

Patterns Of Fulfillment Basic Needs On Rural Area Based On Palm Oil Plantation Community In Riau Province

Rita Yani Iyan, Taryono, Toti Indrawati, dan Rahmat Richard

Abstract: The purpose of this study is to determine the distribution pattern, stabilization of the availability of basic needs of rural communities based on oil palm commodities in Riau Province. The analytical method used is descriptive analysis. The data obtained is processed and tabulated into the frequency distribution which is then presented in the form of tables, graphs and charts to explain the behavior of the variables studied. The results show that the pattern of distribution of basic needs in rural areas based on oil palm commodities in Riau Province is generally taken by land with the road surface conditions are relatively good and can be passed throughout the year. Distribution of basic necessities used in the form of shops / grocery stores, shopping groups to minimarket and permanent and non permanent markets. The prices of basic commodities are relatively fluctuating and tend to increase, but they are still in a stable category. The availability of basic needs sources is seen from the area of land, harvest, and production decreased while consumption as the population increase. So that the supply of basic needs from outside the region is the road taken to ensure the availability of sufficient stock of basic needs.

Index Terms: Patterns, Basic Needs, Distribution, Stabilization, Palm Oil, Plantation Community

1 INTRODUCTION

Oil palm plantations in Indonesia continue to increase. In 1979 the area of oil palm in Indonesia was 3.125 Ha and in 2016 the Directorate General of Plantation estimated that the area of palm oil plantation reaches 4,763,797 Ha. Riau Province is an area in Indonesia with the widest area of palm oil plantation of the widest people. In 2014 the area of oil palm plantations in Riau Province reaches an area of 1,357,819 ha and has increased in 2015 to an area of 1,389,301 Ha. Increasing the area of oil palm plantations in Riau Province is estimated to increase in 2016 to an area of 1.441.705 Ha. The area of oil palm plantation in Riau Province which continues to increase can threaten the reduction of agricultural land for food crops. According to Fahri (2013), in the period of 2003-2010 there was a decrease of wetland area in Kampar regency covering an area of 5,413 ha (40.33%) from 13,419 ha to 8,006 ha. The conversion of farming to oil palm plantations is driven by higher income levels compared to other farms. The average household welfare rate of oil palm farmers is 35.49% higher than that of rice farmers. Better palm oil peasant income levels will encourage changes in distribution patterns, stabilization, and the availability of basic needs of the community. In the context of food security, the absence of food sources in villages with increased farm-based income based on oil palm commodities can be met by importing from outside rural areas. On the other hand, the more open and smooth flow of information on goods and services received by rural communities through television, radio, newspapers and the internet in the form of advertisements for various products and services has encouraged rural communities to tend to consumerism. From the standpoint of food self-sufficiency this condition is increasingly worrisome, as the decreasing of rice fields in rural areas becomes an opportunity for the small-scale farmers in urban areas to market their agricultural products to rural areas that have large agricultural land.

Food self-reliance in rural areas based on oil palm plantations will be a serious problem considering some villages in the districts/cities in Riau Province will and are doing the rejuvenation of their gardens. Syamsuar (2016), approximately 14 thousand hectares of community plantation land will make the process of rejuvenation. So it is feared will reduce the power of the economy. The reason is, during the rejuvenation of the plant progresses, oil palm growers do not earn income from the garden for at least the next 4 years because old oil palm replaced with new plants are still young so it requires an annual process to wait for fertilization takes place. The basic necessities of rural communities provided from outside rural areas will have consequences for the problem of stabilization, distribution and availability. The condition of rural transportation which is not yet fully in good condition causes the distribution of goods and services to the village is hampered. Consequently, prices at the rural consumer level become higher and the staple price stability is relatively under control. The impact of rural consumers must allocate more income as a result of rising prices of basic needs. Fluctuating prices of basic commodities that are not comparable with price fluctuations and FFB production will be able to decrease the welfare of farmers, given that the price of FFB is determined by the global economy, especially the condition of CPO export destination countries.

