

Model for Establishing Agropolitan-Based Economic Growth in Lampung Province

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Abstract

Regional development can be said as a form of equitable distribution of development carried out through the development of agropolitan areas as an alternative solution to developing rural areas. An agropolitan area is an agricultural area consisting of agricultural towns, agricultural production center villages and surrounding buffer villages, and has facilities for the development of the agricultural industry. The theory of attraction (gravity) is used to determine the regional growth center with the carrying capacity of the leading sector (base) with Central Lampung where the distance between these two districts is 129.50 Km, then followed by North Lampung Regency (Earth City) with a value $(T.7-9) = 14,970,792,021.35$ where the relationship between this district is with Tulang Bawang district (Menggala) which is 91.16 Km. The relationship between regencies in Lampung Province reveals the relationship of respective local power, such as the relationship between the need for production materials (interregional) economy. This relationship between regencies and cities is proven by the results of an analysis of the local strengths or potential of each district, where the LQ analysis shows local strengths, which based on research with LQ from BPS Lampung Province in 2021 according to Business Fields, it is known that the Agricultural Sector consists of the Agricultural Sub-Sector, Forestry and Fisheries is the Base sector, where the 2015 and 2019 LQ results obtained a value of 2.37 and 2.18. Other sectors are the transportation and warehousing Sector. Lampung Province with 13 regencies and 2 cities is no strength for one regency to become a center of growth. There are 2 regencies, namely Kota Bumi and Kota Agung which can be planned as regional planning areas for growth points or growth centers.

Keywords: Growth Center and Base Sector, LQ, Province Lampung, Kota Agung, Kota Bumi

Abstrak. Pengembangan wilayah merupakan wujud pemerataan pembangunan yang dilakukan melalui pengembangan kawasan agropolitan sebagai alternatif solusi pengembangan kawasan pedesaan yang terdiri dari kota pertanian, desa-desa sentra produksi pertanian dan desa penyangga di sekitarnya, dan memiliki fasilitas untuk berkembangnya industri pertanian. Dengan teori daya tarik (gravitasi) untuk mengetahui pusat pertumbuhan wilayah dengan daya dukung sektor unggulan (basis), diperoleh nilai terbesar adalah Kabupaten Tanggamus dengan Nilai $(T.3-6) = 1.985.434.271.220,80$ yang merupakan hubungan antara kabupaten Tanggamus dengan Lampung Tengah yang mana jarak kedua kabupaten ini adalah 129,50 Km, kemudian diikuti oleh Kabupaten Lampung Utara (Kota Bumi) dengan nilai $(T.7-9) = 14.970.792.021,35$ dimana hubungan kabupaten ini adalah dengan kabupaten Tulang Bawang (Menggala) yang berjarak 91,16 Km (lihat kajian LQ=location quotient) sedangkan kabupaten atau kota lainnya memiliki nilai kecil yang kurang kuat menjadi pusat kekuatan wilayah dibanding dengan Kota Agung dan Kota Bumi. Hubungan antar kabupaten di Provinsi Lampung menampilkan hubungan kekuatan lokal masing-masing seperti misalnya hubungan kebutuhan akan bahan-bahan hasil produksi (inter-regional) ekonomi. Hubungan antar kabupaten dan kota dibuktikan oleh kekuatan atau potensi lokal setiap kabupaten. Berdasarkan penelitian dengan perhitungan LQ dari BPS Provinsi Lampung tahun 2021 diketahui bahwa Sektor Pertanian yang terdiri dari Sub Sektor Pertanian, Kehutanan dan Perikanan merupakan sektor Basis, dimana hasil LQ tahun 2015 dan 2019 adalah 2,37 dan 2,18. Sektor lainnya adalah Sektor Transportasi dan Pergudangan. Dengan demikian dari 13 kabupaten dan 2 kota di Provinsi Lampung menunjukkan belum ada kekuatan satu kabupaten untuk menjadi pusat tumbuh dan 2 Kabupaten yakni Kota Bumi dan Kota Agung dapat direncanakan wilayah titik tumbuh atau pusat pertumbuhan.

