Assessment of Food Security, Food Independence and Community Welfare in Food Insecure Areas

Angelina Shierly Febriani¹

Universitas Pembangunan Nasional Veteran Yogyakarta¹ JI. Padjajaran, Condongcatur, Kec. Depok, Kab. Sleman, DIY, 55283 Corespondence Email: angelina.shierly2202@gmail.com

ARTICLE INFORMATION

Publication information

Research article

HOW TO CITE

Febriany, A. S. (2023). Assessment of Food Security, Food Independence and Community Welfare in Food Insecure Areas. *Journal of International Conference Proceedings*, 6(6), 52-63.

DOI:

https://doi.org/10.32535/jicp.v6i6.2702

Copyright @ 2023 owned by Author(s). Published by JICP



This is an open-access article. License: Attribution-Noncommercial-Share Alike (CC BY-NC-SA)

Received: 07 October 2023 Accepted: 06 November 2023 Published: 04 December 2023

ABSTRACT

This study aims to analyze the factors that affect food security and its impact on the welfare and economic growth of Javanese societv. This research method is correlation analysis with primary sources in the form of books and secondary sources in the form of articles and internet pages. This research is the result of a long-term correlation analysis as an effort to improve economic stability has an attachment between variables that affect the functions of Food Security, Food Independence, and Welfare which affect each other not enough with just one element standing alone. Food Security has a two tailed Pearson correlation that shows strong and positive results on food self-sufficiency and welfare. Food security, food self-sufficiency and welfare are very complex. The success of the program is also the shared responsibility of all components of the Nation and the Republic of Indonesia.

Keywords: Economy, Food, Independence, Resilience, Welfare

INTRODUCTION

The position of food in the hierarchy of human life is second to clothing, food and shelter. Food is one of the basic needs so that meeting food needs is part of everyone's rights and obligations. Food is everything that comes from biological sources that is intended as food and drink for human consumption, with all its abilities always trying to meet its needs in various ways (Refina, Husaini, & Yanti, 2020).

The need for food is included in the main focus and important focus in national development, so that improving food security is a common problem, both the community and the government of Indonesia. The existence of food security shows the strength of national resilience. Food security is not an issue that can be ignored. It can be seen from the historical development of Indonesia that food shortages can have a negative impact on the socio-economic situation and also have a negative impact on political stability in Indonesia.

Efforts to improve food security, food independence and community welfare still face various challenges and problems, including; increasing the utilization of local resources, increasing food production capacity, dependence on imported food, and a large proportion of the population experiencing food insecurity and experiencing poverty in Indonesia.

In an effort to improve the quality of life of the Indonesian people, the government has conducted various policies, such as policies in agricultural development and food security (Dirhamsyah, 2016). These policies are expected to contribute to encouraging economic development. Agricultural development means growth and equity in economic development including several factors, including; (1) Production contribution, (2) Market contribution, (3) Contribution of production factors, (4) Foreign exchange contribution.

Another crucial issue is the quality of human resources and limited human capabilities. This makes development difficult for underdeveloped countries to fulfill. Unequal education is the main reason why the quality of human resources is low. The global reality causes concerns that the world is experiencing a food crisis, and this is looming over all countries, both poor countries, developing countries, and developed countries (Dewi and Ari, 2012: 65).

Food Security Policy is a key pillar in national development. Food security is also synonymous with national security. Food is also an important issue not only in Indonesia but also in all countries in the world. As the source of all Indonesian laws, the 1945 Constitution mandates that state officials provide guarantees to citizens in order to live in physical and mental prosperity. This means that food is very important as one of the main components in achieving a prosperous life, both physically and mentally. Law No. 18/2012 on Food explicitly states the obligation to realize food security and that the government together with the community must realize food security. In realizing food security must involve all parties.

Food security is a complex phenomenon related to many aspects, so centralized efforts must be fit for purpose. The definition of food security changes from one period to the next, so the universal notion of food security should contain core meanings and practices. Food security is an international issue that has led to a global food crisis. This is the background of this research.

