The Attempt of Local Government in Achieving Food Self-Sufficiency

A Study in the District of Malinau, East Kalimantan

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Abstract
Food self-sufficiency is the ability of the state and the nation in producing a wide range of food to ensure domestic food needs are quite up to the level of the individual to harness the potential of natural resources, human, social, economic, and local wisdom with dignity.

This study aims to present an analysis and interpretation of the agricultural policy, in Malinau associated with (1) food security, (2) the consequences of agricultural policies related to food security and consistency of the policies that have been formulated, (3) critical factors performance of policies that support agriculture, and (4) conduct a critical analysis and a comprehensive review of agricultural policies related to food security and well-being of people who have been executed. Using qualitative research methods with qualitative descriptive research. Where the final outcome of research is that the need for policy changes related to food security agriculture, ie changes in the Food Security Improvement Program to make changes to (a) social goals (Socials goal), (b) the target system (destination system), (c) the target output (target output). Scenario where the role of technology in achieving the target of food self-sufficiency as an alternative solution to increase the productivity of farmers core.

Keywords: self-sufficiency, food, local government

1. Introduction
1.1. Research Background
The issue on the threat of the scarcity of food supply is not a new threat for people. It has been a while since Malthus proposed a theory about arithmetically (food production) and geometrical progression (population growth) in 1978. Human has been warned to anticipate the imbalance between supply and demand of food. Malthus theory mentioned that the decisive factor of the food supply scarcity is the human itself, so that it needs human’s integrity to manage their food. From this statement, lately, it has been proved that human is able to break the threat by doing some reverse to double the world food production.
Government in some countries, especially the developed countries, they have broken Malthus theory through an accurate food production policy (including Indonesia through the farming intensification and extensification program in the end of 1970’s). The success in doubling the food production for the last three decades is because there is a strong commitment from the government of many countries to increase the food production, besides the appeal of food commodities market. This thing shows that the government’s role in developing the agricultural food crops is very important. Even though in the governance concept, the government’s function is reduced, in the definition of reducing their role as the rowing and not their function as the steering through the regulation.

Every country always tries to improve their quality to get strong food self-sufficiency ability through the improvement of food production, stabilizing the food pricing, or domestic food production. According to the Minister of Agriculture (cited in Susanto, 2006) [1], that complexity marked by these few things, as follow:

1) agriculture is not mainly about producing enough food for the people, but also serve the market for some people whose consumption pattern has been shifted which concerned more on protein, fat, vitamin, and mineral;
2) giving a workplace and to be the key to handle food scarcity and bad malnutrition
3) the agriculture development is supposed to give contribution in overcoming world’s concern where there is still 1,2 billion people who still living in an absolutely poor condition and 840 million people live in hunger and malnutrition
4) agriculture could only be sustainable if it becomes a part of the ecological system of the universe which was less concerned in the past in the green revolution
5) as an impact of the communication development, so that the quality prerequisites and food safety that has been applied by so many developed countries, has been easily developed into a hope and demand of the global people;
6) In the free trade era, agriculture becomes a part of the open global competition system, so that it needs an ability to compete with other countries’ agricultural products.

The food self-sufficiency level of a country becomes the measurement of the independency level of that country in the part of food crops. According to Krisnamurthi (2006) [2], it is very difficult to imagine of how a country could be fully sovereign (in politics, security, economics, and others) when the basic needs of the people, especially food, depends on other countries. That dependency could emerge in many forms, such as dependency of technology, dependency in making decision, or dependency of the consumption pattern and life style. Even so, it does not mean that export and import are illegal, since a fair international trade could also be used to prosper the people.

In the UU No.25 year of 2000 about the Authority of Local Government and the Authority of the Province as the Autonomy Region, it is stated that there are four subjects policy of the development of strategic agriculture that has been trusted to local government, which are: (1) promotion at the export of superior local commodities; (2) providing a support for a cooperation between districts/cities in agriculture; (3) the choosing of integrated agricultural areas based on the contract with the city/district; (4) setting the use of irrigation water and the providing of support in the development of fishery technology engineering, and also others water resources (Wiryono, 2006) [3].

That policy gives a chance for the local government to build cooperation with various parties in developing agricultural development in their area. For the government, especially the local government, according to Wiryono (2006) [3], there are few things that should be taken into account as an implication of the available chances, which are: first, stick on to the principle of common but differentiates responsibility, it is proper that local government direct the agriculture development to the importance of empowerment of local farmers. Second, to seek a proper form of intervention, so that the local farmers could have more power to solve the problems they are facing. Third, to grow an awareness of the importance of efficient farming by prioritizing the use of available local resources.

1.2. Research Problems

Based on the research background, the researcher has made some research problems as follow:
1) How is the picture of the potential of agriculture in the district of Malinau?
2) How is the existing condition of the agricultural policy that is running in the district of Malinau nowadays?
3) How is the implication of the agricultural policy for the establishment of food self-sufficiency?
4) How is the developmental model of agricultural policy that could support food self-sufficiency?

