

ANALYSIS OF REGIONAL ECONOMIC POTENTIALS IN DEVELOPMENT OF SUPERIOR COMMODITIES: A STUDY OF BONDOWOSO DISTRICT

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Abstract

Purpose of Study: One important aspect in regional development planning is to grow regional economies. It is expected to be a leverage and attract other sectors to move and grow well. To develop the local economy, there are several things to be used as basis for regional development. The present aims to analyze the regional economic potentials in the development of superior markets of a nation.

Methodology: Exploratory research method is used in the present study to obtain more in-depth results that can be developed according to the outcomes of the analysis. It has been carried out by determining the selection of one of the district's superior products. By using the endogenous development strategy paradigm and integrating endowment factors with human resources capabilities, the development and growth of Bondowoso Regency will be more directed, clear, measurable and targeted. In an effort to realize the development of new economic growth centers in undeveloped areas, determining superior products is very important. Furthermore, by encouraging the development of the specific potential of underdeveloped regions, it is expected to be able to encourage and accelerate economic growth and improve community welfare. so that this builds a new center for economic growth. In general, the flagship program of each district is used as leverage in stimulating regions for development. Notably, there are six parameters left behind. These include the community economy, human resources, infrastructure (infrastructure), local financial capacity (fiscal gap), accessibility, and regional characteristics. It is expected that poverty alleviation and unemployment reduction can be achieved through an increase in the local financial capacity through optimization of the potential of local products. The development of district superior product programs in growth node will be beneficial in encouraging the economic growth of the community.

Main Findings: The results of this study shortlisted some superior agricultural products in the regency with a corn LQ value of 3.86, 4.28 rice; chili 2.37; and cassava 3.92. The coconut plantation 1.89; betel 1.59 and sugar cane 3.31. For the livestock sector, the LQ of Cattle was 3.91; Goat 3.02 and free-range chicken 2.98. From the results of the discussion and in-depth analysis, the flagship products of Bondowoso district were rice, sugar cane, cattle and corn.

Implications/Applications: The present research is expected to establish local products that represent regional superior commodities and can be produced to improve the economy of the community. Such development will also provide job opportunities for the local communities and reduce the rate of poverty. Furthermore, it provides avenues for channeling government funding in terms of aid to provide an impetus for stimulating growth and jobs.

Keywords: *Model, Economy, Region, Disadvantaged, Products, Featured.* Commodities, Economic Development, Regional Economy.

INTRODUCTION

Local economic development is a good strategy for alleviating poverty and reducing disparities especially in disadvantaged regions. Economic development in badly off areas should be based on local economic characteristics of the affected places. The characteristics of the local economy in the regions vary according to the availability of local resources. The availability of potential natural resources that are biological, mineral content, environment, energy and technology vary in each region. Human resources cover social, cultural and educational life. On the other hand, infrastructure includes road facilities, transportation, markets, information and technology. In addition, external environmental conditions also affect regional economic development.^{2,14} The implementation of economic development should be based on the concept of District Superior Products, a scenario in which one district has a greater product.