Based on this description, the problem formulation in this study is first, what is the condition of Food Security in Indonesia. Second, what are the efforts to realize and improve Food Security, Food Independence and Community Welfare for Food Insecure Areas in Java?

The purpose of this study is to provide research results on food security that have a relationship with food self-sufficiency efforts and efforts to realize community welfare in food insecure areas. This research is expected to be a reference and a means of learning science that is useful for increasing knowledge and concern for the welfare of the community. This research is also a tool to provide information and an overview of food conditions in Indonesia, which will then be taken into consideration in making and implementing government policies.

LITERATURE REVIEW

Definition of Food Security

Food security has always been an issue in development in Indonesia since the old order era until now. Food Security has references in various laws and regulations, among others: (a) Law No. 5 of 1984 on Industry (State Gazette 1985 No. 22, Supplement to State Gazette No. 3274); (b) Law No. 32 of 2009 on Environmental Protection and Management, and (c) Law No. 41 of 2009 on Protection of Sustainable Food Agricultural Land. These various food-related legal documents serve as the basis for the implementation of food security development. Government policy in providing food security can be seen from the government's active role in building a good and *resilient* system. The success of the food security program is also closely related to other national development policies such as policies on poverty alleviation and macroeconomic policies (Salasa, 2021).

Law No. 18/2012 on Food in article one provides a definition of food security as "the condition of food fulfillment for the state to individuals, which is reflected in the availability of food that is sufficient in quantity and quality, safe, diverse, nutritious, equitable and affordable and does not conflict with religion, beliefs and culture of the community, to be able to live healthy, active and productive lives in a sustainable manner". Meanwhile, the World Food Organization (FAO) provides a definition of food security as a condition in which the availability of food that meets the needs of everyone both in terms of food quality and food quantity at all times to live healthy, active and productive lives (Salasa, 2021).

The FAO conference in 1984, as stated by Soetrisno (1995), established the basics of food security, which in essence guarantees the adequate availability of food for mankind and the guarantee of each individual to be able to obtain food. The definition of food security was refined during the International Congress of Nutrition (ICN) held in Rome in 1992 in Suhardjo (1996) as follows: Household food security is the ability of households to meet the food sufficiency of its members from time to time in order to live healthy and be able to carry out daily activities. However, in the 1995 session of the Committee on Work Food Security in the above definition was expanded by adding the requirement that it must be accepted by the local culture. The definition was reaffirmed in the Rome Declaration on World Food Security and the 1996 World Food Summit Follow-up Plan as food security is realized when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their needs in accordance with their tastes for an active and healthy life (Saliem & Ariani, 2002).

Food security is also defined as a condition of food availability as the country's ability to produce an adequate amount of food for all consumers at an affordable price. Food security is an issue at the family level, up to the regional level with two important elements, namely food availability and access to sufficient food (Dirhamsyah, 2016). The concept of food security is emphasized to be a system composed of various factors, namely (a) Availability of supply, (b) Food distribution, (c) Accessibility of the wider community (purchasing power), (d) Choice of various commodities by households.

The food security system in Indonesia comprehensively includes four sub-systems, namely: (i) food availability in sufficient quantities and types for the entire population, (ii) smooth and equitable food distribution, (iii) food consumption of each individual that meets the adequacy of balanced nutrition, which has an impact on (iv) the nutritional status of the community. Thus, the food security and nutrition system are not only concerned with food production, distribution and provision at the macro level (national and regional), but also with the micro aspects, namely food access at the household and individual levels and the nutritional status of household members, especially children and pregnant women from poor households. Although conceptually the notion of food security includes micro aspects, in daily implementation it is still often emphasized on the macro aspect of food availability. In order not to neglect the micro aspect, the terms food security and nutrition are used in this document (Suharyanto, 2011: 187).

