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RURAL AGRIBUSINESS BUSINESS DEVELOPMENT STRATEGY IN INCREASING FARMERS' INCOME
(CASE STUDY OF JOINT FARMER GROUP IN DELI SERDANG)

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Abstract. Development of Rural Agricultural Activities (PUAP) is one of the programs developed by the Ministry of Agriculture to be implemented in an integrated manner with the National Community Empowerment Program (PNPM-M). The purpose of this research is to answer the following problems: Describe Gapoktan strategies in the Rural Agribusiness Development Program (PUAP) and determine the impact of the Rural Agribusiness Development Program (PUAP) activities in increasing farmers' income in Deli Serdang. The method used in this study is a census where the data obtained are primary data and secondary data. Primary data is data collected directly from interviewed farmers. This study uses descriptive analysis to provide an overview of the implementation of the Rural Agricultural Business Development Program (PUAP) for rice cultivation in Deli Serdang Regency. Gapoktan PUAP Performance Assessment. The results of this study are the level of effectiveness of the results of research on the implementation of the Rural Agricultural Business Development Program (PUAP) on Gapoktan performance. When the income exceeds the total cost, then part of the farmer's income is generated by a combination of farmer groups (gapoktan) before and after receiving funds from the Rural Agricultural Business Development Program (PUAP), which has a t-score of -14.126 and has a significance of 0.000 < lt; 0.05, Hi received. The results of this study are the level of effectiveness of the results of research on the implementation of the Rural Agricultural Business Development Program (PUAP) on Gapoktan performance. When the income exceeds the total cost, then part of the farmer's income is generated by a combination of farmer groups (gapoktan) before and after receiving funds from the Rural Agricultural Business Development Program (PUAP), which has a t-score of -14.126 and has a significance of 0.000 < lt; 0.05, Hi received. The results of this study are the level of effectiveness of the results of research on the implementation of the Rural Agricultural Business Development Program (PUAP) on Gapoktan performance. When the income exceeds the total cost, then part of the farmer's income is generated by a combination of farmer groups (gapoktan) before and after receiving funds from the Rural Agricultural Business Development Program (PUAP), which has a t-score of -14.126 and has a significance of 0.000 < lt; 0.05, Hi received

Keywords: PUAP; Income; Association of Farmers Groups

I. INTRODUCTION

Indonesia is an agrarian country, meaning that agriculture plays an important role in the overall national economy. This is shown by the large number of residents or workers engaged in the agricultural sector which has a high strategic interest not only to achieve self-sufficiency in food but also to expand sources of currency outside of oil and gas. Currently there are still many problems in the economic sector, such as the problem of poverty and unemployment caused by the shift from the agricultural sector to the industrial sector. In addition to strong economic growth, poverty alleviation is a challenge that must be faced by the Indonesian government. If poverty alleviation can be continued, it will strengthen economic stability so that development can take place permanently. The strategic goal of developing economic development is to strengthen the national economy, which is otherwise located in rural areas. Strong economic growth does not necessarily support people's economic self-determination. Community welfare is a very important part of the progress of the country. In addition to improving people's welfare, one must always strive for a standard of living. How to achieve national development goals, ie. H. increasing the standard of living of the region through harmonious, integrated development between industries, efficient and effective planning to achieve people's welfare.

The development of national agriculture since the independence period until now has not been able to raise the issue of agriculture (farmers) in a broad sense, it is still traditional or traditional, it is even decreasing. Rural poverty is a major national problem whose handling cannot be postponed and must be a priority in the implementation of social welfare development. Therefore, agricultural and rural-based economic development has a direct impact on reducing the number of poor people. The development of the agricultural sector is currently facing many challenges and obstacles, such as: B. low quality of human resources in rural areas, increasingly limited land resources, status and size of small landholdings, limited access of farmers to capital (Asriadi & Rahmawati, **[1]**). The consequence of these problems is that farmers cannot guarantee the sustainability of their agricultural activities **[2]**. This problem actually arises

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because the banking sector pays less attention to the agricultural sector. Farming is considered high risk (high risk) and the circulation of funds is slow, which hinders farmers' access to banking services (Iski, Kusnadi & Harianto **[3]**). The government is trying to overcome this problem through the PUAP (Rural Agribusiness Business Development) program by providing capital assistance of IDR 100 million to each Association of Farmers Groups (Gapoktan). This program provides business capital to farmers, both landowners and farmers and farm labourers **[4]**.

