# Impact Analysis of Rice, Corn, and Soybean Special Effort Program (Upsus Pajale) Towards Corn Farmers Net Income In Hatungun Sub-District, Tapin Regency

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# Abstract:

**Background**: The Ministry of Agriculture has special effort program (Upsus) for food self-sufficient focused in three commodities, namely rice, corn and soybeans (Pajale), which one of the aim is to supports to enhance the production and to attained the self-sufficient of corn in 2020. In increasing the area of corn planting, Hatungun sub-district not as a corn production center, where area has not been maximally processed yet but the production gets increased. It makes Hatungun sub-district become one of the sub-districts to realizing the corn self-sufficient. Beside of being food provider in the agricultural sector, it also contributes significant employed. So its expected that the Upsus Pajale Program could decrease the poverty and increase the corn farmers income in Hatungun District. The aim of the study are to analyzed (1) the corn farmers farming income that participate in Upsus Pajale Program and the feasibility of independent corn farmers; (2) the feasibility of corn farmers farming; (3) the impact of the Upsus Program on corn farmers profit after receiving the Upsus Pajale Program.

Materials and Methods: How to take samples intentionally from independent corn farmers and Upsus Pajale farmers whose locations are close to each other, and the same quality seeds and the same soil structure. Samples taken amounted to 60 farmers (30 independent farmers and 30 Upsus farmers from Asam Randah Village, Batuhapu Village, and Burakai Village), because the sample did not spread geographically. Data processing methods are used to analyze net income of farmers by analyzing costs, income, and profits in one planting period. As far as agriculture is feasible or not, we use Revenue Cost Ratio Analysis (RCR). The impact of the Upsus corn program on farmers' net income was analyzed by Independent Sample t-test.

**Results:** The average total revenue of Upsus Program corn farmers was IDR 14.750.000,-/farming (7.254.000,-/ha), while the average total cost was IDR 10.316.892,-farming (5.076.292,-/ha). So the average total of net income is IDR 10.316.892,-/farming (5.073.881,-/ha). Meanwhile, the average total revenue of independent farmers is IDR 9.950.000,-/farming (6.861.000,-/ha), with a total average cost is of Rp IDR 7.195.908,-farming (4.962.069,-/ha). Thus the average net income is IDR 2.754.092,-/farming (1.897.943,-/ha). The feasibility of farming a corn farmer who participated in the Upsus Pajale Program was higher than an independent corn farmer, with an RCR value of 1.43 while the independent farmer only 1.38. From the statistical test shows t-count> t table (2,475> 2,001). That the benefit of farmer who participate in Upsus program get significant different from independent farmers as statistically with 95% confidence level..

**Conclusion:** The Upsus Corn Program has an impact on increasing net income. Statistically there are significant differences in profits between Upsus Program farmers and independent farmers. **Key Word: Corn Farming, Feasibility, Impact.** 

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# I. Introduction

The Ministry of Agriculture has compiled a road map to the world food barn in 2045. Its vision is to aim for world food barns by trying to provide food through increasing domestic production capacity to strengthen food security and competitiveness in achieving food self-sufficiency (Agriculture Pillar, 2019).

The agricultural sector seeks to achieve food self-sufficiency including increasing the productivity of food, livestock and plantations. There are eight strategic food commodities whose production is boosted through the acceleration of the production of self-sufficiency in rice, corn, soybeans, sugar, chili, shallots, garlic and beef through the Special Efforts Program (Upsus). rice, corn and soybeans (Pajale). In Upsus Pajale, the Ministry of Agriculture not only increases planting area, but also productivity in food centers. With the increase in corn production, the government believes that Indonesia's corn production can already be surplus in 2019 (Agriculture Pillar, 2019).

In supporting the government's policy in expanding the corn planting area, Tapin District is one of the districts designated to run the Upsus Pajale Program in achieving self-sufficiency in corn with a target planting area of 3,517 ha. On the other hand it turns out that in 2018, the area of corn planting area of Tapin Regency has only been realized at 1,353 ha (38.47%). The local government expects each sub-district to be able to expand the planting area of corn in the success of government policies in the form of the Upsus Pajale Program.

