

# The Development Strategy of Main Commodities of Rice in Buru District, Maluku

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**Abstract** This study aims to: 1) Analyze the strengths, weaknesses, opportunities and threats for developing rice commodity. 2) Analyze the alternative formulation of appropriate strategies for the development of superior commodities of rice. 3) Determine the priorities strategically that should be chosen for the development of rice commodity. 4). Provide policy recommendations that can be done by the local government of Buru for the development of superior commodities of rice. This study applied descriptive method using SWOT analysis and QSPM as well as the number of respondents as many as 20 respondents generate a sequence of alternative strategies that can be carried out by the Buru Government, which are: 1) Improved the quality of rice; 2) Optimizing the use of existing land and opening the new market opportunities; 3) Developed agribusiness centers (industrial agriculture that led to the food (rice); 4) Application of technology of agricultural machinery and planting seeds; 5) Increasing the rice production through extension; and 6) Increase the promotion of rice seed products.

**Keywords:** SWOT, QSPM, rice commodities, agriculture sector

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## 1. Introduction

One form of the opportunity of authority decentralization is the need to sharpen the orientation of development based on the potential of the region. Each of these areas is driven not just to be able to take the role and initiatives in development planning, but also to be more observant explore and exploit the resources intended for the welfare of local people. Based on that ability, the local government can really be the main actors of development in their regions, while the central government acting as a facilitator and coordinator of national development.

According to Daryanto [7], the current paradigm of development of the region needs to pay attention to the specificity of the area which can improve the potential of the region. The dominance of the agricultural sector in the economy Buru society in the next few years will continue to survive given that most people's lives in this area rests on the sector and the large share of the contribution of the agricultural sector reached more than 40% in the GDP formation (CBS, 2014). One of the goodness of this is the dominance of the agricultural sector in terms of job creation, especially for the majority of human resources in the area of the surrounding countryside and because it is directly related to the domicile of farming lands is generally located in rural areas. Several previous studies that references associated with this research is Basorun JO, Julius OF [5]; Ekpe II, Alimba JO, [8]; Hyuha TS, et al [9], Prawoto Nano [10] and Aji Ardito Atmaka et.al [1].

Regional economic development efforts to increase the number and types of employment opportunities by

utilizing existing resources in the area, can be done by preparing a plan and program of action based populist economic development leading commodity in Buru. To examine more in depth the existence of paddy rice is the leading commodity as well as to formulate measures operational strategy development, carried out a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats or Strengths, Weaknesses, Opportunities, and Threats).

## 2. Method

### 2.1. Location and Time Research

The research location in this study is Buru District, Province of Maluku in 2015.

### 2.2. Types and Sources of Data

The data used in this research is primary data obtained through Focus Group Discussions (FGD) and filling the questionnaire by the Agricultural Extension Officers (PPL) and the staff of the Department of Agriculture and Livestock of Buru in this field.

### 2.3. Data Analysis Methods

#### 2.3.1. Analysis of Internal and External Environment

Analysis using IFAS matrix (internal factors strategic analysis summary) and EFAS (external strategic factors analysis summary) is to determine how much influence the internal factors and external analyzed in developing superior agricultural commodities (paddy rice) in Buru. Internal analysis was conducted to determine the factors

strengths and weaknesses possessed by an agent of development in this case the District Government Buru. These factors were evaluated using IFAS matrix (internal factors strategic analysis summary) with the following steps: 1) Establish in column 1 of strengths and weaknesses to develop superior agricultural commodities (paddy rice) in Buru. 2) Giving weight to all the factors of strengths and weaknesses with a range of 0.0 (not important) to 1.0 (very important) and total weight value is equal to 1 (column 2). 3) Calculate the rating (column 3), each with a scale factor of 4 (excellent) to 1 (very poor), based on the influence of these factors on the condition develop superior agricultural commodities (paddy rice) in Buru concerned. Giving rating factors are positive for (strength) rated as + 1 (very poor) to + 4 (excellent). Negative factors (weaknesses) and the opposite. 4) The calculation of the score in column 4, namely by multiplying the weight of the column 2 with a rating in column 3. 5) Add up all the scores to get the total score for the activities to develop superior agricultural commodities (paddy rice) in Buru assessed.

Table 1. Matrix of IFAS and EFAS

Internal and External Factors (1)	Value (2)	Rating (3)	Score (4)
Strength. Opportunity			
1			
2 .....etc			
Weakness. Threat			
1			
2 .....etc			
Total			

Source: Rangkuti [11].

External analysis is done with the intent to find and identify opportunities and threats. External factors were evaluated course that directly and indirectly to develop superior agricultural commodities (paddy rice) in Buru. In

this case the use Matrix EFAS (external strategic factors analysis summary) the same stage with IFAS matrix. Total score of 4.0 indicates develop superior agricultural commodities (paddy rice) in Buru respond to opportunities and threats it faces very well. While the total score of 1.0 indicates develop superior agricultural commodities (paddy rice) in Buru cannot take advantage of opportunities and overcome threats. IFAS and EFAS matrix as presented in Table 1.