Development of Rural Agricultural Activities (PUAP) is one of the programs developed by the Ministry of Agriculture to be implemented in an integrated manner with the National Community Empowerment Program (PNPM-M). PUAP is a form of business capital arrangement for farmers, as well as the farmers themselves, ranchers, farm laborers and rural poor households which are coordinated by a combination of farmer groups (gapoktan). As an agricultural institution implementing the Gapoktan PUAP, it is hoped that farmers can improve their quality of life by trying to develop the skills and abilities of human resources (farmers), expand the scope of their business and increase their business, which again can increase. their productivity (Asriadi & Rahmawati, **[1]**). The PUAP program is implemented by farmers (owners and/or farmers), farm laborers and households of poor farmers in rural areas, coordinated by Gapoktan as an institution owned and led by farmers. One of PUAP's goals is to overcome farmers' problems with access to capital, market access and technology. Some of the requirements that must be met by Gapoktan as PUAP distributors are: They have human resources capable of running agricultural businesses, an active management structure owned and managed by farmers, and supported by land managers or mayors (Ministry of Agriculture **[5]**). The PUAP program has a social impact because it increases farmers' views on savings and loans at Gapoktan and increases interaction between farmers, while from an economic perspective the impact of this program is that farmers can obtain credit with simple procedures and conditions. Farmers are no longer tied to middlemen and farmers' income, and employment opportunities are also increasing **[6]**. However, there are also many Gapoktans that fail to develop PUAP funds, because HR capacity is unable to manage absorbed funds, and PUAP fund turnover is low, there are still farmers who arrive late and do not return funds, as well as irregularities. in the use of funds. for consumption activities **[7]**.

The impact of implementing the PUAP program is calculated by calculating how much the farmer's income has increased. It is necessary to take into account the impact of income growth on poor farmers, because the main objective of the PUAP program is poverty alleviation. In addition to working capital subsidies for poor farmers, it is hoped that there will be a bigger multiplier effect. To achieve rapid growth in the welfare of the rural poor. Farmer income can be calculated based on crop analysis. When measuring the financial status of individuals or households, one of the most commonly used concepts is income level. Income can be defined as the remaining depreciation of income and costs incurred. Expected income is positive income. Agricultural produce is the value of all agricultural products in a certain period of time, regardless of whether it is sold or not. Increasing agricultural productivity requires synergy and cooperation, as well as strong, consistent and continuous coordination between the government, entrepreneurs and agricultural sector activists with a focus on improving human resources and agricultural technical management so that agricultural products have high economic value, which benefits farmers. The purpose of this research is to answer the following questions: Describe Gapoktan strategies in the Rural Agribusiness Development Program (PUAP) and study the impact of the Rural Agribusiness Development Program (PUAP) activities on increasing farmers' income in Deli Serdang.

