The Welfare of Local Farmers, Rice Price Policy, and Distribution Process in Improving Food Security

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ABSTRAK: Food security is an integrated food economy system consisting of various subsystems (Suryana, 2003). Food security contains at least two basic elements, namely the availability of adequate food and the accessibility of the community to adequate food, where both elements are absolutely fulfilled in order to achieve the health and welfare of society. This paper presents a review of grain price policy and distribution access in analyzing the welfare of local farmers and their impact on food security in Tanggulangin, Indonesia. This research uses descriptive method approach. Using interview with source from food security department. The results of the analysis indicate that the food welfare factors do not have a significant effect on food security in the surplus food sub-district. While access factor and also policy of food price policy give significant influence to food security and welfare of farmers in subdistrict with surplus of food in 2014. The result of this study are important to see the development food security in surplus food security areas.

KATA KUNCI: Farmers welfare, food access, grain price policy, food security of Tanggulangin sub-district

RISET BACKGROUND

Preliminary

Problems and challenges to achieve sustainable food security Indonesia is multidimensional, covering economic, social, political, and environmental. Identification of these problems and challenges can be done through the analyzes of demand and supply is the case today. In this case (Sustainable Food Security Challenges) there are several aspects that need to be analyzed, among others, the policy output of grain and rice prices as well as good distribution processes that maintain food security kerberlangsungan Indonesia.

The complexity of the agricultural labor economics relative dimensions include the agricultural sector to Gross Domestic Product (GDP) is relatively fast is not followed by the same acceleration on aspects of employment. In the period 1995-2000 total national employment increased by 1.94% per year from 80.11 million to 89.84 million people. The agricultural sector contributed to increasing the proportion of 43.98% to 45.28% and grow at a rate of 0.51% per year.


RESEARCH METHODS

Materials and Methods

In this research using descriptive method, that of writing that focuses on solving the actual problem, the data collected in stacking, is described and analyzed (Suracmad, 1980).

This research was conducted in the District Tanggulangin. The population in this penelitian all districts in Sidoarjo is in a state of food surplus that as many as 13 districts out of 18 districts in Sidoarjo. Tanggulangin is one of the food surplus.

Types and Sources of Data
The data used for this study consisted of primary data and secondary data. Primary data was collected through direct interviews and secondary data collected from a variety of existing agencies or institutions relation to this study, such as the Department of Agriculture, Food Security Agency, and BPS Sidoarjo.

Data analysis

The purpose of this study (1) identify the variables contained in the prosperity factors, the price of rice, and access policies in the absorption of food security in the sub Tanggulangin. (2) to investigate the influence of the welfare of farmers, access to distribution and pricing policy of rice to food security Tanggulangin subdistrict.

Marketing margin is obtained by calculating the difference between the price paid the ultimate consumer / purchaser end (Hc) with the prices paid to farmers as a manufacturer / seller first (Hp) used the formula:

\[ M_i = H_{ci} - H_{pi} \] ..................................... (1)

Information:

\( M \) : Marketing Margin (Rp / kg)
\( H_{ci} \) : The price paid by the final purchaser (Rp / kg)
\( H_{pi} \) : The price paid to the seller first (Rp / kg)
\( I \) : Farmers, traders, end buyers.

RESULT AND DISCUSSION

Food security

The concept of food security broader than the concept of self-sufficiency, which is only oriented to the physical aspects of the adequacy of food production. Some experts agree that food security contains at least two basic elements, namely food availability and accessibility of such food ingredients. One of the elements above are not met, then a country can not be said to have a good food security. Although enough food is available at national and regional level but if the access of individuals to meet food needs is uneven, it said food security remains fragile.

Policy has become a base price of rice and rice food policy in more than 300 years, since the colonial period. Unfortunately, the nature of food price policy today is very different from its origins. The Dutch colonial government always wanted the price of cheap labor for agricultural investments in the archipelago. Therefore, the price of basic food and rice is always kept low, because the price of rice is very important for family consumption so that the need to create a base price of food was low all the time (Mears and Moeljono, 1981: 23-24)

To calculate the cost of marketing is done by marketing agencies as follows:

\[ i_j = a_{ij} \times P_{ij} \] ................................................ (2)

Information:

\( i_j \) : Fees at the level of all the activities of all \( i_j \) (Rp / kg)
\( a_{ij} \) : Activities at the level of the \( i \)-th on the activities of the \( j \)
\( P_{ij} \) : Prices or costs incurred in the level of activity \( j \) (Rp / kg)
\( i \) : The level of farmers, traders, farmers end
\( j \) : The activities of transportation, storage, processing, labor and other activities.

To calculate the difference between the marketing advantage marketing margin (M) and marketing costs (C) used the formula:

\[ T_{Ti} = M_i - C_i \] ........................................... (3)

Information:

\( M_i \) = Marketing margin at the level of the \( i \)-th (Rp / kg)
\( C_i \) = Cost of Marketing at the level of the \( i \)-th (Rp / kg)
TTI = Profit at the level of the i-th (Rp / kg)
i = Level of farmers, traders, farmers end Distribution channel

The success of the development of food security does not only depend on the success of not only increase production, but it needs to be mixed in a comprehensive manner based on three main pillars, namely the production of sufficient, smooth and uniform distribution, and consumption of safe food and nutrition for all individuals affluent society.

