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The Effect of the Farmer's Card Program in Managing Agricultural Business

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Abstract

Agriculture is an aspect that is quite important in improving the country's economy. With the increase in agricultural output, food yields will increase and be free from famine. However, the farmers experienced some difficulties in managing their agricultural business, such as the expensive price of fertilizer and the low selling price, so that the capital to turn the agricultural business into a frightening specter. Therefore, the government created a farmer card program to increase the yield of agricultural commodities. However, the farmer card program is still relatively young, so it is necessary to study the effect of the farmer card program in managing agricultural businesses. The purpose of this study is to determine the effect of the farmer's card, which is positive or negative so that it can contribute ideas for many parties. The method used is descriptive quantitative with the selection of respondents through purpose sampling which is adjusted to the research objectives with a total of 200 respondents. The results showed that the existence of a farmer card program had a positive influence in managing agricultural businesses. Unfortunately, not all farmers have farmer cards so that the price of subsidized fertilizer cannot be utilized by all farmers. Therefore, the government needs to increase the use of farmer cards by providing easy access to making farmer cards for all Indonesian farmers.

Keywords
influence; farmer card; agricultural business

I. Introduction

Indonesia is a country with abundant natural resources, so it is not surprising that it is called an agrarian country (Hadi Ar-Rosyid, et al, 2021). The agricultural sector is an important aspect for Indonesia's progress in the food sector which can have an impact on economic progress (Kamaludin and Sri Wahyuningsih, 2021). With the increase in the agricultural sector, the need for labor will also increase and minimize unemployment in Indonesia.

Therefore, attention to the agricultural sector is important, so in its management there needs to be good management in order to obtain maximum results (Silviana Maulidah, 2012) especially because more Indonesians have a livelihood as farmers (Reni Febrianti, 2018).) it is necessary to empower quality human resources (Agus Supandi Soegoto and Jacky S.B. Sumarauw, 2014) to increase crop yields so that community welfare will increase (Bayu Mahendra, et al. 2021).

Based on observations, it is known that farmers have various obstacles in managing their agricultural businesses, such as, high fertilizer prices and low selling prices. This has an impact on the chaos of the agricultural business, because the farmer does not have sufficient capital to manage his farm besides he has to continue his life, such as to eat and drink, provide education to his sons and daughters and so on.

The inequality of farmers affects various aspects, such as uneven education, because farmers feel they are unable to provide education up to the undergraduate level because the economic gains from farming are less than optimal.

Some of the things above have become the basis for making government policies to issue programs that are pro to farmers so that they no longer continue to experience failure in improving the family economy. Government policy is fresh air which is expected to be able to overcome various problems in the agricultural sector (Ni Luh Putu Rossita Dewi, et al, 2017).

One of the government's policies is to issue farmer cards to make it easier for farmers to manage their agricultural businesses (Setiyo Budi, et al. 2021). The farmer card is expected to be able to provide various conveniences for farmers, such as buying subsidized fertilizers at relatively cheaper prices, selling directly through farmer cards, making debit payments and even saving money or funds for agriculture. With this it is expected to increase the productivity of farmers in Indonesia.

However, since the farmer card program is still too new, the researcher wants to know more about the effect of the farmer card program in managing agricultural businesses. The purpose of this study is to determine the effect of the farmer card, both positive and negative, as well as conveying various inputs or suggestions to be used as a reference for the government in making further policies as well as contributing ideas for future researchers.

II. Research Method

This research was carried out with a descriptive quantitative type with a survey method. Descriptive quantitatives are used to explain research results through numbers (Cypert et al, 2019) which are added with explanations so that readers better understand the validated research results.

Determination of respondents using purpose sampling that is adjusted to the research objectives (Creswell, 2016). Respondents came from several farmers spread across Indonesia with a total of 200 respondents. Dissemination of questionnaires through the g-form for easy access from various places. Data processing was then carried out using ANOVA.

The results of the distribution of the questionnaire will be processed through a Likert scale as follows:

Table 1. Likert scale

Criteria	Score
Very influential	76-100
Quite Influential	51-75
Less Influential	26-50
No effect	1-25

The table above is used as a reference for determining criteria in accordance with predetermined value intervals. After the data is obtained and processed, it will be submitted in the form of a research report.

III. Results and Discussion

The agricultural sector has a significant role in improving the nation's economy. So it is necessary to know more about the effect of the farmer card as one of the government's policy programs in increasing agricultural commodities

There are several aspects that will be discussed in this study, namely: the characteristics of the respondents, how to use the farmer card, and the effect of the farmer card in agricultural business.

