

## Population Data Policy To Overcome Severe Food Insecurity in Central Java Province of Indonesia Amidst Covid-19 Pandemic

By

Yusuf Munandar

Fiscal Policy Agency, Ministry of Finance, Republic of Indonesia

Corresponding Author: yusuf.munandar@kemenkeu.go.id

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### ABSTRACT

To overcome the problem of the severe food insecurity in the Central Java Province of Indonesia amidst the Covid-19 outbreak, the Indonesian government provided staple foods assistance. The research question is whether the provision of staple foods assistance will overcome the problem of severe food insecurity in Central Java Province of Indonesia. The purpose of this study was to determine whether the provision of staple foods assistance would overcome the problem of severe food insecurity in Central Java Province. This research method is a descriptive analysis using 2019 Susenas data obtained from BPS Indonesia. The result of the study is that the provision of staple foods assistance cannot overcome the problem of severe food insecurity in Central Java Province of Indonesia because it is based on DTKS data and local government data which only covers 54.69% of all residents of Central Java Province who suffer from severe food insecurity. The recommendation of this research that the Indonesian central and local government should update DTKS data and local government data as soon as possible so that DTKS data and local government data include all residents of Central Java Province who suffer from severe food insecurity.

**Keywords:** Food Insecurity, Local Government, Social Assistance

### ABSTRAK

*Untuk mengatasi masalah munculnya kerawanan pangan tingkat berat pada penduduk di Provinsi Jawa Tengah akibat dari wabah Covid-19, pemerintah Indonesia memberikan bantuan sosial berupa sembako. Pertanyaan penelitian ini adalah apakah pemberian bantuan sosial berupa sembako tersebut akan mengatasi masalah kerawanan pangan tingkat berat pada penduduk di Provinsi Jawa Tengah. Tujuan penelitian ini adalah untuk mengetahui apakah pemberian bantuan sosial berupa sembako akan mengatasi masalah kerawanan pangan tingkat berat pada penduduk di Provinsi Jawa Tengah, Indonesia. Metode penelitian ini adalah analisis deskriptif menggunakan data Susenas tahun 2019 yang diperoleh dari BPS Indonesia. Hasil penelitian adalah bahwa pemberian bantuan sosial berupa sembako tidak bisa mengatasi masalah kerawanan pangan tingkat berat pada penduduk di Provinsi Jawa Tengah, Indonesia karena didasarkan pada data DTKS dan data pemerintah daerah yang hanya mencakup 54.69% dari seluruh penduduk di Provinsi Jawa Tengah yang menderita kerawanan pangan tingkat berat. Rekomendasi penelitian ini adalah pemerintah Indonesia baik pemerintah pusat maupun pemerintah daerah agar memperbarui data DTKS dan data pemerintah daerah agar supaya data DTKS dan data pemerintah daerah mencakup seluruh penduduk di Provinsi Jawa Tengah yang menderita kerawanan pangan.*

**Kata Kunci:** Kerawanan Pangan, Pemerintah Daerah, Bantuan Sosial

**INTRODUCTION**

Based on 2019 Susenas data, the number of individuals who were living in Central Java Province and suffering from severe food insecurity in 2019, was 579,501 people or 1.67% of all residents in Central Java Province in 2019, totaling 34,661,084 people. This number also represents 9.79% of the total number of Indonesians suffering from severe food insecurity which amounts to 5,921,307 people. This figure represents 0.22% of the total population of Indonesia in 2019.

In the midst of the current Covid-19 outbreak, the Food and Agriculture Organization of the United Nations (FAO) is particularly concerned about the potential impacts of the Covid-19 virus and concerned about the related containment efforts on food security and livelihoods in contexts of high vulnerability and where populations are already experiencing food crises (Food and Agriculture Organization of the United Nations (FAO), 2020). Fortunately, there is growing awareness and acknowledgment in the health care community that health outcomes and disparities are primarily driven by social determinants of health than by medical care. Poverty and food insecurity are social determinants of health, and are associated with some of the most serious and costly health problems in the nation (Food Research and Action Center (FRAC), 2017). This awareness will encourage the Indonesian people to help overcome the health problems.