II. RESEARCH METHODS

This research was conducted in Deli Serdang Regency, North Sumatra. The method used in this study is a census where the data obtained are primary data and secondary data (Moleong **[8]**). Primary data is data collected directly from interviewed farmers. The data was obtained from direct interviews with a total of 60 farmers who were interviewed using a set of questions (questionnaire). Secondary data in the form of information, literature, documents and reports received from related parties in connection with this research **[9]**. In this study descriptive analysis was used to explain the overall picture of the implementation of the Rural Agricultural Business Development Program (PUAP) for rice cultivation in Deli Serdang Regency. The following two formulas are used to estimate the effectiveness of PUAP Gapoktan:

PUAP Gapoktan Performance Analysis

Gapoktan's PUAP performance is reflected in its ability to manage and allocate PUAP funds effectively based on evaluation criteria, both from Gapoktan's own point of view and from the point of view of users of PUAP funds in this case farmers **[10]**. PUAP based on user (farmer) responses to PUAP resources can be analyzed using a performance rating rating system, which is then described descriptively. The Likert scale is used to assign points. The measurement is carried out by asking a series of questions to the respondent, after which the respondent is asked to provide an answer or answers consisting of three scale levels. Responses were rated 1-3, with the highest score of three (3) for the most supportive response and the lowest score of one (1) for the unsupportive response. It's about awarding points at different stages of the statement, ie. H. Answers that support the sentence “1”, such as B. Simple, Easy, Fast, and Good will get a score of three (3). Answers that support the statement “3”, such as B. Hard, Long, Difficult and Bad are given a score of one (1). Based on the scores obtained from the respondents, then intervals or scale ranges are determined to determine the effectiveness of PUAP resource allocation. The results of the difference interval between the highest total

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score and the lowest total score divided by the number of response categories (Umar, **[11]**) are formulated as follows:

$$Selang = \frac{\text{Nilai Max} - \text{Nilai Min}}{\text{Jumlah Kategori Jawaban}} - 1 \quad (1)$$

The formula is used to describe priority attributes for future improvement. The scale used is the Likert scale, presented in Table 1 as follows:

Table 1. Scale Score Rating Effectiveness

Rating Category	Scale Range
Not Yet Effective	250-427
Effective enough	428–605
Effective	606–783

Table 1 explains that if the total score is in the range of 250 – 427, the distribution of PUAP loan funds can be said to be ineffective. If the total score is in the range of 428 – 605, then the distribution of PUAP loan assets can be said to be quite efficient. Meanwhile, if the total score is in the range of 606 to 783, it can be said that the distribution of PUAP loan assets is efficient.

Impact Analysis of the PUAP Program on Increasing Farmers' Income

Farmers' income can be calculated using the formula Soekartaw **[12]**, namely. H. = TR – RC, where TR = Total Revenue and TC = Total Cost. In addition, to find out the differences in farmers' income levels before and after the PUAP program, a paired t-statistic test was carried out **[13]**. The formula formula is as follows:

$$t\ hitung = \frac{\text{d}-\text{d0}}{\text{Sd}/\sqrt{n}} \quad (2)$$

Description:

d–do : average income after loan – before loan
sd : standard deviation
n : number of observations
db : degrees of freedom

The hypothesis used is:

1. Ho: μ1 = μ2 or μ1 – μ2 = 0. There is no difference in the income level of farmers before and after the PUAP program.

2. Hi: μ1 > μ2 or μ1 – μ2 > 0, There are differences in farmer income levels before and after the PUAP program

Where:
μ1 : income before loanPUAP funds
μ2 : income after loanPUAP funds

Test criteria:
Ho is rejected if t-count > t-table, db = n – 1, p value < = 0.05
Ho is accepted if t-count ≤ t-table, db = n– 1, p value >= 0.05