**2.3.2. SWOT Analysis (Strengths, Weaknesses, Opportunities, Threats)**

To formulate measures and developing strategies in manage the superior agricultural commodities (paddy rice) in Buru used SWOT analysis. SWOT analysis is a continuation of the situation analysis of internal-external, where internal factors such as factors of strength and weakness combined with external factors such as factors of opportunities and threats, where this combination will produce some general strategies to develop agricultural commodity of seed (rice) in Buru. According to Rangkuti [11] stages in formulating strategies to develop superior agricultural commodities (paddy rice) in Buru through SWOT matrix as follows: 1) Putting factors strengths and weaknesses in column 2 and column 3, the factors respectively opportunities and threats each on line 2 and line 3 on the SWOT matrix (Table 2). 2) formulate a strategy SO which is a combination of factors-opportunity strength placed in the cell SO strategy. 3) To formulate strategies WO which is a combination of factors weaknesses-opportunities WO strategies put in a cell. 4) Formulate a strategy ST which is a combination of factors-the threat of force is placed in the cell strategy ST. 5) to formulate strategies WT which is a combination of factors weaknesses-threats WT strategies are put in cells.

Table 2. Matrix of SWOT

		External factor	
		Opportunity (O)	Threat (T)
Internal factor Faktor Internal	Strength (S)	Strategy of S-O; Create strategies to use force to take advantage of opportunities. S-T strategy.	Strategy of S-T; Creating strategies that minimize weaknesses to exploit opportunities.
	Weakness (W)	Strategy of W-O; Create strategies to use force to overcome the threat. W-T strategy.	Strategy of W-T; Creating strategies that minimize weaknesses and avoid threats.

**2.3.3. QSPM Analysis (Quantitative Strategic Planning Matrix)**

QSPM is the recommended tool for strategists to evaluate alternative strategies objectively choice; the key success factor is based on the internal-external that have been identified previously. So conceptually, QSPM goal is to establish the relative attractiveness of the (relative attractiveness) of varying strategies that have been and to determine which strategy is considered the best to be implemented. How to create a table QSPM as follows: 1) Make a list of opportunities, threats, strengths and weaknesses on the left QSPM, this information is taken from the matrix EFAS and IFAS. 2) Giving weight to each of the external and internal. Weight is the same as the one on the matrix EFAS and IFAS. 3) Examine the matrices in stage I and identify alternative strategies that can be

recommended from the results of the SWOT matrix, grand strategy. 4) Establish attractiveness score (AS), a value that indicates the attractiveness relative for each of the chosen strategy. The US determined by examining internal and external factors, and the role of each factor in the selection process of the strategy that is being made. Limitation attractive value score is 1 = very weak, 2 = less strong / weak, 3 = strong 4 = very strong. 5) Calculate the total attractiveness score that can be multiplying weight by attractive score in each line. Total attractiveness score indicates the relative attractiveness of each alternative strategy. 6) Add up all the scores attractiveness score for each column QSPM. 7) From the multiple values obtained TAS, TAS value of highest alternative strategies shows that the alternative strategy was the primary choice. TAS value of the smallest strategy shows that the alternative strategies are the last option.

### 3. Results and Discussion

#### 3.1. Analysis of Internal and External Factors Strategy

##### 3.1.1. Strength

a. Application of technology of agricultural machines. Rice farmers in Buru currently using the technology of agricultural machinery owned by the local government or private. However, in an effort to increase the quantity and quality of the crop, agricultural machinery is still needed in relatively large amount.

b. Land and climate that supports the development of agricultural commodities. Suitability of land and climate are natural resources that exist in Buru, regarding the soil type, fertility, the level of soil acidity, water availability, altitude, air temperature, humidity, rainfall and number of days of rain making it suitable for farming rice.

c. The agricultural sector's contribution to the local economy. The overall contribution of the agricultural sector (in the broad sense) is the largest proportion amounting to Rp.97.13 billion in 2014 in Buru (BPS.2014), so it can be understood implicitly that contribution includes part of the food crops subsector where inside them including rice crops. Up to this time, Buru accounted for 30% of demand for rice in the province of Maluku, especially Ambon city to (Agriculture and Livestock Kab.Buru.2015).

d. Socio-cultural factors in supporting the development of agriculture crops. Growth and development of a commodity is not only based on physical factors and the economy of a region, but is also determined by socio-cultural factors such as the level of acceptance and customs of the people seeking the stretcher commodities for generations.

e. Buru strategic layout. Existence of three important cities in eastern Indonesia (Makassar, Manado and Ambon) and traversed Sea Line III has put Buru in a strategic position, so that the market is relatively quick access to the trade center.

f. The existence and management of agricultural institutions and related agencies (farmer groups, farmer cooperatives, KUD, PPL). The farmers, who usually follow counseling, participate as farmers' groups and cooperatives take advantage of farmers who usually become independent, productive, competitive and relatively good income. By following the extension, farmers will have enough knowledge to improve their business results ranging from selecting the seeds, preparing the land, planting, cultivating, maintaining, packing, marketing to the processing of products. The existence of co-operatives in the midst of the agricultural community, in addition to credit in capitalization, farmers also helped in terms of marketing their products through cooperatives.