The distribution channel has the objective to bring a product to somewhere (markets) so that consumers can meperoleh the product. Channels of distribution can be interpreted as an intermediary pathways that bring a product from the manufacturer to do marketing from the stages of transport / transportation and storage of a product marketing goods and services to reach the end consumer.

Distribution channels paddy / rice that occurred in the district Tanggulangin are as follows:

1. farmer → local retailers → Consumer
2. farmer → traders → local retailers → Consumer
3. farmer → traders Gatherer → wholesaler → local retailers → Consumer

There are three channels of distribution that occurred in the district Tanggulangin, ranging from short distribution channels, where between growers and consumers only through the intermediary of a marketing agency, namely local retailers. This condition occurs in areas where the consumer is located at a distance of not so much with the location of the farmer.

The condition is supported by the results of the study population consumption patterns Sidoarjo district in 2012. The average level of energy consumption in Sidoarjo residents amounted to 1,964 kilocalories / capita / day or 98.25% of the ideal energy sufficiency, which is 2,000 kilo-calories / capita / day. So that Sidoarjo regency included in the category of food secure region.

The amount of the agricultural potential of the East Java was not offset by the amount of added value perceived by the farmers in the region. Until now, agriculture is still the less promising sectors in order to improve their lives. This is evident from the low inflation index countryside or Farmer (NTP) in 2010.

Distribution Policy

Distribution policy objective is to ensure food security throughout the year evenly and affordable whole society. Thus, since 1967 the government appointed Bulog to regulate the supply of rice in the country and stabilize prices. Bulog has at least three 3 public duties associated with the rice. (I) government guarantees the purchase price for grain and rice, (ii) Raskin management, and (iii) reserves or national food stocks.

Indonesia’s rice distribution process itself is done in two ways: through Bulog and market mechanisms. Bulog only controls about 10 percent of the national rice market share, while the rest of the market mechanism. To prevent food insecurity, Bulog distributes the rice in the warehouses (Divre and Subdivre) in all provinces in Indonesia.

Food Security Affairs
a. Dietary Pattern Hope,

Food security is a system that consists of sub-availability systems, sub-systems and sub-systems of distribution of consumption. Sub-availability systems include setting the stability and continuity of supply of food derived from Regency production, food reserves in the district and outside the district. Sub distribution system includes arrangements to ensure accessibility of the population physically and economically to food between regions and time as well as strategic food price stability. Sub consumption system includes food management at the local level and households. to guarantee every individual gain in the amount of food, nutrition, safety, diversity and affordability according to the needs and choices.

Aspects of food availability in Sidoarjo has been insufficient to remote areas, although production is not sufficiently available, so as to satisfy the required availability of foodstuffs from outside the area Sidoarjo. For food quality aspects of all the elements needed are carbohydrates, vegetable and animal protein available and sufficient for consumption even though some brought from outside the area.

Aspects of well-functioning distribution will be able to move food products to consumers in time, place, form and the desired quality at minimal cost. Thus the efficiency of the distribution system directly or indirectly related to the people's purchasing power and income of farmers.
Aspects of food consumption is said to be ideal if the food meets the rules people have food Many, Nutritious, Balanced and Safe (B2SA). Conditions that can be seen from the aspect of quantity and quality aspects. The quantity of food is used to determine whether or not sufficient amount of food consumption for the population healthy and productive life, while the quality of the food is used to determine the nutritional balance of the diversity of food consumed by the population.

![Chart](source: Food Security Agency and the Implementing Guidance)

In quality of food consumption still does not meet performance targets set at 100 for PPH PPH Availability and 92.6 for Food Consumption. Efforts are underway to increase the score PPH Availability of Food:

1. Intensification yard by utilizing their yards and uncultivated land with a focus on program / activities are on target, namely:
   a. With the concept of Sustainable Food Houses Region (KRPL)
   b. Planting crops other than rice are tubers
   c. Development of small-scale processed food business through Desa Mandiri Pangan (DEMAPAN)

2. Maintaining and controlling price stability for the welfare of farmers to increase food reserves communities through programs / activities:
   a. Institute for Grain Milling (LPG)
   b. Strengthening community food distribution agencies (PLDPM)
   c. Increased institutional village barns

Efforts are underway to increase the score PPH Food Consumption:

1. Internalization programs, aims to increase the consumption of food groups that are still lacking and mmengurangi consumption of food groups that excessive by way of education through socialization, training or demonstration of food consumption B2SA (Many, Nutritious, Balanced and Safe) should continue to focus on food groups that still less is consumed namely tubers, fruits and vegetables

2. The development of local food businesses, aimed at increasing the consumption of food groups that are less that food business development / market mechanism in the improvement of the group is still lacking, namely tubers, meats, fruits, vegetables

3. Empowerment of women, through optimizing the utilization of the yard various types of plants such as various tubers, vegetables, fruit and cattle farming and fish to support the availability of a source of carbohydrates, vitamins, minerals and protein for the family