Definition of Food Independence

Self-reliance is the essence of independence. Standing on one's own feet, as the nation's fighters used to say. So, development must also be oriented to bring independence. Independence does not mean self-isolation and closing cooperation with other countries (defensive attitude). Independence is more interpreted as optimizing domestic capabilities and continuing to cooperate with other countries in a fair manner. Food self-sufficiency itself is the ability to produce food or food self-sufficiency. Independence is more demanding on the competitiveness of traded products, while self-sufficiency is an import substitution scheme. The ability to produce food is supported by food security institutions that are able to ensure the fulfillment of food needs at the household level (Hakim & Irawan, 2021).

Self-reliance is an absolute requirement for national resilience. One of the strategic steps in maintaining national resilience is through food security efforts. The role of food is very significant for a nation. The first President of Indonesia, Soekarno, said that food issues are the life and death of a nation (Azahari, 2008: 175-6). The realization of food self-sufficiency involves three things. First, increasing domestic food production based on local resources in providing a minimum energy of 2,200 kcal/capita/day, and a minimum protein energy of 57 g/capita/day. Second, increasing the *land-man ratio* through the establishment of perennial land (irrigated and dry). Third, increasing the capacity of food reserve management. Fourth, increasing the reach of distribution networks and food for producers and consumers. Finally, increasing the government's ability to anticipate and respond to food and nutrition insecurity problems (Heryadi et al., 2021: 21). Food security has shifted commodity orientation to nutrition orientation (nutritional adequacy), which can be sourced from various commodities. Thus, there is an open policy intervention in the national food security strategy (Hanafie, 2005: 43-44).

Definition of Community Welfare

Welfare is subjective. Welfare describes a person's satisfaction with the income and consumption obtained. The level of satisfaction is relative based on the amount of income earned. Welfare is divided into two, namely welfare that can be measured (*material*), and *non-material* (spiritual) welfare that cannot be measured. According to the World Health Organization (WHO), there are six categories of well-being, namely (1) Physical, (2) Psychological, (3) Level of independence, (4) Social relations, (5) Environment, and (6) Spiritual.

Welfare itself is the main goal of most people today. Global data shows that *human welfare* tends to increase over time. Out of 132 countries, 64 countries experienced an increase in welfare from 2005 to 2018, 42 countries experienced a decrease, and the remaining 26 countries showed no change. On the other hand, the world is also faced with an undeniable problem, which is currently running with the scenario of global warming and *climate* change. This is grading the quality of human life, the impact of which can be seen clearly such as flooding, rising sea levels, hotter dry season temperatures, and various other impacts of global warming (Anggraini, Komala, & Purwana, 2019). These factors can then disrupt the food security of a region.

In Indonesia, the Constitution mandates policy makers to provide welfare for all people. Furthermore, the 1945 Constitution supports the concept of a *Welfare State*, which explicitly provides great authority for the government to manage resources as much as possible to realize public welfare (Ferryono, Pudjihardjo, & Prasetyia, 2022: 117).

According to Albert and Hannel, welfare theory can be broadly divided into three types: classical utilitarian, neoclassical welfare theory, and the new contractarian approach. The classical utilitarian approach emphasizes that satisfaction and pleasure can be measured and increased. Individually, the principle is to maximize welfare measures. In society, the main point is the achievement of group welfare. The neoclassical welfare theory approach emphasizes the welfare function of each individual. Welfare theory evolved over time, and a new contractual approach emerged, in which it emphasized the promotion of maximum individual freedom. This freedom is in order to realize their ideas about goods and services without interference (Ernawatiningsih, Budhi, Marhaeni, & Yuliarmi, 2023).

Empirical Review

This research uses Tedy Dirhamsyah's book entitled *Food Security, Food Independence and Community Welfare towards Food Insecure Areas in Java* as a primary source. The book was chosen because it contains a complete description of the theme of food security. As the first reference source, the book facilitates understanding.

