

# Development Strategy of National Food Sovereignty To Encounter Radicalism Threat

Didit Herdiawan , Ahmadi



**Abstract:** Higher demand for broader and possible growth of the problem of state instability. Nothing more than a problem triggers social conflict on a small scale to a large scale. This study aims to identify and study various reasons in Indonesia and also formulate conceptions to increase the responsibility of communities in remote areas. The qualitative method in this study was carried out descriptively based on literature studies. The approach used in this study is integral to the national paradigm and applicable regulations. The results of the study show that the concepts that are following the conditions of the community, increase competitiveness among the environment that can be accessed by the government and facilitate people to manage the natural resources of the region, conduct and implement site-specific management and develop economic management to produce superior products.

**Keyword:** Food Sovereignty, Government Strategy, Radicalism.

## I. INTRODUCTION.

The creation of food Sovereignty in a country is usually a contribution to and malnutrition [1]. Food Sovereignty there are various people, at all times, have physical, social and economic access sufficient, safe and nutritious food for their dietary needs and food preferences to be active and healthy life [2]. The fulfillment of food needs for the community is a fundamental problem that needs special attention from the government, considering that until now the Indonesian government still imports rice as a staple food. Indonesia as an agrarian and maritime country has abundant natural resources and has the number four population in the world. The largest population is a potential human resource to manage and process natural resources so that it is beneficial for community food Sovereignty as well as to improve the welfare of the Indonesian people.

Global food problems are very important and new economic phenomena that can cause serious emotions [3]. Food Sovereignty is a system consisting of the supply, distribution and consumption subsystems. The three subsystems are a unit that is supported by the existence of Natural Resources, institutions, culture, capital, and technology. Food Sovereignty development has a strategic meaning in national development.

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First, increasing people's income and macroeconomic performance, which has been proven during the crisis that agribusiness can be a buffer and an economic driver. Second, strengthening economic fundamentals, establishing a balanced economic structure and controlling the rate of inflation. Third, providing food and improving the nutrition and health of the Indonesian population.

Fourth, the preservation of the environment and culture, as well as the strengthening of social-political conditions and national resilience.

Food Sovereignty is an important problem for developed countries and developing countries [4]. Maintaining food Sovereignty at the country to household level is a major challenge for many people in developing countries [5]. Food is one of the most basic human needs. The challenge for food availability will continue to grow as the world continues to grow, That is expected to reach 9 billion people by 2050 [6]. Adequacy, accessibility, and quality of food that can be consumed by the whole community, are important measures to see how much the nation's resistance to each threat is faced. Food shortages will have a broad impact in various fields and can lead to state instability. Not infrequently this food problem has triggered the occurrence of social conflicts on a small scale to a large scale, as what is currently happening and continues to grow, namely the emergence of radicalism and terrorism movements. So important is the role of food in the life of a nation, so that the conditions and the fulfillment process become very sensitive problems.

Demand dynamics causes national food needs to increase in quantity, quality, and diversity. Meanwhile, the growth of national food production capacity is slow or even stagnant, because of the competition for utilization and decreasing the quality of natural resources. Conceptually and legally, the formulation of food Sovereignty policies is improving, sharp and directed, even though there are still human rights violations in the food sector. For example, around 40 percent of households are unable to meet food and nutrition needs for healthy living. About 2.4 million children under five suffer from malnutrition and 5 million children under five suffer from malnutrition. Besides, 7.5 million women aged 15-45 years suffer from malnutrition, about 50 percent of pregnant women and 30 percent of schoolchildren suffer from anemia, and about 18 percent of housewives are classified as poor. Indonesia is actively utilizing international trade opportunities for export and import of agribusiness commodities, including food. The biggest agribusiness commodity exports are in the United States and Japan. Whereas to ASEAN countries are relatively small, except Singapore.



Indonesia's largest imports from ASEAN countries are rice, especially from Thailand, whose numbers have increased significantly from year to year. Since 1995 rice imports from Thailand have reached 30 percent of Indonesia's total rice imports. Huge dependence on imports to meet domestic needs to be avoided because it will endanger economic stability and political stability. The fulfillment of food needs for the community is a fundamental problem that needs special attention from the government, considering that until now the Indonesian government still imports rice as a staple food. In this regard, efforts to improve food Sovereignty for Indonesian people in remote areas, need to improve regional superior products. This is one of the implementations of strategies in regional economic development independently since the enactment of Law No. 32 of 2004 concerning Regional Government.

An area with a superior product based on agriculture and food if pursued in an appropriate ecosystem can provide benefits. Besides, if superior products differ between regions, inter-regional trade will occur. This means an increase in trade, transportation and other services that greatly enlivens the regional economy, as a multiplier effect of agribusiness development. The positive impact of agribusiness development in the long term is the growth of agricultural cities as new growth centers in the regional development system.

The achievement of national food Sovereignty conditions will increase to the stage of achieving sustainable food independence on an ongoing basis. Furthermore, it will strengthen unity and unity which is the deterrent of the nation, to prevent the development of radicalism to strengthen national Sovereignty. Therefore, the Conception of Increasing the Food Sovereignty of Indonesian Communities in Remote Areas to Prevent the Development of Radicalism to Strengthen National Resilience needs to be developed and implemented seriously. Subset/interdependence between variables is the steady independence of food which is sustainable, and in turn, will strengthen unity and unity which is the nation's deterrent to prevent the development of radicalism.

This paper has many literatures to support the research, such as literature with title Factors That Influence Effective Strategic Planning Process In Organizations [7], Food Sovereignty [8], A Study on the Application of Food Sovereignty in International Law [9], Peasant activism and the rise of food sovereignty: Decolonising and democratising norm diffusion? [10], From protest to policy: The challenges of institutionalizing food sovereignty [11], Food sovereignty as decolonization: some contributions from Indigenous movements to food system and development politics [12], The impact of Indonesia's food law reform on the concept of food sovereignty in Indonesia [13].