The need for corn production in Tapin Regency in 2018 was 16,880 tons, and it was only realized at 5,690 tons. The active role of Tapin district farmers largely determines the success of the Upsus Pajale Program in increasing corn production.

Corn farmers in Hatungun District mostly choose to do their business independently. They assume, by following the Upsus Program, it is not beneficial for farmers because they are not free to make choices in their business such as seed selection, fertilizer use, land management, so they think the Upsus Program is actually burdening the corn farmers.

The government hopes that farmers participating in the Upsus corn program can utilize potential land optimally by applying good planting patterns. This is intended to increase the income of farmers in Hatungun District.

Hatungun District is a rubber center area and not a corn center area, but in 2016 to 2018 there was an increase in corn production and corn productivity was the highest among the other districts in Tapin District. So that the corn crop is very potential to be developed in the Sub-District of Hatungun.

Based on the background and formulation of the problem above, this study aims to find out: (1) Analyzing the income of corn farming farmers participating in the Upsus Pajale program and the income of independent corn farmers in Hatungun Sub-District; (2) Analyzing the feasibility of farming of corn farmers participating in the Upsus Pajale program and the feasibility of farming of independent corn farmers in Hatungun Sub-District; (3) Analyzing the impact on the net income (profits) of corn farmers after participating in the Upsus Pajale program in Hatungun Sub-District.

# **II. Material And Methods**

This research uses survey method. The method of determining the sample is by determining the villages to be sampled in Hatungun Sub-District, Tapin Regency, as many as 60 respondents

**Study Design:** Purposive Sampling (intentional sampling)

Study Location: Hatungun Sub District, Tapin Regency, South Kalimantan Province.

Study Duration: From February 2019 to June 2020.

Sample size: 60 farmers.

**Sample size calculation:** Intentional sampling from independent corn farmers and adjacent Upsus Pajale farmers, the same corn seeds/quality and the same soil structure. Samples taken were 60 samples consisting of 10 samples of upsus farmers and 10 samples of independent smallholders from Batuhapu Village, 10 samples of independent smallholders and 10 samples of independent smallholders from Burakai Village, and 10 samples of independent smallholders from Burakai Village, where the tree villages not spread geographically.

**Subjects & selection method**: To answer the first goal, by analyzing the total financing of corn farming issued by farmers in one planting period consisting of explicit costs and implicit costs. The total financing for corn farming is using the following formula (Kasim, 2004):

$$TC = TEC + TIC$$

TC = Total Cost (Rp)

TEC = Total Explicit Cost (Rp)

TIC = Total Implicit Cost (Rp)

Costs used in farming use explicit costs and implicit costs, and to find out the total costs, the explicit costs plus the implicit costs.

Determine farm acceptance using the formula:

$$TR = P \times Q$$

TR = Total Revenue (Rp) P = Price of corn (Rp / kg) Q = Amount of production (kg) Determine farm income using the formula:

## $\mathbf{I} = \mathbf{TR} - \mathbf{TEC}$

I = Income (Rp) TR = Total Revenue (Rp) TEC = Total Explicit Cost (Rp)

Determine net income / profit from farming using the formula:

# $\pi = TR - TC$

 $\pi$  = Profit (Rp) TR = Total Revenue (Rp)TC = Total Cost (Rp)

To answer the second goal, by analyzing corn farming as far as the business is feasible or not feasible, then we use Revenue Cost Ratio (RCR) analysis, which is a comparison between total revenue and total cost, mathematically it can be written as (Suratiah. 2015) :

#### $\mathbf{RCR} = \mathbf{TR} / \mathbf{TC}$

RCR = Revenue Cost Ration / Business Feasibility TR = Total revenue (Rp)TC = Total Cost (Rp)By the rules: RCR> 1: this farm is feasible RCR = 1: this farm is even RCR <1: This farm is not worth / loss

To answer the third goal, with a descriptive analysis of the impact of the Upsus Pajale program on farmers' net income. To see the difference in net income between Upsus corn farmers and independent farmers using the unpaired t test analysis tool at an error rate of 5% with a 95% confidence level calculated using the formula:

$$t = \frac{\overline{Y}_1 - \overline{Y}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

Information :