2 LITERATURE REVIEW

In reality, food security programs can not be completely separated from rice as a strategic base commodity. It is explicit in the formulation of agricultural development that the indicative target of main commodity production of food crops until 2006 and government food reserves is still based on rice. However, with the reduced number of cultivated areas per farmer, the limited supply of irrigation water and the high price of inputs and the relatively low price of the product can be limiting factors for the welfare improvement and self-reliance program of the local resource-based farmers (Darwanto, 2005). Furthermore, according to Elizabeth (2011), the Pillar of National Resilience will be disturbed if the guarantee of availability, diversification and food self-sufficiency can not be fulfilled by a nation. Interrupted national resilience caused the dependence of imported food and reflects the inability of the

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country to reach the independence of the people's rice. The need for technological and informal delivery strategies, the existence of adequate operational policy instruments, the functioning of various support institutions (research, extension, marketing), and the support of more focused and favored government policies to accelerate the achievement and development of diversification and self-sufficiency. The occurrence of the global financial crisis (for a short time) and climate change (for the long term) resulted in weak economic growth, rising unemployment, and people's purchasing power declining as the population's access to food decreased, resulting in more vulnerable resilience. Rangkuti (2009), the independence of food can be realized if the development is implemented on the initiative of the community as a form of awareness to build a modern farming with the support of effective and efficient communication strategy. In establishing food self-sufficiency based on local production and food diversification, government policy is needed to support effective communication system by developing agricultural information centers in production centers as agribusiness development area (KPA). Food security must be created for vulnerable groups that are farmers' households. Food security must be built on self-reliance principles and away from the food imported model as it will encourage the increasingly high price of food for farmer household groups. With such a model of reinforcement it will encourage the creation of the security of the farmers' household welfare. Therefore, it is recommended that food security for households can be assured that food security must be based on self-reliance or self-sufficiency of food production by encouraging farmers to produce food, especially rice optimally. In addition to strengthening food security it is necessary to be encouraged in food diversification measures, in which farm households can produce self-sustaining food and diversify their consumption of food they can consume. (Concerned dkk, 2012). According Syaifullah (2013), the problem of food security includes the availability of food, distribution and consumption. Food availability issues can decrease production capacity. These distribution issues include infrastructure, institutions, distribution networks and production capacity between regions and seasons. The most crucial consumption problem is consumption for wheat and rice. Food security policy is not only to create food sufficiency in terms of economic development, but also food sufficiency for the poor. In order to create community food reserve, Lumbung Desa is important to be improved. Dermorejo and Dwidjono (2012), ASEAN countries have the goal of agricultural development, especially the development of food production which also supports the stability of economic improvement, especially in rural areas. There is a deterioration in the quality of the rural economy which implies that there is still a need to support agricultural development programs that add value to agriculture. The existence of rice availability policy among ASEAN countries indicates support for stability of reserves or availability of rice is still very necessary. Differences in the pattern of development of food production, especially the different rice between ASEAN countries need to be done through mutual programming together so as to create regional food security. Strategic issues in the development of food security can be seen from various aspects, namely First Production, especially availability and adequacy at national, regional and household levels. Second Distribution, in the form of food distribution between regions, between time and among groups of public