This research is organized as follows, chapter I introduction, chapter II shows material and methodology, chapter III shows the results of data and discussion, chapter IV conclusions.

## II. MATERIAL AND METHODS

### 2.1. Geopolitical Theory

A review of recent transformations in international politics in Indonesia including a brief overview of territorial conflict, a new strategic environment, and a new pattern of cooperation between countries [14]. Rudolf Kjellen (1864-1922) stated that geopolitics is a geographical and a state which aims to analyze the problems and conditions of livelihoods in a country that arise due to geographic and environmental factors. Ecopolitics is a source of economy and the state, investigating the economic utilization of sources of state wealth that directly or indirectly affect the power of the state.

By exploring the geopolitics, in terms of agricultural development, we can understand the division of the region in accordance with the behavior and culture of the local population, Natural Resources, agro climates and superior commodities of agricultural products in each region in order to improve agricultural development and national food Sovereignty, taking into account the conditions space, agroclimatic, and demographics or habits of the population in managing the Natural Resources and soil fertility.

### 2.2. Agricultural Development Strategy Theory

Over the past three decades, structural changes have taken place in agriculture throughout the world as a result of globalization, economic liberalization, environmental regulations, rapidly changing communities, and reducing protection for increasingly complex and competitive agricultural markets [15]. Based on the views of each school of thought in understanding development in each country, various ways were born to achieve the desirable community order. Strategies that arise in terms of development cannot be separated from the problems faced by each country and the influence of the ideology they believe in.

Some classifications are put forward by experts such as the empirocautional, the normative educative, and the power coercive according to the classification of Chin and Benne (1969), the locality development, the social planning, and the social action according to Rhotman classification (1974). Crowfoort and Chelser (1974) classify development strategies into the professional technical, the politic, and the countercultural, while Christenson and Robinson share them in the self-help, the technical assistance, and the conflict.

Considering that most of our development so far has focused on material growth, it is only natural that a moral hazard colors the entire life of the nation. The color of humanity in our society that respects differences, togetherness and mutual help is lost along with the exposure of materialism.

### 2.3. Food Sovereignty in Remote Areas

Communities living in remote areas regionally will be vulnerable to food sovereignty problems, this is due to poverty, low income or welfare dependency, and lack of access to affordable and healthy food [16].

In the era of globalization, the agricultural sector has become very potential as a pillar of populist economic development. The role of the agricultural sector is felt to be increasingly important to the implementation of the free market era and regional autonomy.

The agricultural sector must not only be able to provide food, absorb labor, but also must be able to provide raw materials for the processed industry, and other products as a source of foreign exchange.

Also, with the establishment of the agricultural sector development program towards increasing food Sovereignty, and the creation of competitive, sustainable, democratic and decentralized systems and agribusiness ventures, the program implementation consists of the central and regional levels can be carried out by involving all national potential. The program to increase the food Sovereignty relies heavily on domestic capabilities by encouraging the utilization of natural resources in the region as a regional superior product, by developing agricultural agribusiness and agro-industry as a barrier to regional development.

The condition of national food Sovereignty has not yet reached the level of stability or lack of strength. Almost all aspects of supporting food Sovereignty are still shackled by problems. Starting from policies that have not been able to run consistently, food management is often oversized, to the weak anticipation of, environmental disasters, both in the form of long dry seasons and floods.

Unstable food Sovereignty conditions will certainly weaken national Sovereignty, especially in the face of Challenges, Threats, Obstacles, and Disturbances that are currently rampant, namely terrorism and radicalism.

#### 2.4. Food Sovereignty Prevents Radicalism

As a country with a vast archipelago and has a variety of customs, culture, and religion, is a land that is very vulnerable to the occurrence of SARA conflicts (ethnicity, religion, race, and between groups). This has the potential to lead to radicalism, both from the differences that exist, as well as those that occur due to a large scenario that does not want Indonesia to be a large and strong country.

Conflict will always be a threat to the Indonesian people, protracted problems in Aceh, Papua and even coupled with similar problems in other regions such as Kalimantan, Maluku and Central Sulawesi (Poso), suggesting the increasingly clear shadow of the threat. Apart from East Timor from the Unitary State of the Republic of Indonesia, in addition to being evidence of disintegration, if it can inspire those who are dissatisfied in other regions, to make similar efforts, to realize the goal of disintegration for the region. The threat of the conflict was indeed caused by many quite complicated factors. But, the root of the problem is the factors of poverty, hunger, social inequality and the growing sense of injustice in economic distribution. Some people in turbulent regions generally feel that their natural wealth continues to be squeezed, without economically equivalent returns. It has become a fact that is hard to argue, that in certain regions, especially in eastern Indonesia, people have to pay dearly to obtain basic needs in the form of food. Generally, the area is not a center of food, especially rice, so that the region is always dependent and relies on supplies from other regions that become rice barns

such as Java, Bali, West Nusa Tenggara, Sumatra, and South Sulawesi. Food Sovereignty is an important foundation for building a strong national economy. Because, this is directly related to the quality of human resources, which will later become an economic driving actor. Moreover, food Sovereignty is also in close contact with the creation of national stability, which is an important prerequisite for economic growth. Insufficient food availability can create economic instability. Various social and political upheavals can occur if food Sovereignty is disrupted. This critical condition causes the ability and deterrent of the nation to face each of the Challenges, Threats, Obstacles, and Disturbances to become weak and can even endanger national stability, such as the rampant acts of violence and chaos that can eventually develop into radicalism. Experience has shown that disruptions to food Sovereignty, such as rising rice prices during the monetary crisis can trigger social sovereignty that endangers economic stability and national stability. The crisis can easily be utilized by certain groups to realize their goals radically by making Indonesia insecure and unstable through its acts of terror.

#### 2.5. Increasing Food Sovereignty of Indonesian Communities in Remote Areas to National Resilience

Food Sovereignty is one of the pillars for the development of other sectors. This is considered strategic because no country can build its economy without first solving its food problems. Food sovereignty has the potential to trigger social, economic, cultural, political, and defense and Sovereignty vulnerabilities. Such conditions do not support the implementation of the overall development program which means that national sovereignty cannot be realized.

