



Analysis Of The Role Of Stakeholders In The Food Security Strategy Of Bondowoso District Based On The Perspective Of The Three Pillars Of Foods Security : Availability, Affordability an Utilization

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Food security is an important and strategic matter for a country. The food security of a region can be considered successful if the increase in food production and distribution runs smoothly and food consumption is safe and sufficient to meet the nutrition of the people. As the population increases, the amount of consumption will also increase so that the demand for the main food requirement of the Indonesian population, namely rice, will also increase. Bondowoso Regency is the district that has the largest Gross Regional Domestic Product (GRDP) from the agricultural sector. This research aims to determine the influence and interaction patterns of each actor in an effort to increase food security in Bondowoso Regency. The research method used is Mactor Analysis. The research results show that the actor with the highest influence is the Department of Agriculture and Food Security, while the actor with the highest dependency value is the Regional Government. Based on the results of the analysis of the goal of increasing food security, there are goals that have very strong ties, namely adequate food supply, the existence of a food assistance program from the government, sufficient food production, stable and affordable food prices for the community.

Keywords: Food Security, Mactor, Availability, Affordability.

I. INTRODUCTION

Food security is important and strategic for a country. Every country needs food for its people to survive, to meet their needs. Having less food available than needed can create economic instability. Various social and political upheavals can also occur if food security is disrupted. This critical food condition can even endanger economic stability and national stability.

Food security is also an important international concern. At the G20 Meeting which will be held in Bali in 2022, discussions will be held regarding coordination to resolve the issue of world food security. The G20 will work together with the Food and Agriculture Organization (FAO) and the World Bank Group (WBG) to contribute to the results of mapping related to food security carried out by the two institutions such as fertilizer needs and supplies, funding needs for food, and the preparation of G20 Agricultural Market Information System (AMIS), (Arif Arfanda R, 2022).

The food security of a region can be categorized as successful if the increase in food production and distribution runs smoothly and food consumption is safe and sufficient to meet the nutrition of the people (Rahmawati, 2012).

According to Isbandi and S. Rusdiana (2014), food needs in Indonesia cannot currently be met because agriculture in Indonesia cannot be managed well. Farmers really need an institution that can guide farmers in increasing food productivity by establishing farmer groups, the function of the institution is to provide counseling to farmer groups and provide access to facilities regarding agricultural production, however, usually this is not easily accepted by farmers, therefore must be able to convince farmers about how to increase agricultural productivity so that food security in Indonesia runs well. As the population increases, the amount of consumption will also increase so that the demand for the main food requirement of the Indonesian population, namely rice, will also increase.

In 2018 the population of Bondowoso Regency was 772,297 people and in 2022 it will increase to 781,417 people. Meanwhile, the largest staple food production in Bondowoso Regency, namely rice, has experienced a decline in production over the last five years. Rice production in 2018 was 537,450 tons, while in 2022 it was 460,425 tons. When compared with the average annual consumption, rice production in Bondowoso Regency is still insufficient. The average annual per capita consumption is 865.42 kg or production needs that must be met are 676,253.9 tons.

The increase in rice prices in recent years has also been quite significant. According to the East Java Information System for Availability and Price Development of Basic Materials (Siskaperbapo), in June 2019 the price of premium rice in Bondowoso Regency was IDR 11,375. Meanwhile, in June 2023 the price of premium rice will be IDR 12,675. Continuous increases in food prices can pose a threat to economic stability. In an effort to increase food security for the community, the government is trying to continue to increase domestic production and also import. Based on data from the Management Information System of Perum BULOG Kancab Bondowoso, in 2021 Perum BULOG Bodowoso Branch received 5,663,900 kg of imported rice. It is hoped that the receipt of imported rice will help meet rice demand and also stabilize the increase in rice prices on the market.

The level of food security in a region is assessed using the Food Security Index (IKP). This index covers various supporting factors that influence food security, including availability, affordability, and finally food utilization. It is hoped that fulfilling these three aspects can reduce food problems in a region. However, currently the condition of food security in each region shows differences with the condition of food security at the national level. Food availability at the national level does not necessarily guarantee food availability at the provincial/district level (Food Security Agency, 2020).