g. The quantity and quality of agricultural personnel resources. Therefore field conditions facing farmers is very dynamic, so the presence of Agricultural Extension (PPL), which carries the information, technology and solutions is expected farmers. Therefore, PPL must be present in the middle of the farmers. Not just present, but must be present with the information, technology and the

latest solutions and specific new location for the farmers who become surrogate.

h. Planning program to improve rice production. Agricultural potential will only be a mere potential only if not well planned, one of which is planning to increase rice production. Therefore, to achieve sustainable agriculture in the future at the same time increasing agricultural production leading commodity and agricultural development, the economic scale regional planning comprehensive and integrated approach must be taken by the government. It has been stated in the Minister of Agriculture (Permentan) No. 50 of 2012.

i. Paddy rice is the leading commodity Buru. The abundance of rice production in Buru demonstrated by the high contribution of rice production compared with other agricultural commodities. In 2013, farmers Buru capable of 44192.43 tons of rice production with a number of households' of farming for 2,683 people (BPS.2014: 6).

##### 3.1.2. Weaknesses

a. Land not used optimally. By utilizing unused land, not only to help the government, but also increase the income of farmers. The unused land could be cultivated land again after the rice harvest, can also degraded land that had indeed never been explored at all. Optimization of this unused land that is now glimpsed the government to boost food production. Potentially vast rice fields in Buru is 10,000 ha with an area of 7207 ha raw. Thus there is still potential for field extension of 2,793 ha (Agriculture and Livestock Kab.Buru.2015).

b. There is still a lack of infrastructure and economic institutions. The success of rice self-sufficiency program, attention to the improvement of infrastructure becomes paramount. The cause is during these constraints in agricultural self-sufficiency program is the issue of infrastructure (irrigation, distribution of fertilizers, seeds, tools and agricultural machinery as well as the extension). Institutional at farm level need to be activated, developed and strengthened the business development efforts in the district of Buru. Institutional farmer should be encouraged to develop into an economic institution farmers to expand the scale of business and partnership network. Weak institutional system has been one of the factors that have led farmers always have a weak bargaining position and limited market access.

c. The high level of loss and damage to production. The main cause of the production of rice in Buru in the last four years (2011-2014) according to the Department of Agriculture and Livestock Buru is a decline in the acreage and crop damage due to major dams, irrigation canals, and some farmers' productive shift to other business areas as well as land disputes between indigenous peoples with farmers. In addition, high levels of loss and damage of rice production in Buru can be caused by poor post-harvest handling at farm level. The amount of post-harvest loss is likely to occur because most farmers still use traditional ways or despite using mechanical equipment but the process of post-harvest handling is still not good and true. In general loss of harvest is influenced by: crop varieties, grain moisture content at harvest, harvester, harvesting method, means or instrument threshing and rice harvesting system.

d. Results fluctuating production. Buru rice production is relatively large compared with other agricultural

commodities, but the trend in rice production is not increased every year but experienced fluctuating growth. It can be seen from the 2000-2003 year rice production increased from 7,168 tons to 12,600 tons, but in 2004 production to 9824.88 tons. Rice production increased again in 2005 to 2006 (16 110 tons to 35 075 tons), but in 2007 suffered a decline in production (26 203 tones) and then increased production by the year 2011 (52,500 tones). Then in 2012 rice production tends to decline (48168.50 tons) to 2014 (34 595 tones).

e. The low level of education of farmers. The average education of household members of agricultural businesses in Maluku province is dominated not go to school / elementary approximately 68.12 percent (BPS.2014: 15). The percentage of the number of household members who are not school or only able to graduate from the elementary school level is very sad. Low level of education is very influential on the mastery of comprehension, it means the ability to see and analyze the conditions and circumstances. Due to weak human resource education, it is important to be efforts to increase knowledge of rice farmers through training and extension activities are more programmed. With the training and extension, farmers will have sufficient knowledge regarding the correct business rice plants. So farmers can produce rice in terms of both quantity and quality. It will eventually be able to improve the bargaining position of rice farmers.

f. Infrastructure and agricultural inputs. Agricultural development is absolutely necessary for adequate infrastructure and facilities, in the absence of adequate infrastructure and facilities, the farm system will not be able to run well. As regard to infrastructure needed by farmers include the construction of farm roads, streets production, farm level irrigation networks, village irrigation networks, as well as means of transport in order to support the mobility of agricultural apparatus.

g. Work ethic (spirit, tenacity, and perseverance) farmers in conducting agricultural business. Basically hard work, discipline, without despair is the key to success. The main issue is no less important farmers are farmers discipline in the use of production inputs, especially planting rice planting schedule. A farm community in building a good mental attitude needs to be grown. Thus not only the production technology given to them but also build mental attitude, so they are more enthusiastic about trying to farm.

h. Availability of markets for agricultural products. The development of a commodity will somehow finally determine market availability. With the availability of the market to the national and regional level provide positive support to continue to increase rice production. To promote agriculture, the government must find solutions so that farmers can get access to marketing with ease. Abundant agricultural production will not benefit much to farmers if they cannot be marketed, and certainly cannot increase the income and welfare of farming households.

