

Research article

Strengthening a Model of Community Food Security in Central Java During the Pandemic

Ari Subowo, Tri Yuniningsih, and Augustina Rina Herawati

Departement of Public Administration, Fisip-Undip

Abstract.

Achieving food and nutrition security for all people remains one of the defining challenges for humanity in the 21st century. The crisis related to strengthening food security during the Covid-19 pandemic has become a global concern. The World Food Program states that despite developments in agricultural technology, micronutrient deficiencies and stunting remain problems. The purpose of this study was to determine the pattern of food and non-food consumption of the community in Temanggung Regency, as well as the efforts in dealing with community food security. A qualitative approach was used in analyzing a model to formulate policies for strengthening community food security during the COVID-19 pandemic. The results showed that the Temanggung Regency Government has designed an intervention by preparing a strategic plan and implementing a cross-sectoral approach. The policy programs and activities relate to food safety, quality of food intake and nutrition. However, according to the results, promoting food security in villages does not guarantee a decrease in malnutrition, and in some villages such as Kalimangis, the health status of children has actually deteriorated. The relationship between food security and family nutritional conditions is not linear due to factors related to environmental health, cleanliness and healthy lifestyle behaviors. Therefore, interventions in the field of food security have to be followed by interventions related to personal health status and environmental conditions.

Keywords: food security, program intervention model, environmental health

1. Introduction

Food Security is one of the important dimensions in term of protection the component of human rights, due to the fulfillment of food needs will be closely related to improving the quality of human resources. The crisis related to meeting food needs during the Covid-19 pandemic has become a global concern, a real threat that is quite frightening. According to Davis Beasley, Executive Director of the World Food Program (WFP) during the Covid-19 Pandemic, stated that in 2020, the world community at risk of food shortages will increase to 265 million people and this is a significant increase. Meanwhile, food insecurity in Indonesia shows a slightly better condition, based on data from the Hunger Global Index (HGI), Indonesia has experienced a decline in population that has the potential to experience food insecurity from 24.9% in 2010 to 20.1% in 2020. Meanwhile,

Corresponding Author: Ari
Subowo; email:
arisubowo@lecturer.undip.ac.id**Published** 20 May 2022Publishing services provided by
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if food availability cannot be met, within a certain period of time food insecurity will occur. Food insecurity is a condition that describes the opposite of food security. While food insecurity describes the condition of the inability to obtain sufficient and appropriate food for a healthy life and good activities for a while or in the long term. Parmeshwar Udmale (2020) conditions of food insecurity or food vulnerability can conceptually be grouped into two, namely (1) Chronic food insecurity is a situation where a group of people experience a continuous inability to meet basic nutritional needs due to their inability to obtain basic food needs. The incidence of chronic food insecurity will affect households that consistently have a very limited ability to buy sufficient food needs. (2) Temporary food insecurity is a sudden but temporary decrease or disruption in the access of residents or households to sufficient food needs. In worsening conditions, temporary food insecurity can lead to famine in a certain area due to crop failures, natural disasters and pandemics whose recovery period is quite long.

Indonesia is one of the countries that is committed to implementing the Rome Declaration on Food Security, which then stipulates Law No. 7 of 1996 concerning Food and then updated and expanded in a new law, namely Law Number 18 of 2012 concerning Food. The concept of food security in Indonesia includes aspects of safety, quality and diversity as conditions that must be met in meeting the food needs of the population in an adequate, equitable and affordable way for people's purchasing power. Food must always be available in sufficient, safe, quality, nutritious and diverse manner at a price that is affordable by the people's purchasing power, and does not conflict with the religion, belief, and culture of the community. Food security is an important part of agricultural development in Indonesia. considering that Indonesia is a country with a large population so that it requires adequate food availability from agricultural products (BPOM, 2012). One of the most popular types of food known as a staple food is rice. The position of rice in spending for household consumption is still prominent, especially in low-income families. Low-income families will generally use their income to meet their basic needs, namely food which is analogous to rice (Marwanti, 2002).