Prukab (district superior program) is based on the development of district superior commodities expected to encourage and accelerate economic growth and improve community welfare. A product can be called superior if (a) it can be a mainstay of the community in the district, (b) involves the community in its entire supply chain (c) have considerable market opportunities within and outside the district (d) it is local resource-based. The characteristics of superior products along with a combination of existing benefits can be specific to the district. Due to the competitive advantage, the superior product can keep growing. For this reason, the idea of superior product can be a significant economic source, increasing the employment opportunities and community income in the area. With the selection of superior products, it is probable that all development efforts and planning, including investments, will be focused to increase sustainable production activities from upstream to downstream. All production activities should be within a supply chain. The concept of developing superior products is an impartial product development. It requires the support and intervention of various stakeholders (community, government and business). In a production chain, the involvement of various parties starting from the production sector with various supporting infrastructure, distribution and marketing and supporting sectors is crucial. Disadvantaged areas are plagued with relatively low levels of health and education, and wide gaps compared to developed regions. Furthermore, unemployment, high poverty rates and low Gross Regional Domestic Product leads to social inequality problems that must be addressed immediately. In 2016 there were still 4 disadvantaged districts in East Java: Bondowoso, Situbondo, Bangkalan, and Bondowoso. Even though the four districts had an average HDI (National Development Index) lower than the HDI of East Java Province, in essence these areas have abundant natural resource endowment not optimized. They heavily depend on other regions and that is why they lag behind in development when rated with other districts. The reasons why a district may lag behind include geographical factors. In most cases, it is difficult to access some regions because of remoteness, hills/mountains, islands, coastal areas, or due to other geomorphological factors that make it difficult to develop transport and communication networks. Additionally, natural resource factors have contributions as well. Some disadvantaged areas do not have potential natural resources. Also, human resources factors may determine the development of a region. In general, people in disadvantaged areas are characterized by low levels of education, knowledge and skills, and undeveloped institutions. Limitations in infrastructure and means of communication, transportation, clean water, irrigation, health, education, and other services have led to communities in disadvantaged areas experience economic and social problems. Natural factors and social conditions such as disaster prone areas and social conflict affects development. An area experiencing natural disasters and social conflicts face disruption of social and economic development activities. Development policy factors are crucial too. An area can be left behind because of improper policies such as partiality in regional development hampering development approaches and priorities as well as the exclusion of indigenous peoples' institutions in planning and development. Considering the complexity of disadvantaged areas, the concept and policy development of disadvantaged regions is different from development in poverty reduction. The former not only covers economic aspects, but also social, cultural and security aspects (even concerning the relationship between underdeveloped regions and developed regions). Communities' development of deprived regions in medium term is directed towards accelerating development of disadvantaged regions in a focused, measurable and integrated manner supported by the intensity of coordination among national development actors. To realize the success of achieving the goals and objectives of underdeveloped regional development, there is need for implementation of development oriented to the community (people center oriented). People in disadvantaged areas should be the perpetrators as well as those who benefit from the activities carried out. For this reason, disadvantaged regional development programs are directed to finance activities that aim to meet the practical and strategic needs of the community. The whole results (outputs) and impacts (outcomes) of such programs can be felt directly by the local community in accordance with community needs (socially accepted) (Saudi *et al.*, 2019). The deprived area development activities must be based on regional needs and beneficiary communities rather than on the principle of equity (Sinaga *et al.*, 2019). In so doing, the community will receive optimal benefits and full responsibility from regional development programs. The development of activities oriented to the conditions and needs of the community should pay attention to customs and culture developed as a traditional wisdom in the lives of local people and enrich the cultural treasures of the nation. In addition, it must be environmentally sound with sustainable principles. The principle considers the impact of activities on the environmental, economic, social and cultural variables of the community in the concerned area, both for the short, medium and long term. Principles that are not discriminative. The implementation of activities in disadvantaged areas should not be discriminatory, whether on the basis of ethnicity, religion, and race between groups. This principle is meant to prevent biasness on the interests of certain parties.

The approach to implementation of underdeveloped area development is achieved through:

- **Decentralization:** The Law Number 32 of 2004 and Law Number 33 of 2004 gives authority and responsibility to Provincial and District Governments. The Central Government motivates and facilitates local governments to be more active in handling and building their territories.

- **Integration:** Development of disadvantaged areas is carried out in an integrated manner and one unit to facilitate interaction with developed regions.
- **Sustainability:** Development of deprived areas takes into account aspects of maintenance, utilization and development of results.
- **Participatory and Innovative:** The growth of underdeveloped regions encourages the community to take part in the planning, implementation, development, reporting and supervision processes. The National Strategy for the Development of disadvantaged regions demands an increase and acceleration of economic growth for the prosperity of the people in the underdeveloped regions. This can be achieved through the development of District Superior Products. Prukab refers to a concept where one district has a single superior product 10. The PRUKAB concept refers to the adoption and development of the OTOP (One Tambon One Product) concept in Thailand, OVOP (One Village One Product) in Japan, and SAKA-SAKTI (One District One Core Competency) developed in Indonesia. District Superior Products (PRUKAB) are intended to increase production capacity which in turn increases community income and employment opportunities. By choosing a product as a superior district, all development and investment efforts are focused on encouraging increased product activity from upstream to downstream in a supply chain system.