Before discussing further, observe the following data

Table 2. Validity Test Results

The data explains that all questionnaires in this study are valid, because they have an r-count value greater than the r-table value of 0.576. If summarized, it will produce the following data:

Table 3. Summary of Validity Test

Qusetion Number	r count	r table	Description
1	0.911	0.576	Valid
2	0.670	0.576	Valid
3	0.952	0.576	Valid
4	0.975	0.576	Valid
5	0.975	0.576	Valid
6	0.952	0.576	Valid
7	0.975	0.576	Valid
8	0.920	0.576	Valid
9	0.975	0.576	Valid
10	0.952	0.576	Valid
11	0.975	0.576	Valid

Thus, it is clear that all items used in this study are valid because the value of r count> r table. So that all questions can be processed in this study.

Table 4. Research Reliability Test Results

Reliability Statistics

Cronbach's Alpha	N of Items
.982	11

Based on the table above, it shows that all questions are reliable with a value of 0.982 and can be used for further research processes. After the test is carried out, the following data is known:

3.1 Characteristics of Respondents

Respondents used in this study amounted to 200. Characteristics of respondents is important to know so that the data obtained can be more valid. This is because the characteristics of the respondents can affect the mindset when implementing agricultural businesses. Several things were analyzed on the characteristics of the respondents, namely:

1. Age

Age is a unit of life time or a person since he was born (Setyo Budi, et al, 2021). Age is something that can affect a person's mindset. Thoughts in adolescence and adulthood certainly have differences in solving a problem. Based on the results of the study, it is known the following data:

Table 5. Respondent Age Data

No	Age	Amount	Percentage
1	<25	10	5%
2	26-30	20	10%
3	31-35	30	15%
4	36-40	50	25%
5	41-45	50	25%
6	46-50	20	10%
7	51-55	10	5%
8	>56	10	5%
	Amount	200	100%

Based on the data above, it is known that the majority of farmers are still of a productive age. The results of the research show that there are 5% of respondents who are less than 25 years old, but based on the results of the interview they are more than 21 years old so they are classified as productive age. In addition, there are 10% of respondents with an age range of 26-30 years and 46 to 50 years. While in the age range of 31-35 years there are 15% of respondents, at the age of 36-40 years there are 25% as in the age of 41-45 years. while the other 10% consisted of ages 51-55 with a percentage of 5% and those aged over 56 years with a percentage of 5%.

These results indicate that the farmers are still at a productive age with strong energy and power so that they have high enthusiasm in improving agricultural commodities.

2. Formal Education

The Farmer's Card program is mostly aimed at people with low formal education because they have a limited understanding of technology (Setyo Budi, et al. 2021), so that the Farmer Card can support these limitations to increase agricultural commodities. Based on the results of the study, it is known the following data:

Table 6. Formal education data

No	Level of education	Amount	Percentage
1	No school	20	10%
2	Primary school	60	30%
3	Junior high school	60	30%
4	Senior High School	50	25%
5	Bachelor degree	10	5%
6	Postgraduate	0	
7	Doctoral Program	0	
	Amount	200	100%

The results showed that the education level of the respondents was quite diverse, starting from the level of basic education to higher education and some even did not go to school or did not complete basic education.

As research data shows that 10% of respondents are not in school, 30% have completed elementary and vocational education, 25% have completed senior secondary education and 5% have completed S1. After being interviewed, respondents who have completed their bachelor's degree but still want to become farmers are those who want to develop their skills in the world of agriculture. Apart from being a hobby, he also wants to always be near his parents to serve and take care of them.

3. Non-formal Education

Based on Law No. 20 of 2003, non-formal education is one way to obtain a structured and tiered education but is organized by the community (Setyo Budi, et al 2021). Non-formal education can also be used to increase scientific understanding in everyday life. The majority of respondents have had non-formal education with the following data:

Table 7. Data on the length of time following non-formal education

No	Participation time	Amount	Percentage
1	<1 year	20	10%
2	2-3 years	50	25%
3	4-5 years	50	25%
4	>6 years	80	40%
	Amount	200	100%

The data above provides an explanation that most of the respondents attended non-formal education for a long period of time. Most of them continue their non-formal education after graduating from formal education. There are various kinds of non-formal education that are followed in various provinces, such as East Java, Central Java, West Java, and so on to increase understanding and knowledge through various turmoils of life.

As the result of the research, it is known that 10% of respondents attended formal education for less than 1 year, 25% were in the range of 2-3 years, 25% in the time span of 4-5 years and 40% were in the period of more than 6 years.

