IJISET - International Journal of Innovative Science, Engineering & Technology, Vol. 10 Issue 06, June 2023
ISSN (Online) 2348 – 7968 | Impact Factor – 6.72
www.ijiset.com

Household Food Insecurity in West Nusa Tenggara Province in the Time of Covid – 19 Based on March 2020 SUSENAS DATA

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ABSTRACT

Food insecurity is a global issue that is of great concern not only in poor and developing countries but also in developed countries. Condition Food insecurity has worsened since the start of the Covid-19 pandemic. Social distancing and economic contraction caused many people to lose employment and income and increased poverty. West Nusa Tenggara Province was one of the most economically affected provinces at the start of the Covid-19 pandemic. Economic growth in the first quarter of 2020 was recorded only grew 2.3 percent quarter to quarter, and there has been an increase the percentage of poor people is 1.11 percent, the highest in Indonesia as of March 2020. This study examines the effect of household characteristics in West Nusa Tenggara Province on their food insecurity status at the start of the Covid-19 pandemic. Data that used was the March 2020 Susenas which was analyzed descriptively and logistic regression. The research results show there are still households in West Nusa Tenggara province with status food insecurity at the start of the Covid-19 pandemic. In general, households are those with food insecure status are poor households, do not have social security, not working, and have less than a high school education

Keywords: *food insecurity, west nusa tenggara, covid -19.*

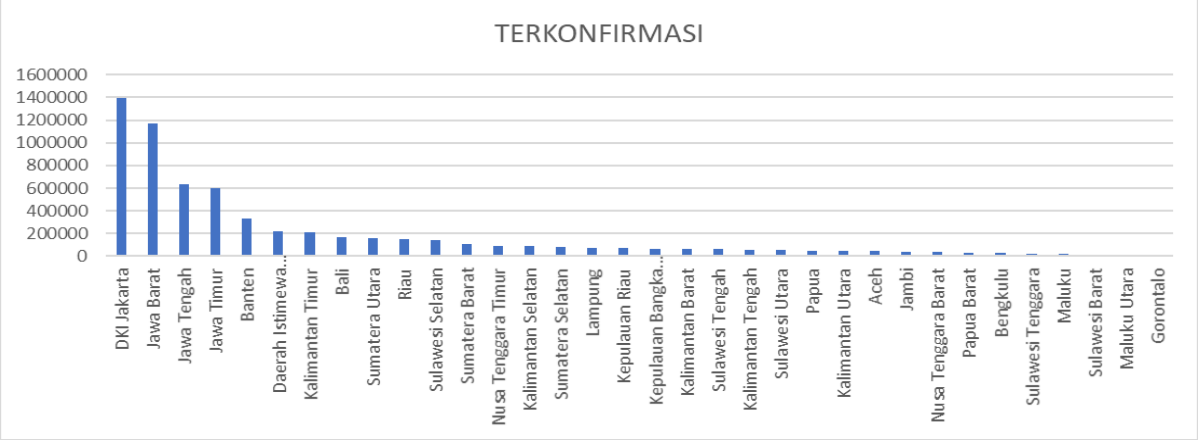
1. INTRODUCTION

Food insecurity is a global issue of concern in poor and developing countries and developed countries (Conceicao et al., 2016). Alleviation of food insecurity is a sustainable development goal in several points of the Sustainable Development Goals (SDGs), including no hunger or no poverty. This SDG target was also ratified by the Indonesian government in the 2015-2019 National Medium-Term Development Plan (RPJMN) through the realization of economic independence, one of which is by increasing food sovereignty, as well as in the 2020-2024 RAPJMN through the mission of inclusive economic development for just and equitable welfare. , one of which is the fulfillment of food.

Food insecurity can occur due to the lack of food availability and access to food for the community. This is a paradox, considering that Indonesia has widespread and fertile land (Suhariyanto, 2011). The Food Security Agency classifies food insecurity as occurring repeatedly at certain times due to economic reasons/poverty (chronic). It can also occur due to emergencies such as natural disasters or social disasters (transient).