METHODOLOGY

Exploratory research is used in the present study. It is meant to obtain more in-depth results that can be developed according to the outcomes of the analysis carried out in the following stages:

- 1). Determining criteria is declared as a District Superior Product, if it meets the criteria that include
 - a) Engaging the community a lot from upstream to downstream supply chains to absorb very high labor;
 - b) Have the potential of local resources and technology for development (comparative advantage);
 - c) Have a market opportunity;
 - d) In accordance with the aspirations of both the District Government and the perpetrators;
 - e) Specific and unique (competitive advantage).
- 2). Determining the selection and one of the district's superior products is as follows:
 - a) The process of getting a long list of products (long list product), 10-20, from the results of the analysis of Shift Share, Location Question of sectors & products, and Revealed Competitive Advantaged;
 - b) Obtain a short list of products (5 products) based on labor absorption data, resource potential, market opportunities, product uniqueness, and availability of infrastructure & infrastructure;
- 3). Determination of one product from the list of 5 products through the FGD results and in-depth interviews with government officials, business players and community groups regarding the policies of the local government to fund the aspirations of the perpetrators.

Once data has been collected it will be analysed using the Location Quotient Value (LQ) approach. The approach provides a modern and better way of quantifying the concentration level in a particular industry, cluster of businesses or firms, occupation/ job sectors or form a particular geographical location such as a region which is compared to the national values (Alcacer and Delgado, 2016; Jahn, 2017). The expected outcome will allow the study to highlight which industries have the potential for development in making the district and region unique and hence providing its competitive advantage (Zhao and Choi, 2015; Fracasso and Vittucci, 2018). In addition, clustering based on the location is shown to promote economic growth due to the unique identity provided, the identification of industries with the potential to be export orientation, to provide support for emerging industries in a particular region or locality as well as prevent the diminishing of endangered industries, especially those with the ability to be exported and bring money into the region (Taib *et al.*, 2018; Takano *et al.*, 2018; Tan *et al.*, 2018)

RESULTS AND DISCUSSION

The development of district superior products requires the intervention of various sectors and stakeholders. It must be synergized with programs at the center of the government so that they can strengthen each other. The district's flagship product is not a top down command, but rather a combination of central programs with bottom up and lower aspirations absorbed. From the results of the data analysis, a long list of superior commodities of Bondowoso Regency was obtained as shown in the table below:

Table 1: Status of Leading Commodities in Bondowoso Regency

No	Production	LQ
1	Rice	4.28
2	Corn	3.86
3	Cassava	3.92
4	Chili	2.37
5	Coconut	1.89
6	Pinang	1.59
7	Sugarcane	2.98
8	Cows	3.91
9	Goats	3.02
10	Wild Chicken	2.98

Source: Authors own estimation

Based on Table 1 above, LQ (Location Quotient) analysis of 10 superior commodities in Bondowoso Regency prospective and feasible to develop are of rice, corn, cassava, chili, coconut, areca nut, sugar cane, beef, goat and domestic chicken. The leading commodity with the highest LQ value are rice guavas. There are two possible results of parameter quantification calculations used to identify a commodity as superior with this scoring technique. These include:

- If the total value is: $0 <$ or is included in the positive (+) category, a commodity meets the criteria of a superior and prospective product to be developed and have comparative advantages and advantages with high growth.
- If the total value is: 0 and or $0 >$ or is included in the negative category (-), a commodity is less and/or does not meet the criteria of superior commodity and cannot to be developed. The commodity lacks one of the comparative and competitive advantage with moderate and or low growth. Based on the above criteria, comparative assessments can be carried out as shown in Table 2. The table shows that commodities with positive values for both shift share (RPs) and Revealed Competitive Advantage (RCA) are rice, sugar cane, cows and corn.

Besides, the results of shift share analysis using proportionality shift approach and revealed competitive advantage analysis, keeping in mind the availability of local resources, infrastructure, conformity with the aspirations of the community, the potential for commodity development, contribution to the local economy, labor absorption, market opportunities, uniqueness and cost constraints, technology, and institutions, and overlay analysis is carried out (Abdul Samad *et al.*, 2018). This analysis is meant to determine a description of potential economic activities based on growth criteria and criteria for competitive advantage on base or superior commodities.