According to FAO et al. (2019), people facing severe food insecurity have likely run out of food, experienced hunger and, at the most extreme, gone for days without eating, putting their health and well-being at grave risk. While Furness et al. (2004) defined food insecurity as “limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways”.

Related to health aspects, in their study, Siefert et al. (2004) and Gundersen and Ziliak (2014) noted that food insufficiency is associated with poor physical and mental health. According to Siefert et al. (2004), food insufficiency in 1998 was significantly associated with meeting the diagnostic screening criteria for recent major depression. These mean that food insufficiency is associated with poor physical and mental health. While Gundersen and Ziliak (2014)’s research has shown that beyond low income, whether transitory or permanent, key factors that predict a child’s food insecurity include the mother’s mental and physical health, as well as her current and past substance abuse, residential instability, living in households without both parents present, living in a household where noncustodial parents make inconsistent or no child support payments, whether it is summertime, when school meals are not offered, and whether the parents are immigrants. Longitudinal studies in Canada which is conducted by Ke and Jones (2015) indicate that hunger is related to poor health outcomes, including a higher risk of depression and suicidal ideation in adolescents, and chronic conditions, particularly asthma. Paradoxically, Cash and Zilberman (2006) found that although individuals with poor food security might be expected to have reduced food intake, and therefore a lower likelihood of being overweight, some empirical evidence has indicated that overweight status is actually more prevalent among the food insecure.

In relation with housing, King (2018)’s research findings suggest that maintaining a strong social safety net (strong food security) would reduce the risk that families experience material hardship and housing instability, which may also reduce the risk of homelessness, and vice versa. While according to Gundersen et al. (2003), families more prone to homelessness have higher levels of food insecurity.

In relation with disaster, according to Clay and Ross (2020), food insecurity prevalence among disaster-affected households has been found to be higher than state prevalence in non-disaster times. While in relation with government assistance, the evidence of Borjas (2004)’s study indicates that a 10 percentage point cut in the fraction of the population that receives public assistance increases the fraction of food-insecure households by about 5 percentage points. Cook et al. (2006) state that participation in the Food Stamp Program (FSP) modified the effects of food insecurity (FI) on child health status and hospitalizations, reducing, but not eliminating them.

In relation with household income, Furness et al. (2004)'s research concluded that food insecurity is a significant public health problem among low-income households in Los Angeles County, so food assistance programs should focus efforts on households living in and near poverty, those with children, and those with a history of homelessness. While Gundersen and Ribar (2005) find that reports of food hardships are positively associated with food expenditures and negatively associated with needs. When expenditures are scaled by a subjective threshold, the study observe near-universal reporting of food problems at low levels of expenditures.

In relation with social and political aspects, food insecurity is both cause and a consequence of political violence. This statement was stated by Brinkman and Hendrix (2010). According to Brinkman and Hendrix (2010), there is a small but consistent body of findings linking food insecurity to increased risk of democratic failure and increased protests and rioting, communal violence, and civil conflict. These conflicts, in turn, create widespread food insecurity, malnutrition, and in some instances famine. So food security is key for political stability.

Based on the explanation above, severe food insecurity will have a negative impact on Indonesia, both from the economic and social political sides. On the other hand, Indonesia is facing a potential problem of severe food insecurity as a result of the Covid-19 pandemic. To prevent severe food insecurity as a result of the Covid-19 pandemic, the Indonesian government provided social assistance in the form of staple foods (*sembilanbahanpokok/sembako*) to the population including to residents of Central Java Province who suffer from severe food insecurity. The targeted population and also residents of Central Java Province who suffer from severe food insecurity was contained in the Integrated Social Welfare Data (*Data TerpaduKesejahteraanSosial/DTKS*) or in local government data. According to the Regulation of the Minister of Social Affairs of the Republic of Indonesia Number 5 Year 2019, Integrated Social Welfare Data (DTKS) is an integrated data containing details of the need for social welfare services, recipients of assistance and social empowerment, and the potential and sources of social welfare. This DTKS data contains details about who has the right to receive social assistance including: (a) social welfare rice assistance (*bantuansosialberassejahtera/bansosrastra*), (b) Family Welfare Card (*KartuKeluarga Sejahtera/KKS*), (c) conditional transfer Conditional Cash transfer (*Program Keluarga Harapan/PKH*), (d) Smart Indonesia Program (*Program Indonesia Pintar/PIP*), and (e) Non-Cash Food Aid (*BantuanPangan Non Tunai/BPNT*). DTKS data is updated all the time when there is data update from the lowest level, namely the Neighborhood Association (*RukunTetangga/RT*). However, given the situation and conditions that change rapidly, it is raising a question whether the provision of staple foods (*sembako*) assistance to residents of Central Java Province of Indonesia who suffer from severe food insecurity and the provision is based on data DTKS and local government will be able to reduce or cure the severe food insecurity. This study aims to answer this question.