##### 1) Sovereignty in the field of Ideology

Violent conflict has changed in nature and dramatic in the last few decades [17]. In carrying out the management of agriculture for national food Sovereignty which does not prioritize social justice as well as conducting conglomeration practices in the food trade system, will trigger the vulnerability in the field of ideology, because each actor is not aware of the meaning of Pancasila values that are beneficial to the unity and national unity. Besides, conditions of increasing food Sovereignty are weak, resulting in economic hardships that greatly squeeze the lives of people, causing a shift in the values of life in society. This condition has been used by several radical groups to develop their influence in the community, including the NII movement (Negara Islam Indonesia) which in several regions has succeeded in recruiting its members from among the youth under the guise of religious activities to gain sympathy and succeed in forming militant cadres.

##### 2) Political Vulnerability

Most will appear and are determined by the short-term goals of the political response (Media sensitivity, political intervention, and inter-governmental coverage) and long-term goals of overall management [18].

The Political will for national food Sovereignty, the independence that has not taken sides in efforts to improve national food Sovereignty. Political commitment through national policies and campaigns on food diversification or food diversification that have not been implemented optimally makes food Sovereignty for people in remote areas increasingly low and vulnerable to disturbances and threats to national stability which ultimately lead to national disintegration.

In addition to the implementation of the Republic of Indonesia Law Number 32 of 2004 concerning Regional Government, has provided a wide opportunity for the region to build its area with the potential it possesses, including in the use and management of Natural Wealth Resources to improve food Sovereignty in the area.

This can spur the pace of development in the region to prosper the people. But along with that, there has been an increasingly strong regional spirit, which raises various problems that if not handled properly can threaten national unity and weaken National Resilience.

Besides, in the implementation of the development of remote areas received less attention from the Central and Regional Governments, where the facilities and infrastructure in the area are still very limited, the lives of the local community are still very poor, causing social jealousy and distrust of the government. Both central and regional. If this does not receive serious attention, it will greatly affect national Sovereignty in the region and the emergence of seeds of a disappointment for people in remote areas.

### 3) Sovereignty in the Economy

Understanding of the concept of connotation has different meanings such as danger; uncertainty; lack of Sovereignty, and lack of safety [19]. Indonesia's economic growth is still largely supported by the consumption and expenditure sectors. While domestic and foreign investment and exports have not shown any improvement, so they are vulnerable to economic shocks, as is the case with the current crisis.

The number of basic needs, such as food and industrial staple products that are still dependent on foreign supply is a big problem that must get attention and settlement because this dependency has economic implications.

On the contrary, the phenomenon that exists during the crisis is the superiority of products with high local content such as agricultural products, fisheries, plantations and others which are mostly carried out by popular business actors such as Small and Medium Enterprises and Cooperatives have not been able to become competitive and still the high number of people who are below the poverty line. Another fundamental problem in efforts to improve food Sovereignty is the increasing population at speeds exceeding the level of economic growth. Population growth will encourage the depletion of natural resources if it is not supported by the ability to value-added products, so the ability to carry out economic and social development in the long term will be difficult and disturbed by the possibility of social unrest in people's lives. The gap between the rich and the poor is the wider this can be seen in the lives of local people, there is a shortage of food in some areas, such as

NTT (East Nusa Tenggara) and some areas in Java, especially in the dry season.

The portrait of this gap is more clearly seen in several major cities in Indonesia, seen around the luxurious buildings there are slums with poor huts, and many street children (beggars). All images of this condition contain vulnerability to social jealousy which can lead to social conflict.

### 4) Sovereignty in the field of Social Culture

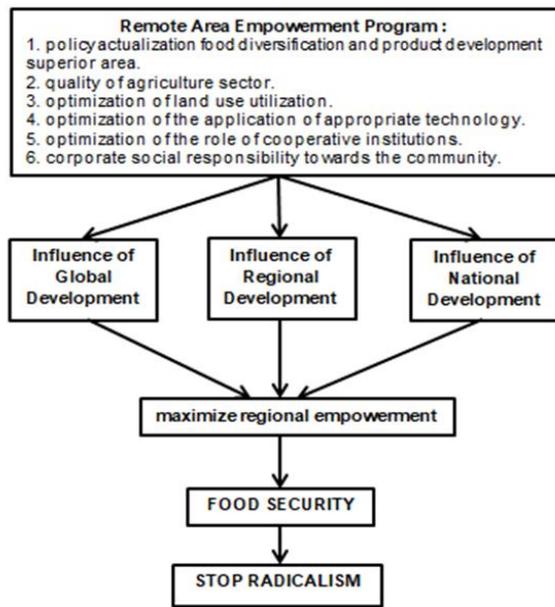
One of the negative consequences of crime is the existence of victims and violations. Fear of crime can damage individual health and community cohesion [20]. The economic crisis experienced by the Indonesian people since the end of 1997 has greatly influenced the ability of the community to fulfill food needs in their daily lives. Besides that, it causes a socio-cultural crisis in the life of the nation and the state. The socio-cultural crisis can be witnessed in various forms of disorientation and dislocation among many of our society. Development beginning with the agricultural sector has gradually shifted towards industrial development. The change in development orientation economically can accelerate the increase in the income of some people. However, behind that, growing gaps that continue to widen due to the uneven development results that are currently the base of various social problems. Changes in development orientation result in contracts of values of community life, and agrarian nuances that tend to move slowly but full of harmony, shifting towards a dynamic and competitive industry nuance that can result in the fading spirit of togetherness. The values of life conflict have brought damage to society, mental, moral and ethical society that reflects the decline of social life. Injustice has become a structural trait as well as coloring the behavior of individuals and society. Powerlessness results in the nature and attitude of not caring for the community, the attitude of being unable to appreciate the work, not being self-confident, the symptoms of self-deprivation and national culture which ultimately affects the weakening of National Sovereignty.

