

Implementation of Norway's Food Security Policy: A Review of Strategies for Achieving Food Security in Indonesia

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Abstract

Food security is a global issue that is increasingly urgent to be resolved along with world population growth, urbanization, and climate change. Norway, as a developed country with an efficient and innovative agricultural system, has become an exemplary example of achieving food security. On the other hand, Indonesia still faces many challenges in achieving optimal food security. In this context, this research reviews strategies for achieving food security in Indonesia and the implementation of Norway's food security policy. The literature study method was used to collect relevant information, and the results showed that the third strategy, which focuses on "ends," is the key to increasing food security. This strategy includes increasing national food independence, developing inclusive food supply chains, and increasing resilience to climate change and natural disasters. By considering strategies that have proven effective in Norway, Indonesia can identify concrete steps to increase food security in a sustainable manner.

Keywords: Food security, Norway, Indonesia, Strategy, Implementation

INTRODUCTION

Food security is a global issue that is increasingly urgent to be resolved, along with the increase in world population, urbanization, and climate change. During these challenges, understanding the concept and implementation of food security policies from countries that have succeeded in achieving them is very important. As a developed country with an efficient and innovative agricultural system, Norway has become an exemplary example of achieving food security. However, food security in Indonesia still faces many challenges, including low agricultural productivity, inequality in food distribution, and vulnerability to natural disasters.

| | Food security | Not food resistant |
|---------------------------|--|--|
| Food Self-Sufficiency | A: Example: USA, Kanada, Australia, Brunei, etc. | B: Example: Myanmar, Indonesia, Filipina. |
| Not Food Self-Sufficiency | C: Example: Norwegian, Japan, Singapura, etc. | D: Example: Malawi, Eritrea, Kenya, Kongo, East Timor. |

Table 1. Food Self-Sufficiency with Food Insecurity

Source: (Suharyanto, 2011)

Norway is one of the countries included in category C in the context of food self-sufficiency but has a strong food security foundation. Norway is not capable of being self-sufficient in food independently but has policies and systems that ensure high food security. This is achieved through agricultural and food policies that are oriented towards food security, diversification of food supplies from various sources, investment in food infrastructure, high awareness of food security issues among communities, and international cooperation on food matters. With a combination of these factors, Norway can maintain a strong food security foundation even though it relies on imports to meet domestic food needs. Food security is not just about the availability of sufficient food but it also involves equitable access to nutritious

food, stability food prices, and the sustainability of the food system. This concept is defined by the Food and Agriculture (FAO) as the condition when all people, always have sufficient physical and economic access to safe, stable and adequate food to meet their personal needs and food preferences in order to live a healthy and active organization life (Nurhemi et al., 2014). Based on data from (The Economist Newspaper, 2022), Indonesia is ranked 63rd out of 113 countries. The 2022 Global Food Security Index data provides an overview of global food security by measuring various factors that influence a country's ability to provide access to safe, affordable, and nutritious food for its population. This index covers aspects such as food availability (6.5%), physical and economic accessibility to food (31.8%), food quality and safety (17.7%), and food system resilience to climate change and natural disasters (6.9%).

A comprehensive state of global food security is achieved by considering several key aspects, including food availability, physical and economic accessibility to food, food quality and safety, as well as the resilience of food systems to climate change and natural disasters. In the Indonesian context, this data has great relevance because it makes it possible to analyze the country's food security status. Even though Indonesia has great agricultural potential, including fertile land and a variety of natural resources, challenges still exist in achieving optimal food security for its entire population. As a large archipelagic country, physical accessibility to food is an important concern, especially in remote or isolated areas. In addition, although food production can meet basic needs, food quality and safety are focused to ensure that the food provided is safe and nutritious for public consumption. Apart from that, Indonesia also needs to strengthen the resilience of the food system to climate change and natural disasters, which are increasingly occurring frequently. Therefore, through the analysis of the Global Food Security Index 2022 data, Indonesia can identify areas where improvement and innovation are needed to increase overall food security. This can help the government and other stakeholders formulate more effective policies to achieve sustainable and inclusive food security goals in Indonesia.

