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Notes: ECT=Error Correction Term; D= first difference operator; [ ] t-statistic  
\*\* Significant at level 5%; \* significant at level 10%

## 5. Conclusion

Based on the results of research it can be concluded that the retail market of rice between the provinces of rice production centers in Indonesia has not fully integrated. There is an independent and interdependence with one another in Indonesia rice market, meaning that the market structure is not perfectly competition. Government intervention in the rice market should always be to maintain rice price stability in Indonesia. For efficiency of rice price policies, the government should pay attention to price fluctuations in Jakarta because disturbances in Jakarta rice market will impact to the other provinces.

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## The Level of Farmer Self Reliance and Institutional Strengthness Strategy in Empowerment of Lowland Rice in Ogan Ilir Regency South Sumatera Indonesia

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**Abstract.** The level of farmer self reliance is very important to agricultural development. Besides that, the institutional role will made success development in rural area. Therefore, the aims of this research are to describe: 1) the level of farmer self-reliance in empowerment of lowland rice and 2) institutional strengthens strategy in empowerment of lowland rice in Ogan Ilir Regency South Sumatera Indonesia. The research had been done in Pelabuhan Dalam Village and Ulak Segelung Village Ogan Ilir District. The method of research used survey method for 40 farmers. The data processing is done by score calculating and SWOT analysis. The result of this research showed that the level of farmers self reliance in lowland rice farming is viewed from three aspects of production inputs, production activities, and production outputs. Score level of farmer self reliance in lowland rice farming is 26.30 which is high criteria. This shows that the input production and production activities most farmers have been able to buy and own farming activities. The institutional strengthness strategies in empowerment of lowland rice can be developed by increasing access, improving the quality of human resources, the necessity of institutional rules and the need for intensive and continuous training.

**Keywords:** Self reliance, Institutional, Strengthness, Strategy, Empowerment, Lowland rice

### 1. Introduction

Concept of agricultural development oriented agribusiness system can be interpreted as away agricultural development with an emphases on four things; first: the development approach based on the business oriented, second: agricultural development is concerned with the downstream agro industries, agro industries upstream, and supporting agro industries upstream and supporting service organizations, third, agricultural development especially related to development of rural areas. Fourth, agribusiness development is done in order to increase agribusiness participation as farmer, home industry, business group, cooperative, medium and large enterprise (PSPK, 2003)

The success of agricultural is inseparable from the role of institution. Institutional set up to support the transformation of agriculture such as to accommodate the production function, market structure and consumer preferences are often only enjoyed by the rich peasants, because these groups have an influence in decision making processes relating to the crucial economic policy (Usman, 2004). The results of research Maksum (2004), the failure of the implementation of rural community development is rooted in the failure of raising participation, creativity and stimulus development in accordance with local needs. Therefore, the research of Junaidi (2009), showed that participation level of farmers developed by LSM was higher than farmers developed by BPP.

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South Sumatra Province has a land valley that has been most widely for rice in Indonesia is 146,279 ha but the proportion of arable land has been twice a year is still very low at 6.200 ha. Most of the land spread over valley in South Sumatra Ogan Komering Ilir regency (OKI) and Ogan Ilir, to the OKI an area of 45,687 or 31.23 percent, while for the Ogan Ilir area of 40,562 ha or 27.73 percent (Central Bureau of Statistics Regency Ogan Komering Ilir, 2004). Amounting to 41.0+ percent while the rest are scattered in the district of Musi Banyuasin, Muaraenim, Ogan Komering Ulu, Banyuasin and the city of Palembang. Ogan Ilir regency is a potential producer of rice in South Sumatra, in addition to harvested area and production is high enough, the district is adjacent to the city of Palembang, so that the reorientation of policy and program development of crops that can be done quickly. Self reliance is success form the empowerment measure the degree of independence in the empowerment of farmers in the lowland rice Ogan Ilir regency.