 $\bar{y}_1$  = average upsus farmers' net income

 $\bar{y}_{2}$ = Average independent farmer net income

 $S_1^2$  = Farmer variance of the UPSus program  $S_2^2$  = Variance of independent farmers

 $n_1$  = Number of samples of UPSUS farmers

 $n_2$  = Number of samples of independent farmers

# III. Result

# **Characteristics of Respondent Farmers**

Age of Respondent Farmers. Based on the results of the study, obtained the age of farmers spread between 30-74 years. Respondents consisted of three age groups namely young age (<14 years), productive age (15-64 years) and unproductive age (> 65 years). Age affects the physical ability of respondents in managing their farming. From the results of the study the number of Productive Farmers for upsus farmers and independent farmers in Hatungun District amounted to 58 people with an average of 41 years. Thus it is said that the respondent is in a productive age. This is in accordance with Nurhasikin (2013) that the productive age is from the age of 15-64 years.

Level of education. The results showed that Upsus Farmers as many as 30 respondents consisted: 5 people did not graduate from elementary school, 14 people graduated from elementary school, 8 people graduated from junior high school, and 3 people graduated from senior high school. While 30 independent respondents consisted of farmers: 14 elementary school graduates, 8 junior high school graduates, and 3 senior high school graduates. The higher a person's education, the better the person's mindset.

Farming Experience. The results showed the duration of corn farming in upsus farmers ranged from 1-2 years amounting to 5 people, 3-4 years totaling 18 people, and> 5 years totaling 7 people. Whereas independent farmers, which are 1-2 years, have 11 people, 3-4 years, 15 people and> 5 years, 4 people. The experience of the farmer is one of the factors that can help solve the problems faced in his farming. They have better knowledge, attitudes and skills in farming.

Number of family dependents. The results showed that Upsus farmers who do not have dependents as many as 2 people, the number of dependents 1-2 people as many as 9 people, the number of dependents 3-4 people as many as 18 people, and the number of dependents> 5 people as much as 1 person. While all independent farmers have dependents, the number of dependents 1-2 people as many as 7 people, the number of dependents 3-4 people as many as 18 people, and the number of dependents> 5 people as many as 5 people.

This is in line with the age composition of farmers in the study area, most of whom are under 50 years old, where farmers still have a wife and several children who still need school fees and unmarried children.

Land area. The results showed that the total area of corn farmers in Hatungun Sub-District was arable land between 0.5 - 1 hectare, which was 63.33%. Corn farmers in Hatungun Sub-District have not dared to speculate to increase the area of corn land. The area of corn farming that they work on will determine the amount of income, profits, and welfare of the farmers because the wider the area of corn farming, the more production will increase.

Land Ownership Status. The status of ownership of corn farmers in Hatungun Sub-District is their own land. Most of the land ownership is derived from family inheritance.

#### Analysis of Corn Farm Revenue

According to Suratiah (2015), a farm is said to be successful or unknown from the amount of income obtained. The success of maize farming done by farmers can be measured by the income of the corn it works. **Farm receipt**. farm receipt determined by the amount of production multiplied by the selling price at that time. farm receipts calculated in one planting season period in hectares based on the area of land planted with corn. Admission to corn ushatani for Upsus Program farmers in Hatungun District with an average price of IDR 3.000,-/kg. The results showed that the average farm receipts of upsus farmers was IDR 14.750.000,-/farming (IDR 7,254,000/ha), while the farm receipts of independent farmers is IDR 9.951.000,-/farming (IDR 6.861.000,-/ha). The average amount of corn production in Hatungun District for Upsus farmers is 4.917 kg/farming (2.418 kg/ha). whereas for independent smallholders the average amount of production obtained is 3.317 kg/farming (2287 kg/ha). The average farm receipt can be seen in Table 1 as follows:

No.	Description	Average Upsus Farmer		Average Independent Farmer	
INO.		Farming	Hectare	Farming	Hectare
1.	Production (kg)	4.917	2.418	3.317	2.287
2.	Price	3.000	3.000	3.000	3.000
3.	Farm receipt/total revenue	14.750.000	7.254.000	9.951.000	6.861.000