### 5) Sovereignty in Defense and Security

Two very important things to find at this time are conflict and sovereignty [21]. As a result of the political, economic, legal and social crisis, public trust in the government has resulted in a decline in national Sovereignty conditions. Various conflicts lead to conflicts in several regions and lead to radicalism, which is colored by religious, ethnic and cultural issues. This has caused loss of life and anxiety in the community. Such conditions can reduce farmer mobility in the processing, marketing and distribution of agricultural products in several conflict areas. Restrictions on freedom in the past which were driven by high unemployment rates, poverty which caused the low purchasing power of people in meeting daily food needs, have encouraged the emotions and attitudes of some people to do "freedom that tends to be excessive and irresponsible". The rise of democracy and reform today has been exploited by interest groups, resulting in criminal behavior that violates public order to endanger the integrity and sovereignty of the state.

**2.6. Thinking Framework**

From the description above, it can be seen that in order to develop the potential of an area, especially in remote areas, it is necessary to consider the advantages of resources,



**Figure 1. Flowchart of Food Sovereignty programs in Remote Areas**

**2.7. The conception of Increasing Food Sovereignty**

The real conditions regarding regional superior products show that each remote region, especially at the provincial level, has a list of potential leading commodities in the agricultural sector, which is carried out in different ways. In the era of regional autonomy, the development and enhancement of superior products are expected to be a locomotive for the people's economy, because the existence of the wealth of natural resources and human resources is owned by each autonomous region.

But in reality, the development of superior products is not easy to do, given the various obstacles. For example, the threat of extreme climate anomalies (global warming), socio-political turmoil (before and after the election), and a less conducive business investment climate.

In terms of paradigms and assumptions, food is not only based on rice. Thus, food diversification is one of the efforts to improve the superior product of the region have been very necessary. Therefore, taking into account the influence of the development of the strategic environment, both at the global, regional and national levels, as well as opportunities that can be utilized and pay attention to existing constraints. To optimize the development of the agricultural sector in the future in improving the welfare of farmers and the people of Indonesia, especially through increasing regional superior products, a policy is needed. The argumentation, reconstruction, and repositioning of agricultural policy is an institutional reform that must be formulated, tested, continuously reconstructed.

Thus, the integration of the agricultural sector into the macroeconomy and the creation of efficiency is achieved at the micro-level of modern farming and agribusiness. The policy must at least be able to provide a balance in achieving some of Indonesia's agricultural development goals. These

institutions, and culture, so as to produce agricultural products, processed by highly competitive agricultural industries, provide added value for regional economic development and improve the welfare of its managers.

include the welfare of farmers and communities, food Sovereignty and agricultural efficiency, industrialization processes and strategies, and international trade frameworks.

**2.8. Policy**

The main objective of the conception or policy formulation adopted in the development of agro-industry and agribusiness to improve superior products in remote areas. In particular, agriculture and food so that people in remote areas of Indonesia do not experience hunger.

By improving superior products, it is hoped that the community will be motivated to manage and process their natural resources. If superior products in different regions, almost certainly in each region can be developed production centers. So that there will be agropolitan cities.

Such conditions can provide a multiplier effect and will increase the income of the local community. Increasing people's income, the purchasing power of the people will increase, and individual food Sovereignty or family can be realized. In the next stage family, food Sovereignty will have an impact on the realization of regional food Sovereignty and national food Sovereignty.

**2.9. Research Design**

The approach used in this study is a qualitative approach through descriptive analysis based on literature studies. The approach used in this writing is integrally comprehensive by referring to the national paradigm and the prevailing legislation and national resilience as PESO (perspective, educative, systematic, and objective) analysis.

Target:

The purpose of this study was to provide an analysis of the importance of national food Sovereignty strategies to prevent the occurrence of radicalism.

Steps:

The step of this research is step 1 to examine the current condition of food Sovereignty, step 2 to do an analysis, step 3 to provide a conception of national food Sovereignty, step 4 concludes.

**III. RESULTS AND DISCUSSION**

**3.1. Strategy**

As a follow-up to the elaboration of the policies formulated above, 6 (six) strategies have been developed to improve food Sovereignty for Indonesian people in remote areas to prevent the development of radicalism to strengthen national Sovereignty as follows:

3.1.1 Strategy-1: Actualize food diversification policies and the development of superior products in remote areas through the method of regulation/deregulation, socialization, education, facilitation, coordination to improve food Sovereignty to prevent the development of radicalism.



This strategy is intended to actualize the government's commitment to realize a decentralized, bottom-up development, in the agricultural sector directed to develop an agribusiness approach in the perspective of increasing people's income. The facilitation role of the government is implemented in the form of macroeconomic policies and trade, service and regulation, provision of public infrastructure, and market intervention to create a fair food agribusiness market.

Agribusiness policy through the actualization of food diversification and development of superior products in remote areas that are competitive, populist, sustainable and decentralized. It is also intended to synergize with other national development sectors, especially in improving regional superior products.

In particular, agriculture and food to realize national food Sovereignty so that it can prevent the development of radicalism, with the methods used are facilitation, education, regulation/deregulation, socialization, incentives, and cooperation/partnership. The realization of this strategy requires a synergy between the superstructure, infrastructure, and substructure, especially from the parties of the government (central and regional), the House of Representatives / Regional Representatives, economic actors and financial institutions, as well as the public. Supporting facilities and infrastructure needed are mainly in the form of formal legality support, for example through laws, presidential decrees, regional regulations, and others.

**3.1.2 Strategy-2: Improve the quality of Human Resources** in the agricultural and food sectors, along with the support of the availability of facilities and infrastructure through methods of socialization, education, facilitation, coordination to improve food Sovereignty, to prevent the development of radicalism.