i. District Government policy in supporting the increase in rice production. Agricultural potential such as rice is the leading commodity Buru should make the government give special attention to the paddy. Within five years, there was a shift in the structure of total GDP formation in Buru. Agriculture which initially is the largest contributor in the formation of GDP is now slowly from year to year

is reduced contribution. Paradoxically, agriculture is the largest contributor in the economy of Buru Regency but poverty is dominated by households working in agriculture sector. This is a challenge for Local Government Buru so that future focuses more on agricultural development. Determination RPJMD and RPJPD also expected to provide a solution so that the agricultural sector can continue to exist in order to achieve food self-sufficiency.

j. Fostering government cooperation in the field of marketing results. The marketing of sub-systems is essential. New limited partnership formed between farmers and middlemen subscription and rice mill entrepreneurs. The role of government in fostering this cooperation is still weak; the farmers have not been routed through a contractual agreement of sale and purchase certain amounts between two or more parties with oversight from the government. Guidance from the government through the existence of a treaty intended to achieve a win-win partnership.

### 3.1.3. Opportunities

a. The potential of agricultural resources owned Buru (agricultural land, water sources, and climate). Location rice crops in Buru derived from Waeapo River, which is one of four major rivers that drain 28 tributaries. Potentially vast rice fields in Buru is 10,000 ha with an area of 7207 ha raw. Thus there is still potential for expansion of 2,793 hectares of new rice fields.

b. Increased market demand for agricultural products of food crops (rice). The food crisis has now become a global issue and makes many countries upset, because when the crisis is not handled, it can be transformed into an economic crisis, social and global security. The crisis becomes a necessity if you see the growth of population continues to increase. To prevent the crisis, there is no other option but to increase food production. Food needs such as rice growing due to increasing population pressure into an opportunity for farmers in Buru to compensate by increasing the production of rice.

c. Development of agricultural technologies (seeds, fertilizers, tools and agricultural machinery). Currently, the tools used by farmers from the simple to the modern. Hand tractor use, treasure, until the rice mills can we meet various rural areas in Indonesia, including in the District of Buru. Agricultural technology is a means to do the work of farming. Including the ways in which farmers spread the seeds, nurture plants and reaping, seed fertilizers, pesticides, medicines, utensils, tools and power source. New technologies applied in agriculture has always intended to raise productivity, if productivity of land, labor or capital. Agricultural development requires all of which are available near the location of farmer business in sufficient quantities to meet the many needs of farmers who need and use them.

d. Central government policies that support agriculture paddy (basic pricing, subsidies, import ban). The Government has set the achievement of sustainable self-sufficiency in rice, corn and soybeans to be achieved in 3 years, precisely in the year 2017. Thus, the government no longer imports rice from abroad. 2015 Ministry of Agriculture has estimated as Rp.22 billion to help farmers in 34 provinces.

e. The implementation of regional autonomy. Regional autonomy, has given freedom to the regional agricultural

services to take the initiative in designing specific local policies. Agricultural development programs that supported the agricultural sector state budget more than 80 percent has been allocated to the area, which is operationally agricultural developing programs largely the responsibility of regional governments. With the support of a large budget, expected areas have more resources and greater freedom to develop local specific policies and local technology through the study / research in local research institutions. With increasing income and freedom in implementing the policy, showing that the District Government Buru able to develop its economy by developing agriculture-based flagship product (rice) as well as specific local natural resources (unique).

f. Land and sea transportation lanes available adequate. The existence of roads and port facilities are adequate this makes it easy to transport rice products to the point's goal. Without transporting efficient and hence inexpensive and agricultural development cannot be conducted effectively. Transporting importance is that agricultural production should be spread expanded, requiring a widespread network transporting, to bring the means of production to each farm and bring back the farm to the consumer market either to the city or to other villages.

#### 3.1.4. Threats

a. Number of regions producing food crops (rice) in Indonesia. Throughout Indonesia, each region has a different agricultural products vary; the average income of farming in Indonesia is particularly rice. This is caused because rice is the staple food of Indonesia, so that almost all regions in Indonesia is producing region of rice plants. Producing regions major rice plants are in Central Java, West Java, East Java, Aceh, South Sulawesi, North Sulawesi, West Sumatra, South Sumatra, North Sumatra and Lampung.

b. Competition marketing of agricultural products with products imported from other regions or countries. Competitiveness is the key to the abundance of imported products flooding the domestic market amid the enactment of free trade in Indonesia today. The changing times resulted in increasingly diverse needs of people who are automatically capable of shifting patterns of consumption. Imported products are sometimes better able to address the needs of an increasingly diverse society rather than with local products. More unfortunate local products again when the prices of imported products are better quality, not much different or even cheaper than the local products. When consumers confronted with the condition, of course they are tempted to buy imported products from the region and other countries.

c. The lack of interest of young workers in the agricultural sector. The agricultural sector is increasingly less attractive among youth. Often the work in the field of agriculture is still underestimated or considered menial jobs which are always dealing with the mud and the heat of the sun, so that the majority of the population working in agriculture the average middle age or older, or tend to the elderly. Whereas the role of young people are needed to modernize traditional methods in agriculture that is considered to be no longer compatible with the development of increasingly sophisticated and modern.