The Global Report on Food Crises notes that the world's population experiencing food insecurity tends to continue to increase, bringing the total to 193 million people in 2021. Pprolonged or intensifying conflict situations, economic shocks related to Covid-19, extreme weather, or a combination of these factors," as the Global Report on Food Crises 2022. According to Chief Economist of the World Food and Agriculture Organization (FAO) Maximo Torero, the international community must prepare a medium and long-term strategy to make this situation manageable. "In the medium and long term, actions needed to increase climate and economic resilience to reduce the price of nutritious food," Torero said in a press release, Monday (20/6/2022).

Figure 1. Number of Covid-19 cases by province in Indonesia as of September 2022 :



Source: Task Force for Handling Covid-19, processed

One of the provinces affected economically due to the Covid-19 pandemic is the Province of NTB. The slowdown in the global economy also affected economic growth in the first quarter of 2020 in the Province of NTB, which only grew 2.3 percent quarter to quarter (BPS, 2020). This economic performance led to an increase in the percentage of poor people by 1.11 percent. The increase in the provincial poverty depth index was 0.19 percent. Higher than the national figure (BPS, 2020).

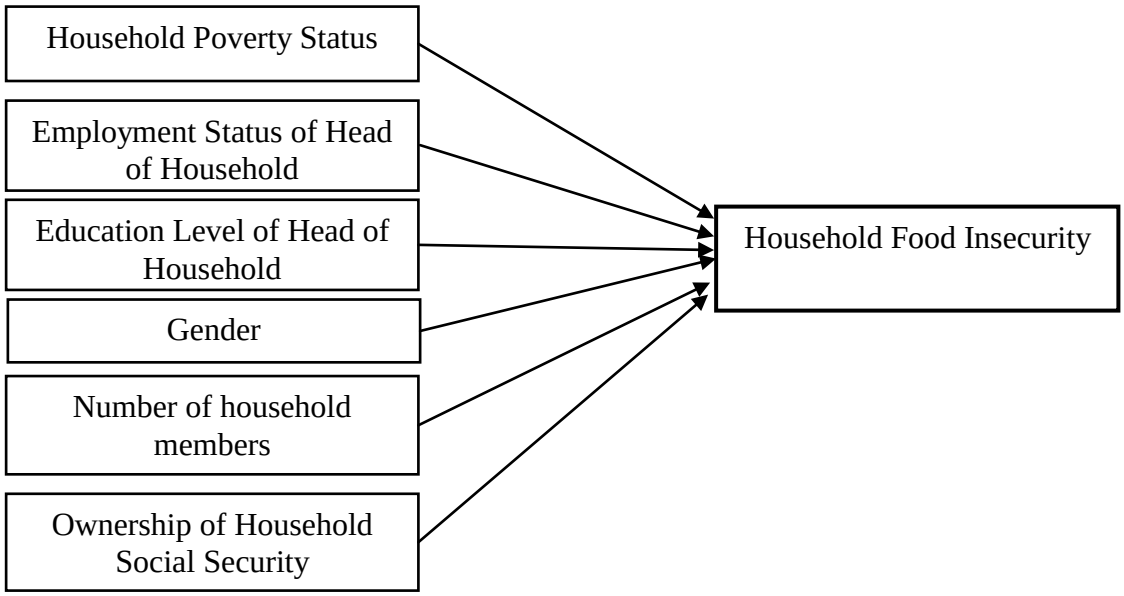
This portrait of poverty and slowing economic growth identifies an increase in food insecurity in the Province of NTB during the Covid-19 pandemic, even though NTB Province is a province with the majority of the population working in the agricultural sector.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Food insecurity is measuring using a food insufficiency approach to determine food insecurity status. Various factors, including social and economic factors, influence household food insecurity. This study analyzes household food insecurity based on its characteristics. The characteristics of the household analyzed were; the poverty status of the household, the employment status of the head of the

household, the level of education of the head of the household, the sex of the head of the household, the number of household members and social security.

