

Problem Analysis And Benefits Of Assistance In Income Of Farmer Participants Of Rice Sl-Ptt Program In Ogan Ilir District

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Abstract

Enhancement results development agriculture reflected by increasing role sector agriculture in support growth high economy, fulfillment _ needs people will food, increases power buy society, as well increasing ability provision ingredient raw for development industry (Department Agriculture, 2008). Plant food, in particular paddy is plant main cultivated by some _ big farmers in Indonesia. Sub- sector problems plant food specifically paddy is exists gap productivity level _ enough farmers _ big compared possible potential _ achieved farmer. (Department Agriculture, 2008). One _ approach for increase productivity conducted through introduction varieties superior new productivity cultivated height _ with approach Management Plant Integrated (PTT). Chosen Subdistrict South Indralaya Regency Ogan Ilir South Sumatra Province as the place study this because have potency still land _ enough broad, however not yet comparable with large land existing agriculture _ utilized. Study this aim for now: 1. Factors influential production _ to production paddy valley farmers 2.Know the average productivity and income farming paddy valley farmer SL-PTT participants who get accompaniment full (strata I) compared productivity and income farming paddy valley farmer SL-PTT participants who get accompaniment no full (level II) and 3. Problems in implementation the SL -PTT program. As for results research obtained : 1. Influential factors of production real positive to production paddy valley is seed rice , urea fertilizer, NPK fertilizer , fertilizer organic , pesticide , broad land and power work . 2. Average productivity and income farming paddy valley farmer SL-PTT participants who get accompaniment full (stratum I) more big compared productivity and income farming paddy valley farmer SL-PTT participants who get accompaniment no full (level II). Difference productivity stratum I to strata II farmers of 393 kg of GKG per hectare and income Rp . 863,614 per hectare. Likewise with _ strata II farmers have productivity and income more farming _ big from stratum III farmers (farmers no rice SL-PTT participants), ie difference productivity 1,204 kg per hectare with difference income IDR 2,237,005 per hectare

A number of problem in implementation SL-PTT program, among others CPCL results (Candidate Farmer Candidate Location) still something is not in accordance with hope

I. Introduction

Indonesia as an agricultural country where sector agriculture is sector strategic and owned role important in Fulfill needs food for society . Crisis period occurring monetary _ a number of last year, sector _ agriculture proven more

Toughness survive and survive recover faster compared sectors other.

On the side that's the target other is increasing quality resource people and quality Public agriculture in mastery of science and technology as well development institutional tough farming , with _ exists cohesiveness sector agriculture with sector industry and services , as well formation network activity productive agro - industry and agribusiness (Department Agriculture , 2008)

Development performance in the sector agriculture focused on society farmer. As perpetrator economy development, society farmer need built and prepared for formulate alone existing problems and plans _ programmed, enjoy products produced, as well could maintain existing programs formulated and implemented. Factor the cause including use _ seed superior varieties potency high and certified in level farmer still low about 25-30 %, usage fertilizer that has not balanced and efficient, usage fertilizer still organic _ limited, technique cultivation Specific location still not yet growing, mentoring extension workers, POPT, PBT and research not optimal, weak access farmer to source capital / financing effort and markets (Department Agriculture, 2008).

Strategies drawn up for enhancement productivity and production includes: 1) Improvement productivity, 2) Expansion of the planting area, 3) Security production, and 4) Empowerment institutional agriculture as well as Support financing farming. In Subdistrict South Indralaya has potency still land _ enough broad, however not yet comparable with large land existing agriculture _ utilized. Constraint between sectoral in enhancement production plant more food _ complex because various change and development environment strategic outside _ sector great agriculture _ take effect in enhancement production food , including impacts _ phenomenon climate (DFI), increasingly decrease availability land production for plant food consequence over function land , reduced availability of irrigation water because more water sources reduced and competition outside water use sector agriculture (industry and settlement) as well rate growth resident .

In SL-PTT participation from farmers are very decisive success in create production rice and high income. _ No only farming capital, experience or adequate land _ but must also supported _ wisdom farmer specifically or even groups farmer generally in accept and apply program innovation. _Especially if supported with liveliness extension worker agriculture field (PPL) in build them.

In this regard, the research is focused on analyzing the problems and benefits of assistance to the income of rice farmers in Indralaya Selatan District, Ogan Regency. Ilir South Sumatra Province.

II. Literature Review

The Role of SL-PTT in Agribusiness

Agribusiness is a system consisting of various subsystems, namely (a) the subsystem of procurement and distribution of production facilities, technology and development of agricultural resources; (b) agricultural or farming production subsystems; (c) sub-system for processing agricultural or agro-industrial products, (d) sub-system for marketing agricultural products, and (e) supporting sub-system (infrastructure, counseling, financing, etc.) (Ministry of Agriculture Education and Training Agency, 1997).