income, including affordability of strategic food prices. Third, 3. Consumption, including improving the quality of nutritional consumption, food diversification and food and nutritional awareness systems (Rahmawati, 2012). In the agricultural producing areas it is necessary to increase the productivity and the harvested area, both with the expansion of the land and the increase of cropping intensity per year with the guarantee of availability of irrigation and agricultural inputs. In the long run the policy of import restriction can be reduced gradually but the policy of increasing domestic production is still needed which is accompanied also by the increase of Domestic/Local Food Security (Prabowo, 2010). Hanani (2012), efforts to increase the availability of food can be done through intensification of existing food production and developing alternative food production based on local resource potential and development of community food reserves. Increased food access needs to be pursued through increased food purchasing power through stabilization of food prices, the creation of non-agricultural employment opportunities and decreased non-food expenditure through education and health subsidies, efforts to reduce population growth, and market development, and transportation infrastructure. In order to increase the food absorption toward diverse and nutritionally balanced diet can be done through behavioral change in consuming food to the Food Pattern of Hope with formal and non formal education, the development of women's productive social-productive organizations in rural areas, and the development and improvement of rural infrastructure such as clean water and health-care facilities. The research of Hermawati (2015) shows that farmers' income increases with increasing land area, while the proportion of income allocated for food sources of protein is declining. Factors studied, such as land area, education, number of family members, average age of family members, farm income and income outside farming, affect simultaneously to the allocation of income for food sources of protein. Yunus's (2012) study aimed at applying the pattern of production movement of agricultural products shows that the distribution of commodities in general through the ports of Makassar, Paotere, Awarangen Barru, Pare-Pare and Mamuju Sulbar with the aim to East Kalimantan to the next to South Kalimantan. Distribution of vegetable trade is carried out by large traders in East Kalimantan in partnership with collecting traders who buy directly to farmers, where large traders provide capital assistance to collecting traders. The distribution of rice in addition to being implemented by inter-island wholesalers is also done directly by mills in South Sulawesi to East Kalimantan via Pare-Pare, Mamuju and subsequent ports to South Kalimantan, and also directly to South Kalimantan via Awarange and Paotere Ports. The availability of sustainable agricultural land resources is a requirement for national food security. Uncontrolled diversion of agricultural land can threaten the food supply capacity. The results of the Gevisioner and Riza (2014) study indicate that implementation of sustainable agriculture food protection policy has not been effective in preventing the conversion of food crops in Riau, due to a decrease in rice field area by an average of 12.1 percent per year. Some of the contributing factors are the implementation of new policies to the stage of location identification and there is no regional regulation that regulates the protection of sustainable agricultural land as a result of weak coordination and synergy between sectors related to the protection of sustainable agricultural land. Research

Damayanti (2007), indicates that there are significant direct influence of food access factors and livelihood, nutrition and health, and food susceptibility to food security. While the food availability factor has no significant effect, neither does the indirect influence of the four factors be significant. The success of food security can be realized if food can reach the household level. Purwaningsih's research (2010) shows that there is a considerable difference in the proportion of food expenditure between households resistant and under-served with vulnerable households and food insecurity. At each level of household food security, household expenditures for finished foods show the highest proportion compared to other food groups. The more unstable a household is, the higher the proportion of expenditure on tobacco. In each household group according to the level of food security, households in urban areas have a smaller proportion of rice expenditure than rural households. Based on these results it is suggested that the priority of handling food security issues should be given to vulnerable groups of households and food insecurity. Mulyana (2012), one of the prerequisites for accessing smoothly food that is not self-produced is the inadequate level of people's income. When people are already engaged in productive economic activities, they have a source of income. When the sources of income are already owned, their economic condition is improving or rising above the poverty line. Means also the ability or accessibility of people to get food strengthened, and in the end they avoid food hunger/vulnerability although also dependent on the availability of food. From there it is expected that community and national food security, even regional can be strengthened. Therefore, it is natural that the policy of stabilizing food security becomes a central issue as well as one of the main priorities in national development. Amara (2006), one of the national problems is the very important food of the whole process of national development and national security. Food is a strategic commodity because it involves the basic human needs. Food not only has an economic meaning, but it is also very important in terms of political social. As a strategic commodity, the provision of food can not be ignored even for a moment. The unavailability of adequate food, potentially has a negative impact that can result in a national resilience shock. Conversely, the provision of food that is appropriate to the needs and affordable by the purchasing power of the community will provide support for the creation of economic and political stability because it can provide a sense of security to the community.

3 RESEARCH METHODOLOGY

Location Research

This research will be conducted in rural areas based on oil palm plantation commodities in Riau Province. Considering the limited resources, resources and time, there are three sample locations in this study: Kampar, Pelalawan and accounting information systems.

Types And Data Sources

The type of data used in this study is secondary data and primary data. The secondary data sources in this study come from data and publications that have been done by agencies or institutions that publish data related to this research, such as the Central Bureau of Statistics (BPS), Local Government and others. Primary data source comes from respondents and

key informants and information directly obtained from the field related to the aspects studied. The data required in this study are data related to the distribution, stabilization, and availability of basic needs in rural areas based on oil palm commodities in Riau Province.

Data Collection Technique

The technique of collecting secondary data online is used to search the data through internet media by accessing official website like BPS, or sending data via email. Data not available online, then collected offline by contacting BPS and the Ministry of Agriculture directly. Primary data collection is done offline that is direct contact of respondent and key informant of research by way of field observation, interview, focused discussion, and questionnaire.