With this it can be said that, non-formal education has a longer percentage followed by respondents compared to formal education. This is because, some of the respondent's parents feel they are unable to provide education in formal education because of the high cost in the past before the large number of aids and scholarships that can be accessed by all levels of society.

4. Income

The income aspect can be used to determine the level of community welfare. Based on the results of the study obtained the following data:

Table 8. Respondent Income Data Every Month

No	Income Interval	Amount	Percentage
1	<500.000	20	10%
2	600.000-1.000.000	50	25%
3	1.100.0000-1.500.000	100	50%
4	1.600.000-2.000.000	20	10%
5	>2.100.000	10	5%
	Amount	200	100%

Through the data above, it is known that the highest percentage of respondents' income is in the income interval of 1,100,000-1,500,0000, with a percentage of 50%. Meanwhile, for incomes less than 500,0000, 10% of respondents, at intervals of 600,000-1,000,000, the percentage is 25%, in the interval 1.600.0000-2,000,000, the percentage is 10%, and for incomes more than 2,100,000, the percentage is 5%. Based on the results of the interview it is known that the respondent with an income of more than 2,100,000 is a farmer with a fairly large agricultural land.

5. Time to be a Farmer

Time to become a farmer can increase monthly income because over time it can increase the ability of respondents to manage agricultural activities. Based on the research data, the following data are known:

Table 9. Data Time To Be A Farmer

No	Time	Amount	Percentage
1	<1 year	20	10%
2	2-3 years	20	10%
3	4-5 years	30	15%
4	6-7 years	40	20%
5	8-9 years	40	20%
6	>10 t years	50	25%
	Amount	200	100%

Through the data above, it can be seen that there are 10% of respondents who have been farming for less than 1 year, 10% in the span of 2-3 years. 15% for 4-5 years, 20% for 6-7 years, 20% for 8-9 years and 25% for more than 10 years have been engaged in agriculture.

At the time of the interview, the respondents stated that the longer it took to farm, the analysis related to temperature, weather and agricultural production could be accurately and sharply known in order to minimize crop failures.

3.2 How to Use Farmer's Card

How to use the farmer's card is actually quite easy, but not a few farmers over the age of 40 have difficulty following the procedures for using it, especially when it comes to applications and gadgets. In fact, 50% of respondents with USA over 40 years stated that they did not register independently to get a farmer card, but the whole procedure was carried out by the village and the farmer card would be distributed to each farmer. Unfortunately, not all farmers have obtained a farmer card. The government states that farmer cards will be distributed in stages from year to year until the entire community can enjoy the benefits (Hadi Ar Rosyid, et al. 2021).

Farmers who have received a farmer card can use the farmer card for various things such as buying subsidized fertilizers, selling crops, making credit or even saving. If you want to use the card to buy subsidized fertilizer, the respondent can directly come to the fertilizer kiosk complete with a farmer card, then insert the card into the EDC machine, and enter the pin card and follow various sequences until the transaction is successful. If respondents experience difficulties, they can ask for help to be guided by their use by the fertilizer provider.

This is like using the farmer card for other purposes, namely the respondent goes to the location that has been determined in the use of the farmer card and follows every step in it.

3.3 The Effect of Farmer's Cards in Agricultural Business

The existence of government policies including farmer cards certainly has an influence in agricultural business. Based on the data, it is known as follows:

Table 10. Data on the Effect of Farmer Cards in Agricultural Business

No	Element	Percentage	Decsription
1	Easy to get cheap fertilizer	100%	Very influential
2	Agricultural yields increase	76%	Very influential
3	Decreased working capital	80%	Very influential
4	Easy to do business credit and savings	80%	Very influential

Based on the data above, it is known that the farmer's card has a lot of influence in agricultural business, namely the respondents can get cheap fertilizer easily. This aspect gets 100% results with very influential criteria. In the aspect of increasing agricultural yields, obtaining a percentage of 76% with very influential criteria, in the aspect of declining business capital obtaining a percentage of 80% with very influential criteria and ease of doing credit or savings obtaining a percentage of 80% with very influential criteria.

In addition, based on calculations through ANOVA, the following data are known:

Table 11. Farmer Card Regression Test With Agricultural Business Management

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.717[a]	.514	.512	5.09277

a. Predictors: (Constant), Card_Farmer

These results explain that the coefficient value of 0.717 means that the farmer card program has a strong influence on the management of agricultural businesses with the percentage of influence 51.4%. In addition, based on the ANOVA results, it is also known that sig. (2-tailed) = 0.000 smaller than 0.005, which means that there is a significant relationship between the farmer card program and agricultural business management.

Thus, it can be seen that the existence of a farmer card program has a positive influence on the management of agricultural businesses.