2. Review Of Literature

2.1. Regional Autonomy

The policy of improving food production in order to establish food self-sufficiency in the region could not be separated from the regional autonomy policy, because the local potential could be maximized through that
policy and a plan could be arranged based on the real needs of the local people. There are four factors that influence the success of the implementation of regional autonomy, which are: human resources, financial, infrastructures, and also management and organization (Widagdo, 2001) [4]. Regional autonomy is created through the allocation and distribution of power, and also the authority and responsibility. The expected result from the autonomy is the more satisfying public service, accommodation of public participation, and also the more suitable program management that suits the local needs. It is the allocation and distribution of power that becomes the power of decentralization.

In applying the modern governmental theory to create the good governance, it is needed to apply governance decentralization. Regional autonomy and decentralization is one inter-related system since both of them is a form of the principles of government in the organization of a state. In the “Ketentuan Umum” UU No.32 year of 2004, article 7, it is stated that decentralization is a transfer of government power from the Government (central) to the regional autonomy to manage and organize the government affairs in the system of Negara Kesatuan Republik Indonesia. Therefore, decentralization is one of the principles in the governance autonomy, besides de-concentration and the helping assignment. This thing is in line with the limitation of decentralization from United Nations (1992) as the transfer of authority away from the national capital whether by deconsentration, delegation to field officer or by devolution to local bodies.

According to Taylor and Mckenzie (1992) [5], local initiative is really needed in developing the agriculture in the villages, based on the government view or local community. From the government view, local initiative is needed when government has not yet able to give proper services, while the ability of the central planning is also in a weak condition. From the local community view, it is because that there are still many untapped resources that may be effective if the local strategic is used. Developmental approach through the local self-reliance indicates that all phases of the empowerment process should be decentralized. Therefore, the empowerment efforts that based on decentralization approach will raise an autonomic condition, which every component will stay in its diversity. The empowerment effort that is decentralized will be able to accommodate various diversity orders. The view on “local self-reliance” is an alternative approach of development which developed based on the shifting of developmental conception, and also the shifting of science paradigm.

Policy of the empowerment of agricultural society should be casuistic, and contextual, which is arranged autonomic by each region. The formulation of the empowerment efforts of the villagers should be based on the basic principles, which is how we could create a chance for the community to develop their ability and self-reliance in order to make benefit of it. In political context, this principal is a form of giving choice to the community and also to improve their ability to say their voice. The implementation of this principal depends on the condition of each community. Local self-reliance shows that development is most suitable seen as a creative-adaptation process of a community structure than as a series of mechanical effort that refers to a plan that is systematically arranged. Local self-reliance also firmly stated that organization should be managed by prioritizing participation and dialogues than the strict control as what has been implemented so far (Amien, 2005) [6].

2.2. Food Self-sufficiency

According to UU No.18 year of 2012 about Food, what meant by food self-sufficiency is the ability of the nation and country in producing various food domestically that could guarantee sufficient food for everyone by taking advantage from the potential of natural resources, human resources, social, economy, and local potential wisely. Thus, the concept of food self-sufficiency is more concerned on the governmental efforts to fulfill the food for people by taking advantage from every kinds of available potential in the country.

Basically, the development of food self-sufficiency is a community empowerment which is meant to improve the self-reliance and capacity of the people to actively participate in embodying availability, distribution, and consumption of food through times. The people involved in the development of food self-sufficiency consist of producers, entrepreneurs, consumers, government apparatus, universities, and non-governmental organizations. The work of those parties affected by these factors: (a) economic, social, politic, and security condition; (b) public services such as transportation, routes, communication, and capital; (c) medical and educational service; (d) technology development, protection; and (e) preservation of natural resources and environment.

According to Ndraha (1985) [7], various empowering efforts to improve the people self-reliance, especially the farmer’s empowerment could be done through: first, developmental empowerment to improve the productivity and competitiveness. It can be done through cooperation with the advisors and researchers. The improving technology should be based on the specific location which has superiority in its suitability with the local ecosystem and taking advantage from the available input in the location, and also pay attention to the balance of the environment. Second, the provision of facilities for the people should not only limited to the supply of production infrastructures, but also with the others needed infrastructures development of agribusiness such as market information, improving access market, capital, and also the improvement of partnership with
other business institutions. Third is the revitalization of organization and food self-sufficiency community system. This thing can be done through the development of food barns, make use of local potential food, and specific improvement based on the local culture that suits with the dynamic taste of the people itself.

Ndraha (1985) [7] proposed that the revitalization of organization and food self-sufficiency community system that should be done right now is the development of food barns so that we could give a significant contribution to the food self-sufficiency work. Therefore, it needs an effort to repair the food barns, not only physically, but also the management so that it could be able to be a motor organization of the economy in the village.

The farmer’s empowerment to reach food self-sufficiency and their welfare could only be done by synergizing all the elements related to the farming development. Therefore, intensity of coordination between government institutions and community should be added. According to Moeljarto (1984) [8], those empowering processes no longer adapt the absorbing pattern, but it has been decentralized based on the potential and the diversity of the resources in the region. Likewise, the chance of business is not only about farming, but also the off-farm business, and even non-farm. Related to that, the attempt of food self-sufficiency does not need to be focused on the agriculture development (primarily), but it can be directed to a competitive, sustainable, populist, and decentralized system and agribusiness.