Data analysis technique

In Presidential Regulation No. 71 of 2015 concerning the Stipulation of Storage of Goods and Essentials It is mentioned that what is meant by basic necessities is goods that relate to the livelihood of the people with high scalability needs and become the supporting factors for the welfare of the community. Referring to the Presidential Regulation in this study the analysis of the basic goods are grouped into three types:

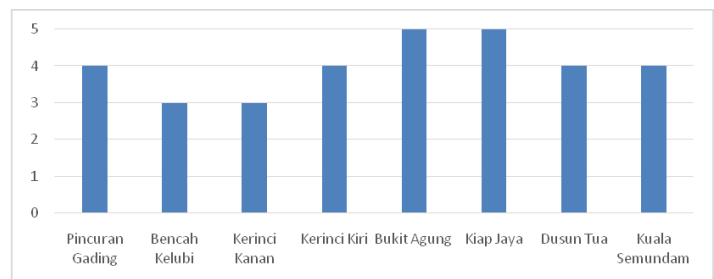
- 1) Basic Agricultural Goods which includes rice, soybean raw tofu, chili, and onion.
- 2) Basic Industrial Supplies which includes sugar, cooking oil, wheat flour.
- 3) Goods The basic needs of livestock and fishery products that includes beef, chicken meat, eggs, fresh fish is milkfish, bloated and tuna.

Furthermore, the three basic needs of people in rural areas based on oil palm commodity in Riau Province are analyzed through three aspects, namely distribution, stabilization, and availability of basic needs.

4 RESEARCH RESULT AND DISCUSSION

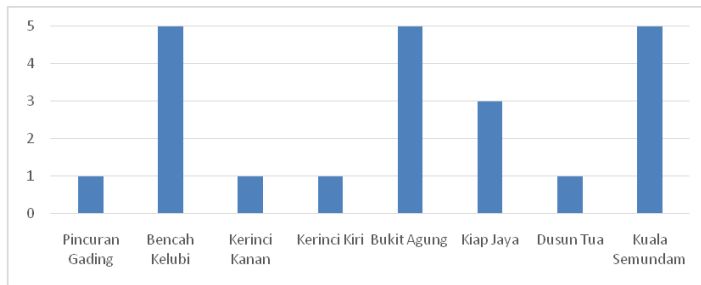
Distribution Patterns

The smooth flow of distribution of basic needs in a region is also determined by the condition of infrastructure, especially roads. The condition of road infrastructure, among others, can be seen from traffic and road quality and road accessibility. In general, villages based on commodity of Oil Palm Plantation in Riau Province can be reached by land. The generally favorable road surface conditions have led to increased accessibility of goods and services to villages based on oil palm commodities in Riau Province.



Graph 1: Traffic Condition and Road Quality To Sample Villageln Fulfilling Basic Needs In Rural Area Based Commodity Of Oil Palm Plantation In Riau Province (Source:

Processed from field data, 2017). Communities in the sample villages to obtain basic necessities generally have to pass the road with surface conditions ranging from soil, gravel, to asphalt / concrete. The condition of sample villages with traffic from and to the villages by land, and the widest type of road surface is land (Score 3), located in Bencah Kelubi and Kerinci Kanan Villages. In addition to the widest surface type of land, in the sample villages there are also villages with traffic from and to the villages by land, and the widest type of road surface is hardened (rock, gravel, etc.) ie Pincuran Gading Village, Kerinci Kiri, Dusun Tua, and Kuala Semundam. The relatively better road conditions are found in villages with traffic from and to villages/villages by land, and the widest type of road surface is asphalt/concrete. The sample villages included in this category are Desa Bukit Agung and Kiap Jaya. The smooth flow of the distribution of staple goods in the villages based on oil palm plantation commodities can not be separated from the availability of facilities and infrastructure supporting the trade. In general, villages based on oil palm plantation commodities in Riau Province are villages where there is no shop or minimarket group, but there is a grocery store/shop/grocery store with a ratio of less grocery stores to less than 100 facilities per 10,000 inhabitants. This is evident from the sample villages that have a score of (one) 1, namely Pincuran Gading Village, Kerinci Kanan, Kerinci Kiri and Dusun Tua Village.