Food insecurity is a condition of inability to access sufficient and nutritious food for normal and healthy growth and development of the body due to the unavailability of food and a lack of resources to obtain food (FAO, 1998). Specifically, the United States Department of Agriculture (USDA) states that food insecurity refers to the lack of financial resources available to access food at the household level based on its characteristics. The characteristics of the household to be analyzed are the poverty status of the household, the employment status of the head of the household, the education level of the head of the household, the sex of the head of the household, the number of household members, and social security ownership. Here is the framework that was built.



The research hypothesis test convincing evidence that something is happening or has happened (Turkey, 1986). The hypothesis aims to provide direction for the research to be carried out, prevent researchers from conducting trial and error research, help researchers avoid confusing variables, and allow researchers to quantify variables (Morissan, 2015).

Based on the problems and framework that have been described previously, the research hypothesis can be formulated as follows:

1. Households with poor status are more likely to be food insecure than households with non-poor status when the independent variables are constant.
2. Households with heads of households who do not work are more likely to be food insecure than households with heads of households who work when the independent variable is constant.
3. Households with heads of households with high school education and below are more likely to be food insecure than households with heads of households with high school education when the independent variable is constant.
4. Households with female heads are more likely to be food insecure than households with male heads when the independent variable is constant.

5. An increase in the number of household members will increase the tendency for household food insecurity when other independent variables are held constant.
6. Households that do not have social security are more likely to be food insecure than households with heads of households who have social security when the independent variable is constant.

3. METHODS

The type of research that will be used is an associative quantitative research type, namely research that asks about the relationship between two or more variables, Sugiyono (2013: 57). The relationship used in this study is a causal. A casual relationship is a causal relationship, which consists of independent variables (variables that influence) and dependent (variables that are influenced) according to Sugiyono (2013: 59). This study aims to analyze the influence of the variables that affect food insecurity in households residing in the province of NTB during the Covid-19 pandemic. The data used comes from data from the 2020 National Socioeconomic Survey (Susenas) by the Central Statistics Agency, whose enumeration was carried out in March 2020. The unit of analysis used is the household.

The population is a generalized area consisting of objects or subjects with specific qualities and characteristics determined by researchers to be studied and then drawn concluded (Sugiyono, 2005:72). The population in this study are households in the province of NTB. The sample is part of the population's characteristics (Sugiyono, 2005:73). The samples obtained from raw data from the Central Statistics Agency were 6,955 household samples.

The implementation of the March 2020 Susenas covered 320,000 sample households spread across all provinces and 514 districts/cities in Indonesia, whereas for the September 2020 Susenas there were 75,000. This research has a research location in the province of NTB. The raw data from the Central Bureau of Statistics is a sample of 6,955 households.

The analytical method used in this research is descriptive analysis and inflectional analysis. The descriptive analysis uses graphs and tables, while inference analysis uses first logistic regression. The data in this study is raw data for the March 2020 National Susenas of NTB Province with selected variables. Furthermore, each variable is coded to suit the purpose of this study.

Data processing in this study states the final weight (FWT) available in the March 2020 Susenas data sheet for descriptive analysis. Final Weight (FWT) is a sampling weight/weight that includes strata and clusters in its manufacture.

4. RESULT & DISCUSSION

Data analysis and hypothesis testing in this study were carried out using SPSS version 22.0 software. Determine the significance level of coefficient at the significance level of 0.05. The hypothesis will be supported if the p-value is smaller than the critical value of 0.05 (5%). The results of the significance level test can be seen in the table below.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	X1	,879	,191	21,175	1	,000	2,407
	X2	-,521	,191	7,423	1	,006	,594
	X3	-,032	,155	,042	1	,838	,969
	X4	,170	,200	,717	1	,397	1,185
	X5	-,059	,057	1,094	1	,296	,942
	X6	2,990	1,005	8,846	1	,003	19,894
	Constant	-6,064	1,031	34,567	1	,000	,002

a. Variable(s) entered on step 1: X1, X2, X3, X4, X5, X6.

Households with poor status are more likely to be food insecure than non-poor one when the independent variables are constant.