Conceptual Framework

The conceptual framework contains the tools used by researchers to guide research. In the book used as the first reference, the conceptual framework contains the variables studied, namely the condition of food security, food self-sufficiency and community welfare. The research structure contains a table of research results and discussion, including research questions, literature review, methods, and data analysis.

RESEARCH METHOD

Analysis Method

The basic method used is descriptive analysis research method. The method will examine the status of a human group, an object, a condition, a system of thought, and an event by giving a description of the relationship between phenomena and hypotheses. This research is the result of a long-term correlation analysis as an effort to improve economic stability has an attachment between variables that affect the functions of Food Security, Food Independence, and Welfare which affect each other not enough with just one element standing alone.

The data used as a primary source is a book entitled "Food Security: food independence and community welfare in food-insecure areas in Java" by Tedy Dirhamsyah published in 2016, which uses a survey method to obtain data in the field.

RESULTS

This results section contains a table of research results sourced from the main book in the form of quantitative data, as follows:

Table 1. Level of Food Security According to Several Institutions and Experts

Undang- Undang Pangan (2012)	FAO (1996)	Badan Ketahanan Pangan dan Depkes	WNPG X (2012); Kartono et al (2012)	Jonsson dan Tolle (1991)	LIPI (2004)
Kecukupan pangan bagi negara sampai perorangan: • Jumlah • Bermutu • Aman • Beragam • Bergizi • Merata dan terjangkau • Tidak bertentanga n dengan agama, keyakinan, dan budaya	Kecukupan tingkat individu: • Aman • Bermutu • Bergizi • Sesuai dengan preferensi konsumen	Konsumsi energi (2.000 kkal perkapita perhari- AKE): • Tahan pangan (91-110% AKE) • Rawan pangan (70- 90% AKE) • Sangat rawan pangan (< 70% AKG)	Tingkat konsumsi: • Angka Kecukupan Energi (AKE) 2.150 kkal perkapita perhari • Angka Kecukupan Protein (AKP) 57 gram perkapita perhari • Tingkat ketersediaan: • Angka Kecukupan Energi (AKE) 2.400 kkal perkapita perhari • Angka Kecukupan Protein (AKP) 63 gram perkapita perhari	Indikator pangsa pengeluaran pangan dan konsumsi energi ekuivalen orang dewasa: • Tahan pangan (< 60% pengeluaran total dan > 80% kecukupan energi) • Rentan pangan (260% pengeluaran total dan > 80% kecukupan energi) • Kurang pangan (<60% pengeluaran total dan ≤ 80% kecukupan energi) • Kurang pangan (<60% pengeluaran total dan ≤ 80% kecukupan energi) • Rawan pangan (260% pengeluaran total dan ≤ 80% kecukupan energi)	Kombinasi antara kontinyuitas ketersediaan pangan dengan kualitas/keama nan pangan: • Konsumsi protein hewani dan atau nabati. Dimana ada beberapa tingkat ketahanan pangan: • Tahan pangan • Kurang pangan • Tidak tahan pangan

Sumber: Undang-Undang Nomor 18 tahun 2012 tentang Pangan; FAO, 1996; Badan Ketahanan Pangan, 2011; Departemen Kesehatan, 1996; Widya Karya Pangan dan Gizi (WNPG X), 2012; Kartono et al (2012); Jonsson dan Toole (1991) dalam Maxwell, D et al (2000); dan Puslit Kependudukan LIPI, 2004.

Table 2. Measures of Community Welfare

(Pola Pangan Harapan	diaan energi (2.150 +2.400 = hari-AKE); setara 1,251 kg			
/PPH)-maksimal bernilai				
100	> 1,251 kg beras < 1,251 kg beras			
>78 PPH	Sejahtera Cukup sejahtera			
<78 PPH	Cukup sejahtera Miskin			

According to BKP (2006), to calculate the conversion of weight of grains into energy is used: 275 grams of grains (rice) is equivalent to 1.000 kkal. So, the sum of the consumption level (2.150 kcal per capita per day) and the availability level (2400 kkal per capita per day) is 4,550 kcal equivalent to: (4.550/1000) x 275 grams ~ 1,251 kg of rice per capita per day or 456,6 kg per capita per year.