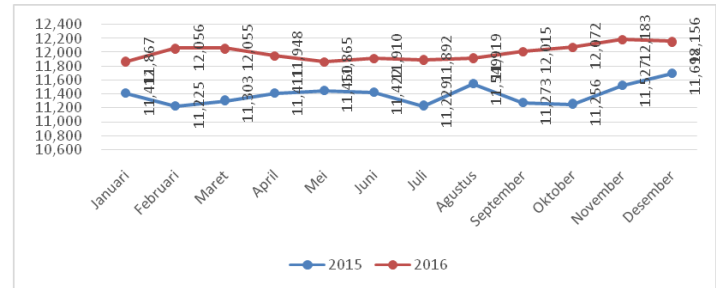


Graph 2: Availability of Shopping Facilities, Mini Market or Grocery Store In Sample Village In Fulfilling Basic Needs In Rural Area Based Commodity of Oil Palm Plantation in Riau Province (Source: Processed from field data, 2017). Communities in villages based on oil palm plantation commodities in Riau Province in obtaining basic daily necessities other than grocery stalls, shops, shopping groups, and minimarkets they also acquire them through markets, both in their villages and in other villages . For example, the people of Pincuran Gading Village to get their basic goods in the market must go to Desa Bencah Kelubi. People in Kerinci Kanan village to buy basic needs in the market they have to go out of village like to market Rawang Kao or that exist in Pangkalan Kerinci City. The people of Kerinci Kiri Village to fulfill the basic needs of the nearest market are in Simpang Langgam and to Kiap Jaya Village. Whereas in Dusun Tua village, the basic needs of the community are generally supplied from Ukui and Sorek market.

Stabilization Patterns

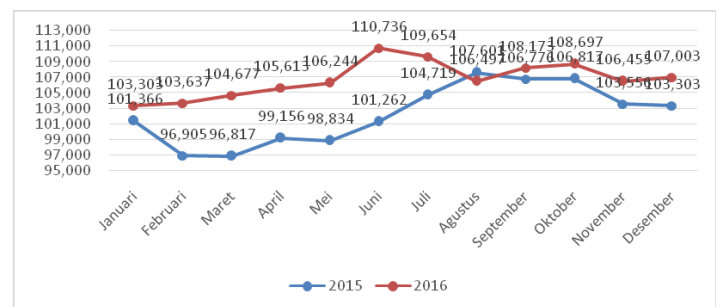
Rice as the main staple food needs of the people of Indonesia, then this commodity price stability becomes important to continue to be maintained at a stable price level and affordable by the community. During the last 2 years rice prices in rural areas in Riau Province tend to increase. In January 2015 the

average price of rice is Rp. 11,412 increased to an average of Rp. 11698. Entering the year 2016 the average price of rice in rural areas in Riau Province continues to increase to Rp. 11,867 and up to December 2016 the average price increased to Rp. 12156.



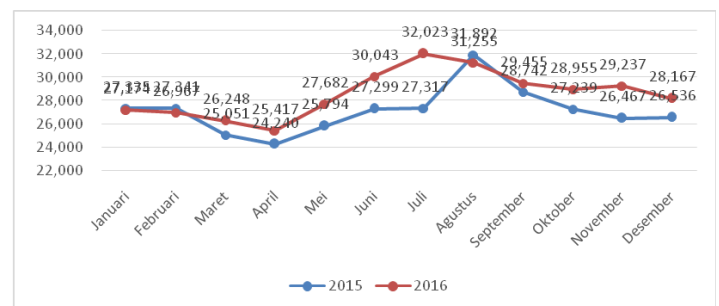
Graph 3: Consumer Price of Rice Rice In Riau Province 2015-2016 (Rp / Kg)

The price of beef in rural areas tends to increase when facing month of hajj or feast day. The highest price of beef in 2015 is Rp. 106,497 / kg which occurs in August and every year tends to increase where in 2016 the highest average price of beef is Rp. 110,736 / kg which occurred in June.