This strategy is aimed at realizing the quality of Human Resources in the agricultural and food sectors, especially the agricultural and food sector businesses, Small and Medium Enterprises managers and cooperatives, microfinance institutions, and more productive and competitive agricultural traders. Besides, it can manage and develop networks throughout the food economic system, which consists of the food supply subsystem, distribution subsystem, and consumption subsystem which interact with each other continuously. The quality of human resources in the agricultural and food sectors greatly influences the processes and results of agriculture and food production. Quality of Human Resources is needed because community participation starts from the production process, processing industry, marketing, and services in the field of food agriculture.

In the process of agricultural and food production, innovations are needed to implement and develop technology and maintain product quality. The higher the quality of agriculture and food human resources, the higher the ability to create innovations, including the off-farm industry in the downstream aspects.

Improving the quality of Human Resources needs to be supported by the availability of optimal agricultural facilities and infrastructure so that the development of agribusiness activities and improvement of food Sovereignty are realized which ultimately can support the prevention of radicalism

with the methods used are socialized, education, facilitation, and coordination.

The realization of this strategy requires a synergy between the superstructure, infrastructure, and substructure, especially from the parties of the government (central and regional), the House of Representatives / Regional Representatives, economic actors, and the public. Supporting facilities and infrastructure needed are the development of spatial plans and development programs, education and training facilities, and communication and dialogue forums.

**3.1.3 Strategy-3: Optimizing the function of agricultural land** through methods of socialization, education, facilitation, coordination to improve food Sovereignty to prevent the development of radicalism.

This strategy is intended to provide adequate access to agricultural land for business actors in the agricultural and food sectors, which is more than the current condition of agricultural land tenure. The provision of access to the land remains in the context of rural development by the spatial plan of the area in question.

Optimizing agricultural land is carried out in one connection with the development of other sectors, especially related to land management and regional development that can increase food production results so as to create a condition of national food Sovereignty that is able to support the prevention of radicalism, with the methods used include regulation/deregulation, socialization, education, facilitation, and coordination.

The realization of this strategy requires a synergy between the superstructure, infrastructure, and substructure, especially from the parties of the government (central and regional), the House of Representatives / Regional Representatives, economic actors, and the public. Supporting facilities and infrastructure needed are land management policies and space allocation, regional spatial plans, and law enforcement facilities.

**3.1.4 Strategy-4: Develop and implement appropriate technology** in the fields of agriculture and food through methods of socialization, education, facilitation, partnership cooperation to improve food Sovereignty, to prevent the development of radicalism.

This strategy aims to provide an appropriate alternative technology that can be used by agricultural and food business actors, based on local materials and technology or local wisdom, both as a result of the preservation of traditional or local technology, as well as the results of the development of regional R & D institutions.

The development of appropriate technology is a joint effort of all actors in the field of agriculture and food to improve food Sovereignty, to prevent the development of radicalism, using methods of socialization, education and partnership cooperation. The realization of this strategy requires a synergy between the superstructure, infrastructure, and substructure, especially from the parties of the government (central and regional), the House of Representatives / Regional Representatives, economic actors, and the public.

Supporting facilities and infrastructure needed are appropriate information technology systems that are easily accessible to rural communities, as well as cooperation and dialogue forums.

3.1.4 Strategy-4: Develop and implement appropriate technology in the fields of agriculture and food through methods of socialization, education, facilitation, partnership cooperation to improve food Sovereignty, to prevent the development of radicalism.

This strategy aims to provide alternative appropriate technologies that can be used by agricultural and food sector businesses, which are based on local materials and technology or local wisdom, both as a result of the preservation of traditional or local technology, as well as the results of the development of regional research and development institutions.

The development of appropriate technology is a joint effort of all actors in the field of agriculture and food to improve food Sovereignty, to prevent the development of radicalism, using methods of socialization, education and partnership cooperation.

The realization of this strategy requires a synergy between the superstructure, infrastructure, and substructure, especially from the parties of the government (central and regional), the House of Representatives / Regional Representatives, economic actors, and the public. Supporting facilities and infrastructure needed are appropriate information technology systems that are easily accessible to rural communities, as well as cooperation and dialogue forums.

Strategy-5: Increasing the role of agricultural cooperative institutions through education, socialization, facilitation and supervision methods to improve food Sovereignty, to prevent the development of radicalism.

This strategy is intended to optimize and implement improvements in rural economic institutions or Village Unit Cooperatives. Cooperatives are a form of business characterized by togetherness or based on family. Indonesian cooperatives operate in various fields to achieve public welfare, one of which is in agriculture. Considering that most of the Indonesian population makes a living as farmers, one of the types of cooperatives that is quite prominent in the village unit cooperative.

Agricultural cooperatives (cooperatives that are engaged in agricultural business), in this case, the Village Unit Cooperatives, are not merely trying to organize production. But it also helps its members in the processing of agricultural products at a higher level of both quantity and quality. Also, helping with marketing efforts, helping to provide agricultural facilities (agricultural tools, fertilizers, drugs to eradicate pests), helping to provide daily necessities for members at reasonable prices and can be purchased on credit.

Strategy-6: Increasing corporate social responsibility (CSR) towards the environment and people in remote areas through education methods, socialization, facilitation, supervision to improve food Sovereignty, to prevent the development of radicalism.

This strategy is intended to enhance corporate social responsibility (CSR) in community development to improve food Sovereignty to prevent the development of radicalism.

Increased responsibility is intended to increase company participation in fostering human resource capacity, fostering the mental fighting of the younger generation to avoid the influence of promiscuity, drug abuse, improving facilities and infrastructure and enhancing the empowerment of environmentally-friendly potential in remote areas.

The realization of this strategy requires a synergy between the superstructure, infrastructure, and substructure, especially from the parties of the government (central and regional), the People's Legislative Assembly / Regional People's Legislative Assembly, economic actors, and the public. Supporting facilities and infrastructure needed are mainly in the form of formal legality support, for example through laws, presidential decrees, regional regulations, technology, information systems that are easily accessible to rural communities and cooperation and dialogue forums.