Table no 1: The average total cost of corn farming for upsus farmers and independent farmers

Based on research by Hermawan et.al. (2017) in the Handapherang Ciamis village, corn production was 4.93 tons / ha. Here we see that corn production in Hatungun Sub-District both upsus farmers and independent farmers, the production is still lagging behind corn production in the village of Handapherang Ciamis. Upsus farmers have a difference in production of 48.88% per hectare while for independent farmers the production difference is 46.24% per hectare. By seeing that production is still low compared to other regions, it is very necessary for corn farmers in Hatunggun Sub-District to have apprenticeships or comparative studies to other regions whose production is high in order to be able to share knowledge of corn farming in increasing corn production.

The difference in the amount of production between upsus farmers, independent farmers, with the Upsus Pajale Program target where Tapin Regency is targeting corn production of 3.08 tons / ha. The difference in the average yield of corn farmers in Hatungun Sub-District based on interviews with farmers is caused by:

- The aid of the corn seeds that were given were still mixed with the seeds which were not good (the seeds were mixed between big and small ones).
- Provision of alsintan has not been evenly distributed to all farmers, so the use must take turns and the placement is only placed in the head or group administrator.
- Corn planting time has been determined in Upsus Pajale Program where the determined time is not in accordance with the time of planting, this is not in accordance with the farmers planting calendar.
- Distance of planting corn plants is not in accordance with how to cultivate corn. Where the correct planting distance is 70 -75 and 20 cm.
- In maintenance there is a change of season between the rainy season and the dry season, so that corn farmers cannot estimate when to plant.
- The occurrence of a long dry season throughout the year so that the corn crop lacks water and causes some corn plants to die. Bad weather can cause the planting season to be delayed so that corn growth is not optimal.
- Corn crop maintenance by farmers is not done properly because farmers do not do watering in the dry season so that the plants become dead.
- The existence of pest and disease disorders in maize plants that lack control so that some plants become dead.

**Farming Costs**. Corn farming costs are divided into two parts, namely explicit costs and implicit costs. Explicit costs are costs incurred in cash to buy production inputs such as the costs of purchasing seeds, chemical

fertilizers, manure, herbicides, transportation, labor costs outside the family, and land taxes. Implicit costs are costs that are not cash incurred by farmers or are only calculated as costs for depreciation of equipment, labor costs in the family, assistance and land rent.

Costs of production facilities incurred in corn farming activities. Production input costs for upus farmers include the cost of using mechanical power of IDR 991.500,-/farming (487.623,-/ha), the cost of seeds, amounting to IDR 1.332.667,-/farming (655.410,-/ha), the cost of chemical fertilizers is IDR 867.067,-/farming (426,426,-/ha), herbicide costs IDR 165.800,-/farming (81.541,-/ha), the cost of manure is IDR 525.667,-/farming (258.525,-/ha) and depreciation expense of IDR 36.175,-/farming (17.791,-/ha). So the average input costs for farmers in the UPSus program are an average of IDR 3.918.875,-/farming (1.927.316,-/ha).

Independent farmer input costs include the cost of using mechanical power of IDR 938.167,-/farming (647.011,-/ha), the cost of seeds, amounting to IDR 1.653.600,-/farming (1.140.414,-/ha), the cost of chemical fertilizers is IDR 652.783,-/farming (450.195,-/ha), herbicide costs IDR 73.667,-/farming (50.805,-/ha), the cost of manure is IDR 61.350,-/farming (42.310,-/ha) and depreciation expense of IDR 28.492,-/farming (19.649,-/ha) So the average cost of production input for independent smallholders is IDR 3.408.058,-/farming (2,350,384,-/ha).

Labor costs outside the family (TKLK) include the cost of land management, planting costs, fertilizer costs, harvest costs and transportation costs. Labor costs outside the family in the HOK (working day people) in the form of wages. Farmers TKLK upsus program an average of IDR 2.313.333,-/farming (1.137.705,-/ha) and the average number of TKLK is 11 people. Independent farmers on average IDR 1.950.000,-/farming (1.344.828,-/ha) and the average number of TKLK is 13 people.