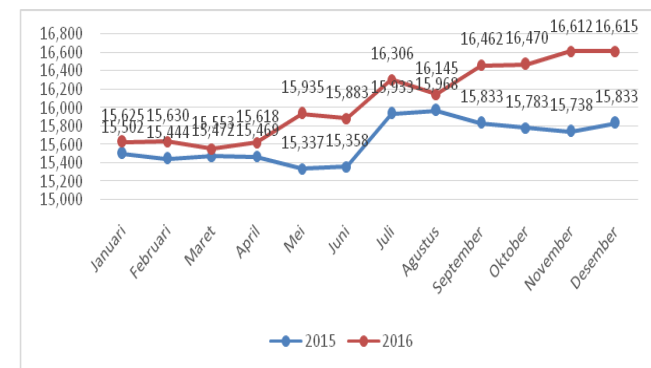
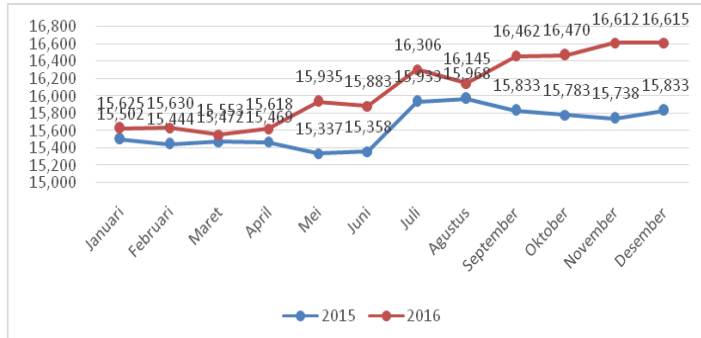
Graph 4: Consumer Price In Rural Beef In Riau Province 2015-2016 (Rp/Kg).

The price of chicken meat in rural areas based on oil palm plantation commodity shows that during January to April the price tends to decrease. The trend of the price of chicken meat has increased from May to August and after that the trend of chicken meat prices began to show a decline. It is understandable that from May to August there are many religious holidays and the need for meat tends to increase.



Graphic 5: Consumer Price Rural Chicken Meat in Riau Province 2015-2016 (Rp/Kg).

Chicken eggs as a source of protein for people in rural areas in Riau Province prices tend to fluctuate. The average price of chicken eggs ranges from Rp. 18,000 / Kg to Rp. 23,000 / Kg in 2015 until 2016. The highest average price of chicken eggs in rural areas in Riau Province mainly occurs in July to September.



Graph 7: Consumer Price Rural Cooking Oil In Riau Province 2015-2016 (Rp / Liter).

The price of red chili tends to fluctuate between Rp. 37,000 up to Rp. 68,000 per kilogram. In March to August the price of Red Chili tends to be stable.

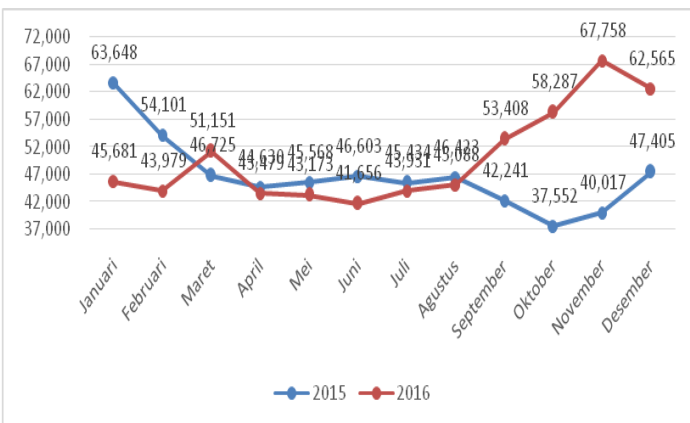
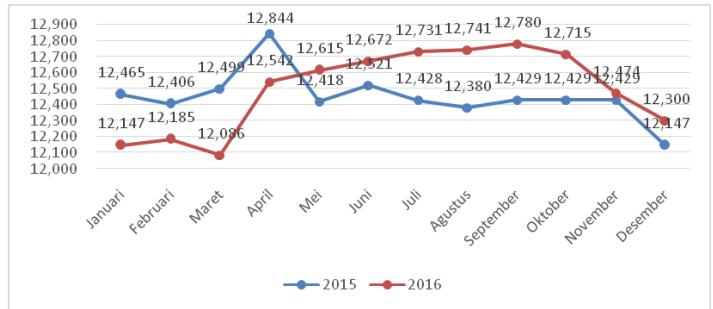