Agribusiness is a series of interrelated activities, so the success of the development of the agribusiness system will be largely determined by the level of progress that can be achieved at each node that is its subsystem. For reach simultaneous progress between subsystems is system agribusiness, then needed coaching and service government that includes among other aspects regulation, coordination, protection and stimulation. Because that resources, environment and marketing need developed such shape so that capable support implementation various activity in every subsystem in a manner adequate. According to Sjarkowi and Sufri (2004), agribusiness given limitation the meaning of "every related business with activity production agriculture, which includes exploitation of agricultural inputs and or exploitation production agriculture that alone or also business processing results agriculture".

The government wants to maintain rice self-sufficiency in a sustainable manner. An increase in rice productivity of 1.5% per year with a cropping index of 1.52 is estimated to be able to maintain self-sufficiency in rice until 2025. To achieve this target, the Agricultural Research and Development Agency has produced and will produce new varieties of rice and new types of rice. It is hoped that these high-yielding superior varieties can actualize their genetic potential through the development of cultivation technology with the PTT approach implemented with SL-PTT. According to him, SL-PTT is a strategy that can be pursued in increasing national rice production, namely encouraging synergy between agribusiness subsystems.

Draft Production

Production is goods made or produced, in other words production is results from something activity for produce goods. The results obtained by the manufacturer at the time earn commodity called production (Mubyarto, 1994) as one factor production, land agriculture is determinant from influence factor production commodity agriculture. Kindly general said, increasingly large land (cultivated / planted), the more big amount land - generated production (Rahim and Diah , 2007).

Every production process has a theoretical basis, which in economics is called the production function. The production function is a function that shows the relationship between physical production results (output) and the factors of production (input) (Mubyarto, 1994).

A simple agricultural production function is obtained by using various alternative quantities of labor per unit of time to work a fixed plot of land and recording the alternative outputs produced per unit of time. (Rahim and Diah, 2007).

Review of Research Results Previously

Sembiring and Abdulrachman (2008) researched the Potential for Application and Development of PTT in Efforts to Increase Rice Production explaining that integrated resource and crop management (PTT) in lowland rice is aimed at optimally utilizing resources in order to obtain optimal productivity, efficiency, and profitable economically and production systems. Sustainable. The formulation of technology in PTT is based on suitability for agroecology and farmers socio-economic, which is prepared in a participatory manner between farmer-extensionists and assessors or researchers.

The application of PTT in experimental gardens increases productivity and efficiency in the use of production inputs, but in farmers' fields in general there are variations in appearance. Overall the productivity of rice with PTT technique increases and the use of production inputs can be saved. The PTT government plan is implemented in an area of 1.59 million hectares involving 60,000 farmer groups in 32 provinces. The success of PTT is

determined by the accuracy of technology selection and the quality of its application in the field. Guidance from field extension officers is needed to achieve these requirements. Field Schools (SL) in the area of PTT implementation are expected to be able to educate farmers to be more independent in determining the most optimal technology and to be more responsible for the application of the selected technology. PTT technology indirectly functions to empower farmers to be more productive, efficient, and competitive, obtain optimal profits, and be aware of the importance of a sustainable agricultural business.

Approach Models

The model is a description of the goals to be achieved. Approach models can be formulated in various forms, for example diagrammatic models and mathematical models. The goal is to help solve problems effectively. In this study will be used diagrammatic and mathematical models. The diagrammatic model is depicted in Figure 1.