III. RESULTS AND DISCUSSION

A. *Gapoktan Strategy in Rural Agribusiness Development Program (PUAP)*

The Rural Agibusiness Development Program (PUAP) provides benefits because it enables farmers to understand and apply agricultural management, increase productivity and maintain production sustainability as a buffer for national food security and increase farmer household income for farmers **[14]**. The expected impact is to ensure production stability and improve crop quality, as well as provide political guidance to municipal governments in the development of key raw materials. In addition, this is expected to increase regional income and employment opportunities significantly. The Direct Community Assistance (BLM) model is a way of channeling capital assistance funds directly from the central government to group accounts, giving farmers the freedom to use them both to provide group facilities or equipment, to buy production inputs and to develop their business. Basically, the main objective of implementing the BLM model is to increase the efficiency of assistance to farmers and eliminate leakages so that utilization is optimal and becomes a government agency or agency so that farmers are ready and able to use commercial credit. As mentioned above, optimizing the use of BLM PUAP funds in the regions is expected to generate sustainable business capital through recycling good funds into groups that are ultimately independent from farmer capital. However, in reality there are still several farmer groups that receive PUAP BLM packages from one project and also receive packages from other projects. Some even occurred in the same fiscal year (overlapping projects) or in subsequent years after receiving the BLM package. Another fact was the lack of corporate capital, which could promote the advancement of the skilled faction of the underground warrior group. However, until now there has been no group of BLM recipients whose ability class has changed since the Council Decree. This phenomenon illustrates the non-optimal utilization of BLM funds by farmer groups, especially those with capital accumulation mechanisms. Community empowerment tools, especially for farmers, cannot be shared by all. To find out the recapitulation of the effectiveness of a performance and the level of satisfaction presented in Table 2 as follows:

Table 2. Efficiency Recapitulation in Deli Serdang Regency

	Answer Indicator	Range Total Score Scale	Information
A.	Interest Level		
	1.Organization Level	609	Effective
	2.Fund Management	595	Effective enough
	3.Farm Business	600	Effective enough
B.	Satisfaction Aspect		
	1. Organization Level	612	Effective
	2. Fund Management	600	Effective enough
	3. Farm Business	615	Effective

Source: Primary Data Recapitulation After Processing, 2023

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Based on the summary of the effectiveness of the respondents' answers, Table 2 shows that all respondents answered the performance aspect of Gapoktan members, namely the level of importance, consisting of organizational level with a score of 609 (effective). Fund management with a scale score of 595 (quite effective) and farming with a scale score of 600 (quite effective). At the same time satisfying aspects, ie. degree of importance, consisting of organizational level with a score of 612 (effective). fund management with a score of 600 (fairly effective) and agriculture with a score of 615 (effective). Observing the presentation of the results above, the success of PUAP is generally well received, the implementation of the PUAP program is effective.

B. *The Impact of the PUAP Program on Farmer's Income Before and After the existence of PUAP*

The production factors used in the production process of growing rice are divided into costs, which are divided into cash costs and imputed costs. Cash effective costs include costs incurred for the purchase of fertilizers, pesticides, seeds and salary costs for outside family helpers (TKLK). These costs are calculated to finance family work (TKDK) and depreciation of agricultural machinery. The following is a general explanation of the use of production factors (inputs) in rice cultivation at Gapoktan. *Procurement of Farming Business Inputs* : Inputs are the first source of cash costs that must be provided for the sustainability of agricultural production. The seeds are available at a price of IDR 9,000 per kilogram. The average rural area for each farmer is 0.7720 hectares. The average number of fertilizer doses used by farmers per hectare before and after PUAP is presented in Table 3 as follows:

Table 3. Average Amount of Fertilizer Dosage Per Hectare by Farmers Before and After PUAP

Fertilizer Type	Unit (Kg)	Before PUAP	After PUAP
Urea	kg	180	220
TSP	kg	57	63
Phonska	kg	55	62
ZA	kg	60	65

Source: Primary Data After Processing, 2023

Based on Table 3 above, it can be seen that the use of fertilizer varies depending on the type of urea and phonska fertilizer. Urea fertilizer changes from 180 kg to 220 kg or 40 kg and more. 57-63 kg of TSP fertilizer, 55-62 kg of Phonska fertilizer and 60-65 kg of ZA fertilizer. This change in the use of fertilizers is the result of a process of outreach to extension workers about the importance of using inorganic fertilizers in rice production which is increasingly affecting agricultural yields. In addition, Gapoktan people who work in the fields and fields do not cultivate organic fertilizers which are products of processed animal waste and environmental products. The complete use of chemical fertilizers recommended by the authorities or field workers can be seen in Table 4, where the average dose per hectare is higher than recommended, thereby wasting fertilizer procurement costs that could have been allocated for other inputs.