## 2. Research Method

The research was conducted in the district of South Sumatra Ogan Ilir. the selection is done on purposive by reason of this district has the potential valley swamp land to be developed as centers of agri-based food because of its proximity to the provincial capital of Palembang city. Also in this district there is a public university that can serve as a center for development of science and technology. These two forms of institutional activities in parallel contained in the two districts, namely District and District Pemulutan Indralaya. So that the two districts can be used as a research site.

The method used in this study is a survey method. According Singarimbun (1995) in Singarimbun and Effendi (1995), meaning the survey is limited to studies for which data were collected from a sample of the population to represent the entire population. In addition, research surveys can be used for the purpose of (1) assessment or exploratory, (2) descriptive, (3) an explanation (explanatory or confirmatory) is to explain the causal relationships and testing hypotheses, (4) evaluation, (5) prediction or forecast events certain in the future, (6) operational research, and (7) development of social indicators. In this study, the unit of analysis is the head of household (HH) lowland rice farmers.

The sampling aimed to obtain population data by simply taking a portion of the population as a whole. Of the two sub-studies, each purposefully selected one village with similar characteristics and reasons for periods in the empowerment process, the Pemulutan Village and Ulak Segelung Village for Indralaya District. The sampling method used is simple random method (*random sampling*).

Field data collection is performed to find the data on an inventory of institutions, participation in the empowerment of farmers, institutional strengthening, lowland rice farming activities, the identity of sample farmers and the general state and local agricultural conditions. These data are events already in progress (historical data) and is still available, both stored in the memory of the farmer samples or informants, and recorded in the archives.

Data collected in this study are categorized into primary data and secondary data. Primary data obtained from observation and direct interviews with farmers and key informants example. the secondary data obtained from archived and records consisting of the general state of research areas, the study of literature and other data that support the research. Data processing method for a study conducted by descriptive analysis, for the first research with a score and the second research with SWOT analysis.

## 3. Results and Discussion

### 3.1. Farmers Identity In Empowerment Of Lowland Rice

Farmer's samples taken in this study was seeking farmers who grow rice. In addition, to meet the needs of farmers have side jobs such as growing vegetables and merchant The identity of the farmer samples in this study were stratified by age, education, experience, area and number of family members.

Age have an influence on the level of productivity on the job. In general the higher the age the ability to work will be increased to a certain extent and then decreased. Someone is in the productive age will work more effectively than in old age. Age of farmers in this area varied examples, the average age of farmers sample mean age is 51 year old farmer is quite productive. Based on the first Table. can be seen that the age



of farmers is at productive age (70%) are between 29-54 years. Thus it can be said that the farmers are still physically able to work farming and processing activities to get better results anyway.

Table 1. Characteristics of sample in the Ogan Ilir Regency, in 2011

No	Characteristics	Number (People)	Percentage (%)
1.	Age		
	Young (29-54)	28	70.00
	Old (55-80)	12	30.00
2.	Education		
	Low (No-No End <sup>o</sup> Junior High School)	28	70.00
	Height (Graduate school - high school and above)	12	30.00
3.	Experience		
	Low (4-20)	21	52.50
	High (21-36)	19	47.50
4.	Area		
	Small ( $\leq 1$ )	19	47.50
	Extensive ( $> 1$ )	21	52.50
5.	Number of Family Members		
	Small (1-4)	22	55.00
	Large (5-8)	18	45.00

Education levels also have influence in the running for the farmers farming, because with higher education can assist farmers in making a decision if a farmer is faced by several problems related to farming activities are done. The education level of farmers in the district average Ogan Ilir graduated elementary school. Pretty good example of farmers' knowledge in farming, although many who did not complete formal education, it could have been caused by their farming experience that is long enough. For the average farmer graduated from elementary school (SD) and had not completed junior totaled 28 people or 70 percent, and for farmers who graduated from junior high and high school numbering 12 people or 30 percent. The differences in level of education affect the mindset of farmers in managing their farm. However, with the formation of farmer groups they can share knowledge and experiences among fellow farmers and extension are carried out periodically.

Experience is the length of the farmers do farming rice paddies. Based on the first Table, the experiences of farmers including low at between 4-20 years as many as 52.5 percent. In theory, the longer the experience, the higher the ability of farmers to farm.