Availability Regional Food

Results of Sidoarjo pure production for local food needs is still lacking compared to its needs, so it needs to be supplied from other regions. The development of food needs, especially rice in 2010 till 2014 can be seen in the following graph.
Chart

Source: Food Security Agency and the Implementing Guidance

Realization of the availability and distribution of food in the area 2014 further shown in the following table:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Realization (tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice (production/tonne)</td>
<td>130,921.96</td>
</tr>
<tr>
<td>Corn (production/kw)</td>
<td>1,266</td>
</tr>
<tr>
<td>Soybean (production/kw)</td>
<td>2,015</td>
</tr>
<tr>
<td>Green beans (production/tonne)</td>
<td>-</td>
</tr>
<tr>
<td>Sugar (production/tonne)</td>
<td>26,997.047</td>
</tr>
<tr>
<td>Meat cattle (production/tonne)</td>
<td>10,097.793</td>
</tr>
<tr>
<td>Chicken (production/tonne)</td>
<td>6,403.791</td>
</tr>
</tbody>
</table>

Realization of local rice production in 2014 amounted to 130,921.96 tons, with a target of 126,442.42 tons, so that the gains of 103.54%. When compared with the realization in 2013 amounted to 125,116.40 tonnes a decline of 4.64%.

The availability of food in the community in meeting the food needs apart from the production of Sidoarjo regency is also supplied from outside the area which is generally derived from the existing districts in East Java region.

b. Mapping Prone to Food
To accelerate and sharpen the focus of local government services to the public in matters of food security, there needs to map food insecurity. The map can be obtained through the initial picture of the locations that need special attention, and to optimize the allocation of

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To accelerate and sharpen the focus of local government services to the public in matters of food security, there needs to map food insecurity. The map can be obtained through the initial picture of the locations that need special attention, and to optimize the allocation of program / intervention activities related to food insecurity, including food distribution to areas which indicated food insecurity. However, a map of food insecurity per village per subdistrict last made in 2007. In the future, as a tool for mapping food insecurity using form FNS analysis (Alert System for Food and Nutrition), which includes three indicators of aspects of food availability (production of rice, corn , cassava and sweet potatoes), aspects of the utilization of food (nutrition status) and the aspect of food access (the number of Family Welfare 1 / KS 1 and Pre-Welfare / Pre S of BPMPKB). Ideally, the preparation of a map of food insecurity done 3-5 years that uses 13 indicators.
Prone District of Food Based Distribution
aspects of access Food

<table>
<thead>
<tr>
<th>Score</th>
<th>Total Subdistrict</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
</tr>
<tr>
<td>Green (safe)</td>
<td>13</td>
</tr>
<tr>
<td>Yellow (Vigilant)</td>
<td>4</td>
</tr>
<tr>
<td>Red (Prone)</td>
<td>1</td>
</tr>
</tbody>
</table>

UPGRADES FARMERS ORGANIZATION

Increased capacity of farmer groups / Gapoktan intended to function as a unit of farming, processing units, a unit of production facilities, the business unit marketing and microfinance enterprise units and other supporting services unit so that it becomes a strong farmers' organizations and independent. The hallmark of a strong and independent organization is a meeting / conference held regularly and continuously. Then the group work plan prepared jointly and implemented by the executive in accordance with the collective agreement.

Farmer groups / Gapoktan directed to have the ability to take decisions in determining the development of profitable production based on the information available in the field of technological, social, capitalization, production facilities and other natural resources.

Capital assistance programs of the Government is a stimulant funds in order to develop activities and initiatives gapoktan members to take advantage of any available capital access. Gapoktan members can manage commercial microfinance and able to develop the ability to explore the sources of business, which can increase capital.

The stimulus funds are intended among other things to the activities of savings and loan in the form of agricultural inputs and livestock such as fertilizers and seeds. Implemented in order to promote and advocate for members to venture capital development. Therefore, the farmer groups / gapoktan active mainly in running a business unit of production from year to year. In 2013 as many as 144 gapoktan active, whereas in 2013 fell to 133 active gapoktan.

CONCLUSION

Based on the results of the discussion on this research, it can be summed up as follows:
1. There are three channels of distribution that occurred in the district Tanggulangin.
2. Of distribution channels in the sub Tanggulangin, the biggest margin occurring between marketing agencies wholesalers and local retailers. Similarly, with the greatest benefits received by local retailers. The conditions show that the class of chain retailers as the ultimate marketing actually receive the highest returns compared to other marketing agencies involved in the distribution of rice in the District Tanggulangin.
3. Excess food availability in food surplus district is not accompanied by adequate food access and food absorption maximum so that the district still found their food surplus districts indicated food insecurity.

POLICY ADVICE

1. For local government, whose territory has reached a surplus of food in order to strengthen the access factor and absorption of food to achieve food security truth.

To improve the welfare of farmers needed to boost section in prices received by farmers and the control of prices of consumer goods and the means of production, for domestic farm laborers, besides the need to maintain a reasonable level of wages, it is also necessary that is inclusive and integrative in welfare improvement.

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