The average land tax issued in one hectare for farmers in the UPSUS program and independent farmers is IDR 10.350,-/farming (7,500,-/ha)

The cost of labor in the family (TKDK) Upsus Farmers is lower at IDR 1.870.000,-/farming (919.672,-/ha), the average number of TKDK was 9 people from independent farmers amounting to IDR 1.610.000,-/farming (1,110,345,-/ha) and the average number of TKDK is 11 people per hectare.

Seed assistance costs IDR 1.700.000,-/farming (836.066,-/ha). and fertilizer assistance costs for IDR 199.333,-/farming (98,033,-/ha) only for Upsus Program farmers, while for independent farmers there is no seed or fertilizer assistance.

Land rental costs include implicit costs because the land used is their own. The cost of leasing land for UPSUS farmers and an independent fee of IDR 150,000,-/ha.

From the description above, the average total cost of farming can be seen in Table 2 as follows:

Table no 2: The average total cost of corn farming for upsus farmers and independent farmers per hectare

No	Description	Average Upsus Farmer		Average Independent Farmer			
110		Farming	Hectare	Farming	Hectare		
A.	A. Eksplisit Cost						
1.	Pproduction facilities	3.918.875,-	1.927.316,-	3.408.058,-	2.350.384,-		
2.	TKLK	2.313.333,-	1.137.705,-	1.950.000,-	1.344.828,-		
3.	Tax	10.350,-	7.500,-	10.350,-	7.500,-		
	Total Eksplisit Cost	6.242.558,-	3.072.521,-	5.368.408,-	3.702.712,-		
В.	B. Implisit Cost						
1.	TKDK	1.870.000,-	919.672,-	1.610.000,-	1.110.345,-		
2.	Seed Aid	1.700.000,-	836.066,-	-	-		
3.	Fertilizer Aid	199.333,-	98.033,-	-	-		
4.	Land lease	305.000,-	150.000,-	217.500,-	150.000,-		
	Total Implisit Cost	4.074.333,-	2.003.771,-	1.827.500,-	1.260.345,-		
Total cost (A+B)		10.316.892,-	5.076.292,-	7.195.908,-	4.963.057,-		

Source : Primary data (2019)

The biggest proportion in total costs is the explicit cost for UPSus farmers of IDR 3,072,521/ha or equal to (60.53%) while for independent farmers IDR 3,702,721/ha or equal to (74.60%). The biggest explicit costs incurred by upsus farmers and independent farmers are input costs and costs of TKLK who still use human labor for planting and harvesting activities that are impossible for TKDK so that their HOK also increases.

Implicit costs for upsus farmers are on average IDR 2,003,771/ha while for independent farmers IDR 1,260,345/ha. The biggest cost of the implicit costs of corn farmers both for upsus farmers and independent farmers is the cost of TKDK.

**Farming income.** Farming income is the difference between the amount of total revenue and the costs actually incurred by farmers (explicit costs). The average total revenue of upsus farmers is IDR 14.750.000,-/farming (7.254.000,-/ha) and the average explicit cost is IDR 6.242.558,-/farming (3.072.521,-/ha) so the average income of farmers in the Upsus Program is IDR 8.507.442,-/farming (4.181.479,-/ha) while for independent farmers the average total revenue is IDR 9.950.000,-/farming (6.861.000,-/ha) and the average

explicit cost is IDR 5.368.408,-/farming (3.702.712/ha) so the average income of independent farmers is IDR 4.581.592,-/farming (3.158.288,-/ha). Corn Farmer Income in Hatungun District can be seen in Table 3 as follows:

No	Description	Average Upsus Farmer		Average Independent Farmer	
		Farming	Hectare	Farming	Hectare
1.	Total Revenue	14.750.000,-	7.254.000,-	9.950.000,-	6.861.000,-
2.	Explicit cost	6.242.558,-	3.072.521,-	5.368.408,-	3.702.712,-
3.	Income	8.507.442,-	4.181.479 <b>,-</b>	4.581.592,-	3.158.288 <b>,-</b>
	Income		4.181.479 <b>,-</b>	4.581.592,-	3.158.