The World Bank responded to increasing global food insecurity by in short, the latest data shows that domestic food price inflation remains high, with more than half of low- and middle-income countries experiencing inflation of more than 5%. The agricultural and export price index rose, while the cereal price index fell. The increase in export prices was driven by increases in cocoa and cotton prices. However, corn and wheat prices fell, while rice prices remained stable. Despite this, annual rice prices increased by 26%. The state of global market stability was noted in the February 2024 AMIS Market Monitor Report, despite concerns regarding Brazilian soybean production and global shipping disruptions due to the geopolitical situation. Additionally, the latest report highlights the need for greater coherence between humanitarian and development financing to address the root causes of acute food insecurity. Additional impacts arise from new trade policies implemented by several countries following Russia's invasion of Ukraine, with increased food export bans potentially exacerbating the global food crisis (The World Bank, 2024).

In Indonesia, even though it has great agricultural potential, there are still many challenges that hinder the achievement of food security. Factors such as low investment in agriculture, lack of access to modern technology, unpredictable climate change, and unequal food distribution are serious threats that need to be addressed immediately. Food security in Indonesia faces complex challenges from climate change, the COVID-19 pandemic, and geopolitical conflicts such as the Ukraine-Russia War. The impact is felt through increases in domestic food prices and threats to global supplies. Indonesia, as an agricultural country, needs to strengthen the agricultural system and food security through measures to increase agricultural productivity, climate change risk management, and coordination between the government and farming communities. This effort is important to face the global crisis and ensure stable food availability in Indonesia (Alfarizi & Ngatindriatun, 2023). In this context, the implementation of

Norway's food security policy can provide valuable insights for Indonesia. A review of strategies for achieving food security in Indonesia can draw lessons from the approach implemented by Norway in facing similar challenges. By considering strategies and policies that have proven effective in Norway, Indonesia can identify concrete steps to increase food security in a sustainable manner.

RESEARCH METHODS

A literature study approach was used in this research to collect information from various relevant text sources, including scientific journals, books, government reports, and policy documents. The steps in this approach involve identifying literature relevant to the research topic, in-depth reading to understand various perspectives and related findings, and synthesizing information to support analysis and discussion. In (Habsy, 2017), the literature study method is used to collect data and sources related to research topics that focus on the implementation of Norwegian food security policies as well as strategies for achieving food security in Indonesia. The collected data was then analyzed using descriptive analysis methods.

Descriptive analysis aims to describe the facts that have been collected from the literature and provide an explanation and understanding of these facts. The objectives of this literature study include, among other things, identifying the problem to be researched, obtaining relevant information related to the research problem, as well as reviewing basic theory and empirical aspects related to the implementation of food security policies. Through literature studies, researchers can expand their knowledge about the problem to be researched, review previous research that is relevant to the research topic, and avoid duplication of the same research. This allows researchers to gain a better understanding of food security strategies that have been successfully implemented in Norway as well as identify lessons that can be applied in the Indonesian context, so that this research can make a significant contribution to overcoming food security challenges in Indonesia.

RESULT AND DISCUSSION

Based on Clauswitz's theory (Supriyatno dalam Wirapranatha et al., 2022), there are three main elements that influence war strategy, namely means, ways, and ends. The relationship between the implementation of Norwegian food security policies and strategic concepts is very closely related. This research will explain strategic points in the context of implementing Norwegian food security policies and review strategies for achieving food security in Indonesia, which directly influence national economic recovery.

First Strategy: Means (Means or Attributes)

Adequate agricultural infrastructure is essential to increasing productivity and food security. One important component of agricultural infrastructure is an efficient irrigation system. Good irrigation can increase water availability for plants, reduce the risk of drought, and increase crop yields. Using organic fertilizer is also an important strategy because it can increase soil fertility and minimize negative impacts on the environment. In addition, developing plant varieties that are resistant to climate change can help farmers overcome the challenges faced by climate change, such as floods, droughts, or more intense pest and disease attacks (Sutrisno & Hamdani, 2020) Then, investment in agricultural research and development is very important. important for increasing the productivity and efficiency of food production. This can include the

development of superior plant varieties that are more productive, adaptive, and resistant to various environmental conditions. Apart from that, research can also focus on agricultural technology innovation, such as the development of agricultural tools and machines that are more efficient and environmentally friendly (Fitria & Ali, 2014). And developing policies that support sustainable and environmentally friendly agriculture is important to ensure that the agricultural practices carried out do not damage the environment or existing natural resources. These policies could include fiscal incentives for farmers who adopt environmentally friendly farming practices, such as the use of organic fertilizers or no-burn farming techniques. Apart from that, policies can also focus on sustainable management of natural resources, including protecting agricultural land and forests and controlling water and air pollution (Vinata Wisnu Saputra et al., 2023).