## METHODS

The study was conducted in May 2020. The data used are secondary data, namely 2019 Susenas data obtained from the BPS-Statistics Indonesia. This research uses descriptive analysis method which aims to create a systematic review of an issue by analyzing data and facts and concluding a research object (Loeb, et al., 2017). This study uses the FIES approach to measure food insecurity in Central Java Province of Indonesia. Food Insecurity Experience Scale (FIES) which is developed by FAO, is an indicator that provides a perspective on global food insecurity relevant for all countries of the world: one that looks beyond hunger towards the goal of ensuring access to nutritious and sufficient food for all. The approach relies on data obtained by directly asking people through surveys about the occurrence of conditions and behaviors that are known to reflect constrained access to food. Based on their responses to the FIES Survey Module items, the individuals surveyed are assigned a probability of being in one of three classes, as defined by two globally set thresholds: food secure or marginally insecure, moderately food insecure, and severely food insecure (FAO et al., 2019). For 2019 Susenas data, individuals experiencing severe food insecurity are individuals who answered Yes to 2019 Susenas questions item number 1707 or item number 1708.

## RESULTS AND DISCUSSIONS

In this study, the definition of people who suffer from severe food insecurity are people who have experienced feeling hungry but did not eat due to lack of money or other resources to get food, in the past year, or people who have never eaten all day due to lack of money or other resources to get food, for the past year.

The government's effort to provide staple foods (*sembako*) aid to residents of Central Java Province who suffer from severe food insecurity whose names are contained in the DTKS or local government data will not be able to reduce or cure severe food insecurity in Central Java Province. This is because the number of people who are living in the Central Java Province and suffering from severe food insecurity and recorded in the DTKS data or local government data is only 316,918 Out of 579,501 people or only 54.69% of the entire population suffering from severe food insecurity in Central Java Province. The rest are not in the DTKS data and also not in the local government data, so they will not receive staple foods (*sembako*) assistance and will continue to suffer from severe food insecurity.

Table 1. Residents Who Live in the Central Java Province and Suffer from Severe Food Insecurity and are Recorded in the DTKS Data or Local Government Data

No	Type of Government Assistance Received	Received only 1 type of social assistance	Received more than 1 type of social assistance
1	Social welfare rice assistance ( <i>bansosrastra</i> )	7,033	15,169
2	Family Welfare Card (KKS)	15,518	136,148
3	Conditional Cash transfer (PKH)	1,826	162,835
4	Non-Cash Food Aid (BPNT)	39,843	245,123
5	Assistance/subsidy from local government	14,734	50,162
6	Smart Indonesia Program (PIP) SD/equivalent	16,254	108,898
7	Smart Indonesia Program (PIP) SMP/ equivalent	2,133	45,004
8	Smart Indonesia Program (PIP) SMA/ equivalent	435	38,341
9	Receiving more than one type of government social assistance	219,142	----
Total		316,918	----

Source: BPS-Statistics Indonesia (2019), processed

As can be seen in table 1, there were 7,033 people who are living in Central Java Province and suffering from severe food insecurity and only receiving social welfare rice assistance (*bansosrastra*). But the number of people who live in Central Java Province and suffer from severe food insecurity and receive not only welfare rice social assistance but also other type of social assistance.

Likewise, the population of those who lived in Central Java Province and suffered from severe food insecurity and received only a Family Welfare Card (KKS) was 15,518 people. But the population of those who lived in Central Java Province and suffered from severe food insecurity and received Family Welfare Card (KKS) and also received other social assistance amounted to 136,148 people.