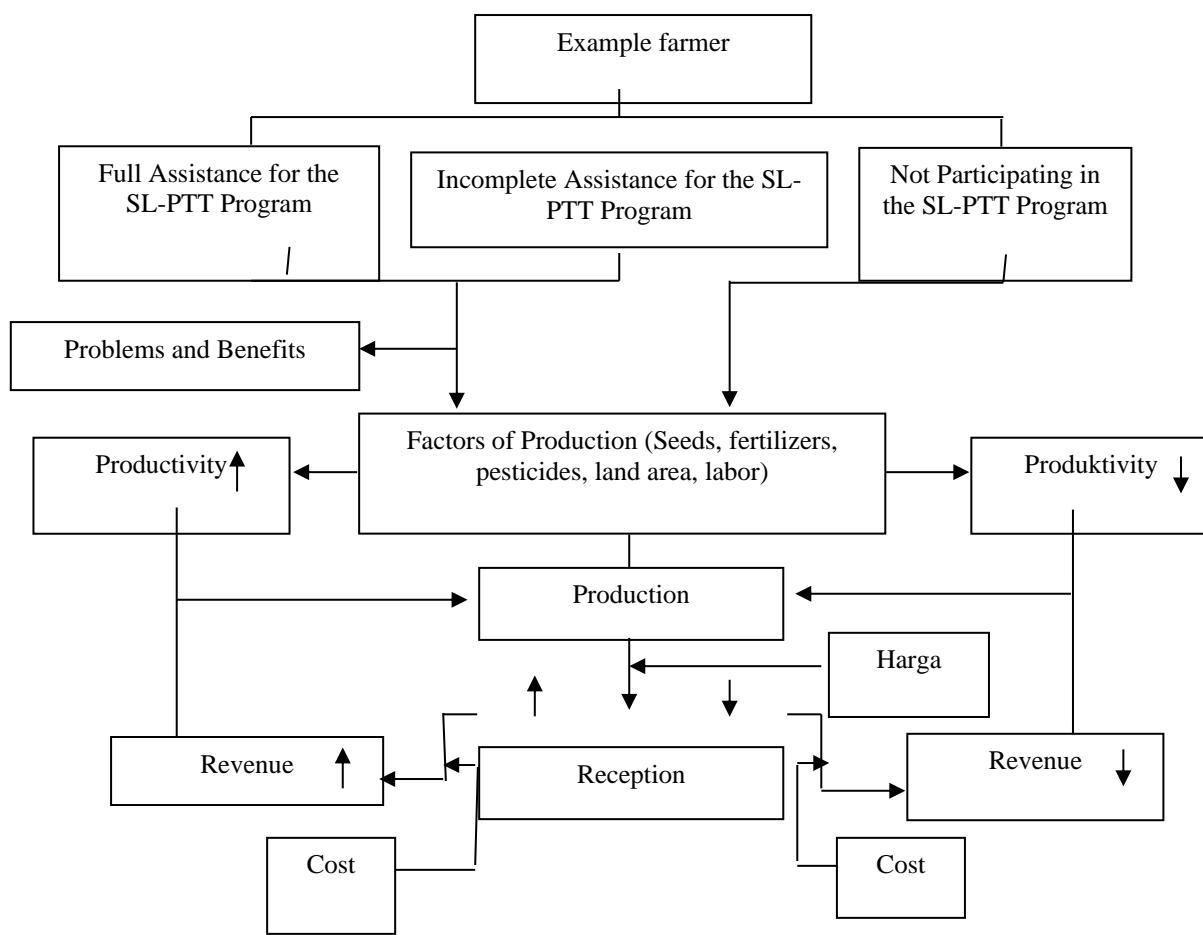


Figure 1. Diagrammatic Approach Model

Information:

- = Research flow
- Affect

The diagrammatic model as presented in Figure 1 is intended to clarify the relationship between the main research problems. From these several objective indicators, a mathematical approach is then needed to measure progress, comparisons and differences above. The mathematical models needed include: (1) income comparison, (2) relationship and influence of

program variables with expected results and, (3) calculation of farming needs (capital, production inputs, and labor), revenues, and income.

In addition to the mathematical model, qualitative analysis is needed on various institutional social aspects related to the introduction, implementation and dissemination of programs in the community. For that linkages Among problem tree study with activity programs will explained in a manner descriptive and contextual with notice dimensions time , space , and change .

III. Research methods

The basic research method used is descriptive method, which is a method for examining the status of a group of people, an object, a set of conditions, a system of thought or a class of events in the present. Study this use technique survey, which according to Singarimbun and Effendy (1995) are technique study with method take sample from something population with use questionnaire as tool data collector against something problem certain inside _ something area certain. By and large analysis in study survey is individual , in study this is farmer trying example _ paddy lebak that becomes SL-PTT program participants and get accompaniment full support _ no full nor farmer examples that don't Becomes SL-PTT program participants .

Sampling Method

The selection of sample villages was carried out *purposively* based on the number of farmer groups participating and not participating in the SL-PTT program, whether they received full or partial assistance. The population in this study were all farmers who participated in rice SL-PTT activities in Indralaya Selatan District Regency Ogan Ilir which will be held in 2021 and lasts from March to December.

The number of farmers taken as sample farmers (respondents) in South Indralaya District came from six villages, namely Sukaraja Baru Village, Tanjung Dayang Utara Village, Tanjung Dayang Selatan Village, Arisan Gading Village, Meranjat Iilit Village, and Meranjat I Village. Total population there are 325 farmers participating in rice SL-PTT activities in 2021, divided into 13 farmer groups spread across 6 villages, for each farmer group consisting of 25 farmers. The sampling method used in this study was *disproportionate stratified purposive sampling*, with the consideration that the farmers who were sampled were homogeneous farmers, namely farmers who cultivate lebak rice and have farming locations at the same level. In this research the sampling is divided into three strata.