According to Moeljarto (1984) [8], the paradigm of food self-sufficiency improvement should be changed and corrected into a new paradigm as follow:

a) Developmental approach: from the macro level of food self-sufficiency into household food self-sufficiency. By the building of household food self-sufficiency, automatically, the regional food self-sufficiency will be achieved, and the national food self-sufficiency will also be accomplished.

b) Developmental management approach: from the centralized pattern into decentralized. Through decentralization, most of the plan and the implementation of food self-sufficiency development will be the authority of the local government and their people. This approach creates more possibility for the people to do proper development of food self-sufficiency activities in order to solve their problem specifically, and allow the development of local people creativity in developing their potential food that suits with the available resources, culture, and the local taste.

c) The main actor of development: from the government domination changed into the people domination. Government should prioritize the role of the people in the development of food self-sufficiency and limit the government role only at the facilitative functions, the building of public infrastructures, regulations, and other roles that have not been able to be done by the people.

d) Focus of commodities development: from rice into food commodities in wider sense. Food development that only focuses on rice has caused a high dependency on that commodity. Therefore, the development should be directed into production diversification or even food consumption that suits the local potential resources and food culture. This approach gives a chance to the people to improve their potential food resources to sustain the people food and nutrition.

e) Household affordable food: from provision bargain into increased purchasing ability. The effort of fulfillment enough food for the people through the improved domestic products and cheap food supply, especially rice, needs to be changed to an efficient and competitive agriculture’s development that could make the farmers able to get a higher income. In this way, integrated farming or agribusiness will be more suitable to the open economics condition like nowadays. Through this approach, the household income will rise, which meant that purchasing power of enough and qualified food is also rise.

f) Changing behavior of the family toward food: from enough food awareness into nutritious food awareness. Behavior and point of view of some people toward food, those who are less educated or even higher educated, knowledge and ability, still focus on the volume, plating, taste or the modern image. This behavior should be changed into the fulfillment of food quality, especially for the nutritious food.

According to Tjokroamidjoyo (1987) [9], in line with the problems, the chance and new paradigm of food self-sufficiency stabilization, the developing strategy in sustaining the food self-sufficiency are:

1) Capacity development of national food production through rehabilitation ability, sustainable optimization and natural resources preservation for water, land, and aquatic areas;

2) The improvement of public empowerment and participation heading toward household food self-sufficiency, and also people awareness of food nutrition;

3) The development of competitive, populist, integrated, and decentralized food agribusiness with the following understandings:
   a) high competitiveness through the improved efficiency by making use of innovation and technology, improving productivity and adding value, and also sharpening the market orientation;
   b) populist which means to facilitate a bigger chance for the public to participate in small and medium industries by making use of any resources they have;
the district of Malinau is quite large enough, but the numbers that have been made use of is still limited. It other 6.886 acre is still on attempt to be cultivated. Based on this data, it is seen that potential are for farming in
4.1. Potential Farming Business in the District of Malinau
1) Farming areas resources

The numbers of farming areas in the district of Malinau is 14.090 acre that consists of: 1.040 acre cultivable with rice plantation twice in a year, and 2.785 acre cultivable with rice plantation once in a year, and other 6.886 acre is still on attempt to be cultivated. Based on this data, it is seen that potential area for farming in the district of Malinau is quite large enough, but the numbers that has been made use of is still limited. It happens because the low numbers of human resources who manage the area. Take a look at the specification of the area, 1.019 acre is still half-technical irrigation system, 206 acre with simple irrigation system, 2.013 acre cultivable with rice plantation twice in a year, and 2.785 acre cultivable with rice plantation once in a year, and other 2.261 acre is another specification. Based on those data, it can be seen that there are no land for farming in the district of Malinau that has specification of technical irrigation yet. Most of it is still depend on the nature’s condition with the specification of using water from the rain to irrigate, or ebb and flow. This condition is not possible to optimize the use of the land for all year. It also makes many opened lands cannot be cultivated because there has been no irrigation system.

The role of local government in the process of farming development in the district of Malinau is relatively difficult since they should empower the people, whose most of them are still living in the remote areas, live nomadic, and relatively has not known a modern farming. In Pranaka and Prijono’s (1996) [12] concept, it could be stated that the people in the district of Malinau still in the initiation phase, which is a phase where all empowerment process comes from government and used for the people, and the people only do what has been planned and wanted by the government, and still depends on the government. Others who live in the district of West Malinau, North, South, City of Malinau, and Mentarang have been in the participator phase. It is a phase where the empowerment process comes from the government along with the people, by government and the people, and for the people. In this phase, the people have been involved actively in the development activities heading toward to the food self-sufficiency program.