In addition to the aspect of influence, it is important to know the level of satisfaction of respondents in using farmer cards. So that the data is obtained as follows:

Table 12. Data on Satisfaction of Using Farmer's Cards

No	Measurement	Percentage	Description
1	The program was quite successful	75%	Enough
2	Farmer cards are very useful for farmer entrepreneurs	90%	Very satisfied
3	The target on the farmer's card is right	70%	Enough
4	The programs contained in it are quite in accordance with the needs of the farmers	70%	Enough

The results showed that the farmer card program was quite satisfactory in several aspects, namely the program that was successfully implemented with a percentage of 75%, the right target of the farmer card obtained a percentage of 70%, and aspects of program suitability obtained a percentage of 70%. While the benefits of the farmer's card obtained a percentage of 90% with the criteria of being very satisfied.

With this, it is known that the majority of farmers are quite satisfied with welcoming the farmer card program to increase agricultural yields. However, there are some farmers who feel dissatisfied with the benefits of the farmer card because it is considered "useless", meaning that some farmers feel that having a farmer card is useless, because of the scarcity of fertilizers and the high price. This is acknowledged by farmers around the island of Java where they find it difficult to get black fertilizer even though the price has increased by more than 75%.

IV. Conclusion

Agriculture is an important aspect for Indonesia in improving its economy, because the majority of Indonesian citizens make a living as a farmer. Various difficulties experienced by farmers such as expensive fertilizer prices, cheap harvest prices and various other obstacles that caused agricultural commodities to decline. Therefore, the

government made a policy, namely the farmer card program to increase agricultural yields because of the various facilities facilitated by the farmer card.

The results showed that the farmer card had a positive effect in increasing agricultural commodities and the majority of farmers were satisfied with the program contained in the farmer card. Unfortunately, not all farmers have farmer cards so that agricultural commodities have not yet reached their maximum point in improving the country's economy. Therefore, the government should immediately make efforts to issue farmer cards and distribute them to all farmers so that the benefits of farmer cards can be felt by every level of society.

In addition, the government should also carry out regular control over the circulation of fertilizers, which have recently been deemed scarce and whose prices have soared, such as black fertilizer, so that farmers have difficulty managing their agricultural businesses.

References

Ar-Rosyid, Hadi et al. 2021. *Analisis Efektivitas Kartu Tani Terhadap Kesejahteraan Masyrakat Petani di Lingkungan Cilipung*. Proceedings UIN Sunan Gunung Djati Bandung 1(38): 72-92.

Budi, Setiyo, et al. 2021. *Analisis Efektivitas Program Kartu Tani di Desa Cabak Kecamatan Jiken, Kabupaten Blora*. Jurnal Sosial Ekonomi Pertanian 14(3): 299-310.

Creswell, John W. 2016. *Research Design Pendekatan Kualitatif, Kuantitatif, dan Mixed*. Yogyakarta: Pustaka Pelajar.

Cypert, K., Prasetyo, E., & Setiadi, A. (2019). *Analisis Faktor-Faktor Yang Mempengaruhi Keputusa Pembelian Brokoli Organik Di Pasar Modern Gelael di Semarang.*JSEP (Journal of Social And Agricultural Economics), 12(2): 67–79.

Dewi, Ni Luh Putu Rossita, et al. 2017. *Faktor-Faktor Yang Mempengaruhi Produktivitas Usaha Tani dan Keberhasilan Program Simantri di Kabupaten Klungkung*. E-Jurnal Ekonomi dan Bisnis Universitas Udayana 6(2): 701-728.

Febrianti, Reni. 2018. *Penyuluhan Pertanian*. Yogyakarta: Sentra Edukasi Media.

Kamaludin dan Sri Wahyuningsih. 2021. *Analisis Pengelolaan Modal Usaha Dalam Rangka Meningkatkan Taraf Kehidupan Ekonomi Petani Bawang Merah Dengan Menggunakan Media Tana, Sawah Tadah Hujan*. Costing: Journal Of Economic, Business and Accounting 5(1): 1-12.

Mahendra, Bayu et al. 2021. *Pengaruh Program Kartu Tani Terhadap Penurunan Biaya Pupuk Pada Petani Padi*. Jurnal Agriep 20(2): 411-420.

Maulidah, Silviana. 2012. *Pengantar Manajemen Agribisnis*. Malang:UB Press.

Soegoto, Agus Supandi dan Jacky S.B. Sumarauw. 2014. Analisis Manajemen Usaha Petani dan Pertanian di Kawasan Agropolitan Dumoga Untuk Menopang Ketahanan Pangan Nasional. Jurnal EMBA 2(2): 233-245.

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