Kata Kunci: Pusat Pertumbuhan Dan Sektor Basis, LQ, Provinsi Lampung, Kota Agung, Kota Bumi.

I. INTRODUCTION

Villages have an important role in terms of food and export commodities to build a

country's economy. Therefore, the strategy for developing rural areas based on agricultural development must pay attention to the

potential of the available resources in an efficient, effective and sustainable manner. This is to encourage rural development with various ecological, economic, socio-cultural, technological and infrastructure dimensions that have integration and synergy to advance rural areas.

Regional development can be said as a form of equitable distribution of development carried out through the development of agropolitan areas as an alternative solution to developing rural areas. An agropolitan area is an agricultural area consisting of agricultural towns, agricultural production center villages and surrounding buffer villages, and has facilities for the development of the agricultural industry. The basis of the agropolitan concept is to build the function of an agricultural city, where agriculture is not only seen from the side of farming or hoeing but still makes agriculture the dominant sector.

In supporting the development of agricultural industrial areas, it is necessary to have agricultural production center villages and agricultural cities designed to have adequate facilities such as urban facilitation, educational institutions, agricultural extension and technology transfer institutions, health institutions, road networks, irrigation, transportation, telecommunications and infrastructure and other public facilities. Therefore, the recommended agricultural areas to be selected are areas that already have growth and development such as Plantation Community Industrial Areas (KIMBUN), Animal Husbandry Areas, Horticultural Areas or Food Crops Areas. Even so, so far the concept of development in the agricultural sector has still relied on agricultural commodities, which has been running very slowly. Therefore, it is necessary to develop the agricultural sector which can increase the income and welfare of the community, especially farmers through the management of the agricultural sector from upstream to downstream using an agribusiness approach.

The agribusiness approach can provide maximum benefits and impact for economic development and increasing people's income. The agribusiness approach that is considered

effective is the agropolitan model which in essence is known to be able to synergize agribusiness development in the context of regional economic development that can be enjoyed by the local community. If this agropolitan model is implemented, it can advance rural areas in economic, social, environmental, technological and infrastructure as well as institutional aspects. Progress can be made by involving all components in an agropolitan area including its inhabitants, so that this effort can suppress urbanization and create agropolitan areas with independent and sustainable performance.

On the other hand, the "agropolitan" areas that have been developing so far in Lampung Province show that there is no established coordination between each city/regency as agropolitan managers. Lampung Province should have one growth point that can coordinate between agropolitan areas in cities/regencies. Based on the description above, it shows that there are gaps that occur in agropolitan areas in Lampung Province which will be elaborated on three issues, namely contextual issues, conceptual issues, and methodological issues

II. RESEARCH METHOD

In terms of contextual issues, Lampung Province has problems related to food security as a challenge in agricultural development which must be expanded from upstream to downstream aspects. Lampung Province has the potential to become an "earth of agribusiness", but the agropolitan area does not yet have a single growing point between districts/cities. On the other hand, if this one-point growth can run it will strengthen food security in Lampung Province.

Based on the results of tracing the regional potential of Lampung Province as a recipient of transmigration and the dominant area potential with the agricultural, plantation, fishery and animal husbandry industries, there have been many investments planted to fill the space/region. However, 13 regencies and 2 cities from Lampung Province have not shown that their regions already have Core Regions, even though the development of

agropolitan areas in Lampung Province itself has also been carried out by many district governments that utilize ex-transmigration areas. Therefore, an in-depth study related to spatial issues is urgently needed in order to generate geo-economic efficiency. Lampung Province is one of the regions that operates its spatial area through determining an agropolitan hierarchical model with the basis/base of the polar regions and growth centers.

On the other hand, the results of a study in Fifty Cities District showed that the implementation of agropolitan policies did not reach ends due to the lack of explanation and provision of agropolitan development guidelines from the Ministry of Agriculture. This has resulted in different understandings among working groups (central, regional and provincial) in terms of handing over assets and facilitating the agropolitan master plan. In addition, there is no legal basis that guarantees the enforcement of the agropolitan master plan.