According to Antjok (1995) [13], public empowerment is a process where people, especially those who lack access to the development resources. They will be pushed to be more independent in improving their life. In
this process, people are helped to analyze their needs, their problems, and developmental chance, and also their own life. Besides, they also learn to understand and manage the best solution and access the required resources, external or even their own resources. The condition of the people in the district of Malinau has not been in a good condition for the government to just leave aside the developmental process of agricultural sector. Local government should be able to stand as the facilitator in empowering farmers, even in opening the new farming areas, cultivating period, or even the harvest time, so that people could fulfill their own food, besides to make the food as their income.

(2) Production Infrastructures, land area, and productivity

Data in the year of 2011 shows that for the rice commodity in the district of Malinau that is harvested is about 3.011 acre, with the production output for about 10.800 tons and the level of productivity is 35.87 hundred pounds/acre. This achievement is still lower than the average land area of all harvested land in the province of East Kalimantan, which is 6.883 acre/district and productivity level of 46.85 hundred pounds/acre.

Based on the displayed data, the land area for harvested corn in 2011 is about 187 acre and its production is 364 tons with its productivity in the level of 18.90 hundreds pounds/acre. That product output's achievement is still lower than the average output products of East Kalimantan for about 999.5 hundreds pounds with the productivity level of 25.56 hundred pounds/acre.

That condition reflects of the low ability in managing the available land as the impact of the lacking of agricultural infrastructures, besides the capability of their human resources itself. According to Moeljarto (1984) [8], development of independency and community empowerment is supposed to be able to find and independent in recognizing their potential and their ability, the alternative chances and able to make the best decision in developing their business independently and integratedly. The improvement of community independency and empowerment is done through: (1) empowerment in improving technology to support the productivity development and competitiveness; (2) giving facilities to the people by supplying the infrastructures for the development of agriculture, such as market information, improving access toward production market, capital, and also cooperation with others business institutions; (3) revitalization of organization and community food self-sufficiency system, such as food barn, development of the utilization of potential local food and quality improvement, and also the attraction of local special food that suits with the taste of the people nowadays; and (4) farmers' empowerment in order to improve community food self-sufficiency through some coaching program.

Based on the above explanation, it can be said that the infrastructures of agricultural productions is not the mainly factor, but it also depends on other factors such as: numbers of cultivated land areas, difficulty in opening the land areas for farming and managing the land, and farmers’ empowerment in part of agricultural technologies.

(3) Organization of agricultural elucidation

It is important to get realized that the success and integration of food production is really depend on the main actors of that production processes, which are farmers, breeders, fishers, and fish preserver. Therefore, the elucidation programs become important in motivating those actors to keep improving their agricultural products in the district of Malinau. Thus concept is in line with what has been proposed by Tjokroamidjoyo (1987) [9], that in facing the challenge of a complex agricultural development, the improvement of human resources’ ability and the structural organization in the village are needed as the factors that should be taken care of by the government. With the improvement of that ability, it is expected that the work of the apparatus and the village institution could work and functioned more optimize as what has been expected.

Based on that explanation, then it can be stated that the role of the elucidation organization in creating food self-sufficiency is very important. Therefore, local government should be reinforced the elucidation organization, through the human resources empowerment or even the organization facilitation by using the needed infrastructures.

Based on those descriptions, the researcher could draw a proposition as follow:

Proposition (1):

The effectiveness of the utilization of the potential of agriculture in a region depend on these factors: (a) farmers’ ability in managing the available farm; (b) local government support in supplying the infrastructures of agricultural production; and (c) the effectiveness role of elucidation organization in the field.
The agricultural policy at the district of Malinau that is running seems to have orientation toward the attempt of food self-sufficiency and the application of agricultural technology in order to reach a prosperous agriculture are: (a) farming intensification; (b) improvement of agricultural infrastructures; (c) improvement of agricultural products and the management of after-harvest period; (d) purchasing of agricultural products in improving the farmers' welfare. There are also applicable programs which consist of obligatory and chosen programs which are: (a) obligation of food self-sufficiency by using programs as follows: (i) program on improving the farmers' welfare; (ii) program on improving food farming/plantation independency; and (iii) food barn program; (b) matter of chosen farming (cultivating of food plantation and horticulture); (ii) program of improving production and productivity of food crops and horticulture; (iii) program on improving farmers' welfare; (iv) program on raising the added value of agribusiness; (v) program on improving of the agricultural products marketing; (vi) program of agricultural elucidation empowerment; (c) obligatory matter on spatial planning with the program as follow: (i) program on regional spatial planning; (ii) program on making use of spatial; and (iii) program on area landscaping; (d) matter of chosen farming (plantation) as follow: (i) developmental program of plantation business management; (ii) program on improving the plantation products and productivity; (iii) program on developing plantation protection; (iv) program on developing plantation crops; (v) program on managing and promoting the plantation products; (vi) program on improving the plantation infrastructures.

Therefore, the strategy and the policy's direction of agriculture in the district of Malinau have been applied and well-arranged. The scope of that program has included widely agricultural matter, including food crops, plantation, husbandry, and fishery. This thing proper with the concept of public policy proposed by Dye (1992) [14], that stated as "public policy is whatever government choose to do or not to do". According to Dye, when government chooses to do something, then there should have purpose and the public policy should include all the "government actions", so that is not only a statement of government will or the government officials only. In the other words, public policy is the representation of will from the whole available stakeholders.