Second Strategy: Way (Benefits)

In the context of "way" as a second strategy, which refers to the method or benefits of a program or policy, this understanding can be related to the method accepted by all parties involved, including aspects of financing and operational concepts. One important aspect of the "way" is ensuring that the methods or strategies adopted to increase access to nutritious food are accepted by all parties involved, including the government, non-governmental organizations, and society itself. This also involves arranging appropriate financing methods, such as budget allocations from the government for food subsidies or food assistance for underprivileged communities. An effective operational concept is needed to regulate food distribution evenly and efficiently so as to ensure that nutritious food is available in all areas, including remote or vulnerable areas (Ulum & Anggani, 2020).

Then, the food consumption diversification strategy must also be acceptable to all parties involved, including producers, distributors, and consumers. This includes financing arrangements to support promotion and education about nutritional diversity and its health benefits, which can be done through nutrition education programs or public health campaigns. The operational concept involves developing policies and guidelines that facilitate public access to various types of food and provide clear information about the diversity of foods that can be consumed. Furthermore, the development of public health and nutrition education programs, in the "way," must be based on a method that is accepted by all parties involved, including the government, health institutions, and the community. This involves adequate financing to support the implementation of these programs, such as funds for training health workers or nutrition education in the community. A clear operational concept is needed to organize and implement these programs effectively, including appropriate resource allocation and ongoing monitoring (Triastuti & Wijaya, 2023).

Third Strategy: Ends (Goals or Values)

To implement the Norwegian Food Security Policy and review strategies for achieving food security in Indonesia, the third strategy, which is "Ends" or the desired final goal, becomes the determining essence. The main aim of this strategy is to increase national food independence by strengthening local food production and simultaneously reducing dependence on food imports. In addition, the goal also includes increasing market access for small farmers and local producers through developing efficient and inclusive food supply chains, so that they can contribute significantly to the local and national economy. Furthermore, increasing resilience to climate change and natural disasters is an equally important priority. This is achieved through the development of early warning systems and effective risk mitigation plans, so that countries can be better prepared to face threats from climate change and natural disasters that are increasingly occurring (Susetyo & SI, 2008). By strengthening local food production, increasing market access for small farmers, and developing a system that is resilient to climate change, it is hoped that Indonesia can achieve a better and more sustainable level of food security.

Additionally, the role of the government in the form of legislation, such as the Regional Regulation of South Kalimantan Province Number 2 of 2020 concerning the Implementation of Food Security, is crucial. This regulation emphasizes the need for safe, high-quality, and affordable food for all citizens and delegates the authority to ensure food security to the provincial government, thereby supporting the overall objectives of the food security strategy.

CONCLUSION

Food security has become a global issue that is increasingly urgent to be resolved considering the ever-increasing world population growth, rapid urbanization, and the increasingly pronounced impacts of climate change. During these challenges, understanding the concept and implementation of food security policies from countries that have succeeded in achieving them is very important. Norway, as a developed country with an efficient and innovative agricultural system, has become an exemplary example in achieving food security. However, Indonesia still faces many challenges in achieving food security, such as low agricultural productivity, inequality in food distribution, and vulnerability to natural disasters.

In the context of this research, the results of a review of strategies for achieving food security in Indonesia and the implementation of Norway's food security policy show that the third strategy, which focuses on "Ends" or final goals, is the determining essence. The main objective of this strategy is to increase national food independence by strengthening local food production and reducing dependence on food imports. In addition, the goals also include increasing market access for small farmers and local producers through the development of efficient and inclusive food supply chains, as well as increasing resilience to climate change and natural disasters through the development of effective early warning systems and risk mitigation plans. Thus, through this combination of strategies, it is hoped that Indonesia can achieve a better and more sustainable level of food security, in accordance with the vision of implementing Norway's food security policy.

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