Table 4. Average Comparison of Fertilizer Use per Hectare in Gapoktan, Deli Serdang Regency

Fertilizer Type	Unit (Kg)	Before PUAP	Department of Agriculture recommendation	Price/Kg (IDR)	Mark (IDR)
Urea	kg	180	220	2,250	405,000
TSP	kg	57	63	8,500	484,500
Phonska	kg	55	62	10,000	550,000
ZA	kg	60	65	1,700	102,000

Source: Primary Data After Processing, 2023

Based on Table 4 above, it can be seen that the use of excessive doses is due to the belief of rice farmers that the more fertilizer used, the production will increase. Changes in the number of doses of fertilizer used by the respondents did not show any changes in the amount or value of the doses which were not significant because they did not meet the Agency's recommendations. Other production tools include agricultural tools such as hoes, sickles, machetes, and rucksacks that form one unit. Table 5 shows the use of rice additives as follows:

Table 5. Average Value of Equipment Use in Rice Farming in Gapoktan, Deli Serdang Regency

Equipment Type	Number owned	Price/Unit (Rp)	Economic value (IDR)
Machete	1	50,000	50,000
Pest Sprayer	1	350,000	350,000
Hoe	1	80,000	80,000
Amount	3		480,000

Source: Primary Data After Processing, 2023

Based on Table 5 above, it can be seen that the economic life of the interviewed farmer's equipment is usually one to five years, and the number of growing seasons in one year is doubled. PUAP BLM funds are not used to buy agricultural machinery, only chemical fertilizers and pesticides. The depreciation value is calculated using the straight-line method and the results are shown in Table 6 as follows:

Table 6. Agricultural Equipment Depreciation Value in Farming Farmers of Gapoktan Respondents Per Year in Deli Serdang Regency

Equipment Type	New Price (RP)	Old Price (Rp)	Economic age	Depreciation Value (Rp)
Machete	65,000	50,000	5	15,000
Pest	390,000	350,000	10	40,000
Sprayer	95,000	80,000	5	15,000
Hoe				
Amount	550,000	480,000	20	70,000

Source: Primary Data After Processing, 2023

Based on Table 6 above, it can be seen that the depreciation value of the alsintan tools used by the interviewed farmers is Rp. 70,000/planting season, which consists of depreciation of machetes of Rp. 15,000 and depreciation of hoes of Rp. 15,000. collect 15,000.00; and the

pest sprayer price is IDR 40,000.00. The depreciation value of farming tools before and after the PUAP program did not change because the farming tools were already there when the farmers started farming. *Farming Business Output:* The performance of rice farming measures the success of rice farming in terms of production and farmer income. These results were obtained from field interviews with 60 interviewed farmers. Land owned on average around 0.7720 hectares. The average rice production before and after the PUAP program is shown in Table 7 as follows:

Table 7. Average Production Per Hectare of Respondent Farmers' Rice Farming Before and After PUAP

Input Type	Unit	Average Value (Rp) Before PUAP	Average Value (Rp) After PUAP	Difference Value (Rp)
GP production	kg	4,240	4,400	160
Price of Grain/Kg	kg	4,560	5.150	590

Source: Primary Data After Processing, 2023

Based on Table 7 above, it can be seen that the average dry grain production at harvest (DBP) per hectare before purchasing PUAP by interviewed farmers during one season was 4,240 kg. If farmers apply the price of harvested dry unhusked rice (HGP) it is IDR 4,560 per kilogram. The fee structure for farmers consists of cash costs and imputation costs. Cash costs are defined as the initial costs of fertilizers, pesticides and drugs to eradicate plant pests and diseases, as well as labor and agricultural taxes, incurred by Gapoktan farmers during the rice production process. Agricultural costs included in the cost calculation are agricultural costs incurred by farmers and do not include cash such as seeds and labor values. The cost of accepting farmers before and after passing PUAP can be seen in Table 8 as follows:

Table 8. Average Revenue Costs in Rice Farming Before and After PUAP

Input Type	**Average Value (Rp) Before PUAP**	**Average Value (Rp) After PUAP**	**Difference Value (Rp)**
Seed	550,250	620,500	300,000
Fertilizer			
a. Urea	405,000	410,350	5,350
b. TSP	484,500	502,300	17,800
c. Phonska	550,000	580,400	30,400
d. ZA	102,000	114,000	12,000
Pepticide			
a. Spontaneous (liters)	95,000	95,000	-
b. Grass Poison	26,000	55,000	39,000
c. Stimulant (Filia & Score)	48,000	50,000	2,000
Labor	1,850,000	1,900,000	50,000
Tax	195,000	195,000	-
Tool Shrinkage	9,200	11.150	1950

Source: Primary Data After Processing, 2023

Based on Table 8 above, it can be seen that the average seed received by interviewed farmers before PUAP was Rp. 550,250. PUAP after Rp. The difference is Rp 620 500 300 000. The average urea received by farmers before PUAP is Rp. 405,000, after PUAP Rp. The difference between IDR 410,350 and 5,350 is the average TSP. interviewed farmers received before PUAP was Rp. 484,500, after PUAP Rp. Difference Rp. 502,300 17,800. Phonska's average profit before PUAP was Rp. 550,000, after PUAP. Difference Rp. 580,400. 30,400. and the average ZA obtained by interviewed farmers before PUAP was Rp. 102,000, after PUAP Rp. The difference between Rp. 114,800 and Rp. 12,000. According to the information obtained from interviewed farmers, the average depreciation of tools before PUAP was Rp. 9,200., PUAP after Rp. Difference Rp. 11,150 in 1950. The average labor cost before receiving PUAP from the sources was Rp. 1,850,000, according to PUAP the difference is Rp. 1,900,000, the price does not change at the time of cultivation. The average tax received by each farmer before PUAP was Rp. 195,000, after PUAP Rp. The difference of 195,000 does not change the tax price to farmers during cultivation. *Acceptance of Farmers Before and After PUAP:* The value of farming revenue issued by farmers before and after PUAP can be seen in 9 as follows:

Table 9. Average Revenue and Income Per Hectare of Respondent Farmers' Rice Farming Before and After PUAP

Description	Average Value (Rp) Before PUAP	Average Value (Rp) After PUAP	Difference Value (Rp)
Reception	16,500,000	19,540,000	3,040,000
Income	12,450,000	17,050,000	2,600,000

Source: Primary Data After Processing, 2023

Based on Table 9 above, it can be seen that the average income of the interviewed farmers before receiving PUAP was Rp. 16,500,000 and after receiving PUAP Rp. The difference from IDR 19,540,000 to IDR 3,040,000. This increases the average farmer's income by up to 30 percent. . Based on Table 9 above, it can be seen that the average income of the interviewed farmers before receiving PUAP was Rp. 12,450,000 and after receiving Rp. The difference from IDR 17,050,000 to IDR 2,600,000. This increases the average farmer's income by up to 200 percent. *Acceptance of Rice Farming Before and After PUAP:* The income earned by farmers is quite large, this is because the selling price of harvested dry unhusked rice (GKP) when selling chili is quite high. The following is the result of the acceptance of each farmer seen in Table 10 as follows:

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Table 10. T Test of Total Rice Farming Revenue Before and After PUAP Paired Samples Statistics

Reception	Means	N	std. Deviation	std. Error Means
Before	15553192,31	60	8471682,091	1174810,930
After	18791826,92	60	9029344,483	1252144,789