According to Tripitono Adi Prabowo in his research in Nganjuk Regency stated that, the higher quality and competitiveness of commodities will encourage the formation of superior commodity markets and then form dynamic trading activities marked by high demand (demand) originating from various regions outside the Regency. sleepy. This trading activity will become the "pulse" for the economy in the agropolitan area, which will trigger a trickle-down effect for the surrounding economy. So the suggestion for further research is an analysis of the determination of superior commodities to pay attention to the level of excellence and competitiveness. Aspects of cooperation (networking), is one of the strategies that need to be done to accelerate the development of agropolitan, both from the private sector and the government. This collaboration can be in the form of on-farm or off-farm investment, the production stage, as well as marketing [8] Some of the views as contextual issues above, tracing the relation will of course have an impact on the conceptual direction, as follows:

In terms of Conceptual Issues (Theoretical) where global challenges and regional autonomy are so that regions with high opportunities can implement agropolitan, the concept that can be used as an issue is that the concept of agropolitan Development arises from the problem of regional development inequality between cities as centers of activity and economic growth with rural areas as lagging center of agricultural activity. The process of interaction between the two regions has been functionally in a position of weakening each other. So that in the spatial context (space), the development process that occurs has in fact caused various problems related to the level of welfare between regions (rural-urban). City areas in general are characterized by dominant economic sector activities in the form of manufacturing industries; Strong trade and services; Occupied by qualified human resources (HR); and Adequate and complete level of infrastructure services. Meanwhile, on the other hand, rural areas are characterized by dominant activities in the agricultural sector in a broad sense; Occupied by human resources with low levels of education; Poverty; and Limited level of infrastructure services [4].

The development of agribusiness systems and businesses and food security is the goal and at the same time becomes the target of agricultural development. In order for agribusiness development to provide maximum benefits and impact for economic development and increase in local community income, a new approach is needed in agribusiness development in the field. The approach that is considered effective is the agropolitan model which in essence is to synergize agribusiness development in the context of regional economic development, so that the total added value of agribusiness development can be enjoyed by the local community or agropolitan is a development model that relies on decentralization, relying on infrastructure development equivalent to cities in rural areas, so that encourage urbanization (urbanization in a positive sense) and can overcome the negative impacts of development such as uncontrolled rural-urban

migration, pollution, traffic congestion, urban sprawl, massive destruction of natural resources, impoverishment of villages, and others. [1] So that the issue in this research is the need for regional development that is inter-regional by knowing the leading sectors and inter-sector linkages in an agropolitan space and its hinterlands. Methodological Issues (Variables) through a literature search for handling rural and urban disparities as an alternative solution for developing rural areas can be carried out by developing areas as a form of equitable development through the development of agropolitan areas (agricultural areas), consisting of agricultural towns with facilities for the development of the agricultural industry, villages agricultural production center villages and surrounding buffer villages.

The concept of development through integrated regional development must refer to the concept of agropolitan spatial structure, because in general the hierarchical structure of the system of agropolitan cities with a series of the highest order (main farming town), then second order (agropolitan district center), and third order as unit center agricultural area with various functions. [1] Spatial hierarchy in agropolitan space geographically refers to the notion of Centers and Growth Poles where agropolitan implementation is ensured to be functionally close to the predicate of growth poles and growth centers (Growth Pole and Growth Centre). In accordance with the Growth Pole theory that in order to grow rapidly, a region needs to choose one or more regional growth centers that have the strongest potential.

Perroux defines a growth pole as a collection of industries that will be able to drive a country's economic growth because these industries have strong forward and backward linkages with superior industries. He said that industrial clusters tend to choose locations that are concentrated in big cities and supported by a strong hinterland. A potential area is an area that is less developed or not developed at all but has factors that can cause it to develop rapidly if there is development. [7]

Perroux also said that growth does not appear in various areas at the same time but occurs in several places called growth centers. The essence of the Growth Center theory is as follows, firstly, in the development process, leading industries will emerge which are the main driving industries in regional economic development. Because the linkages between industries are very close, the development of leading industries will influence the development of other industries that are closely related to these industries. Second, industrial concentration in a region will accelerate economic growth, because industrial concentration will create different consumption patterns between regions so that industrial development in that area will affect the development of other regions. Third, the economy is a combination of relatively active industrial systems (leading industries) with relatively passive industries, namely industries that depend on leading industries or growth centers. Areas that are relatively advanced or active will affect areas that are relatively passive. [10]