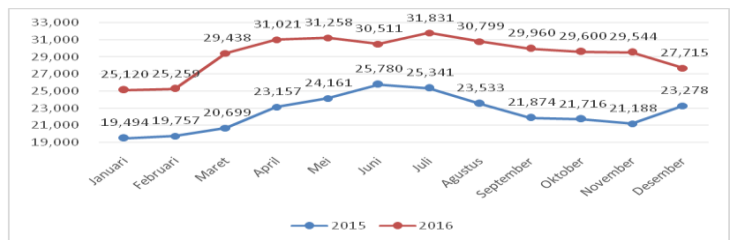
Figure 8: Consumer Price Rice Red Chilli In Riau Province 2015-2016 (Rp/Kg).

Soybeans are the main raw material needed for the manufacture of Tempe and Tofu. Soybean Prices in 2015 and 2016 tend to fluctuate relatively around Rp. 12,000 / Kg up to Rp. 13,000/Kg.



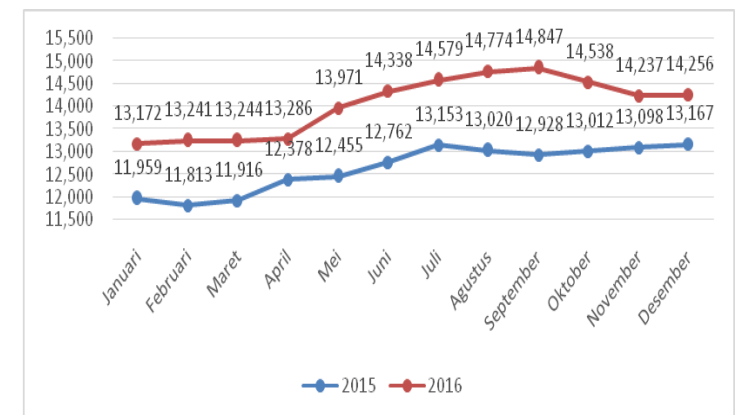
Graph9: Consumer Price Rural of Soybean In Riau Province Year 2015-2016 (Rp/Kg).

In rural areas of Riau Province, the price of onion during 2015 to 2016 is around Rp. 19,000/Kg up to Rp. 33,000 / Kg. Entering the month of March to July the price of Red Onion is relatively increased. Then in August to December the price of Red Onion is relatively decreased.



Graph10: Consumer Price Rural Red Onion In Riau Province 2015-2016 (Rp / Kg)

Sugar Sand prices fluctuate and tend to increase. The market is sold at a price of about Rp. 11,500 / Kg up to Rp. 15,000/Kg.



Graph11: Consumer Price Rural Sugar Sand In Riau Province 2015-2016 (Rp/Kg).

Pattern of Availability

Crops harvest area in general in Riau Province tend to decrease. Cassava plantation area of 3,863 Ha in 2013 fell to 3,578 Ha in 2015, Peanuts from 1,325 Ha in 2013 fell to an area of 1,081 Ha in 2015. Similarly, some other crops harvested area decreased. While the harvest area of Paddy field crops is relatively increasing, where in 2013 area of 20,722 Ha increased to an area of 21,328 Ha in 2015.

Table 1: Crop Harvest Area by Type of Plants Year 2013-2015 in Riau Province (Ha)

Information	2013	2014	2015
Rice Field	97.796	85.062	86.218
Rice	20.722	20.975	21.328
Corn	11.748	12.057	12.425
Cassava	3.863	4.048	3.578
Peanuts	1.325	1.194	1.081
Sweet potato	1.028	981	793
Soybeans	1.949	2.030	1.516
Green beans	585	598	576

Source: BPS, Riau in Figures 2017

The decline in the area of food crops in Riau Province as a source of basic needs of the community tends to be followed by a decrease in food production. Some of the food production that has decreased include Rice Field, Peanut, Sweet Potato, Soy Bean and Green Beans. While the production of food crops that are relatively increasing are Paddy Field, Corn and Cassava. For more details about the development of food crop production can be seen in the following Table2.