		Paired Differences					t	df	Sig. (2-tailed)
		Means	std. Deviation	std. Error Means	95% Confidence Interval of the Difference				
					Lower	Upper			
Reception	Before - After	-3238634,615	1479684,704	205195,349	-3650581,468	-2826687,763	-15,783	51	,000

Source: Primary Data After Processing, 2023

Based on Table 10, it can be seen that rice crop income increased after the Rural Agricultural Activity Development Program (PUAP), with an average before PUAP of Rp. 16,500,000 while after the PUAP scheme, the average income of farmers is Rp. 19,540,000 so that it shows a t-value of -15,783 with a significance of 0.000 <; 0.05. This Hi is accepted, meaning that there is a significant difference in the income of farmers before and after the Rural Agricultural Business Development Program (PUAP). Rice *Farming Income Before and After PUAP:* The income used in the analysis is the average farm income obtained by subtracting the average income from the average total cost and average cash cost of the respondent farmers. Total cost revenue is less than cash costs because they are not deducted from calculated costs. In this study, rice farming income was calculated as total income minus the total costs of cultivar production during one growing season. The following is the farm income of each respondent. shown in Table 11 as follows:

Table 11. Test t of the total income of rice farming before and after PUAP Paired Samples Statistics

		Means	N	std. Deviation	std. Error Means
Pair 1	Income Before	11763124,81	60	8451844,906	1172060.007
	Income After	14681875.00	60	8986868,719	1246254,461

		Paired Differences					t	df	Sig. (2-tailed)
		Means	std. Deviation	std. Error Means	95% Confidence Interval of the difference				
					Lower	Upper			
Pair 1	Income_Before - Income_After	-2918750,192	1489949,329	206618,796	-3333554,734	-2503945,650	-14,126	51	,000

Source: Primary Data After Processing, 2023

Based on Table 11, it can be seen that the difference in the income of the Association of Farmers Groups (GAPOKTAN) of Deli Serdang Regency before and after receiving assistance from the Rural Agricultural Business Development Program (PUAP) with the average income before receiving PUAP assistance was IDR 12,450,000 per harvest, while according to PUAP the income the average is Rp. 17,050,000 per plant. The average difference is 2,600,000 or 20%. Thus showing a t-score of -14.126 with a significance of 0.000<; 0.05. This Hi is accepted, meaning that there is a significant difference in the income levels of farmers before and after the Rural Agricultural Business Development Program (PUAP).

IV. CONCLUSION

Based on the data analysis that has been done, several conclusions can be drawn, namely the effectiveness of research results in the implementation of the Rural Agricultural Business Development Program (PUAP) in relation to Gapoktan performance. This shows the cooperation and commitment of all stakeholders, in this case the government and the community, in this case GAPOKTAN management and farming communities, for the Rural Agricultural Development Program (PUAP), starting from preparation, implementation and supervision. which fall into the category of good performance. So that the Rural Agricultural Business Development Program (PUAP) can develop even better in the future. When income exceeds total costs, part of the farmer's income is generated by a combination of farmer groups (gapoktan) before and after receiving funds from the Rural Agricultural Business Development Program (PUAP), which has a t-score of -14.126 and a significance of 0.000 < lt; 0.05, Hi is accepted, meaning that there is a significant difference between the income levels of farmers before and after the Rural Agricultural Development Program (PUAP) and the average income before receiving Rural Agricultural Development Program (PUAP) funds is Rp. . 12,450,000 per harvest, while according to PUAP the average income is Rp. 17,050,000 per harvest. The average difference is 2,600,000 or 20%. Based on several conclusions, the suggestions that can be given are related to aspects of performance and satisfaction of Gapoktan members and it is hoped that the government will routinely support the Rural Agricultural Business Development Program (PUAP) according to the suggestions in the form of availability of fertilizers, seeds, medicines to increase production. Regarding crop income, it is hoped that the government and farmers can effectively support the rural agricultural development program (PUAP) and increase grain prices so that farmers can benefit from the PUAP program. that it is more purposeful.

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