(2) Strategic Plan Framework

Strategic steps that could be taken in agriculture in the district of Malinau are as follow:

a) the building and repairing of agriculture infrastructures
b) optimization of land area usage especially for the reachable land and the broaden of farming areas in the potential areas;
c) improving innovation in serving the farmers through the supply of production facilities;
d) agricultural development is directed into integrated approach with the entrepreneurial farming;
e) development of regional commodity which is directed into farming system by creating an integration between technology, or even between organizations with the entrepreneurial farming;
f) development of regional commodity is directed into farming system by creating an integration between technology, or even between organization by applying intensification, diversification, and rehabilitation;
g) development of agribusiness and agricultural city which leads into superior commodities;
h) Agribusiness empowerment through the improvement of competitiveness.

Strategic steps in the matter of elucidation and food self-sufficiency which have been applied are:
1) development of productive, efficient, and effective system and organization of agriculture elucidation;
2) development of the quantity and quality of human resources related to the elucidation program;
3) development of knowledge, skill, and behavior of the farmers, so that they are able to be an independent and productive farmer;
4) development of farmers’ organization to be a tough farmer and have business knowledge and understand the business’ chances;
5) improvement of control and supervision of food availability, food distribution and consumption, and also food security;
6) Improvement of elucidation facilities and elucidation role in the development pf food self-sufficiency program.

As for the policy taken in reaching those goal is as follows:

1) Agricultural policies are included:
a) repairing and improvement of agriculture facilities;
b) development of central of production and agricultural seeding/nursery;
c) the supplying of agricultural tools;
d) improvement of quality standards of agricultural products;
e) development of production technologies and after-harvest technology;
f) development of agribusiness and agribusiness city in the matter of making use the areas and the raising of local real income;
2) Policies on elucidation and Food Self-sufficiency are included:
   a) the building of *Balai Penyuluhan Pertanian* (BPP)\(^1\) as the central base of elucidation activities in the sub-district;
   b) the provision of *Penyuluhan Pertanian Lapangan* (PPL)\(^2\) who has a functional title that suits the skill;
   c) quality improvement if the elucidation officers through the provision of proper education and technical skill training;
   d) elucidation, counseling, and mentoring provision for the farmers/group of farmers;
   e) conducting identification and policy related to food availability, food distribution, consumption, and food security;
   f) Provision of research, and development in order to stabilize elucidation and food self-sufficiency.

It is undoubted that the goal of public policy will be reached effectively and efficiently if it has been well-arranged. Local government has been arranged a well-planned framework, and actions policy that should be taken in realizing that plan should have also been well arranged, which is: actions policy in the matter of agriculture in a broader sense, and also actions policy in the matter of elucidation on farming and food self-sufficiency. This thing is in line with the statement from Anderson, as what has been quoted by Abdul Wahab (1990) [15], who proposed that the implication of public policy is the existence of the substance of the charge of public policy which contain some aspects as follow: (1) having specific purpose; (2) containing actions or patterns of government officers’ works in reaching the goal; (3) it is an activity to do something or not to do something; and (4) based on the requirements or rules.

(3) Reality of policy and prediction

In agricultural policy implementation in the district of Malinau there are some crucial problems that should be solved first so that Malinau could achieved food self-sufficiency, which are: (1) food production matter; (2) conversion, degradation, and fragmentation of the land; (3) matter of losing harvest output (losing rice in the farmer’s hands, farm labors, middleman, and rice mill that happens when it is harvested, defoliating, drying, until milling; shrinkage of the rice when it is loaded, saved, sold in the market; and lost in the form of cooked rice in the consumers’ hands because it is not wholly spent in the consumption); (4) availability of water (matter of irrigation); and (5) the farmers’ welfare.

problem of food production in the district of Malinau still need to be identified about how much the need of food, how much the numbers of food that still brought from the other regions and also the kinds of food, so that we could design a priority policy to improve the food productions. Problem happens in Malinau is the number of available land areas and proper for food production that almost run out, not only because of the conversion for the use of off-farm and/or because of the quality degradation for being polluted and wrong management, but also because of the wider usage of land for big plantation and coal mining business. Fertile and productive land, especially around the city is getting lessen and more because of the conversion, including technical irrigation’s farms. The lessen numbers of land areas should get a compensation sooner with the open of new land.

(4) Policy on control over the land’s function

The phenomena on control over the function of the land from farm into off-farm in the district of Malinau have not been a serious threat. Since there are still many available empty land and could be opened for the importance of facilities and infrastructures building. The upcoming problem then is the permission in controlling over the function of the land, especially the area inside the conservation forest that has been protected by the law and the function that could not be controlled over for other usage. Therefore, government of the district of Malinau tries to open the land for farming in the areas that not included in the area of conservation forest. In this case, contradiction of the policy’s objection happened; between the policies on maintain the conservation forest and the policy on land expansion for farming.