The coefficient value of 0.879 with a p-value of 0.000 (same as an error tolerance value of 5% (0.05) is significant. The test results show that X1 (poor status) positively and significantly effct household food insecurity.

The coefficient value on the household poverty status variable (β 1) is of 0,879. The positive sign on the value of β1 shows that the probability of a poor households to be food insecure status is greater than households are not poor.

The study's results align with previous studies. Which state the high tendency of poor household to hane vulnerable status food (Lee and Frongillo, 2001; Onime and Tamuno, 2021).

Households with heads of households who do not work are more likely to be food insecure than households with heads of households who work when the independent variable is constant.

The coefficient value of X2 (Employment Status) is -0.521 with a p-value of 0.006 (lower than the 5% error tolerance (0.05) meaning that Employment Status has a negative and significant effect on Household Food Insecurity.

The coefficient value of the KRT employment status variable (β2) is as big as -0,521. The negative sign on the value of β 2 shows the odds of a house Households with head of household do not work for a greater food insecure status compared to households with working households.

The study'a results align previous studies, stating the employee status strongly correlates with the vulnerability status of food (Tolossa, 2010; Etana and Tolossa, 2017).

Households with heads of households with high school education and below are more likely to be food insecure than households with heads of households with high school education hen the independent variable is constant.

The X3 coefficient (Education) is -0.032 with a p-value of 0.838 (greater than 5% (0.05) error tolerance means that Education has no significant effect on Household Food Insecurity.

The coefficient value on the education level variable (β3) is as big as 0,838. The positive sign on the value of β 3 shows the odds of a house households with household heads with less than high school

education for food insecure status larger than households with household heads with high school education and above.

The results of this study are in line with previous studies which stated that better education would increase household opportunities earn better income so it will lower the rate food insecurity (Nwokolo, 2015; Alves, 2012).

Households with female heads are more likely to be food insecure than households with male heads when the independent variable is constant.

The X4 coefficient (gender) is 0.170 with a p-value of 0.397 (greater than 5% (0.05) error tolerance means that gender has no significant effect on household food insecurity.

An increase in the number of household members will increase the tendency for household food insecurity when other independent variables are held constant.

The X5 coefficient (number of household members) is -0.059 with a p-value of 0.296 (greater than 5% (0.05) error tolerance means that the number of household members has no significant effect on household food insecurity.

Households that do not have social security are more likely to be food insecure than households with heads of households who have social security when the independent variable is constant.

The X6 coefficient (Household Social Security Ownership) is 2.990 with a p-value of 0.003 (lower than 5% (0.05) error tolerance means that Household Social Security Ownership has a significant effect on Household Food Insecurity.

The coefficient value on the household social security ownership variable (β6) is equal to 2.990. The positive sign on the value of β 6 shows that opportunity a household that does not have social security for vulnerable status more food than households that have social security.

The results of this study are in line with previous research which states households that are protected by social safety nets tend to experience reduction in levels of food insecurity (FAO, 2011; Schmidt, Sheppard & Watson, 2016)

5. CONCLUSIONS

From the results of the research and discussion above, the conclusions of the research that can be drawn are :

1) Poverty status positively and significantly effect on household food insecurity. The higher the poverty status, then the higher the household food insecurity.
2) Employment status negatively and significantly effect on household food insecurity. The stronger the employment status, the lower the food insecurity.
3) The level of education has a negative and insignificant effect on household food insecurity.
4) Gender has a positive and insignificant effect on household food insecurity
5) The number of household members negatively and insignificantly effect on household food insecurity.
6) Ownership of social security positively and significantly effect on household food insecurity. If households have social security, they will be able to avoid household food insecurity.

6. RECOMMENDATIONS

Based on the conclusions, there are several suggestions, namely:

1. The need for government efforts with the community to develop employment through labor-intensive industries that are able to absorb lots of staffing.
2. Improving the quality of human resources (HR) through training skills, free courses, and the growth of an entrepreneurial spirit so that after following the skills training, can develop potential to create jobs.
3. Measures are needed to increase community participation in the ownership of social security as an effort alleviation of household food insecurity

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