Table 1. Number of Sampling Farmers Taken for Research

Level	Farmer Status	Total Population (KK)	Number of Samples (KK)	Percentage (%)
SL-PTT Program				
I	Farmers who are fully supported	175	30	17,14
SL-PTT Program				
II	Farmers who do not receive full assistance	150	30	20.00

III	Farmers are not participants SL-PTT Program	2,626	30	1.14
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(Source: *Primary Data*)

Method of collecting data

For obtain the necessary data from field, the steps are prepared among others (1) do withdrawal farmer example , (2) preparing a list of questions (questionnaire) and (3) data collection which includes primary data and secondary data .

Data Processing and Analysis Methods

Data processing in the research begins with grouping data obtained from the field and presented in tabulation, then testing the hypothesis is carried out in the following way:

1. To determine the relationship between factors of production on rice production, a multiple linear regression equation model is used. To facilitate the estimation of the regression model, according to Soekartawi (2003), the equation is first transformed into logarithmic form, so that a multiple regression equation is obtained.

Analysis regression conducted with computer programs *The SAS System for Windows v 6.12*. To find out how far the variation of the independent variable can explain the dependent variable, the coefficient of determination (R²) is used. If R² gets closer to one, it means that it gives an indication that the estimated model is getting better and closer to the truth (Koutsoyannis, 1985) · Meanwhile, to determine the effect of the independent variables jointly used the F test. For knowing is there is the difference in rice farming income from farmers in the three strata, beforehand, the amount of income for each farmer must be known using the formula.

Furthermore, to find out how big the difference in productivity and income of farmers in the three strata is used parametric statistical analysis.

I V. Results and Discussion

Use Factor Production and Production

The results of the study obtained data on the use of production factors by sample farmers in rice farming in Indralaya Selatan District as presented in Table 2

Table 2. Average Use of Factors of Production and Farmer Rice Farming Production Example in South Indralaya District in 2022

No	Description	Package SL-PTT	Grade I Average	Grade II Average	Grade III Average
1.	Production Factors				
	- Seed (kg)	25	34.03	33,25	35,19
	- Urea Fertilizer (kg)	100	100	100	45,57
	- NPK Fertilizer (kg)	300	300	300	124.05
	- Org Fertilizer (kg)	1,000	1,000	1,000	339,24
	- Pesticides (liters)	1.0	1.0	1.0	0.99
	- Land Area (ha)	0.5 - 1.0	0.72	0.67	0.66
	- Kindergarten (HOK)	24	24	24	23.80

Based on the data in Table 2, it can be seen that the average use of strata I and II production factors is the same, namely 100 kg of urea per hectare, 300 kg of NPK fertilizer per hectare, 1,000 kg of organic fertilizer per hectare, 1 liter of pesticide per hectare, and 1 liter of pesticide per hectare. Labor 24 HOK per hectare. Except for stratum I seed (34.03 kg per hectare) which is higher than strata II, namely 33.25 kg per hectare and the land area is respectively 0.72 hectares and 0.67 hectares. This condition occurs because strata I and strata II farmers are farmers participating in SL-PTT so that the average production factor used is the same. The seed assistance from the SL-PTT program of 25 kg per hectare was not in accordance with the seed needs for lowland rice of 30-40 kg per hectare, so the farmer groups bought the shortage of seeds themselves.

In general, the average use of production factors by strata III farmers is less than that of strata I and strata II except for the average use of seeds of 35.19 kg per hectare. The use of the number of seeds in strata III is actually more in accordance with what is recommended by the Ministry of Agriculture, namely the number of seeds of lowland rice as much as 30-40 kg per hectare.

Production produced by strata I farmers was on average higher than that of strata II and III farmers, namely 4,658 kg per hectare, 4,255 kg per hectare, and 3,051 kg per hectare, all of which were in the form of milled dry grain. Production is quite high for strata I farmers because they are rice SL-PTT participant farmers who receive full assistance so that the cultivation techniques and management carried out by this group are better than strata II farmers who, although they are also SL-PTT participant farmers, receive adequate assistance. not full.

Production factors which are independent variables in rice farming include seeds, urea fertilizer, NPK fertilizer, organic fertilizer, pesticides, land area, and labor. The dependent variable that is influenced by the combined use of production factors is rice production in the form of dry milled grain (GKG).

The results of the analysis of the influence of the use of factors of production on the production of rice farming in the SL-PTT program in Indralaya Selatan District, Ogan Ilir Regency for the 2020 planting season, based on the results of the regression model estimation yield a coefficient of determination (R^2) of 88.77%. The summary of the results of the estimation of the model is presented in Table 3.