Based on those explanations, then it can be stated that the effectiveness of goal achievement of policy on food self-sufficiency is determined by the ability of local government to control the use of productive land that is used for housing and office area. Even those things has not become a serious problem yet in Malinau, since there are still many potential lands available for farming, but in the long-term period, if it is not controlled, then the control over of the function of land could affect to the lessen of the numbers of the productive land for farming.

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\(^1\) A place where farmers gathered and accept any kinds of information about agriculture from the elucidation’s officer, usually from the government officers

\(^2\) The government officer whose duty is to give elucidation about farming in the field
Therefore, the effectiveness of the implementation of the policy on control over the function of the land depends on three factors, which are: (a) changing environment which will push the government, private sector, and also people to use the productive land areas for other function beside farming; (b) lack capability of the supervisor officers to control the use of productive land areas; and (c) unclear punishment in formulating the policy, so that the people may not obey the contents of the policy. This thing is relevant to substantial model of the implementation of the policy that has been developed by Van Meter and Van Horn (1975) [16]. which is called as A Model of the Policy Implementation Process (Abdul Wahab, 2005:71) [17]. In their theory, Van Meter and Van Horn departed from an argumentation that differences in the implementation process will be affected by the nature of the policy that is going to be implemented. Both experts asserted their commitment that the changing, control, and obedience in doing something is an important concept in the implementation procedures.

(5) Effectiveness of the implemented policy

An attempt that has been done so that the implementation of the agricultural policy could be more effective is by involving the community in the process of policy implementation. This thing is in line with Taylor and Mckenzie (1992) [18], who stated that local initiative will be really needed in the development of villages, both the government and the local community. From the view of government, local initiative is needed if the government is not yet able in providing proper services, while the planning capability of the central is also in a weak condition. Meanwhile, from the view of local community, in between is because there are still many untapped resources, which is considered to be more effective if local strategy is used. Nevertheless, the involvement of local community in the agricultural policy implementation is not too effective since the farmers’ community is not homogenous. Most farmers thought in opening other business that has more promising income, not just farming but also outsides farming. Also in the matter of people initiative in preventing the control over of the function of the land shows that in some sub-districts there are still many people who are lack of initiative because there are still thinking that agricultural sector is not promising and give them less income. Despite of it, people of Malinau are known as people who loves gardening and concocting in the forest. Besides, there are some community groups who prefer to use their land to build stores or even sell their land to get some money that could be used as capital in opening business. This thing comes up because there is a thought that business sector is more promising that agricultural sector.

For all those explanations, the researcher could build a proposition as follow:

Proposition (2):
The effectiveness of the running agricultural policy is determined by these factors, which are: (a) clear strategy and policy’s goal; (b) strategic plan framework that could be implemented in the field; (c) the reality of the policy in the field and the prediction in the future; (d) the success of the policy on control over the function of the land areas; and (e) the local community involvement in the running policy implementation.

4.2. Implications of Agricultural Policy toward Food Self-Sufficiency

(1) Implementation toward the plan framework

Food self-sufficiency is an integrated system that consists of various sub-systems, with the main subsystem is the food availability, food distribution, and food consumption. Realization of food self-sufficiency is a synergy of the interaction of those three sub-systems, which has been arranged in the plan framework that consists of sub-systems as follow:

1) food availability sub-system includes aspects of production, inventory and balance between import and export of food. Food availability should be well-managed so that even it is seasonal, but the volume of available food for the people should be enough in number and kinds, and the supply is also must be stable from time to time;

2) food distribution sub-system includes aspects of physical and economical evenly accessibility of food. Distribution system is not only including the physical aspect, which means that food is available in all location that needs food, but also community. Food surplus in the regional has not yet ensure individual food sufficiency in community. This sub-system need to be well-managed and should not be in contrary with the open market mechanism so that the efficiency in the evenly distribution of food accessibility for the people could be achieved.

3) food consumption sub-system is related to the improvement of community knowledge and capability, so that they could have understanding on good food, good nutrition, and good health. Therefore they could well-managed their food consumption by having those knowledge.

One of the goals that wanted to be achieved by government of the district of Malinau is to embody food self-sufficiency by producing their own food. This program is much connected to the achievement of agricultural
commodity productions. If the work of agriculture in improving the food production is getting higher, then the food self-sufficiency in that region will be accomplished. Based on the recognized data, it is known that food production, especially rice, cassava, and sweet potato, in 2011, rice production almost reach the number of 22.678 tons; while cassava and sweet potato is almost reach the number of 2.582 tons. Production of rice, cassava, and sweet potato is evenly in almost all sub-districts, except in Kayan Hulu and Sungai Boh that do not have available land area to cultivate those crops.

Thus, if analyzed from those three sub-systems of food self-sufficiency, then the food availability and food distribution in the district of Malinau are relatively not in problem because there is always enough numbers of food available every year. Meanwhile, for the third sub-system, which is knowledge of nutrition and health is not yet evenly, because of the limited access for the people toward the available medical facilities, besides the low level of education of the people.