Kabupaten-	Tingkat Kesejahteraan Masyarakat							
Provinsi	Sejaht	tera	Cukup Sejahtera		Miskin		Total	
	Jumlah	%	Jumlah	%	Jumlah	%	Jumlah	%
Pandeglang- Banten	0	0	7	11,67	53	88,33	60	100
Sumedang- Jabar	0	0	7	11,67	53	88,33	60	100
Brebes- Jateng	2	3.33	4	6,67	54	90	60	100
Bantul-DIY	0	0	14	23,33	46	76,67	60	100
Pacitan- Jatim	0	0	2	3,33	58	96.67	60	100
Jawa	2	0.67	34	11,33	264	88	300	100

Table 3. Distribution of Community Welfare Levels in Food Independent VillageSites in Java

Source: Primary Data Analysis 2013.

Table 4. Factors Affecting Food Security, Food Independence and Community Welfare at Food Independent Village Sites in Java

Variabel	KP	KMP	KM
	Coefficient	Coefficient	Coefficient
Pendidikan kepala keluarga	0,1481	-0,0201	0,6834
Pendapatan rumah tangga	0,1464	-0,1067	-0,0972
Jumlah anggota rumah tangga	-1,8276***	-1,4568***	-2,5699***
Luas lahan	0,1166***	0,4296***	0,3651***
Kegiatan penting Demapan	0,1155*	0,1415*	0,2205***

Dummy daerah aliran sungai	0,2030	-0,9779	2,8389**
Dummy agroekosistem pantai	1,0846	-3,0390***	2,5803**
Dummy pertanian perkotaan	2,3931***	0,8894	2,7067**
Dummy lahan kering	0,2625	1,5613**	0,2697
	0,2377	0,623631	0,3521

Source: Primary Data Analysis 2023.

Keterangan:

*signifikan pada a 10%, ** signifikan pada a= 5%, dan ***signifikan pada a = 1% KP Ketahanan Pangan; KMP = Kemandirian Pangan; KM = Kesejahteraan

Table 5. Correlation between Food Security, Food Independence and Community Welfare in Food Independent Village Sites in Java

		KP	KMP	KM
KP	Pearson Correlation		0,679**	0,679**
	Sig. (2-tailed)		,000	,000
	Ν	300	300	300
KM	Pearson Correlation	0,679**	1	0,645**
	Sig. (2-tailed)			0,000
	Ν	300	300	300
KM	Pearson Correlation	0,679**	0,645**	
	Sig. (2-tailed)	0,000	0,000	
	Ν	300	300	300

**Correlation is significant at the 0.01 level (2-tailed).

DISCUSSION

Discussion of Table no. 1, which shows an overview of food consumption in Indonesia, the energy consumption of the population, and the protein consumption of the population. Food consumption of the population is calculated by multiplying the amount of food consumed by the specified food conversion. Population energy consumption is calculated by multiplying the amount of food consumed by food conversion and the energy content of each commodity consumed.

Table 2 discusses that in this study, the measure of welfare level is a combination and modification of the Food Poverty Line (FPL) in terms of the adequacy of the level of energy consumption, plus the adequacy of the level of energy availability with the quality of food consumption measured in the *Deserible Dietery Pattern* (Pola Pangan Harapan/PPH). The poverty line is used to determine the number of poor and non-poor people who can be seen from the income of the population equivalent to the price of a kilogram of rice, namely the price of 240kg of rice/cap/year per year for rural areas, and 360kg of rice/cap/year for urban areas.

The discussion in Table 3 shows that Food Independent Village households in Java. Two households (3.33%) reached the prosperous level in Brebes district. Fourteen households (23.33%) reached the moderately prosperous level in Bantul district, Yogyakarta.

Discussion of Table 4, which shows an overview of factors affecting food security, food self-sufficiency and community welfare at food self-sufficient village locations in Java.