d. Pests, diseases, weeds, climate and natural disasters. This pest attacks often haunting feeling of farmers as a threat, since the conduct of the nursery, planting and after harvest. In fact, various efforts have been made in overcoming farmers. Meanwhile, the only external factor that cannot be influenced by humans are natural disasters and climate, even with today's technology advances the negative effects of bad weather on agricultural production can be minimized. In empirical research, climate factors are usually seen in the form of the amount of rainfall. Rainfall affects the pattern of production, cropping patterns, and processes of plant growth.

e. Conversion of agricultural land (industrial, social, and settlement). Land is one element which becomes an important point in determining the high and low agricultural productivity. The high demand for certain commodities other and urging the need for land for housing and other economic activities such as mining which seems to bloom late in Buru, causing the possibility of competition in land use which, in turn, feared the impact on the conversion of land previously planted with rice to other uses. Land use per household farming of paddy fields into non-agricultural land amounting to 3613.12 ha over five years ago in Buru (BPS.2014: 111).

f. Fluctuations in input and output prices of agricultural commodities. Fluctuations in the price of rice usually occur throughout the year. The price of rice fell, when there is a harvest season. However, rice prices will rise when the famine. A fluctuation in the price of agricultural output is a threat to farmers when the price is down, because it will reduce the income of farmers.

g. The free market (ASEAN 2015). The free market/globalization of the world economy will lead to commodity trading rice more competitive and more open, where trading conditions are like do not like to face together including our farmers in Buru. Paddy competition occurs not only between countries producing rice, instead of competition can occur between districts, even between districts with other rice producing countries. The ASEAN's market is opening by 2015 so that the product of ASEAN countries will easily fit into the Indonesian market. This condition is a threat to local farmers as they begin to enter the market by manufacturers from abroad.

h. Farmers' access to bank or through a partnership. Household farming today is still considered not able to optimize the credit disbursed by financial institutions and non-bank banks for agriculture. One reason is that there are many who consider the process of obtaining loans through banks and non-bank difficult and convoluted. Then funders prefer the non-agricultural entrepreneurs; because they are prone to agriculture have failed. Access to capital is very difficult, it is necessary to specifically address the institution's capital for farmers in agricultural development.

### 3.2. Internal Factor Evaluation (IFE) Matrix

After the identification and evaluation of internal factors that influence the development of superior agricultural commodities (paddy rice) in Buru, data processing results can be seen as the IFE Matrix table as follows:



**Table 3. Internal Factor Evaluation Matrix (IFE Matrix)**

Internal Factor	Rating	Value	Score
<b>STRENGTH:</b>			
1. Application of technology of agricultural machinery	2	0,08	0,17
2. The climate that supports the development of agricultural commodities	2,73	0,11	0,31
3. The contribution of agriculture to the local economy	3,18	0,13	0,42
4. The socio-cultural factors in supporting the development of crop farming sector	2,09	0,09	0,18
5. The strategic location of Buru	2,64	0,11	0,29
6. The existence and institutional management of agriculture and related institutions (farmer groups, farmer cooperatives, cooperatives, PPL)	2,55	0,11	0,27
7. The quantity and quality of agricultural personnel resources	2,45	0,10	0,25
8. Planning program to improve rice production	2,91	0,12	0,35
9. Rice field is the leading commodity Buru	3,45	0,14	0,50
<b>WEAKNESS:</b>			
1. Land not used optimally	-1,73	0,08	-0,13
2. There is still a lack of infrastructure and economic institutions	-2,36	0,10	-0,24
3. The high level of loss and damage to production	-2,18	0,09	-0,21
4. The result of fluctuating production	-2,09	0,09	-0,19
5. The low level of education of farmers	-1,91	0,08	-0,16
6. Infrastructure and agricultural inputs (irrigation, agricultural machinery, etc.)	-2,36	0,10	-0,24
7. Work ethic (spirit, tenacity, and perseverance) farmers in conducting agricultural business	-3,27	0,14	-0,47
8. The availability of markets for agricultural products	-2,09	0,09	-0,19
9. District Government policy in supporting the increase in rice production (realization of budget funds)	-2,73	0,12	-0,32
10. Development of cooperation between the government in marketing field	-2,27	0,10	-0,22
<b>Total</b>			<b>0,37</b>

Source: The result of primer data analysis.

### 3.3. External Factor Evaluation (EFE) Matrix

Identification and evaluation of external factors that influence the development of superior agricultural commodities (rice) once done then performed the

weighting of such elements and determined that the magnitude rating from 1 to 4. The weight of each element multiplied rating to get score weighting and the total value of external factors. Results of data processing can be seen in [Table 4](#).