Based on the cut off point for the Food Security Index, Bondowoso Regency is included in the IKP group 5 category, namely in the range of IKP values $> 67.75 - 75.68$. Meanwhile, the highest IKP cut off point value is in category 6, namely > 75.68 for the Regency category. The Food Security Index (IKP) value for Bondowoso Regency in 2021 is 74.89 and is in 231st place nationally out of a total of 416 districts in Indonesia. Meanwhile, in 2020 the IKP of Bondowoso Regency was 73.68 and was in 247th place. With this description, a study is needed to determine the patterns and interactions of each actor with various different goals in increasing food security in Bondowoso Regency.

II. LITERATURE REVIEW

According to the Ministry of Agriculture (1996), food security is the ability to meet the food needs of household members in quantity, quality and variety according to local culture from time to time in order to maintain a healthy life.

According to FIVIMS (Food Insecurity and Vulnerability Information and Mapping Systems) (2005), food security is a condition when all people at all times physically, socially and economically have access to sufficient, safe and nutritious food to fulfill their consumption needs and according to their tastes. (food preferences) for an active and healthy life.

According to FAO (2016), food security is a condition where individuals or households have physical or economic access to food for all household members and are not at risk of losing both.

There are three indicators that are subsystems of food security, namely the food supply, distribution and consumption subsystems, all three of which influence each other on an ongoing basis. According to the Food Security Agency (2005), there are four aspects that form food security, namely: Food availability, namely the physical availability of food in the area obtained from domestic production, imports or food aid but its availability is prioritized over domestic production, Food access, namely the household's ability to obtain sufficient food, either from their own production or purchases, bartering, gifts, loans, and assistance or from all five, Food absorption, seen from the use of food by family members in the community, Nutritional status is an outcome of food security .

According to Saragih (1998), aspects of food security are aspects of providing adequate amounts of food to meet the increasing demand for food as a consequence of population growth, changes in population composition or due to population increase. Aspects of fulfilling demands for quality and diversity of food ingredients to anticipate changes in consumer preferences who are increasingly paying attention to health and fitness issues. Aspects regarding the distribution of food ingredients over space and time. The aspect of food affordability (food accessibility), which is related to the availability of food (quantity, quality, space and time) must be accessible to the entire community.