The discussion of Table 5, which is to determine the relationship between food security, food self-reliance and community welfare, uses a *two-tailed* Pearson correlation analysis, which shows that food security has a positive correlation of 0.769 with food self-reliance, and a correlation value of 0.679 with welfare. Food self-sufficiency has a positive correlation of 0.645 with welfare.

The State of Food Security in Indonesia:

During the New Order era, the main focus of policy and implementation of agricultural development in rural areas was on increasing food production in a centralized, unidirectional and uniform manner. The main food production was rice. An important program was the "Green Revolution" based on new technology, the spread of superior seeds, and the increased use of chemical fertilizers.

Indonesia's commitment to improving development, one thing that is no less important is to refer to the strategy. According to the Food Security Council, the strategy for realizing food security is a *twin-track strategy*, namely (1) building an agricultural and rural-based economy to provide employment and income; and (2) fulfilling food for the poor through direct assistance so that these communities cannot rise from the worst conditions, as well as efforts to empower these communities to be able to meet food security independently.

What the government refers to in determining the location of the community poverty line, namely BPS research in 2011 which measures welfare from the Poverty Line (GK), including; (1) The concept of minimum needs proxy average expenditure of Rp. 263. 594.00 per capita per month in urban areas, and Rp. 223. 181.00 per capita per month in rural areas for the non-food poverty line. (2) The minimum food requirement is 2,100 kcal per capita per day for the food poverty line. The value of the poverty line used by the government to meet basic needs at the minimum limit for food and non-food is called the poverty line.

The main problems of food security and poverty are essentially problems of rural community development. The direction of development should be focused on efforts to empower and prosper rural communities. The Food Independent Village Program (Desa Mapan) is an empowerment activity for food-insecure village communities with characteristics that have low quality human resources, limited capital resources, low access to technology, and limited infrastructure. The process of community empowerment in the Food Independent Village Program is carried out through training, mentoring, and improving aspects of development, inclusive participation cooperation on individual capacity, the capacity of social and economic institutions, and of course food security (Dirhamsyah, 2016).

Efforts to improve community food security through various facilitations require the support of coordination and integration of cross-sector programs and activities. This is implemented in empowerment activities to achieve the objectives, namely the development of productive businesses based on local resources, increasing food availability, increasing household purchasing power, increasing household food access, which will slowly lead to the realization of food security and nutrition of rural communities. An increase in the area of agricultural land, paddy fields, dry land, and yard land is utilized to grow food crops, which will increase the amount of production and household food availability.

The scope of welfare is very broad and complete. Welfare is reflected in an increase in *output* per capita, which at the same time provides many alternatives in consuming goods and services, which has an effect on people's increasing purchasing power.

CONCLUSION

The condition of food security in Indonesia is still at a developing stage, which means that food security must be improved. In terms of building food security, food independence, and community welfare is very important to do. Food independence should not rely on one particular commodity such as rice because it will be very risky and dangerous, for that food diversification is very important. The development of non-rice staple foods can be done through local food processing. Local food industries at household, small to medium scale need to be built and developed in rural local food production centres.

The government must continue to expand agricultural land in order to increase domestic food production. Food security, food independence and welfare are very complex things (programs). For this reason, government programs to encourage and improve food security, food self-sufficiency and community welfare cannot be carried out partially or per-sector or per-sub-sector. It needs to be done simultaneously, synergized, holistic, and coordinated between ministries or institutions both at the central and regional levels. This success is of course also the shared responsibility of all components of the Nation and the Republic of Indonesia.

Efforts to realize and improve Food Security, Food Independence and Community Welfare towards Food Insecure Areas in Java, namely agricultural development for Food Security can basically achieve the ideal if it rests on "independence" and "alignment", in the sense that here farmers must be empowered to be independent in carrying out their activities and making decisions, and the government provides support and alignment to realize this independence. Assistance must also involve and mobilize all components of the nation, including of course the government, the community, NGOs, professional organizations, cooperatives, small and medium business actors, and other social organizations. The task of the community must be to see the factors that hinder progress so that they can find and find solutions for optimal results.