**Table 4. External Factor Evaluation Matrix (Matrix EFE)**

Eksternal Factor	Rating	Value	Score
<b>OPPORTUNITY:</b>			
1. The potential of agricultural resources owned Buru (agricultural land, water sources, climate)	3,67	0,18	0,66
2. Increased market demand for agricultural products of food crops (rice)	3,56	0,17	0,62
3. The development of agricultural technologies (seeds, fertilizers, tools and agricultural machinery)	3,33	0,16	0,55
4. Central government policies that support agriculture paddy (basic pricing, subsidies, import ban)	3,67	0,18	0,66
5. The implementation of regional autonomy	3,22	0,16	0,51
6. Line land and sea transportation available adequate	2,89	0,14	0,41
<b>THREAT:</b>			
1. Number of regions producing food crops (rice) in Indonesia	-2,67	0,13	-0,34
2. Competition marketing of agricultural products with products from other regions	-2,67	0,13	-0,34
3. The lack of interest of young workers in the agricultural sector	-2,11	0,10	-0,21
4. Disruption of pests, diseases, weeds, climate and natural disasters	-3,00	0,14	-0,43
5. The transformation of agricultural land (industrial, social and residential)	-3,00	0,14	-0,43
6. Fluctuations in input and output prices of agricultural commodities	-2,33	0,11	-0,26
7. The free market (ASEAN 2015)	-2,56	0,12	-0,31
8. Farmers' access to financial institutions (Bank) or through partnership	-2,44	0,12	-0,29
<b>Total</b>			<b>0,78</b>

Source: The result of primer data analysis.

### 3.4. Determination of Grand Strategy

IFE matrix analysis on the internal factors resulted in a total score of 0.37 (meaning strength) and EFE matrix analysis resulted in a total score of external factors was 0.78 (mean opportunities). Results IFE and EFE matrix calculation then be used to determine the matrix grand strategy in the development of superior agricultural commodities (paddy rice) in Buru. Determination of grand strategy can be seen in [Figure 1](#).

The result showed that the grand strategy is in quadrant I with the coordinates S (0.37; 0.78), which means the

strategy SO (Strength Opportunities) or an aggressive strategy (expansion). In the aggressive strategy means having the opportunity to make agricultural development, but on the other hand there are weaknesses that hamper development. Thus SO strategies implemented to take advantage of the opportunities that exist to minimize weaknesses, although in a position relatively distant point of perfection that is the point S1 (9; 9). Based on the location of the position S that is relatively far compared to S1, it needs some SO strategy to improve the chances of success if the development of superior commodities paddy rice is done in Buru.

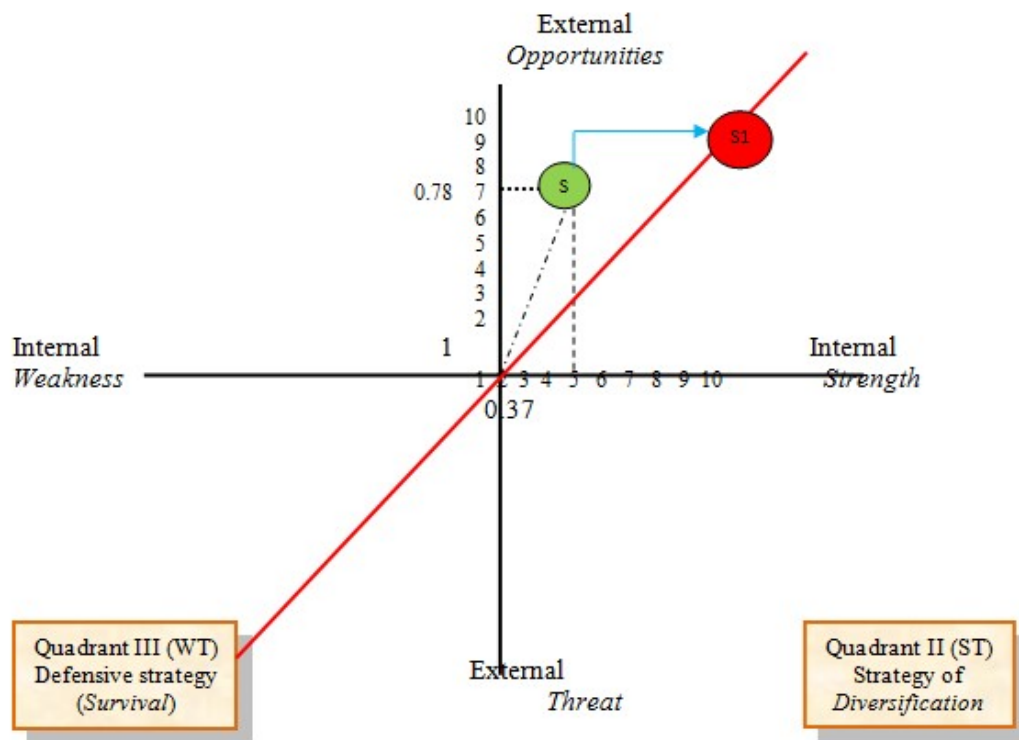


Figure 1. Determining of Grand Strategy Matrix

### 3.5. Alternative Formulation Strategy

From the SWOT matrix, there are four sets of possible alternative strategies, namely: SO Strategies (Strength Opportunities); ST Strategy (Strength Threats); Strategy WO (Weakness Opportunities); Strategy and WT (Weakness

Threat), but the results obtained by analysis of the appropriate strategy is SO strategy, such as the grand strategy matrix is in quadrant I (SO strategy). The fourth set of strategic alternatives in the form of a SWOT matrix as follows:

Table 5. SWOT matrix of Rice Commodities

Exsternal Internal	Strength; 1. The application of agricultural technology 2. Climate supporting agricultural commodities 3. The contribution of agriculture to the local economy 4. The socio-cultural factors supporting food crops sector 5. The strategic location of Buru 6. Management of agricultural institutions and agencies 7. The quantity and quality of agricultural personnel resources 8. Planning program to increase rice production 9. Rice is the leading commodity	Weakness; 1. Land not used optimally 2. Lack of infrastructure and economic institutions 3. The high level of loss and damage to production 4. The result of fluctuating production 5. Lack of education of farmers 6. Infrastructure and agricultural inputs 7. The work ethic of farmers 8. Availability of market 9. District Government policy support to increase rice production 10. Development of cooperation between the government in marketing	
	<b>Opportunity;</b> 1. The potential of agricultural resources Buru 2. Increased market demand for agricultural products (rice) 3. The development of agricultural technology 4. Central government policies that support rice farming 5. The implementation of regional autonomy 6. Line adequate public transportation	<b>STRATEGY OF S-O</b> 1. Development of agribusiness centers (the industry that lead to the agri-food sector / rice) 2. Application agricultural machinery technology and planting improved seed 3. Improving promotion of superior products / rice 4. Increasing amount of rice production through extension 5. Optimizing of existing land use, opening new market opportunities 6. Perbaikan quality or the quality of rice	<b>STRATEGY OF W-O</b> 1. Intensification of rice farming 2. Increased community empowerment and self-reliance of farmers melalalui improving the quality of human resources 3. Development of the agricultural information system 4. Development of cooperation with the marketing of business partners 5. Revitalization of agricultural infrastructure 6. Increased financial access to financial institutions
	<b>Threat;</b> 1. The number of rice-producing region 2. Competition agricultural products with imports 3. The lack of interest of young workers in the agricultural sector 4. Disruption of pests, diseases, etc. 5. The transformation of agricultural land 6. Fluctuations in input and output prices of agricultural commodities 7. The free market (ASEAN 2015) 8. Farmers' access to the Bank and partnership	<b>STRATEGY OF S-T</b> 1. Utilizing function of agricultural land in accordance with spatial planning and territory 2. Preventing rate of conversion of agricultural land 3. Effectively in the production process 4. Improving technical training and agricultural extension 5. Strengthening the regional food policies in favor of farmers	<b>STRATEGY OF W-T</b> 1. Improve coordination with all relevant agencies and among farmer groups. 2. Maintaining the stability of the quality and quantity of production. 3. Develop coaching and training intensity. 4. Utilizing non-productive land. 5. Optimizing economic institutions such as cooperative societies rooted from below. Increased productivity of farmer groups.

### 3.6. Priority Order of Operational Strategy

The analysis results obtained six formulation of operational strategies in the development of food crops (paddy rice), for it is necessary to determine the order of

priority in the strategy implementation. To determine the order of priority of the strategy is done by matrix QSPM (Quantitative Strategic Planning Matrix). From the calculation QSPM matrix, obtained the order of priority of operational strategy as in the following table:

**Table 6. Priority order of Operational Strategy**

No.	Operational Strategy	Total Attractive Score (TAS)
1.	Repair Quality or Quality Rice	<b>12,71</b>
2.	Optimization of Existing Land Use, Open New Market Opportunities	<b>12,27</b>
3.	Develop Agribusiness Center (Industry which empties into the Agricultural Sector Food / Rice)	<b>11,92</b>
4.	Agricultural Machinery Technology Application and Planting Seeds of Excellence	<b>11,81</b>
5.	Increased Rice Production Through Extensification	<b>11,78</b>
6.	Increase Promotions Featured Product / Rice	<b>11,64</b>

Source: The result of primer data analysis.

### 3.7. Elaboration of Operational Strategy

The operational strategy further elaborated in the development programs of food crops, especially rice on Buru as follows:

1. Quality or Quality Improvement Strategy Rice, carried out with the program: a) harvest and post-harvest handling. Post-harvest handling of agricultural products includes all detailing activities directly to the treatment and processing of agricultural products due to their nature should be addressed to improve the quality of agricultural products that has the power savings to a higher power. Post-harvest handlings of rice not only suppress the loss of quantitative results, but also maintain or improve the quality of rice. Post-harvest handling of paddy is a very strategic effort in order to support the increase in rice production. Post-harvest handling contributes to the increase in rice production may be reflected in a decrease in loss of yield and quality of grain or rice to achieve the appropriate quality requirements. Against paddy, rice post-harvest stages covering harvesting, threshing, treatment, drying, milling, processing, transportation, storage, quality standardization, and waste handling. b) Creating a road map of rice post-harvest technology development to reduce the level of yield loss as low as possible and improve the quality of grain and rice. The expected outcomes of the development of post-harvest handling technology is the formation of a group of rice harvesting and threshing services, implementation of integrated rice harvesting and post-harvest handling is good. Road map of rice post-harvest technology development includes research and development, assembly and dissemination of technology, products and processes of socialization, as well as user and technology adoption.