The number of people who lived in Central Java Province and suffered from severe food insecurity and received only the Family Hope Program (PKH) was 1,826 people. But the number of people who lived in Central Java Province and suffered from severe food insecurity and received the Family Hope Program (PKH) and also received other social assistance amounted to 162,835 people.

The population who are living in Central Java Province and suffering from severe food insecurity and receiving only Non-Cash Food Aid (BPNT) is 39,843 people. But the population who are living in Central Java Province and suffering from severe food insecurity and receiving Non-Cash Food Aid (BPNT) and also receiving other social assistance amounts to 245,123 people.

The population who are living in Central Java Province and suffering from severe food insecurity and receiving only Smart Indonesia Program (PIP) SD/equivalent is 16,254 people. But the population who are living in Central Java Province and suffering from severe food insecurity and receiving Smart

Indonesia Program (PIP) SD/equivalent and also receiving other social assistance amounts to 108,898 people.

The population who are living in Central Java Province and suffering from severe food insecurity and receiving only Smart Indonesia Program (PIP) SMP/equivalent is 2,133 people. But the population who are living in Central Java Province and suffering from severe food insecurity and receiving Smart Indonesia Program (PIP) SMP/equivalent and also receiving other social assistance amounts to 45,004 people.

The population who are living in Central Java Province and suffering from severe food insecurity and receiving only Smart Indonesia Program (PIP) SMA/equivalent is 435 people. But the population who are living in Central Java Province and suffering from severe food insecurity and receiving Smart Indonesia Program (PIP) SMA/equivalent and also receiving other social assistance amounts to 38,341 people.

The population who are living in Central Java Province and suffering from severe food insecurity and receiving only social assistance or subsidy from local government is 14,734 people. But the population who are living in Central Java Province and suffering from severe food insecurity and receiving social assistance or subsidy from local government and also receiving other social assistance amounts to 50,162 people.

As many as 262,583 people or 45,31% of the total population who live in Central Java Province and suffer from severe food insecurity (which is totaling 579,501 people) are not in the DTKS data and also not in the local government data. If the provision of staple foods (*sembako*) assistance to residents who live in Central Java Province and suffer from severe food insecurity is based solely on DTKS data and local government data, then the provision of staple foods (*sembako*) assistance will not reach their hands, so they will continue to suffer from severe food insecurity that could lead to death.

The data above is 2019 Susenas data, in the current Covid-19 pandemic situation, the number of people who are suffering from severe food insecurity is almost certain to increase. Effort must be made by the Indonesian government so that residents who experience severe food insecurity, especially those who live in Central Java Province, no longer experience food insecurity, is expanding data on potential staple foods (*sembako*) recipients. First, getting the RT (*RukunTetangga*) administrator to update the DTKS data and the local government data as soon as possible with the new beneficiary criteria. Second, at the same time the central government and local government fielded personnel to the field to collect data on potential staple foods (*sembako*) recipient residents, who have not been recorded in the DTKS data and local government data.

The above efforts must be carried out by Indonesian government as quickly as possible even though the risk that must be taken is to add an error in entering people who might not have the right to receive the staple foods (*sembako*) assistance (inclusion error). Another risk that must be taken is the increase in the budget that must be provided by the Indonesian government, both the central and regional governments. In the midst of declining economic activities so that tax revenue also decreases, when the budget increases, the Indonesian government can relax or widen the deficit of the state budget revenue and expenditure (*AnggaranPendapatan dan Belanja Negara/APBN*).

## CONCLUSIONS

Provision of staple foods (*sembako*) assistance to residents who are living in Central Java Province and suffering from severe food insecurity based solely on DTKS data and local government data that has not been expanded and updated will make the assistance reach only around 54.69% of the population. Some of the population (45.31%) will not receive it so they still suffer severe food insecurity and can lead to death.

To overcome this, the Indonesian central government and regional governments must update DTKS data and local government data as soon as possible so that all residents who suffer from severe food insecurity, especially residents who live in Central Java Province, can be cured or reduced.

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