 Table no 3: The average income of upsus farmers and independent farmers

Source : Primary data (2019)

**Farm profits**. Profit is the main goal of farming obtained by farmers. Profits are the difference between total revenue and total costs. The profit of corn farming in Hatungun District for upsus farmers is IDR 2.177.708,- / ha with an average total revenue of IDR 7.254.000,-/ha, the average total cost is 5.076.292,-/ ha while the profit for independent farmers is IDR 1.897.943,-/ha with an average total revenue of 6.861.000,-/ha, the average total cost of IDR 4.963.057,-/ha. The average profit can be seen in Table 4 below:

No	Description	Average Upsus Farmer		Average Independent Farmer	
		Farming	Hectare	Farming	Hectare
1.	Total Revenue	14.750.000,-	7.254.000,-	9.950.000,-	6.861.000,-
2.	Total cost	10.316.892,-	5.076.292,-	7.195.908,-	4.963.057,-
3.	Profit	4.433.108,-	2.177.708,-	2.754.092,-	1.897.943,-
a	D' 1 . //	3010			

Source : Primary data (2019)

# Feasibility Analysis of Corn Farming

The feasibility of corn farming is measured using the value of RCR (Revenue Cost Ratio), aiming to determine the extent to which the results obtained from farming is profitable or unprofitable. RCR value is the ratio between total revenues and total costs.

The average RCR value for upsus farmers of 1.43 was obtained from the total revenue of IDR 7.254.000 / ha divided by total farm costs of 5,076,292 and for independent farmers an RCR value of 1.19 is obtained from a total revenue of IDR 6,861,000 / ha divided by the total farm cost of IDR 4,963,057, - / ha. RCR values can be seen in the following table 4:

 Table no 4: Analysis of the Feasibility of RCR (Revenue Cost Ratio) Value in Corn Farming in Hatungun

 District

		District	
No	Description	Average Upsus Farmer	Average Independent Farmer
1.	Total Revenue	7.254.000,-	6.861.000,-
2.	Total cost	5.076.292,-	4.963.057,-
3.	RCR	1,43	1,38
a	D' 1 (00)		

Source : Primary data (2019)

The RCR value of Upsus farmers and independent farmers shows that the RCR value> 1. RCR value is 1.43 for upsus farmers and 1.38 for independent farmers. This means that for every IDR 1 of the total cost incurred in running a corn farm, it will provide an income of IDR 1.43 for the UPUS program farmers, while for an independent farmer, IDR 1.38. The RCR value for upsus farmers is higher than that of upsus farmers, this shows that the upsus program farmers who commercialize corn are more feasible compared to independent farmers.

# Analysis of the Impact of Upsus on Corn Farmers' Net Income After Participating in The Upsus Pajale Program

The impact of the Upsus Pajale Program on profits was analyzed using the Independent Sample t-test. The aim is to find out whether the two sample groups have significant differences or not. so the t test uses the formula as follows:

$$t = \frac{\bar{Y}_1 - \bar{Y}_2}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

<i>t</i> =	4.433.108 - 2.754.092
	$\overline{3.326.882^2}$ + $\frac{1.653.213^2}{1.653.213^2}$
<i>t</i> –	$\sqrt{30}$ $^+$ $30$ 1.679.016
ι –	11.068.143.841.924 2.933.113.223.369
	$\sqrt{30}$ + 30
t =	1.679.016
ι —	$\sqrt{368.938.128.064 + 91.103.774.112}$ 1.679.016
t =	$\overline{\sqrt{460.041.902.176}}$
	1.679.016
t =	678.263
t hit	ung = 2,475

Based on this, Ho was rejected and Ha was accepted, meaning that there were statistically significant differences in profits between farmers participating in the Upsus Program and independent farmers. This condition can be interpreted that the Upsus Program has an impact on the net income of corn farmers in Hatungun District. In this case the average income of upsus farmers is higher than the net income of independent farmers. In other words, corn farmers participating in the Upsus Program are clearly better at increasing income.

The success of the Uspus Program is inseparable from the role of agricultural extension workers in the Agricultural Extension Center of Hatungun District. One of the roles carried out by the Agricultural Counseling Center is the assistance and counseling of the corn upsus program carried out by agricultural extension workers. Assistance continues to be carried out by applying technology to increase corn production and increase the corn planting index. Maize cropping index in Hatungun District has begun to be applied by farmers, but has only reached twice the planting period (IP 100-200) in the corn field. With the Upsus Program assistance, farmers will be able to implement planting patterns three or four times a year (IP 300-400) so that corn production will increase.