In the last 5 years, food availability in all districts in Central Java has improved significantly. If the FSVA map in 2009 still shows red in some districts, in 2017 all districts are already green, although with varying densities. During the pandemic, the FSVA data above becomes one of the references in determining social restriction policies in an area. The issue of food security during a pandemic cannot be taken lightly. This is evidenced by the holding of several coordination meetings of relevant stakeholders in anticipating the possibility of the collapse of the fortress of food security in Indonesia during the pandemic. There are three main indicators used in the preparation of the

food security map, namely the availability, affordability, and utilization of food. Food affordability is considered to be the most significant variable affected during the pandemic because it is related to food distribution, people's ability and purchasing power. The Food and Agriculture Organization (FAO) said that the impact of the COVID-19 pandemic could lead to a new food crisis due to the delay in food distribution due to social restrictions imposed in most regions. In addition, the decline in people's per capita income also has an impact on affordability to access food. The results of a survey conducted by BPS stated that the poor and vulnerable to poverty in Indonesia have experienced a drastic increase due to the COVID-19 pandemic. This of course will have an impact on people's accessibility to food.

This study aims to identify and analyze community food and non-food consumption patterns during the COVID-19 pandemic, analyze the policy model of the Temanggung Regency Government in an effort to strengthen community food security during the COVID-19 pandemic and analyze and formulate an effective food security strengthening model to support the existence of development. area during the COVID-19 pandemic.

2. Methodology

This research is a descriptive-analytic study that is used to obtain a systematic, factual and accurate description of the facts of the relationship between the phenomena being investigated. While the focus of this research is to obtain data on the Model for Strengthening Community Food Security in the Pandemic Era in Temanggung Regency. The majority of the variables analyzed will be related to the affordability of the community in accessing food which will later be linked to the poverty rate that occurred during the COVID-19 pandemic. Data collection techniques were carried out by means of secondary data studies, including the Temanggung Regency RPJMD, Strategic Plan of the Food Security Service and FGDs were conducted on community group in several District in Temanggung Regency.

3. Results

3.1. Food and Non-Food Consumption Pattern

Based on data from the National Socio-Economic Survey (Susenas) conducted by the Central Statistics Agency every year, it is known that the average monthly per capita expenditure for food and non-food groups in Temanggung Regency continues

to increase. In 2020 the average monthly expenditure per capita is Rp. 681,806,- an increase of 3.64 percent from the previous year which amounted to Rp. 657,837,-. For the food group, Rp. 346,581,- or 50.83 percent, while the remaining 49.17 percent for non-food amounting to Rp. 335.225,-. This increase in per capita expenditure certainly shows an increase in people's income as well as illustrates an increase in community welfare and the success of development in Temanggung.

From the Susenas data, there are 14 types of expenditure on food, namely grains, tubers, fish/shrimp/squid/shellfish, meat, eggs and milk, vegetables, nuts, fruits, oil and coconut, beverage ingredients, , spices, other consumption, food and beverages, and the last is tobacco/betel (cigarettes). In 2020 the highest food expenditure in Temanggung Regency was processed food and beverages, which amounted to 29.27 percent, then the second rank was expenditure on grains at 14.76 percent and the third was consumption expenditure for tobacco/betel (cigarettes) of 10.98 percent. In contrast to ten years ago, in 2009 to be exact, grains still ranked first with a percentage of 22.07 percent, beating ready-to-eat food and beverages which amounted to 20.53 percent. While cigarettes are still the same in third place with a percentage of 9.11 percent.

Consuming ready-to-eat food and beverages turned out to be the most preferred choice in Temanggung in meeting their food needs, and the habit of consuming tobacco or cigarettes was actually greater than consuming vegetables. Prepared food and drinks are food and drinks that are not prepared/cooked by households, but can be directly consumed both inside and outside the home, such as in stalls, at the office or at school. The consumption pattern of the Temanggung community is certainly influenced by various factors such as economic, social and local cultural conditions. Seeing this, then what if it is associated with the health condition of the Temanggung community.

Based on Susenas data, the percentage of the population who experienced health complaints in 2020 seemed to increase compared to the previous year. In 2017 the percentage of the population experiencing health complaints was 29.70 percent, while in 2020 it was 32.05 percent, and the percentage of morbidity increased from 11.21 percent in 2017 to 13.76 percent in 2020. Buying finished food and drinks is indeed more practical and tastier, without the hassle of cooking, not bothering to clean cooking utensils, and being able to eat whatever you want. Moreover, it is supported by the existence of food delivery applications/services that are increasingly pampering consumers. But of course there will be more money to be spent. Therefore, it is important for consumers, especially the Temanggung people to pay attention to the quality of food and beverages, cleanliness, and of course the price of the food itself. Seeing this reality, of course, it is necessary to give more understanding to the people of Temanggung

about the importance of healthy food consumption patterns, which are better known as Diverse, Nutritious, Balanced and Safe Foods (B2SA). For this reason, awareness of healthy consumption patterns needs to be carried out from an early age, both through formal and non-formal education.