Table 3. Estimation Results of the Multiple Linear Regression Equation Model of Factors Affecting Rice Production

No.	Variable	Estimated Parameter Value	T-hit	Trust Level	Ket .
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	intercept				
	Amount seed rice (B)				
1.	Amount urea (U)	348.9564	2,790	0.0115	A
2.	fertilizer	18.0475	2,287	0.0290	B
3.	Amount NPK fertilizer	0.1832	2,633	0.0162	A
4.	(N)	0.0365	1,543	0.1586	E
5.	Amount of organic	1.8762	1,361	0.2174	F
6.	fertilizer (O)	0.0037	1,450	0.1582	E
7.	Amount of pesticide (P)	3550,4591	1,597	0.1215	D
8.	Total land area (LL)	1.3438	1,088	0.2854	G
9.	Number of workers (TK)	-110.6381	-1.775	0.0637	C
	Business pattern				
	dummy				
	F-hits = 29.25				
	R ² = 89.75 %				

Source: Primary Data Processed

Description:

A = significant at $\alpha= 1\%$ E = significant at $\alpha= 20\%$

B = significant at $\alpha= 5\%$ F = significant at $\alpha= 25\%$

C = significant at $\alpha= 10\%$ G = significant at $\alpha= 30\%$

D = significant at $\alpha= 15\%$

Kindly statistical models of equations regression production rice in the district Ogan Ilir already satisfying. this _ seen from score coefficient determination (R^2) which is 89.75 %, the calculated F -value is 29.25 and does not there is one variable free or not significant at $\alpha= 30\%$ of 8 variables . R value ² this meaning 89.75 percent variation production paddy could described by variable ; amount seed (B), amount urea (U) fertilizer , amount NPK fertilizer (N), amount fertilizer organic (O), amount pesticide (P), broad land (LL), amount power work (TK), and *dummy* patterns exploitation (D), meanwhile the rest of 10.25% is explained by other variables that are not covered in models, like for example circumstances social economy farmer , use tool machine other agriculture , maintenance , pests and diseases rice , and factors climate . The results of the F test also have an effect real because score the probability not enough of 1% (0.0001). This means in a manner together, eighth variable (production inputs rice) effect real to production.

Kindly economics, model obtained already enough satisfactory, p this seen from almost all the sign of the estimated parameters obtained has in accordance with what is expected. Kindly econometric models of equations linear regression is also satisfactory because no there is multicollinearity , as shown _ from high R2 value ('89.75 %). Beside it, from score coefficient correlation, no someone reached _ value 70%. Only there is one number coefficient correlation of 55.14% ie among fertilizer organic with large land. Likewise from _ possibility problem autocorrelation, it turns out no indicated. This _ because obtained Durbin Watson values is 2.525, which is closer to 2 than approaching zero (0) and 4. Meaning Among amount seed (B), amount urea (U) fertilizer , amount NPK fertilizer (N), amount fertilizer organic (O), amount pesticide (P), broad land (LL), amount power work (kindergarten), no each other each other relate (correlate) between variable free .

1. Quantity Effect Seed

Influence amount seed to production paddy could see from the estimated parameter values obtained that is 18.0475. Variable this after a t test was performed take effect real positive to production rice on the level confidence (α) 5 percent. This means every addition amount seed as much one kg, then production paddy will increase of 18.0475 kg, *ceteris paribus*. This _ because amount seed will take effect to amount puppies rice. With increase amount puppies paddy in a manner certain will add production produced rice. _Besides that usage seed paddy 25 kg per hectare no in accordance with needs seeds in lowland rice fields which should be 30-40 kg per hectare.

2. Quantity Effect Urea Fertilizer

Regression results variable amount urea fertilizer against production paddy show positive relationship in both _ pattern farming paddy from the estimated parameter values obtained that is 0.1832. Variable this after a t test was performed take effect real positive to production rice on the level confidence (α) 1 percent. This means every gift urea fertilizer increases one kg, then production paddy will increase of 0.1832 kg, *ceteris paribus*. Vice versa, if _ gift reduced urea fertilizer one kg, then will hinder happening increase production 0.1832 kg, *ceteris paribus*. Because urea fertilizer is fertilizer base for plant paddy, if gift urea fertilizer no in accordance with recommendations (75 – 100 kg per hectare) will result in obstruction expected production. _

3. Quantity Effect NPK fertilizer

Regression results variable gift NPK fertilizer against production paddy show positive relationship in both _ pattern farming paddy from the estimated parameter values obtained that is 0.0365. Variable this after a t test was performed take effect real to production rice on the level trust (α) 20 percent. This means every gift NPK fertilizer increases one kg, then production paddy will increase of 0.0365 kg, *ceteris paribus*. Vice versa, if _ gift reduced NPK fertilizer one kg, then will hinder happening increase production 0.0365 kg, *ceteris paribus*. This _ because NPK fertilizer is fertilizer complete containing _ phosphorus and potassium in addition to nitrogen which is needed by plants rice to be able optimum production