Although these programs succeeded in increasing national food production, without being supported by human resource development, human capacity building, and institutional capacity building, they ultimately did not prove to be able to maintain rice self-sufficiency (Dirhamsyah, 2016).

REFERENCES

- Anggraini, N., Komala, M., & Purwana, D. (2019). The effect of social connectedness and mindfulness on sustainable wellbeing. *Journal of International Conference Proceedings*, *2*(3), 316-320. doi:10.32535/jicp.v2i3.676
- Azahari, D. H. (2008). Membangun kemandirian pangan dalam rangka meningkatkan ketahanan nasional. *Analisis Kebijakan Pertanian*, 6(2), 174-195. doi:10.21082/akp.v6n2.2008.174-195
- Dewi, G. P., & Ginting, A. M. (2012). Antisipasi krisis pangan melalui kebijaakn diversifikasi pangan. *Jurnal Ekonomi Kebijakan Publik*, *3*(1), 68. doi:10.22212/jekp.v3i1.172
- Dirhamsyah, T. (2016). *Ketahanan Pangan: Kemandirian Pangan dan Kesejahteraan Masyarakat Daerah Rawan Pangan di Jawa.* Yogyakarta: Yogyakarta Plantaxia

- Ernawatiningsih, N. P. L., Budhi, M. K. S., Marhaeni, A. A. N., & Yuliarmi, N. N. (2023). Improving farmers welfare by enhancing the ability of information technology adoption: an event study of food crisis' threat. *Journal of The Community Development in Asia*, 6(1), 100-109. doi:10.32535/jcda.v6i1.2067
- Ferryono, B., Pudjihardjo, M., & Prasetyia, F. (2022). The impact of financial accountability, internal control and government expenditure on social welfare. *Journal of International Conference Proceedings*, 5(2), 116-127. doi:10.32535/jicp.v5i2.1678
- Hakim, L., & Irawan, I. A. (2021). Strategi membangun kemandirian pangan nasional dengan meminimalisir impor untuk kesejahteraan rakyat. *Indikator*, *3*(3), 353549. doi:10.22441/indikator.v3i3.7459
- Hanafie, R. (2005). Ketahanan pangan rumah tangga miskin pedesaan. *Agro Ekonomi*, *12*(2), 43-54. doi:10.22146/agroekonomi.16977
- Heryadi, D. R., Alexandfri, M. B., & Sari, D. S. (2021). Membangun kemandirian pangan dari rumah. *Sawala: Jurnal pengabdian Masyarakat Pembangunan Sosial, Desa dan Masyarakat*, 2(1), 19-27. doi:10.24198/sawala.v2i1.29958
- Saliem, H. P., & Ariani, M. (2002). Ketahanan pangan, konsep, pengukuran, dan strategi. *Forum Penelitian Agro Ekonomi, 20*(1), 12-24.
- Refina, E., Husaini, M., & Yanti, N. D. (2020). Ketahanan dan kemandirian pangan rumahtangga petani di lahan marginal desa semangat dalam kecamatan alalak kabupaten barito kuala. *Frontier Agribisnis*, *4*(4). doi:10.20527/frontbiz.v4i4.2936
- Salasa, A. R. (2021). Paradigma dan dimensi strategi ketahanan pangan Indonesia. *Jejaring Administrasi Publik*, *13*(1), 35-48.
- Soetrisno, N. (1995). Ketahanan Pangan Dunia: Konsep, Pengukuran dan Faktor Dominan. *Majalah Pangan*, *5*, 21.
- Suhardjo, S. (1996). Pengertian and kerangka pikir ketahanan pangan rumah tangga. *Lokakarya Ketahanan Pangan Rumah tangga*.
- Suharyanto, H. (2011). Food Security. *Journal of Social Humanities*, 4(2), 13.