Growth centers are interpreted in various concepts so that efforts to identify growth centers in the real world still raise doubts. Likewise, in determining how many growth centers are placed to maximize the positive impact. These different interpretations cause growth centers to be presented in various forms or can differ between regions. This creates confusion and contributes to difficulties in constructing hypotheses to be tested empirically [5]. The growth pole theory developed by Perroux is still considered ineffective when applied to the discussion of geographic spatial groupings. In contrast, the theory of central place by Walter Christaller, is categorized as a static theory because it only explains spatial groupings geographically and does not discuss changes in certain patterns [2].

This research is located in all Regencies and Cities in Lampung Province, so in order to accelerate regional development, it is necessary to carry out research related to sectoral and regional activities (Sectoral and Spatial). However, in this writing, which originally had three stages, the writer carried

out the first stage of writing, namely to look at the territoriality in Lampung Province on the space (region) side which is designated as a growth center with this research for one month starting in December 2021. The research raises the problem development of district and city space and economy (sectoral and spatial). This research is descriptive qualitative and quantitative, namely research that produces descriptive and quantitative data in the form of things that can be observed. This research is the development of an understanding of regional and sectoral phenomena which is carried out by gathering information from the problems that exist in the research object and is linked to problem solving in terms of theoretical and empirical studies. Data Collection Method required is primary data. Where the use of qualitative methods will be complemented by quantitative methods obtained from secondary data collection activities that are institutional in nature and supported by primary data obtained from visits to sector/sub-sector locations resulting from analysis. In this research secondary data is needed as the main analysis material and primary data to support the results of the analysis from various agencies such as Bappeda (Regional Development Planning Agency), BPS (Central Bureau of Statistics) or other agencies in Lampung Province.

While the analysis tool is the gravitational model, this theory assumes that each mass has a force of attraction (gravity) to interact at each point in a region that is complementary (regional complementarity), then has an opportunity to intervene (intervening opportunity), and ease of transfer or displacement in space (spatial transfer ability). Interaction theory is a theory about the strength of economic connections between two places which is related to the number of inhabitants and the distance between these places. The greater the population in the two places, the greater the economic interaction. Conversely, the further the distance between the two places, the smaller the interaction that occurs. To use this theory, consider the formula in Figure 1 below:

$$I = \frac{P_1 P_2}{d_2}$$

Figure 1. Gravity Formula

Explanation:

I = attractive force between the two regions.

d = distance between the two regions.

P = total population of each region [9]

Another approach used is a comparison between the relative function of the GRDP (Gross Regional Domestic Product) of a sector/production of a commodity in an area with the relative function of the magnitude of GRDP of a sector/production of a commodity at the regional level above it. Thus mathematically, LQ can be formulated as follows:

$$LQ_i = (e_i/e) / (E_i/E) \quad (1)$$

Explanation:

LQ_i = LQ value for sector i in the Regency/City/Province analysis

e_i = GRDP sector i in Regency/City/Province analysis

e = GRDP of all sectors in the Regency/City/Province analysis

E_i = GRDP sector i in Regency/City/Province analysis

E = GRDP of all sectors in the province of analysis

III. RESULT AND DISCUSSION

Lampung Province as an integral part of the unitary territory of the Republic of Indonesia is in a strategic position at the tip of the island of Sumatra which is very close to the National Capital and several regions in Java. Inter-regional relations certainly make the

Lampung region one of the areas that can play a role, including being a source of income for local strength, namely agricultural, plantation, forestry and fishery products.