4. Quantity Effect Fertilizer organic

Regression results variable gift fertilizer organic to production paddy show positive relationship in both _ pattern farming paddy from the estimated parameter values obtained namely 1.8762. Variable this after a t test was performed take effect real to production rice on the level trust (α) 25 percent. This means every gift fertilizer organic increase one kg, then production paddy will increase of 1.8762 kg, *ceteris paribus*. Vice versa, if _ gift fertilizer organic reduced one kg, then will reduce production rice 1.8762 kg, *ceteris paribus*. This _ because gift fertilizer organic could repair structure ground and add micro and macro nutrients needed by plants.

5. Quantity Effect Pesticide

Regression results variable gift pesticide to production paddy show positive relationship in both _ pattern farming paddy from the estimated parameter values obtained namely 0.0037. Variable this after a t test was performed take effect real to production rice on the level trustworthiness (α) 20 percent. This means every gift pesticide increase one liter (appropriate with principle 6 right), then production paddy will increase of 0.0037 kg, *ceteris paribus*. Vice versa, if _ gift pesticide reduced one liter, then will lower production 0.0037 kg, *ceteris paribus*. This _ because pesticides used _ farmer consists from herbicides and rodenticides usage herbicide is needed in maintenance plant from weed. Whereas rodenticide used for eradicate pest rats are often destructive _ plant rice.

6. The Effect of Land Area

Influence large land to production paddy could see from the estimated parameter values obtained namely 3550.4591. Variable this after a t test was performed take effect real positive to production rice on the level trust (α) 15 percent. This means every addition large land one hectare, then production paddy will increase of 3550.4591 kg, *ceteris paribus*. Vice versa, if _ large land reduced one hectare, will caused decline production paddy of 3550.4591 kg, *ceteris paribus*. This _ because large land will take effect to level production paddy, increasingly large cultivated land _ farmer so will the more many the resulting production.

7. Total Workforce

The results of the regression of the effect of outpouring/amount of labor on rice production can be seen from the estimated parameter value obtained, namely 1.3438. This variable after the t test turned out to have a significant positive effect on rice production at the confidence level (α) 30 percent. This means that for every outpouring/amount of labor of one HOK, rice production in the form of dry milled grain will increase by 1.3438 kg, *ceteris paribus*. Vice versa, if the outpouring/amount of labor is reduced by one HOK, it will result in reduced production of 1.3438 kg, *ceteris paribus*. This is because the outpouring/amount of labor will have a direct impact on rice production. In rice farming, the outpouring of labor is used for the cultivation process. If cultivation is carried out correctly, the plants will grow well and have an impact on production

Of Business Patterns

Influence pattern exploitation to production paddy in this model is variable *dummy*, where *dummy* will worth 1 if pattern SL-PTT and a value of 0 if no SL-PTT pattern. From the results model estimation is obtained estimated parameter values i.e. -110.6381 and it turns out after an effect t test was carried out real to production rice on the level trust (α) 10 percent. This means pattern exploitation give real influence _ to production rice , where farmer pattern non SL -PTT production on average more low 110.6381 kg per year compared farmer SL-PTT pattern . this _ because of the pattern non SL -PTT farmers no get accompaniment from extension worker agriculture field so that method they try farming paddy permanent like habit they During this without notice usage seed superior , fertilization balance , and control pest disease and harvest and postharvest processes . Whereas for farmer SL-PTT participants get accompaniment from extension worker agriculture field good in a manner full nor no full , besides get production input assistance so that method they try farming paddy has in accordance with what is recommended with notice usage seed superior , fertilization balance , and control pest disease and harvest and postharvest processes .

B. Differences in Productivity and Income Levels farming Paddy

Based on the research results, the SL-PTT program was able to have a positive impact on the productivity and income of rice farmers. The reason for this is due to several technological innovations in rice cultivation and the assistance of production facilities provided by the government. The differences in productivity and income levels of rice farmers are presented in detail in Table 4

Table 4. Productivity and Income of Sample Farmers' Rice Farming in Indralaya Selatan District in 2022.