### 3.2. Efforts

Listening to the above description of the strategy, and with the clarity of the roles and responsibilities of the subjects in implementing these strategies, which are supported by adequate methods and infrastructure, the efforts that need to be carried out are as follows:

1) The central and regional governments implement an understanding of regional autonomy in the development of the agricultural and food sectors, particularly in improving regional superior products, which shows the government's strong consistency, commitment and political will in making changes in development management from the top-down centralistic to decentralisation bottom-up, both in government work plans, as well as in strategic plans, as well as annual plans and programs.

Regulations and deregulation of concrete policies that are included also lead to efforts to empower the community in the development of the people's economy, the implementation of the strategy of sufficiency and Food Sovereignty in the countryside, and socio-cultural transformation of society that is adaptive to contextual environmental change.

2) The central and regional governments in collaboration with the Ministry of Agriculture and the Ministry of Trade encourage the increase in the production of non-rice food commodities, and the provision of incentives from the government to business players in the agricultural sector and food producers of rice. The aim is that business actors in the agricultural and food sectors remain passionate about increasing their production. If necessary, through a partnership with the private sector in providing various targeted subsidies, such as production facilities, including subsidies for farming loans.

- 3) The central and regional governments together with Non-Governmental Organizations and field agricultural extension facilitators increase the knowledge of businesspeople about agriculture and food, so that the business actors have the ability and skills, as well as the expansion of business capacity by providing education, guidance and counseling on land use, development and improvement of superior products based on agroecological suitability, and providing knowledge about nurseries, fertilization and cropping patterns, as well as post-harvest handling to maintain the quality of agricultural and food products in order to have more competitiveness.
- 4) The Ministry of Agriculture and the Ministry of Trade together with business actors and non-governmental organizations increase the role of the community in the development of agro-industry and agribusiness by giving freedom to the agricultural and food sector business actors to choose commodities, cultivation techniques, and business systems that will be pursued by utilizing the results of map studies regional superior commodity region. Besides that, commodity selection, cultivation techniques, and business systems need to consider the carrying capacity and the capacity of the available land and environment, and activate the role of the government as a facilitator, promoter and regulator in creating a conducive climate for the growth and development of creativity in the agricultural sector businesses and food.
- 5) The regional government together with the ministries of agriculture and non-governmental organizations conduct intensive socialization of the results of studies in order to improve understanding of agricultural and food business actors, so as to accommodate resources to implement plans to review land policies, and the development of the agricultural and food sectors, including superior products structurally by reallocating agricultural land and developing integrated areas in rural areas.
- 6) The Government is optimizing land management, so that it can produce superior regional products maximally, by integrating the planning of agricultural land into the district/city and/or provincial spatial layout, especially rural areas, such as through planning, design and development approach agropolitan area.
- 7) The central and regional governments together with business actors and Non-Governmental Organizations conduct socialization and field trials of the outputs of research and development institutions, especially appropriate agricultural and food technologies for agricultural and food sector businesses in order to undertake agricultural-based development efforts agro-industry and agribusiness, in a rural area that was the target of joint development.
- 8) The central and regional governments together with business actors, community leaders, Non-Governmental Organizations and communities facilitate the use of appropriate technology through gradual and sustainable stimulant and pilot activities in a particular area, while still prioritizing the achievement of the objectives of community empowerment and utilization and preservation of local technology.
- 9) The Ministry of Cooperatives through cooperative units in the regions conducts education/counseling to farmers, which leads to the growth of awareness of cooperatives as well as understanding the correct way of cooperating so that farmers are encouraged to participate actively in cooperatives, both as owners and customers.
- 10) The Ministry of Cooperatives through cooperative units in the regions conducts a rigorous selection of cooperative membership so that only those who work as farmers are members of cooperatives.
- 11) The Government together with the People's Legislative Assembly, experts / experts in the fields of economics, law and social affairs to formulate and ratify regulations that regulate business actors / companies to have a social responsibility to communities in remote areas to improve human resources and empower natural resource potential to improve food Sovereignty to prevent the development of radicalism in the context of national Sovereignty.
- 12) Coordinating Ministry of Politics, Law and Sovereignty in collaboration with the Ministry of Economy, Financial and Industrial Coordinators, Ministry of Law and Human Rights, Ministry of Industry and Trade to socialize corporate social responsibility (CSR) to business people/companies.