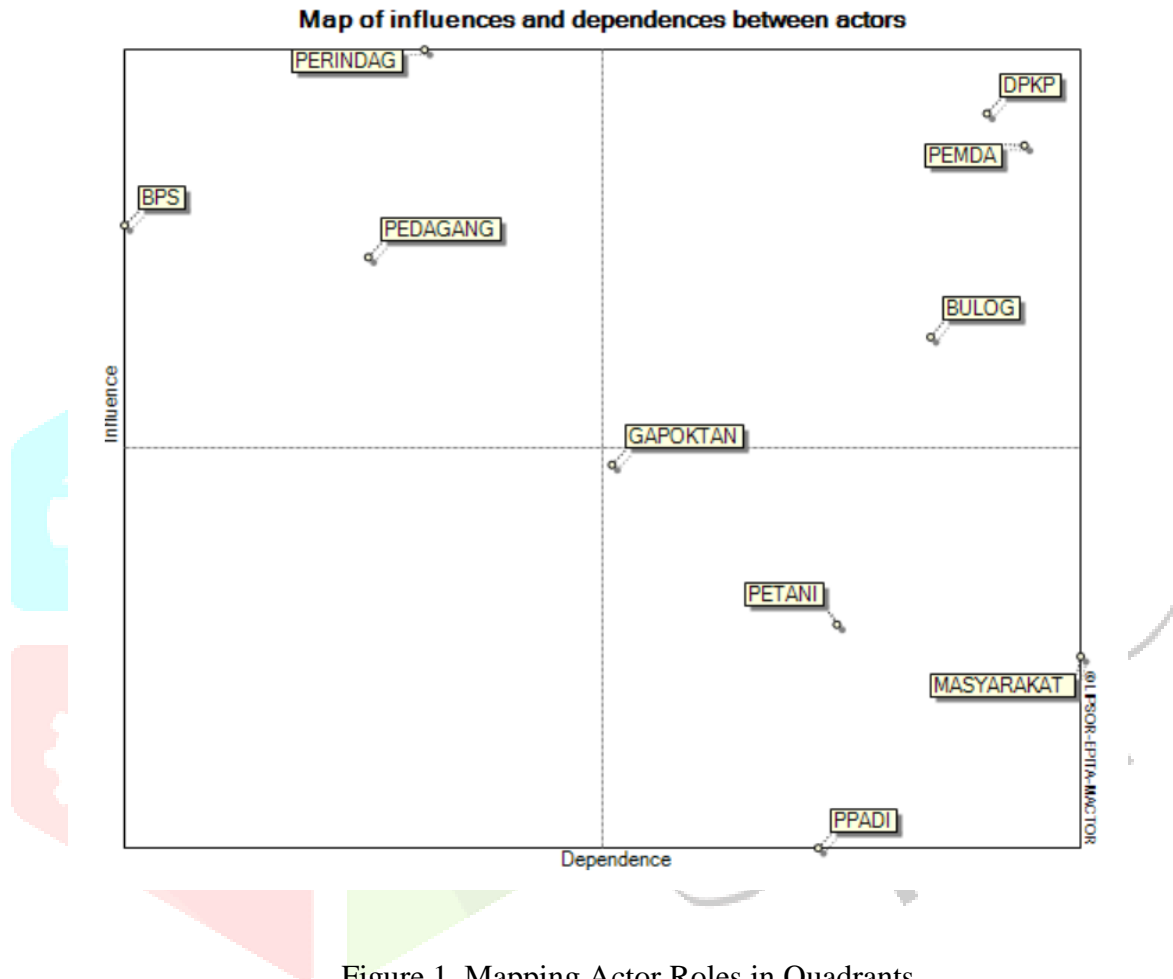
According to Webb and Rogers (2003), there are several indicators of national food security, namely the Food Availability Indicator. Food availability is a condition where a person can meet food needs in quantities that are safe, nutritious and healthy, originating from the country's own production or imports. and food assistance so that the number of calories needed for community life can be met. Food access indicators are all individuals or households with the resources to obtain food that meets nutritional needs obtained from food production personal or food purchases and assistance. There are several household and individual accesses to food, namely: economic access, including income, employment opportunities and prices, namely transportation of distribution facilities and infrastructure; food utilization). Food absorption is a person's need for a healthy life in using food, such as the need for energy, nutrition, water and environmental health, knowledge of household members on sanitation, water availability, health service facilities, nutritional education and the health level of toddlers are very effective in food absorption. Nutritional status (Nutritional status) Nutritional status is an outcome that comes from food security which is defined as a reflection of a person's quality of life, good or bad. Nutritional status is calculated based on life expectancy, nutritional level of toddlers and infant mortality.

III. RESEARCH METHODS

This research took place in the Bondowoso Regency area, East Java Province. The analysis method that will be used, namely the MACTOR analysis method, is used to see the preferences of each stakeholder and the level of support for the identified goals. The Mactor method carries out a comprehensive analysis of the strategies and initiatives of actors (actors) which is based on the influence between actors (actors). Mactor's method provides a global picture of the importance and likely outcomes of issues, as well as expected actor strategies, power relations and potential alliances and conflicts. The actors in this research consisted of Regional Government, Department of Agriculture and Food Security, Central Statistics Agency, Perum BULOG, Department of Industry and Trade, Rice Mill, Association of Farmers' Groups, Farmers, Rice Traders, Bondowoso Residents.

IV. RESULTS AND DISCUSSION

The actor who has the highest direct and indirect influence (judged from the results of the Li value) is the Department of Agriculture and Food Security with a value of 228, the next actor who has the highest direct and indirect influence is the Regional Government which has a direct and indirect influence value of 226. This means that this actor is very influential in determining several goals related to increasing food security in Bondowoso Regency. Meanwhile, actors who have direct or indirect dependence on other actors (judged from the Di value) are the Regional Government with a value of 228 and the Department of Agriculture and Food Security with a value of 226.