3.2. Food Security Policy in Temanggung Regency

The portrait of food security in Temanggung Regency can be seen based on four aspects of food security, namely: i) food availability; ii) food distribution; iii) food consumption; and iv) hopeful food pattern. The realization of food security in Temanggung Regency is a synergy and interaction of these four aspects. In general, food security problems in Temanggung Regency include the availability of food over time and between regions and if not anticipated properly, it has the potential to cause food insecurity, price fluctuations in several food commodities are quite sharp, consumption levels of animal foods are relatively expensive and tend to increase. has increased, the potential for local food and its processed products has not been optimally utilized through a comprehensive movement, safety issues for fresh and processed food (such as pesticide/drug residues in vegetables and fruit, harmful ingredients in fish) have so far been under-touched, and the integration of programs and activities between OPD related to food security matters is not yet optimal. One of the indicators used to map consumption patterns is the expected food pattern score (PPH). The PPH score shows the diversity of people's food consumption, where the more diverse, the higher the PPH score. Until mid-2017, the PPH score for Temanggung Regency was 78.87. This PPH achievement is still far from the PPH score target of 90, so it can be said that the diversity of community consumption patterns in Temanggung Regency is not optimal. Policy recommendations for achieving food security in Temanggung Regency emphasize institutional strengthening, food diversification, and support for local processed food R&D.

3.3. Model of Strengthening Food Security

First. Strengthening institutions, increasing coordination and synergy across sectors in managing the availability and handling of food insecurity, distribution, prices and food reserves as well as food consumption and security. The strengthening of food security institutions is carried out through the synergy of the central government, provincial government, Temanggung district government, the private sector, and the community

from the district to the village level. The Temanggung Regency Government should continue to strive to socialize these institutions and encourage active participation of the private sector and the community so that they have the widest opportunity to play a role in realizing food security in Temanggung Regency. In accordance with its duties, the central government plays a role in facilitating the creation of conducive conditions through the establishment of macro policies that are directly and indirectly related to the realization of national food security. Meanwhile, local governments provide opportunities for the public and the private sector to contribute to the realization of regional food security and must rely on local food resources that contain diversity and must be avoided as far as possible depending on food imports/food imports.

Second. The Temanggung Regency Government needs to issue policies that are oriented towards spurring rural economic growth (farmers) while increasing regional food production through diversification of food commodities. Policy instruments that can be carried out are in the form of guidance on modern agricultural cultivation through commercial oriented agricultural mechanization (agribusiness), so as to increase farm productivity and provide benefits for farmers. Policy support can also be provided through increasing farmers' access to credit and improving the quality of credit services through soft loans to improve storage, transportation, and marketing of agricultural products. Meanwhile, access to important production inputs such as fertilizer can be realized by re-implementing the fertilizer subsidy policy.

Third. Increased support for research and development of local food. The existence of research and development to spur the productivity of local non-rice commodities is very necessary considering the dependence of the government and the people of Temanggung Regency on one of the food commodities, namely rice. With the R&D of processed food, the diversity of processed food can be carried out, so that people can get used to consuming daily food from various types of processed food. Innovations resulting from these R&D activities can be disseminated through empowering local communities by fostering community creativity in producing and consuming various types of processed food.

4. Conclusions

Food Security is one of the important dimensions in term of protection the component of human rights, due to the fulfillment of food needs will be closely related to improving the quality of human resources. The crisis related to meeting food needs during the Covid-19 pandemic has become a global concern,

Based on data from the National Socio-Economic Survey (Susenas) conducted by the Central Statistics Agency every year, it is known that the average monthly per capita expenditure for food and non-food groups in Temanggung Regency continues to increase. Consuming ready-to-eat food and beverages turned out to be the most preferred choice in Temanggung in meeting their food needs, and the habit of consuming tobacco or cigarettes was actually greater than consuming vegetables.

The portrait of food security in Temanggung Regency can be seen based on four aspects of food security, namely: i) food availability; ii) food distribution; iii) food consumption; and iv) hopeful food pattern. The strengthening of food security institutions is carried out through the synergy of the central government, provincial government, Temanggung district government, the private sector, and the community from the district to the village level. Policy instruments commercial oriented agricultural mechanization (agribusiness), so as to increase farm productivity and provide benefits for farmers.

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Conflict of Interest

The authors have no conflict of interest

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