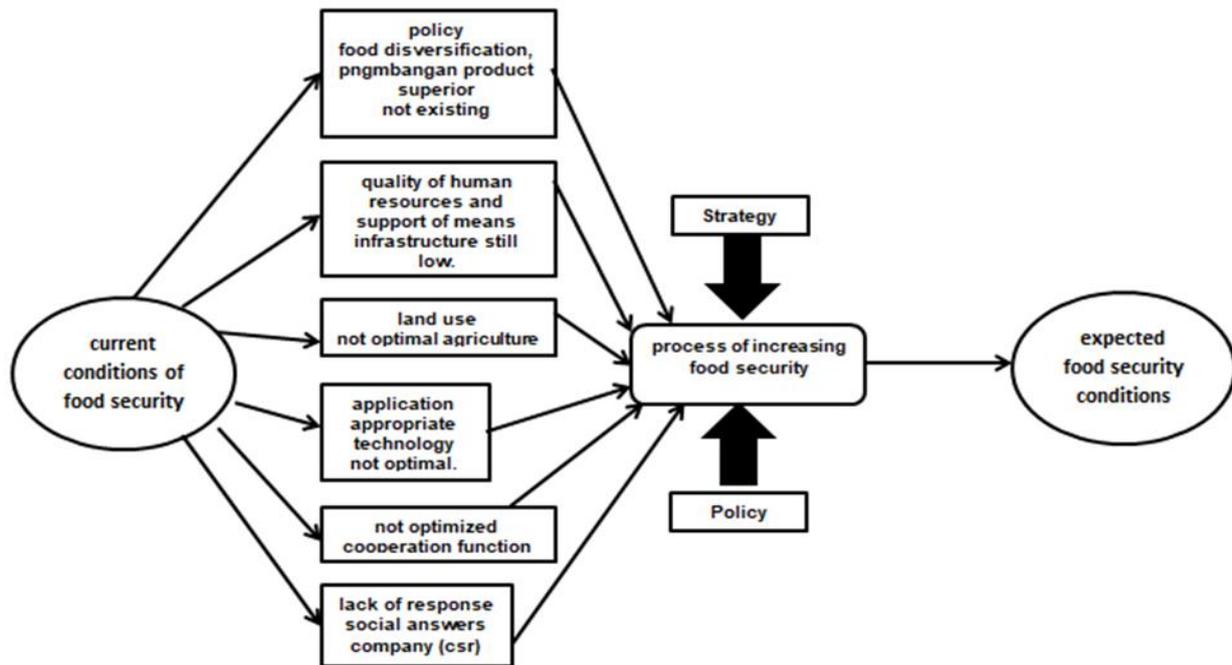


Figure 2: Process of Increasing Food Sovereignty

#### IV. CONCLUSION

Agribusiness or business development approach in the field of production and distribution in the agricultural sector, require synergy with other sectors in an integrated manner from upstream to downstream, covering the development of the seed industry, marketing, processing, distribution, transportation, construction of facilities and infrastructure, development of capital access, and the development of rural areas as a social, economic and environmental entity.

Improved superior products in remote areas to improve national food Sovereignty can be realized if the government can facilitate increased enthusiasm and motivation of regional communities to manage and process the natural resources of their regions, make efficient application of site-specific technologies, and develop management and economic infrastructure to produce products. Highly competitive agricultural and food products, as well as creating a fair food agribusiness market.

Fluctuations in the travel of the agricultural economy in Indonesia are closely related to macroeconomic policies and general economic development strategies. On the other hand, the policy of economic decentralization and regional autonomy, which should improve the welfare of the people, in fact, only caused political euphoria in the form of changes in the authority of a small elite group in the region. Therefore, the government needs to immediately carry out the reconstruction of the agricultural sector through the reintegration of the agricultural sector into macroeconomic policies and improvements at the micro-level of agriculture and agribusiness. Thus, it is expected that economists, politicians, policymakers and other elites can provide commitment and serious efforts to be able to reinstate the agricultural sector to become the main base and key position in the national economic development strategy.

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#### REFERENCES

1. G. A. Abu dan A. Soom, "Analysis of Factors Affecting Food Security in Rural and Urban Farming Household of Benue State, Nigeria," International Journal of Food and Agricultural Economics, pp. 55-68, 2016.
2. S. S. Matus, S. G. Paloma dan S. Mary, "Economics and Food Security: Selected Issues," Bio-based and Applied Economics, pp. 65-80, 2012.
3. M. A. Abdulkadyrova, A. H., Dikinov, H. E., Tajmashanov, L. A. Shidaev dan E. A. Shidaeva, "Global Food Security Problems in the Modern World Economy," International Journal of Environmental & Science Education, pp. 5320-5330, 2016.
4. G. R. Joshi dan B. Joshi, "Household Food Security: Trends and Determinants in Mountainous District of Nepal," Journal of Food, agriculture, and Society, pp. 42-55, 2017.
5. S. Zakari, L. Ying dan B. Song, "Factors Influencing Household Food Security in West Africa: The Case of Southern Niger," sustainability Journal, pp. 1191-1202, 2014.
6. R. Capone, H. E. Bilali, P. Debs, G. Cardone dan N. Driouech, "Food System Sustainability and Food Security: Connecting the Dots," Journal of Food Security, pp. 13-22, 2014.
7. J. K. Kiptoo dan F. M. Mwirigi, "Factors That influence Effective Strategic Planning Process in Organizations," Journal of Business and Management, pp. 188-195, 2014.
8. R. Patel, "Food Sovereignty," Journal of Peasant Studies, pp. 663-706, 2009.
9. M. Á. M. López, "A Study on the Application of Food Sovereignty in International," Groningen Journal of International Law, pp. 14-31, 2016.

