of performance and the level of importance of each attribute. Based on the results of calculating the farmer card user satisfaction index, the CSI value was obtained in this study, which is presented in Table 12.

Table 12. Customer Satisfaction Index (CSI).

Code	Indicator	MIS	WF	MSS	WS
X1.1	The flow and procedures for making cards are easy to understand and complete.	4.6	2.52	3.67	9.25
X1.2	Card application requirements are easy to obtain and can be met.	4.6	2.52	3.88	9.78
X1.3	The distribution of farmer cards has been evenly distributed to farmers according to the criteria in the program.	4.6	2.52	3.49	8.80

ISSN 2580-0566; E-ISSN 2621-9778
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X1.4	Refilling the tani card balance must be done by depositing cash at the Bank BRI office.	3.81	2.09	3.25	6.78
X1.5	Fertilizer distribution kiosks encourage and promote the use of farmer cards.	4.27	2.34	3.55	8.30
X1.6	Farmers believe that it is easier to obtain fertilizers.	4.56	2.50	3.23	8.07
X2.1	Field extension officers disseminate information about the Farmer Card program.	4.69	2.57	4.36	11.20
X2.2	Field extension officers assist in the preparation of GMDP and data collection on the *Sistem Informasi Manajemen Pangan Indonesia*/SIMPI (Lit: Indonesian Food Management Information System/IFMIS) mobile application.	4.66	2.55	4.39	11.21
X2.3	BRI provides good service in the process of issuing farmer cards.	4.49	2.46	3.93	9.67
X2.4	Capable and competent EDC machine operators.	4.36	2.39	3.65	8.72
X2.5	Farmer group management actively assists in the preparation of the RDKK and redemption of fertilizers.	4.48	2.45	4.09	10.04
X2.6	EDC machine operators are friendly and informative in serving fertilizer redemption.	4.45	2.44	3.82	9.31
X3.1	Bank BRI's location is easily accessible from home.	4.33	2.37	3.75	8.89
X3.2	Farmers don't have to go through long queue to obtain the card in BRI.	4.54	2.49	3.43	8.53
X3.3	Access to BRI banking services is easy, in terms of saving and borrowing funds, and especially the redemption of subsidized fertilizers.	4.46	2.44	3.73	9.11
X3.4	Payment uses a card integrated with ATM debit card.	4.29	2.35	3.92	9.21
X3.5	Farmers can apply for capital assistance to Bank BRI through Kredit Usaha Rakyat/KUR (SME business credit line).	4.31	2.36	3.68	8.69
X3.6	Administrative fees for Kartu Tani savings account are not expensive.	4.38	2.40	4.05	9.72
X4.1	Redemption of subsidized fertilizer is made easy by swiping the card on the EDC machine.	4.5	2.46	3.85	9.49
X4.2	Subsidized fertilizers can be redeemed directly at appointed kiosks/retail shops.	4.58	2.51	4.06	10.19
X4.3	Easy access to appointed retail outlets/stores.	4.64	2.542	3.88	9.86
X4.4	There is more than one appointed retail shop/kiosk in close proximity.	4.13	2.26	3.31	7.49
X4.5	Information on the remaining subsidized fertilizer allocation can be seen immediately after redemption.	4.32	2.37	3.89	9.21
X4.6	Farmer cards can function (actively) in the redemption of fertilizers without any problems.	4.71	2.58	3.77	9.73

ISSN 2580-0566; E-ISSN 2621-9778
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X5.1	The SINPI mobile app always works well/no errors occur.	3.95	2.16	3.26	7.05
X5.2	Information on the allocation of subsidized fertilizers can be seen in the SINPI application.	4.07	2.23	3.36	7.49
X5.3	Ease of GDMP application prcess and in validating data in e-RDKK (lit: electronic GDMP)	4.23	2.32	3.67	8.50
X5.4	Easily make changes to farmer's GMDP data related to land area, ownership, planting commodities.	4.23	2.38	3.38	7.83
X5.5	Farmers receive sales reports from PT Bulog (formerly Indonesian Logistic Affairs Agency) via short telephone messages.	3.39	1.86	2.61	4.85
X5.6	Farmers can access the SINPI application at any time.	3.44	1.88	3.17	5.97
X6.1	Farmers can redeem subsidized fertilizer according to the quota listed in the RDKK.	4.67	2.56	3.69	9.44
X6.2	Farmers save money on the purchase of fertilizers.	4.62	2.53	3.53	8.93
X6.3	Official government assistance programs (Ministry of Finance, Ministry of Agriculture, Ministry of Cooperatives) are easily accessible.	4.19	2.30	3.17	7.28
X6.4	Price takers buys crops at an agreeable rate.	4.08	2.23	2.63	5.88
X6.5	Subsidized fertilizers can only be redeemed by holders of farmer cards.	4.13	2.26	3.69	8.35
X6.6	Smallholders receive preferential allocation for the subsidized fertilizer available.	4.31	2.36	3.65	8.62
X7.1	The issuance and distribution of farmer's card do not take long.	4.61	2.53	2.92	7.37
X7.2	The stock of fertilizers (Urea, SP-36, ZA, NPK) are always available in the appointed retailers.	4.51	2.47	3.3	8.15
X7.3	The pricing of fertilizers do not exceed the Suggested Retail Price/SRP.	4.52	2.48	3.51	8.69
X7.4	Uninterrupted internet connection supports EDC machine operation in kiosks/retail shops.	4.55	2.49	3.64	9.07
X7.5	The EDC machines are always operational.	4.46	2.44	3.44	8.40
X7.6	It is easy to sell the harvest directly (facilitated by PT Bulog).	3.84	2.10	2.55	5.36
	Total	182.56		149.80	
	WT				358.847
	CSI (%)				71.69

Source: Primary Data (2022)

Information:

MIS : Mean Importance Score
WF : Weight Factor
MSS : Mean Satisfaction Score
WS : Weight Score

ISSN 2580-0566; E-ISSN 2621-9778
http://ejournal2.undip.ac.id/index.php/agrisocionomics
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Table 11 showed that the CSI score obtained was 71.69%. This value is in the scale range of 61%<CSI<80.99%, which can be interpreted as a general consumer satisfaction index for the attributes tested are in the satisfied criteria. Therefore the government must improve performance so that user satisfaction expectations for the farmer card program can be achieved.

CONCLUSION AND SUGGESTION

Based on this study, it was found that farmers who were beneficiaries of the farmer card program were dominated by men, graduated from high school, and with land ownership of 0.5-1.0 hectares. Importance Performance Analysis (IPA), shows that in quadrant I there are 8 attributes that need improvement, in quadrant II there are 16 attributes that need to be maintained, in quadrant III there are 11 attributes with low priority, and and in quadrant IV there are 7 attributes that exceed expectations. Based on the results of calculations and level assessments on farmer card recipients, the quality of service performance and attributes of this program are in accordance with consumer expectations, because in general the respondents are satisfied. This is represented by the Customer Satisfaction Index (CSI) at 71.69%. It is recommended that the implementation of the Kartu Tani program be improved, to facilitate access to quality fertilizers, especially for smallholders.

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