No	Indicator	Grade I	Grade II	Grade III
1.	Productivity (kg MPD/ha)	4,648	4,255	3,051
2.	Price (Rp/kg)	1,753	1,757	1,737
3.	Revenue (Rp/ha)	8,184,535	7,492,750	5,297,063
4.	Cost (Rp/ha)	2,565,406	2,737,236	2,778,555

5.	Income (Rp/ha)	5,619,128	4,755,514	2,518,509
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Source: Primary Data Processed

1. Differences in Productivity Levels

Based on the table above, it can be seen that the highest average rice productivity was obtained by strata I farmers, namely 4,648 kg of GKG per hectare. The second highest was obtained by strata II farmers, namely 4,255 kg of GKG per hectare, while the lowest productivity was obtained by strata III farmers, namely 3,051 kg of GKG per hectare. To find out how big the difference in productivity of each stratum is, a mean difference test is carried out using the t test, the results of which can be seen in Table 5

Table 5. Differences in the average productivity of sample farmers in Indralaya Selatan District in 2022

No.	Level	t hits	t table	α	Information
1.	I – II	13.154	1,665	0.05	Real different
2.	I – III	13,454	1,665	0.05	Real different
3.	II - III	11,486	1,665	0.05	Real different

Source: Processed from Appendix 20-22

Based on the results of the analysis between the productivity of strata I and II farmers, the p value: $0.002 < (\alpha = 0.05)$ with t hit value of 13.154 while t table is worth 1.665 then H₀ is rejected. It was concluded that the productivity of strata I farmers was greater than the productivity of strata II farmers.

The results of the analysis between the productivity of strata I and III farmers yielded a t hit value of 13.154 while the t table value was 1.665, so H₀ was rejected. It was concluded that the productivity of stratum I farmers was greater than that of strata III farmers.

While the results of the analysis between the productivity of rice farmers of strata II and III produce a t hit value of 11.486 while the t table is 1.665, so H₀ is rejected. It was concluded that the productivity of rice farmers of strata II is greater than the productivity of rice farmers of strata III.

The high productivity of rice obtained by strata I farmers is due to this

Full assistance by field agricultural extension workers in addition to obtaining complete production facilities used, namely the use of certified superior seeds with the Ciherang variety, urea fertilizer, NPK fertilizer, organic fertilizer, and pesticides

The production facilities are assistance from rice SL-PTT program activities. While strata II farmers are in second place, this is due to the incomplete assistance by field agricultural extension workers in addition to obtaining complete production facilities, namely the use of certified superior seeds with the Ciherang variety, urea fertilizer, NPK fertilizer, organic fertilizer, and pesticides. The production facilities are also assistance from the rice SL-PTT program activities. With the assistance that is not full, the strata II farmers have not fully implemented the farming techniques as recommended by the government due to the farmers' ignorance.

In addition, the high rice production obtained by strata I farmers is also due to the influence of innovation adoption caused by several adoptions of technological innovations. This program has a direct influence on production, such as the use of superior and certified

seeds. Certified seed innovation will affect the increase in production, especially the Ciherang variety which has several advantages, namely: shorter lifespan, relatively high production and better quality of rice so that the price of rice from this variety will be higher. Furthermore, other innovations such as land management and cropping patterns, proper water management, and control of plant-disturbing organisms.

While the lowest production was obtained by strata III farmers, namely farmers who were not participants in the rice SL-PTT program. Farmers in this group did not receive assistance with production facilities, either seeds, fertilizers, pesticides, or even received assistance from field agricultural extension workers (PPL). Even though strata III also use fertilizer in their rice cultivation, it is not in accordance with what is recommended by the Ministry of Agriculture. However, in terms of the transfer of innovation, these strata III farmers can be said to be successful farmers and want to progress because these farmers use their own capital to fulfill their farming production facilities. Prior to the SL-PTT program, in general, these strata farmers did not use complete production facilities, especially seeds. and fertilizer.

2. Differences in Income Levels

From the income side, it shows that the income earned by participating farmers is higher than that of non-participating farmers. The difference between strata I and III farmers is IDR 3,100,621 per hectare. Likewise, if you look at the difference in income between strata II and III farmers, there is a difference in income of IDR 2,237,006 per hectare. To find out how big the difference in income is, it is done by testing the average difference using the t test, the results of which can be seen in Table 6.

Table 6. Differences in Average Income of Sample Farmers in Indralaya Selatan District in 2022

No.	Level	t _{hits}	t _{table}	α	Information
1.	I – II	4,250	1,665	0.05	Real different
2.	I – III	3,599	1,665	0.05	Real different
3.	II - III	1,599	1,665	0.05	Real different

(Source: Primary Data Processed)

Based on the results of the analysis between strata I and strata III farmers' rice farming income, the p value: $0.000 < (\alpha = 0.05)$ with t_{hit} value of 3.599 while t_{table} is worth 1.665 then H_0 is rejected . It was concluded that the income of farmers participating in the SL-PTT program was greater than farmers who did not participate in the program. In strata II and strata III farmers, they produce p values: $0.000 < (\alpha = 0.05)$ with t_{hit} value of 1.599 while t_{table} is worth 1.665 then H_0 is rejected. It was concluded that the income of farmers participating in the SL-PTT program was greater than farmers who did not participate in the program.