Assistance to corn farmers in carrying out corn planting in Hatungun District can have an impact on the motivation of the farmers to motivate corn farming. Farmer assistance activities in the Upsus Program provide many benefits for upsus maize farmers in gaining experience, knowledge of trying to grow corn and adding in the area of added corn cultivation. The addition of corn area is the output of the Upsus Program which in the future is capable of self-sufficiency in corn. The upsus program has an impact on the addition of 24 hectares of land area in Hatungun District (32%), where in 2018 corn area in Hatungun District covering 75 hectares there will be an increase in land area in 2019 of 99 hectares

The expectation of the Upsus Program is that it will have a good impact on farmers directly in the form of higher profits.

# **IV. Conclusion**

Based on the results of data analysis and discussion the following conclusions can be drawn:

- 1. From the results of research the benefits obtained by UPSUS farmers are more profitable than independent farmers.
  - a. The average profit gained by Upsus Program farmers is IDR 4.433.108,-/farming.
  - b. The average profit gained by independent farmers is Rp 2.754.092/farming.
- 2. The feasibility of farming a corn farmer participating in the Upsus Pajale program is more feasible than an independent corn farmer, as seen from the RCR value of 1.43 for Upsus Program farmers and 1.38
- 3. The Upsus Corn program has an impact on increasing net income. Significant impact of the t test showed that Ho was rejected and Ha was accepted, statistically there were significant differences in profits between Upsus Program farmers and independent farmers.

## References

- Ahmadi. et. al. 2016. Journal of Proceedings of the National Seminar on Agro-Innovation on Specific Locations for Food Security in the Era of the ASEAN Economic Community. Impact of Special Efforts Program (Upsus) on Planting Area and Rice Production in Bangka Belitung Province
- [2]. Statistics Indonesia, 2019. Tapin Regency in Numbers, Tapin Regency in Figures, Tapin
- [3]. Hanafie, Rita. 2010. Introduction to Agricultural Economics, Andi Offset Publisher, Yogyakarta.
- [4]. Haryanto, Lorenta. 2018. Kawistara Journal Vol 8, No. 3 2018. Competitiveness and Sensitivity of Corn Farming in Pacitan Regency. Faculty of Agriculture, Gadjah Mada University.
- [5]. Kasim, Syarifudin. A. 2000. Economics of Agricultural Production. Faperta Unlam Banjarbaru
- [6]. Kasim, Syarifudin. A. 2004. Practical Guidelines for Calculating Profits and Farming Income. Faperta Unlam Banjarbaru.

- [7]. Ministry of Agriculture. 2015. Minister of Agriculture Regulation No. 03 of 2015 concerning Guidelines for Special Efforts (UPSUS) to Increase Rice, Corn and Soybean Production. Fiscal Year 2015. Jakarta
- Mubyarto. 1995. Introduction to Agricultural Economics. Jakarta, LP3ES [8].
- [9]. [10]. Pilar Agriculture, 2018. Issue 57 In October, Indonesia's Future Food Barn, South Jakarta
- Riduwan et. al. 2013. Formulas and Data in Statistics Applications, Alfabeta Bandung.
- [11]. Soekartawi. 2016. Agribusiness Theory and Its Applications, PT. Raja Grafindo Persada, Jakarta.
- [12]. [13]. Suratiah, Ken. 2015. Revised Edition of Farming Business Sciences. Swadaya Jakarta Spreader Publisher.
- Tjakrawiralaksana, A. 1983. Farming. Bogor: Department of Agricultural Social Economic Sciences Faculty of Agriculture Bogor Agricultural University.

Zaini Dahlan, et. al. "Impact Analysis of Rice, Corn, and Soybean Special Effort Program (Upsus Pajale) Towards Corn Farmers Net Income In Hatungun Sub-District, Tapin Regency" IOSR Journal of Agriculture and Veterinary Science (IOSR-JAVS), 13(7), 2020, pp. 01-08.

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