According to Maleha and Susanto (1995) [19], the development of food self-sufficiency has a basic development perspective since it is included some aspects which are:

1) access toward food and balanced nutrition is a human right;
2) the success in developing the quality of human resources is much determined by the success of food and nutrition consumption fulfillment;
3) food self-sufficiency is the main base or pillar in creating sustainable economy condition and national security.

(2) Implication toward control over of the function of the land area

There are some problems related to the implementation of the control over of the function of the land area policy, which are: first, that until now, the effectiveness of that law instruments is still at the low level, which is caused by the weak consistency and coordination between various stakeholders in region. This condition happen because of various existing regulations has not had enough power in directing certain related parties to protect the land areas for farming from the control over activities. Second, socialization from various existing regulations is still weak, and the understanding toward those regulations is still varied. Therefore, the attempt to protect the farming land areas from the possibility of the control function over to the other usage needs to get a back up from a strong regulation. Ideally is in the form of clear and specific regulation that could protect the land areas for farming from the control over of the function of the land areas.

Based on that description, it can be stated that the policy implication could be positive and negative. Positive implication is when the policy could give an adding value for the non-productive land into productive land through the control over of the function. For example, ex-mining land area and ex-illegal logging land areas, or migrating land that switched into farm or plantation. While negative implication is when the land area that is being controlled the function over is the productive land.

(3) Implication toward the rehabilitation of agricultural facilities and infrastructures

The attempt in establishing food self-sufficiency in Malinau, could be seen from the attempt of local government in opening new land areas for farming, build a new irrigation system, and build farm business chance. Besides those, there are also supervision toward subsidiary seeds and fertilizers, and also the establishing of sample land for plantation, husbandry, and fishery.

Based on the description above, then it can be stated that the agricultural policies in the matter of food self-sufficiency bring an implication toward the provision of facilities and infrastructures of agricultural productions, and has been able to help farmers in production process.

(4) Implication toward improving access for farmers toward the loan institutions

Most farmers in the district of Malinau are poor, and then their capability in funding their farming is low. This poor condition makes the access for the farmers toward the formal loan institution are low, and for a short term, there are not many changes that could be reached. The problem is not only on the difficulty of the farmers to fulfill the loan’s requirements, but also a big different between the applied requirements from the formal loan institutions and the characteristics of the farming business.

(5) Implication toward the development of farming business technology

The improvement of productivity and repairmen of products’ quality could be gained through a conducive applied technology in optimizing vegetative and generative grows of the plants; while in minimizing the products’ loss and the repairmen of products’ quality needs better applied technology of harvest and post harvest. Through the technology improvement, people will be ease to manage their farming products. Local government introduces technology through the farming counselors in the field who’s able to reach the remote area.
According to Muljarto (1984) [8], technology development empowerment in supporting the productivity and competitiveness development could be done through the cooperation between farmers and the counselors, and the researchers. Developed technology based on the specific location that has superiority in the matter of suitable with the surround environment, make use of any available input in the location and pay attention to the balance of the environment.

(6) Implication toward light tax of land areas for farming
This attempt is done so that the farmers would not control over the function of their land. Moreover, the farmers are pushed to be resistant toward the businessman who’d like to take over the land. By doing this attempt, government hopes that the farmers would not sell their productive land areas that used for farming. The development of plantation areas should be striven to a new land ex the HPH logging or illegal logging, or the land that is used as moving farm before.

Based on the whole description about implication of agricultural policy in the matter of food self-sufficiency program, then a proposition could be made as follow:

Proposition (3):
Agricultural policy in creating food self-sufficiency could have positive and/or negative implication toward six aspects, which are: (a) agricultural plan framework; (b) control over the function of the land areas; (c) rehabilitation of agricultural facilities and infrastructure; (d) Farmers’ access toward the loan institutions; (e) farming technology; and (f) tax on farming land areas.

4.3. Model of Agricultural Policy in creating food Self-sufficiency
Model of existing agricultural policy in the district of Malinau that has been applied so far has some advantages, and also disadvantages. Those advantages and disadvantages are displayed on the explanation below:

Advantage of the Empirical Model
The advantage of the empirical model or the existing running model is as follow:
1) agricultural revitalization as the input factor, not only related to the function of the organization, but also the work plan, which is rice self-sufficiency and food independency;
2) sustaining institutions as the input has been included important institutions which covers up all the agriculture subjects, which are food crops, husbandry, fishery, plantation, and elucidation;
3) the aspects inside the process has reflected concrete activities that has been doing, so that could bring positive implication toward food self-sufficiency; such as through the database of potential of the region that will ease the local leader in making decision in agriculture’s development; through the management of control over the land’s function will avoid the lessen numbers of productive land; and etc;
4) empirical model has given more positive implication that could push the creation of long tern food independency, even there are some inhibitors that should be solved.