The results of the mapping of actor roles can be seen in Figure 1. The results of the mapping in the figure above show that the actors of the Central Statistics Agency (DPS), the Department of Industry, Trade and traders are in quadrant I. Actors in quadrant I have high influence while their level of dependence is low. In quadrant II there are Regional Government actors, the Department of Agriculture and Food Security, and Perum BULOG. Actors in quadrant II have high influence and also have a high level of dependence. Actors in quadrant III are actors who are highly influenced and dependent on other actors. In quadrant II there are Gapoktan actors, farmers, communities and rice milling companies. Quadrant IV are actors or stakeholders with low influence and dependence. In the results of this analysis there are no actors in quadrant IV. This means that there are no actors who have influence and also low dependency in increasing food security in Bondowoso Regency.

The 3MAO Histogram shows what objectives have the highest and lowest support by each actor or stakeholder in improving Food Security in Bondowoso Regency. The highest objective intensity is the need for adequate food for the people of Bondowoso. Other objectives that have high value are that food production must be sufficient, providing social assistance for underprivileged communities, providing good information to the community regarding the proper use of food, stabilizing food prices, food security programs for the people of Bondowoso Regency and also institutional development to support increased food security in Bondowoso Regency.

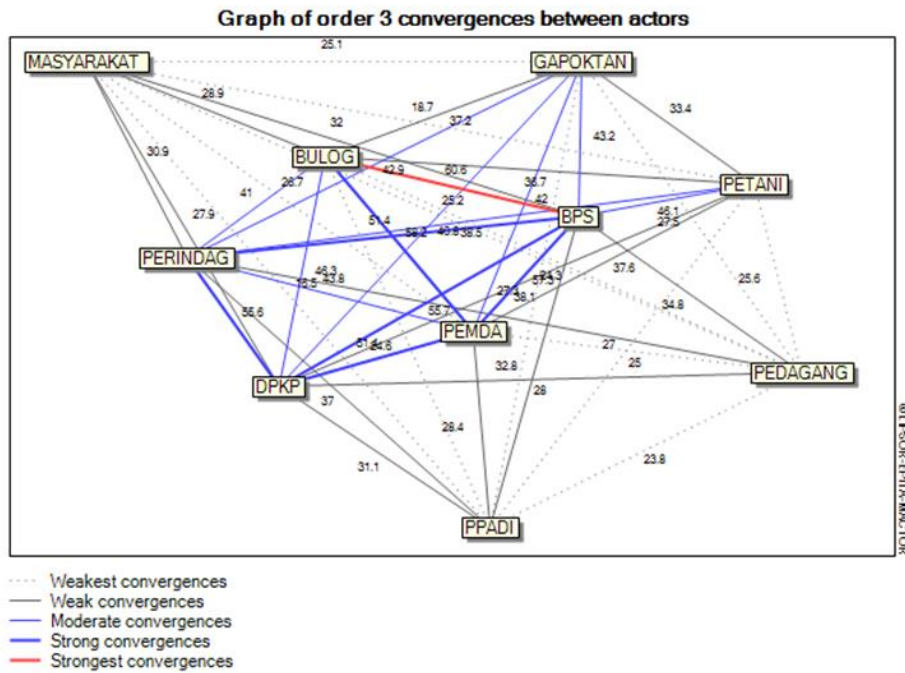


Figure 2. Convergence Network Graph

Then the results of the next analysis are the convergence network and its convergence values presented in Figure 2. Convergence networks can be used to determine which actors can work together to avoid possible conflicts. The level of convergence is shown from the lines in figure 2. The color shows the difference in the level of convergence between actors, while the thickness of the line differentiates the level of convergence. The thicker the line indicates the closeness or strength of the level of convergence, conversely the thinner the line, the weaker the level of convergence between the actors. The convergence between the BULOG actors and the Central Statistics Agency is outlined in red, which means the level of convergence is the strongest among the convergence between other actors.

Based on the results of the analysis of the goal of increasing food security, there are goals that have very strong ties, namely adequate food supply, the existence of a food assistance program from the government, sufficient food production, stable and affordable food prices for the community.

IV. CONCLUSION

The actor with the highest influence is the Department of Agriculture and Food Security, while the actor with the highest dependency value is the Regional Government. The actors with the strongest convergence regarding objectives are BULOG and the Central Statistics Agency. Regional Government, Disperindag and the Department of Agriculture and Food Security also have strong convergence. The strongest cooperation exists between actors from the Department of Agriculture and Food Security, and the Department of Industry and Trade. This proves that in efforts to increase food security in Bondowoso Regency, good synergy and cooperation between actors is needed.