Table 2: Food Crop Production by Type of Plant in Riau Province, 2013-2015 (Ton).

Information	2013	2014	2015
Rice Field	387.849	337.233	345.441
Rice	46.295	48.242	48.476
Corn	28.052	28.651	30.870
Cassava	103.070	117.585	103.599
Peanuts	1.325	1.194	1.036
Sweet potato	8.462	8.038	6.562
Soybeans	2.211	2.332	2.145
Green beans	619	645	598

Source: BPS, Riau in Figures 2017

The average consumption of paddy rice per person is 21.97 grams/day. Based on data in Riau In Figures 2017 indicates that in 2016 the number of people in rural areas in Riau Province as many as 3,928,098 inhabitants. This means that consumption needs for grains in rural communities in Riau Province on average every day requires as much as 86.30 tons. Awareness of rural communities to consume fish/shrimp/squid/shellfish is quite large, this is reflected from the per capita consumption of 8.55 grams/day. This means the total needs of fish/ shrimp/squid /shellfish consumed by villagers in Riau Province averaged 33.59 tons/day.

Table 3: Average Protein Consumption per capita per day (Gram) by Food Group in rural areas in Riau Province 2016.

Information	Gram / Capita
1. Grains	21,97
2. Tubers	0,44
3. Fish/Shrimp/Squid/Shellfish	8,55
4. Meat	3,98
5. Eggs and Milk	3,2
6. Vegetables	1,94
7. Nuts	3,31
8. Fruits	0,3
9. Oil and Coconut	0,6
10. Beverage	0,77
11. Seasonings	0,44
12. Other Consumption	1,07
13. Food and Drink	6,16
Amount	52,73

Source: BPS, Riau in Figures 2017

The allocation of household expenditure budget to meet basic daily needs will determine the pattern and quality of community life in rural areas. The largest proportion of expenditure in rural communities in Riau Province is for the expenditure of food and beverages to be Rp. 103.465/month. Then followed by spending on cigarettes of Rp. 87.767/month. The lowest consumption expenditure is still allocated for consumption of tubers, beans, and other consumption. For more details about the average information per capita expenditure on rural areas in Riau Province can be seen in Table4 below.

Table 4: Average Per Capita Monthly Expenditure (Rp) In Rural Areas In Riau Province 2016.

Food	Average Per Capita Expenditure
1. Grains	83.325
2. Tubers	6.654
3. Fish/Shrimp/Squid/Shellfish	53.952
4. Meat	19.844
5. Eggs and Milk	28.619
6. Vegetables	56.094
7. Nuts	8.904
8. Fruits	19.140
9. Oil and Coconut	20.181
10. Beverage	20.090
11. Seasonings	11.384
12. Other Consumption	9.764
13. Food and Drink	103.465

14. Cigarettes	87.767
Amount of Food	529.183

Source: Riau People's Welfare Statistic 2016

5 CONCLUSION AND SUGGESTION

CONCLUSION

1. Distribution of basic needs in rural areas based on oil palm commodities in Riau Province is generally reached by land with relatively good road surface conditions and can be passed throughout the year. Distribution of basic needs such as shops/grocery stores, shopping groups to minimarket and permanent and non permanent markets.
2. In general, prices of basic commodities in rural areas based on oil palm commodities fluctuate and tend to increase, but still in the category of stable.
3. The availability of basic resources seen from the area of land, harvest, and production in rural areas in Riau Province continues to show a decline while consumption of basic needs as the increase of the villagers will continue to increase. In general, most of the basic needs of rural communities based on oil palm plantation commodities are supplied from outside the region, but the availability of access to infrastructure, trading facilities, and the smooth flow of distribution is felt easy with sufficient stock availability.

SUGGESTION

Based on the results of research that has been done, it is suggested the condition and quality of road infrastructure in rural areas based on plantation commodities to be continuously improved. The path of the distribution chain of goods needs to be shortened to reach consumers so that prices will be cheaper and fluctuations in the price of basic needs can be minimized. The policy of the fulfillment of basic needs is strived not only to realize food security but more than that also aimed to realize food self-sufficiency in rural areas based on oil palm commodity in Riau Province.

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