10. R. Dunford, "Peasant activism and the rise of food sovereignty: Decolonising and democratizing norm diffusion?," *European Journal of*, pp. 145-167, 2015.
11. H. Wittman, "From protest to policy: The challenges of institutionalizing food sovereignty," *Canadian Food Studies journal*, pp. 174-182, 2015.
12. S. Grey dan R. Patel, "Food sovereignty as decolonization: some contributions from Indigenous movements to the food system and development politics," *Agric Hum Values Journal*, pp. 1-12, 2014.
13. E. O. H. Soetoro, "The impact of Indonesia's food law reform on the concept of food sovereignty in Indonesia," *International Conference on Green Agro-industry and Bioeconomy*, pp. 1-5, 2018.
14. O. Osterud dan G. Honneland, "Geopolitics and International Governance in the Arctic," *Arctic Review on Law and Politics*, pp. 156-176, 2014.
15. C.-C. Chen, H.-P. Yueh Dan C. Liang, "Strategic Management of Agribusiness: Determinant and Trends," *Journal of Entrepreneurship, Management and Innovation (JEMI)*, pp. 69-97, 2016.
16. D. Davy, "Australia's Effort to Improve Food Security for Aboriginal and Strait Islander Peoples," *Health and Human Right Journal*, pp. 209-218, 2016.
17. C. S. Hendrix dan H.-J. Brinkman, "Food Insecurity and Conflict Dynamics: Causal Linkages and Complex Feedbacks," *International Journal of Security & Development*, pp. 1-18, 2013.
18. r. S. Daniels, "Vulnerability education and political Responsiveness: Explaining Executive Decision in US Disaster Policy during the ford and carter administration," *International Journal of Mass Emergencies and disaster*, pp. 225-253, 2002.
19. O. O. Ewetan dan E. Urhie, "Insecurity and Socio-Economic Development in Nigeria," *Journal of Sustainable Development Studies*, pp. 40-63, 2014.
20. D. ummelsheim, H. Hirtenlehner, J. Jackson dan D. oberwittler, "Social Insecurity and Fear of Crime; A Cross-National Study on the Impact of Welfare State Policies on Crime-Related Anxieties," *European Sociological Review*, pp. 327-345, 2010.
21. I. S. Ladan-Baki, "Corruption and Security Challenges in Developing Countries," *International Journal of Politics and Good Governance*, pp. 1-19, 2014.
22. A. Varshney, D. Gupta dan B. Dwivedi, "Speed response of brushless DC motor using fuzzy PID controller under varying load condition," *Journal of Electrical Systems and Information Technology*, pp. 310-321, 2017.
23. M. C. D. Piazza dan M. Pucci, "Techniques for efficiency improvement in PWM motor drives," *Electric Power Systems Research*, p. 270-280, 2016.
24. V. A. Balogun, B. I. Oladapo, A. O. Adeoye dan J. F. Kayode, "Hysteresis analysis of Thornton (IP6, IP12E, and TH5V) magnetic materials through the use of Arduino microcontroller," *JMRTECH*, p. 7, 2017.
25. Y. Sanjaya, A. Fauzia, D. Edikresnaa dan M. M. Munira, "Single Phase Induction Motor Speed Regulation Using a PID Controller for," *Procedia Engineering*, pp. 404-409, 2016.
26. S. Padmanaban, F. J. Daya, F. Blaabjerg dan P. Wheeler, "Wavelet-fuzzy speed indirect field-oriented controller for three-phase," *Engineering Science and Technology*, p. 1099-1107, 2015.
27. H. Ibrahim, F. Hassan dan A. O. Shomer, "Optimal PID control of a brushless DC motor using PSO and BF techniques," *Ain Shams Engineering*, p. 391-398, 2013.
28. R. H. Issa, "Three-Phase Induction Motor Stator Current Optimization," *International Journal of Computer Applications*, pp. 41-50, 2010.
29. H. Sarhan, "Energy Efficient Control of Three-Phase Induction," *Energy and Power Engineering*, pp. 107-112, 2011.
30. G. R. Sreehitha, A. K. Teja dan K. P. P. Rao, "Control of a Three Phase Induction Motor using," *International Journal of Engineering Trends and Technology*, pp. 431-436, 2012.
31. B. N. Jamadar, D. S. R. Kumbhar dan D. S. Sutrave, "PIC Microcontroller Based Speed Control of Three," *International Journal of Research in Computer Science and Information Technology (IJRCSIT)*, pp. 37-43, 2013.
32. V. Chopra, S. K. Singla dan L. Dewan, "Comparative Analysis of Tuning a PID Controller using Intelligent Methods," *Acta Polytechnica Hungarica*, pp. 235-249, 2014.
33. B. Nagaraj, S. Subha dan B. Rampriya, "Tuning Algorithms for PID Controller Using Soft Computing Techniques," *IJCSNS International Journal of Computer Science and Network Security*, pp. 278-281, 2008.
34. Anthony dan Zuriman, "A Simple Method For Operating The Three-Phase Induction Motor On Single Phase Supply (For Wye Connection Standard)," *International Journal of Engineering Trends and Technology (IJETT)*, pp. 13-16, 2013.
35. D. Zechmair dan K. Steidl, "Why the Induction Motor could be the better choice for your electric vehicle program," *World Electric Vehicle Journal*, pp. 546-549, 2012.
36. P. Shinde, R. Burungale, P. Kale dan P. Jain, "Speed Control of Induction Motor by Using Variable Frequency Drive," *Rupali Burungale et al Int. Journal of Engineering Research and Applications*, pp. 35-37, 2014.
37. Babarinde, O. O., Adeleke, B. S., Adeyeye, A. H. Ogundeji, O. A. dan G. A. L., "Design and Construction of 1kVA Inverter," *International Journal of Emerging Engineering Research and Technology*, pp. 201-212, 2014.
38. Z. Qiang, H. Wei, L. Songnong dan H. Xingzhe, "Research and Experiments on a Unipolar Capacitive," *Sensors*, pp. 20679-20697, 2015.
39. H. Y. Yang dan R. Sarpeshkar, "A Time-Based Energy-Efficient Analog-to-Digital Converter," *IEEE JOURNAL OF SOLID-STATE CIRCUITS*, pp. 1590-1601, 2005.
40. R. Sudhan, M. Kumar, A. Prakash, S. R. Devi dan P. Sathiyaa, "Arduino ATmega-328 Microcontroller," *International Journal Of Innovative Research In Electrical, Electronics, Instrumentation And Control Engineering*, pp. 27-29, 2015.
41. S. Mirchevski, "Energy Efficiency in Electric Drives," *Electronics journal*, pp. 46-49, 2012.
42. N. Barsoum dan I. F. B. Modi, "DC Motor Speed Control Using SMS," *Intelligent Control and Automation*, pp. 205-212, 2014.
43. "Speed and Direction Control of DC Motor using Android Mobile," *International Journal of Engineering Science and Computing*, pp. 5462-5464, 2017.
44. M. P. Bodkhe dan K. N. Pawar, "Monitoring and Control System for Three Phase Induction Motor Using Poly Phase Multifunction Energy Metering IC ADE7758 and Zigbee Protocol," *International Journal of Science and Research (IJSR)*, pp. 321-327, 2015.
45. H. Haq, M. H. Imran, H. Okumus dan M. Habibullah, "Speed Control of Induction Motor using FOC Method," *Hafeezul Haq et al. Int. Journal of Engineering Research and Applications*, pp. 154-158, 2015.
46. S. J. Bassi, M. K. Mishra dan E. E. Omizegba, "Automatic Tuning of Proportional-Integral-Derivative (PID) Controller Using Particle Swarm Optimization (PSO) Algorithm," *International Journal of Artificial Intelligence & Applications (IJAIA)*, pp. 25-34, 2011.