Land area is cultivated by farmers in the District of Ogan Ilir examples range from 0.5 acres to 3 acres, with an average land area of 1.5 hectares. Farmer's farming land area the dominant instance large ( $> 1$  ha) as much as 52.5 percent. Thus the area of land owned by farmers, the greater the expected production output so as to provide a greater income.

The number of household members can be seen the large number of people living together in the household, both wives, husbands, children or other family such as parents, nephews or grandchildren. The size of the farm household members is also one of the factors that determine farmers manage farming activities. Farmers with large family size is usually a great source of labor for farming and morale boosters for the more active in improving farming or find additional revenue to meet the needs of his family, so no need to seek employment helpers to assist in managing their farm.

The first Table shows that the number of members of peasant households looks quite varied. The average farmer here has a number of 1-4 family members of people with the percentage of 52.5 percent, this suggests that rural communities have a high enough level of education has not been well done planning programs, although there are no farmers who have family members over 5 people.

#### 4. The Level of Self-Reliance in Empowerment of Lowland Rice

The level of farmer's self-reliance in lowland rice farming is viewed from three aspects of production inputs, production activities and production output. Score the level of farmers self-reliance in lowland rice farming is 26.30 which is at the high criteria. This shows that for the input stage of production and production activities most farmers have been able to buy and do their own farming activities, although they are constrained in the processing and marketing.

Table 2: Score level of independence of farmers in lowland rice empowerment activities, 2011.

No	Stages of self-reliance	Score	Criteria
1.	Production Input	8.28	High
2.	Production activity of	9.18	High
3.	Production Output	8.85	Moderate
	Number	26.30	High

Measurement levels of independence as seen from the production inputs are at high criteria with a score of 8.28. This suggests that farmers have been able to buy their own seeds, fertilizers and pesticides. Input needed for the production of rice farming activities. Directly purchase their own farmers markets and farm stalls. For production activities, farmers already were high with a score of 9.18. This suggests that farmers do the tilling their own tools, using a homemade seed. For maintenance activities, farmers use fertilizers and pesticides are sold separately. Seen the production output of the processing and marketing results that include doing milling, utilizing the by product of rice bran / husk, sold directly to market yourself and do delay selling. Measurement of the production output is on the criteria being with a score of 8.85. This suggests that most farmers already know the processing, utilization of farming.

## 5. Institutional Strengthness Strategy in Lowland Rice Empowerment

The institutional strengthness strategies done with SWOT analysis (*Strengths, Weaknesses, Opportunities, and Threats*). The SWOT analysis can be solve a problem with internal and external factors analyzing. Based on observation, it gained some strengths, weaknesses, opportunities, and threats that actually experienced and faced by farmers in the area. These factors include the following.

### 5.1. SO Strategies

1. Formation collective farmer group-based activities to facilitate social capital
2. Increasing access to farmers in cooperation with employers' mutual
3. The establishment and development collective farmer group, also use a local base 'social capital' with the principle of local autonomy, which is achieved through the principle of autonomy and empowerment.

### 5.2. WO Strategies

4. Improving the quality of human resources with non-formal education
5. Increasing the capacity of communities to self-
6. Desiging of institutional development as an effort to increase the capacity of the community itself so that it becomes independent.

### 5.3. ST Strategies

1. The need for government policies that support the existence of institutional
2. The necessity of institutional rules
3. The existence of government programs on an ongoing basis
4. High commitment of institutional leaders of farmers' rice paddies on the implementation of regulations

### 5.4. WT Strategies

1. Cooperative effort with the government to obtain capital / funding
2. Forming a locally specific institutions
3. The need for intensive and continuous training

4. Institutional development tailored to the potential of the village itself (Specific Local)

## 6. Conclusion

Based on the results of research it can be concluded that the level of farmers self-reliance in lowland rice farming is viewed from three aspects of production inputs, production activities, and production outputs. Score level of farmer independence in lowland rice farming is 26.30 which is high criteria. Many strategies can be developed in the institutional strengthness but it must be emphasized in accordance with local specific and based on social capital.

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