4.4. Disadvantages of Empirical Model
Disadvantages of empirical model are as follows:
1) the sustainable of the institution should not only limited on the organizational of food self-sufficiency council, but should also include the lowest structure in the organization of Agriculture, husbandry, and Fishery Department of the district of Malinau which consists of: counseling section, organizational section and counseling facilities, and food self-sufficiency section; since they are the main person that directly meet the farmers in person in the attempt of implementation program and agricultural activities in establishing food self-sufficiency;
2) the management of control over the function of the land has not been well managed in the separated Perda, so that it has not had a basic operational regulation that could be used as a guideline in the management of control over the function of the land;
3) research and development activities has not been done intensively, such as in the development of local superior variety, such as for rice, fruits, or even tubers plants;
4) empirical model has not yet given a real implication toward the behavior and attitude change of the farmers in the remote areas, since there are still many who lives from moving farming and has not yet adapted more modern farming, such as the use of plow, fertilizers, pesticides, and etc.

Based on the description on those advantages and disadvantages of empirical model, the researcher could arrange a recommended model as what will be displayed in the picture below.

Picture: Recommended Model of Agricultural Policy in creating Food Self-sufficiency
<table>
<thead>
<tr>
<th>INPUT</th>
<th>PROCESS</th>
<th>OUTPUT</th>
</tr>
</thead>
</table>
| • Agriculture’s revitalization  
  o Agricultural human resources  
  o Counseling hall  
  o Rice Self-sufficiency  
  o Food independency | • Potential database (land areas and productions)  
  • Help on loan access  
  • Technical counseling  
  • Management on control over the function of the land  
  • Research and development of local superior potential which has high selling price  
  • Arrangement of *Perda* about control over the function of the land | Food independency:  
  • Enough food availability  
  • Well-managed food distribution  
  • Nutritious food consumption |
| • Sustainable institution  
  o Food Independence council  
    • Food crops section  
    • Husbandry  
    • Fishery  
    • Plantation  
    • Counseling  
  o Counseling and food independency section  
    • Counseling management section  
    • Organizational and counseling facilities section  
    • Food independency section | • Facilitation of institutional activities  
  • Counselors’ training  
  • Raising funding for the research and development activities  
  • Involving university and LSM in assisting the farmers  
  • Farmers empowerment through the establishment of sample farming, plantation, and fishery | |
<p>| Positive implication toward: | | |</p>
<table>
<thead>
<tr>
<th><strong>Strategic plan framework</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Management of control over the function of the land</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Production facilities and infrastructures rehabilitation</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Improvement of farmers’ access toward loan institutions</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Development of agricultural technology</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Low tax on the land areas for farming</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Significant degradation of the numbers of moving land’s farmers in the village</strong></td>
<td></td>
</tr>
<tr>
<td><strong>The significant improvement of the numbers of land areas for farming with technical irrigation</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Inhibitors:**
- Policy and regulation is still weak (there has been no separated Perda that regulates the management of control over the function of the land areas)
- Coordination and synergy between related institutions is still less
- Less fund for the counseling
- Less support on agricultural infrastructures
5. Suggestion And Conclusion

5.1. Conclusion

Based on the analysis and discussion above, several conclusions could be drawn as follow:

1) Agricultural potential in the district of Malinau will be benefited if it is effectively exploited. The effectiveness will depend on the factors as follow: (a) farmers’ capability in making use of available land areas for farming; (b) support of local government in the provision of agricultural facilities and infrastructures; and (c) the effectiveness role of elucidation organization in the field.

2) The effectiveness of the running agricultural policy is determined by these factors, which are: (a) clear strategy and policy’s goal; (b) strategic plan framework that could be implemented in the field; (c) the reality of the policy in the field and the prediction in the future; (d) the success of the policy on control over the function of the land areas; and (e) the local community involvement in the running policy implementation.

3) Agricultural policy in creating food self-sufficiency could have positive and/or negative implication toward six aspects, which are: (a) positive implication toward the arranged of plan framework which consist of three concept of food self-sufficiency, which are: production and food availability; access guarantee toward food; and also quality and food safety; (b) positive and negative implication toward the control over of the function of the land; it is positive if that policy could give more value to the non-productive land into productive land through the control over the function of the land areas process; it is negative if the land that has been controlled over is the productive land; (c) implication toward the provision of agricultural facilities and infrastructures productions, and has been able to help the farmers; (d) positive implication toward the farming business, because of the availability of farm loan facilities; and has pushed the farmers to improve their productivity; (e) implication to the improvement of farmers’ knowledge and skill in using new farming technology; and (f) positive implication to lower the tax on farming land areas and building for the farmers.

5.2. Suggestion

Based on those conclusions, researcher could propose some suggestions as follow:

1) It needs research and development of the local potential food that has high selling price in the domestic or even international market;

2) it needs an arrangement of local regulations that specifically written about the control over of the productive land;

3) it needs an integrated sustainability toward the elucidation and food self-sufficiency section, which consists of organizational and counseling facility section, and food self-sufficiency section; both in organization’s facilities and its human resources;

4) it needs to add the funding for research and development activity, and the involvement of university and LSM to assist the farmers;

5) the improvement of farmers empowerment through the building of sampling farming, sampling plantation, sampling fish pond, and etc.

References


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