2. Strategy Optimization of Existing Land Use, Open New Market Opportunities, carried out with the program: a) the utilization of idle land to be used in the cultivation of food crops. The regulating of the use of water resources is coping with water shortages in the dry season. b) Development and maintenance of irrigation networks. Develop of organic fertilizers in the cultivation of rice crops. c) Development of integrated pest management by utilizing natural enemies. d) Optimizing the management of agricultural land on the basis of modern technology. In order to achieve optimal results, use a variety of modern equipment should be implemented immediately. Modernization does not mean eliminating the traditional

concept of farm management, but by applying agricultural technology can deliver better results and more. In addition, farmers also got great added value. Productivity is high, efficient, the cost burden of farmers is low, and the exchange rate farmers increased. Steps and breakthroughs that can be done by the Local Government Buru to improve rice productivity through the application of modern technology are:

1. Procurement of modern-based agricultural projects that use the tools of modern technology so as to increase rice productivity.

2. Provide an opportunity and a stimulant to the big businessmen and industrialists to open large-scale agricultural projects that use modern systems, so it will be the more agricultural land is opened and maintained with more modern methods.

3. Perform a variety of areas of agricultural research for development, so that the policies adopted from research conducted.

3. Develop Strategy Center of Agribusiness (Industry which empties into the sectors of Agriculture Food / Rice). This strategy is carried out with the program: a) Policy development of agricultural businesses with an integrated territorial approach to the concept of the development of agribusiness and agropolitan to develop economies of scale, which will further improve the efficiency and added value. Agropolitan development is the development of all the activities / business agribusiness system that involves all agriculture-rural areas, which as a whole serves as an agricultural town. b) Industrial development policies that put more emphasis on small-scale agro-industries in rural areas in order to increase the added value and income of the farmers. Capital reinvestment into the rural sector to accelerate the development of the agribusiness system is very relevant to the purpose of regional autonomy. County regional economy will grow in case of reinvestment into the countryside. c) Development of agriculture-based industries to continue to develop derivative products to obtain high added value. d) Preparation of rice agribusiness region are modern, powerful, and guarantees better welfare for farmers. e) Development of cooperation between subsystems agribusiness so that the process of production, distribution, processing, and marketing can be run effectively and efficiently.

4. Strategy of Agricultural Engineering Technology Application and Planting Seeds of Excellence is done by the program: a) Socialization application of modern agricultural technology through counseling, training, and



demo plot. b) Development of the application of biotechnology in agricultural cultivation of rice plants. The use of modern agricultural technologies and machines is being effectiveness of labor, both in terms of tillage, fertilizing, pest eradication and harvesting. c) The use of materials and production equipment has technological advantages (seeds, fertilizers, pesticides, and agricultural machinery). d) Study the development policy of appropriate technologies to support efforts to increase value added products in the regions. e) The increase in productivity which is done through the use of seed varieties of high productivity grade hydride including rice seed, balanced fertilization and the use of organic fertilizers and bio-biological fertilizer, water management and improvement of cultivation accompanied by escorts, mentoring, monitoring and coordination. f). Provide an opportunity and a stimulant to the big businessmen and industrialists to open a large-scale agricultural projects that use modern systems, so it will be the more agricultural land is opened and maintained with more modern methods. g) To conduct research for the development of agricultural areas, so that the policies adopted from research conducted.

5. Strategies to Increase Rice Production Through Total intensification, carried out with the program: a) Policy area expansion of planting and processing of land through land optimization efforts such as efforts to improve JITUT, JIDES and micro water management, and the addition of pumping raw paddy field (new paddy print). b) Sustainable land conservation and improvement of cropping index, irrigation water management etc.

6. Strategies to Increase Competitive Products Promotion / Rice. This strategy is carried out with the program: a) conventional Promotion by creating a central promotion and marketing of superior product. b) Promotion of Internet-based virtual to facilitate access to global markets.

## 4. Conclusion

Buru regency government needs to take advantage of strategic factors and considering the strengths and weaknesses opportunities and threats and have a relatively high interest. Factors leading force in the development of main commodities of rice are agricultural sector's contribution to the local economy. Weakness strategic factor for the development of superior commodities paddy land is not used optimally. Factors opportunities that have relatively high interest is the potential of agricultural resources owned Buru such as farmland, water sources and climate. Then factor central government policies that support rice farming as basic pricing, subsidies and import

ban. While the threat owned Regency factor in the development of leading commodity rice is the lack of young workers in the agricultural sector. Policy recommendations that can be done Buru local governments for the development of leading commodity paddy with the order of priority are: 1) Improved quality or quality of paddy / rice; 2) Optimizing the use of existing land, opening new market opportunities; 3) Develop agribusiness centers (the industry that lead to the agri-food sector (paddy rice); 4) Application of technology of agricultural machinery and planting seeds; 5) Increasing rice production through extension; 6) Increase the promotion of superior products paddy rice.

Buru regency government needs to do a strategy based on priorities obtained from the results of this study, in order to achieve rice self-sufficiency and ultimately improve regional food security and food security of the country. Beside, Buru regency government needs to improve the factors of weakness and improve the strength factor. Similarly, the opportunity should be exploited and pay attention to the threat. Based on the first order of the operational strategy of the development of superior commodities of rice in Buru, then further research that can be done is related to the improvement of the quality or the quality of rice in Buru.

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