Geographically, Lampung Province is located between 3045' South Latitude and 103050' – 105050' East Longitude with an area of 35,376.50 km² (“Overview of Lampung”). Lampung Province is geographically located at the southern tip of Sumatra Island. The location is very strategic because this province is the central link between Java and Sumatra. To the south, the province with the capital city of Bandar Lampung is bordered by the Sunda Strait, an area that must be passed by anyone wishing to go from Sumatra to Java or vice versa. In the north, Lampung is bordered by the provinces of South Sumatra and Bengkulu, in the east it faces the Java Sea, and in the west it coincides with the Indonesian Ocean. Bandar Lampung is a combination of two twin cities, namely Tanjungkarang and Telukbetung [3]

As in the background, the main problem regarding territoriality is the lack of coordination between and between districts and cities in Lampung Province, which consists of the City of Bandar Lampung, Liwa, Kota Agung, Kalianda, Sukadana, Gunung Sugih, Kota Bumi, Blambangan Umpu, Menggala, Metro, Gedong Tataan, Pring Sewu, Mesuji, Panaragan, Krui.

Based on the results of the analysis with the gravitational area test tool with the carrying capacity of the population in each Regency and City and the distance between Regencies and Cities, the largest value is obtained is Kota Agung with a value $(T.3-6) = 1,985,434,271,220.80$ which is the relationship between Tanggamus and Central Lampung districts where the distance between these two districts is 129.50 Km, then followed by the City of Bumi with a value $(T.7-9) = 14,970,792,021.35$ where the relationship between this district is with the Tulang Bawang district (Menggala) which is 91.16 Km away (see $LQ = \text{location quotient study}$) while other regencies or cities have a small value which according to regional attractiveness considerations is not strong enough to become a regional power center

compared to Kota Agung and Kota Bumi. The physical distance between Kota Agung and Kota Bumi is 186.84 Km, thus it can be said that each district and city still runs its (economy) wheels according to their respective local strengths, no one has yet implied the existence of one power (district) intended to be a Growth Center. Or the growth of one of the Regencies or Cities to become or become a Growth Center. The relationship between regencies in Lampung Province reveals the relationship of respective local power, such as the relationship between the need for production materials (interregional) economy.

This relationship between regencies and cities is proven by the results of an analysis of the local strengths or potential of each district, where in the LQ analysis it shows local strengths, based on research with LQ calculations from BPS Lampung Province in 2021 according to Business Fields, it is known that the Agriculture Sector consists of The Agriculture, Forestry and Fisheries sub-sector is the Base sector, where the 2015 LQ results obtained a value of 2.37 and the 2019 LQ results obtained a value of 2.18. Other sectors that become the basis are the Transportation and Warehousing Sector. Thus it is clear that Lampung Province with 13 regencies and 2 cities shows that there is not yet the strength of one regency to become a growth center and from the results of the analysis there are 2 regencies, namely Kota Bumi and Kota Agung which can be planned as growth point areas or growth centers.

Based on the analysis with the carrying capacity of the population for each Regency or City, which totals 15 Regions along with the distance (Km) between the districts/cities in Lampung Province, the result is that the region of Tanggamus Regency with the Capital Kota Agung can be tricked as the center of the center. all regencies and cities in Lampung Province. Regardless of the regional strength conditions such as Bandar Lampung which claims to be a City of Commerce, it does not rule out the possibility that the area resulting from the analysis of gravity between Regencies and Cities in Lampung Province turns out that Tanggamus Regency is a

Growth Center, so centripetally and centrifugally this Tanggamus Regency area will become a center or its magnetism for regencies and cities in Lampung Province.

IV. CONCLUSION

Apart from being the capital city of Lampung Province, Bandar Lampung actually claims to be a trading city. The completeness of facilities and infrastructure guarantees that Bandar Lampung City as a city is truly not just a figment of the imagination. The downstream production of agricultural products requires Bandar Lampung with its sea dock facilities for export and import activities. But on the other hands besides the city of Bandar Lampung of course there are 13 regencies and 1 Metro City which can be said to have not progressed. Nearly 60% of the population of Lampung Province are in rural areas and these villages or Pekon (Rural: Lampung Ethnic) are in the 13 regencies.

The results of the analysis using the gravity method obtained 2 regencies, namely Kota Agung and Kota Bumi as feasible areas that can be said to be areas that will grow to become centers of growth. The phenomenon is that the distance between the 2 selected districts is 186.84 Km and there are several Regencies that act as intermediaries between the two Selected Regencies, namely Pring Sewu Regency, Pesawaran Regency and Central Lampung Regency. This means that several regencies outside Kota Agung and Kota Bumi can be used as buffer zones.

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