Table 2: Status of Recapitulation Scoring Criteria for Determining Leading Commodities

No.	Commodity	Criteria										Total	Information
		1	2	3	4	5	6	7	8	9	10		
1.	Rice	1	0	1	1	1	1	1	0	1	1	8	+
2.	Corn	1	0	0	0	-1	0	-1	-1	-1	-1	-4	-
3.	Cassava	1	0	0	1	1	1	1	1	1	1	8	+
4.	Chili	1	0	0	0	-1	1	-1	-1	-1	-1	-3	-
5.	Coconut	0	0	-1	0	-1	0	-1	-1	-1	-1	-6	-
6.	Pinang	0	0	0	0	-1	-1	-1	-1	-1	-1	-6	-
7.	Sugarcane	1	0	1	1	1	1	1	1	1	1	9	+
8.	Cows	1	0	1	1	1	1	1	1	1	1	9	+
9.	Goats	1	0	0	1	1	1	1	1	1	1	8	+
10	Wild Chicken	1	0	0	0	-1	1	0	0	-1	-1	-1	-

Source: Authors Own Estimations

There are 4 possible results of overlay analysis of the LQ Location Quotient value; RPs = The ratio of the rate of growth of income to labor; RCA = Revealed Competitive Advantage. These are as below:

- LQ (+), RPs (+) and RCA (+) indicate a potential economic activity from a base sector or a superior commodity dominant in comparative and competitive advantage, and growth.
- LQ (+), RPs (+) and RCA (-) indicate a potential economic activity from a base sector or a superior commodity with dominant comparative and growth advantages but with no competitive advantage.
- LQ (+), RPs (-) and RCA (+) indicate a potential economic activity from a base sector or a superior commodity with a dominant comparative advantage and competitive advantage but low growth.
- LQ (+), RPs (-) and RCA (-) indicate a potential economic activity from a base sector or a dominant superior commodity with a comparative advantage but low growth with no competitive advantage.

This is shown in Table 3 for the short list of the flagship products of the Bondowoso Regency.

Table 3: Status of Leading Commodities in Bondowoso Regency

No	Commodity	LQ	RPs	RCA
1	Rice	+	+	+
2	Sugarcane	+	+	+
3	Cows	+	+	+
4	Corn	+	+	+
5	Cassava	+	+	+

Source: processed data, 2018

The basic strategy of district superior product development includes optimizing the potential of superior products in each district by developing product programs in one growth node area (Ishak *et al.*, 2018). This can be done by ensuring scaling up for district superior product programs to all environmental areas. On the other hand, the operational strategy of district superior product development includes expedition of the potential of superior district products carried out in

underdeveloped districts. This can be through identifying the potential and carrying capacity of available resources and through infrastructure business carried out continuously by forming business models partnership as a strategy of gaining access to capital and marketing sources.

The strategies for underdeveloped regional development nationally are adjusted to the needs and conditions of each region 4. These strategies include (Hussain *et al.*, 2019):

- 1) Development of the local economy. The strategy is directed at developing the economy of deprived regions based on the utilization of local resource potential (human resources, institutional resources, and physical resources) in each region, by the government and the community through local governments and community-based institutional groups.
- 2) Community empowerment. This strategy is directed at increasing the ability of the community to play an active role in social, cultural, economic and political activities.
- 3) Expansion of opportunities effort is directed to prevent the isolation of disadvantaged areas to ensure a connection with developed regions
- 4) Capacity building is meant to increase the institutional capacity along with human resources of the government and communities within the deprived areas.
- 5) Increased mitigation, rehabilitation and improvement is meant to reduce risk and restore the effects of damage caused by conflict and natural disasters as well as various aspects in the border area.

CONCLUSIONS

There are 4 (four) superior commodities such as rice, sugar cane, cattle and corn. These are quite prospective and deserve to be developed and designated as superior products in Bondowoso, East Java, Indonesia. Bondowoso Regency as a deprived region needs to realize 3 (three) basic strategies: (1) Increasing and accelerating economic growth to improve the prosperity of the people in disadvantaged areas, (2) Increasing social welfare in such areas, and (3) Increasing fiscal capacity based on the district's superior products. These three strategies need to be incorporated in a number of development strategies including the development of superior district products and infrastructure to encourage the realization of a prosperous society marked by a decrease in unemployment and poverty.

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