Differences in rice income also occur among farmers participating in the SL-PTT program (stratum I and II farmers) resulting in a p value: $0.000 < (\alpha = 0.05)$ with t_{hit} value of 4.250 while t_{table} is worth 1.665 then H_0 is rejected. It was concluded that the income of farmers participating in the SL-PTT program who received full assistance was greater than farmers who received partial assistance.

The high income earned by farmers participating in the SL-PTT program, especially strata I farmers, aside from being due to the complete production facilities obtained, is also due to the indirect effect on income as a result of the adoption of the SL-PTT program innovations,

such as the use of Ciherang variety seeds which have a short lifespan. will reduce maintenance costs. Likewise, the implementation of harvesting using a power thresher will encourage efficiency because it will reduce the use of labor so that it will have a direct effect on reducing harvest costs which will be able to encourage an increase in farmers' income. Meanwhile, strata III farmers, apart from not getting superior and certified seeds, are also more likely to be due to the use of fertilizers that are not in accordance with the recommended dosage. So that the rice production obtained is low, and in the end causes the income received is also low.

A. *Analysis Problems and Benefits Accompaniment*

Empowerment Public is the process where Public specifically those who are lacking have access to resource development pushed for the more independent in develop life they (Suryana, 2003) in this process

Public helped for study needs, problems and opportunities in its development _ in accordance with environment social economy life they alone. Empowerment Public with system accompaniment is one _ effort for prepare society to be able to realize progress, independence, and prosperity in atmosphere justice sustainable social. _ Implementation empowerment that itself varies greatly from time to time with notice condition field and globalization. Target main system accompaniment this is how open outlook group farmer.

V. Conclusion

Based on results research and discussion about Analysis Problems and Impact Accompaniment to Income Farmer Rice SL-PTT participants in the District Indralaya South Regency Ogan Ilir got taken conclusions include: _

1. Factor influential production _ real positive to production paddy valley is seed rice , urea fertilizer, NPK fertilizer , fertilizer organic , pesticide , broad land and power work .
2. Average productivity and income farming paddy valley farmer SL-PTT participants who get accompaniment full (stratum I) more big compared productivity and income farming paddy valley farmer SL-PTT participants who get accompaniment no full (level II). Difference productivity stratum I to strata II farmers of 393 kg of GKG per hectare and income Rp . 863,614 per hectare. Likewise with _ strata II farmers have productivity and income more farming _ big from stratum III farmers (farmers no rice SL-PTT participants), ie difference productivity 1,204 kg per hectare with difference income IDR 2,237,005 per hectare.
3. A number of problem in implementation SL-PTT program, among others CPCL results (Candidate Farmer Candidate Location) still something is not in accordance with hope, seed the quality provided the amount no in accordance with needs ricefield swamp lousy and frequent too late , fertilization often no appropriate time , schedule seed and schedule plant often not _ appropriate time , lost results at the time harvest and postharvest still enough tall about 10 percent up to 20 percent .

Bibliography

- A. Rahim and Diah Retno Dwi Hastuti, 2007. Introduction to Agricultural Economics, Theory and Case, Self Help Spreader. Jakarta.

- Department Agriculture . 2008. School Field PTT Padi , Helping Farmers speed up Rather Technology . Research Agency and Development Agriculture .
- Department Agriculture . 2008. School Field PTT Padi Sawah Lebak . Research and Development Agency Agriculture .
- Department of Agriculture . 2008. School Technical Instructions Roomy Management and Resources Plant Integrated . Department of Agriculture Sukoharjo . Gujarati., D., 1995.
- Basic Econometrics . PT. surge Script Primary . Jakarta
- Koutsoyannis , A., 1985. Theory of Econometrics: An Introductory Exposition of Econometric Methods. 2nd . -Ed. The Mac Millan Press Ltd. USA
- Mubyarto , 1994 . Introduction to Agricultural Economics . Research Institute , Education and Economic and Social Information (LP3ES), Jakarta.
- Nazir, M. 1988. *Research Methods* . Indonesian Ghalia . Jakarta.
- Sembiring H and Abdulrachman S. 2008. Potency PTT Implementation and Development in Effort Enhancement Production Paddy . Hall Big Study Bogor Rice .
- Singarimbun , Masridan Effendi. 1995. Methods Study Survey . PT. LP3ES library Indonesia. Jakarta.
- Sjarkowi ., F and M. Sufri ., 2004. Management Agibusiness . CV. Baldad Graffiti Press, Palembang.
- Soekartawi . 2002. Analysis Cobb-Douglas function and its application , Faculty Agriculture Brawijaya University . Poor
- Soekartawi , 2003 . Production Economic Theory with tree Discussion Analysis Function Coob- Douglas. PT. RajaGrafindo Persada . Jakarta.