The New Growth Centres and Strategy for Building and Accelerating Agribusiness Development in Cirebon Regency, Indonesia

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Abstract

This research aims to find out the potential of natural resources that have comparative advantage, and determine the growth centres formulation to build and accelerate of agribusiness development. Furthermore, to compile the strategy of regional development-oriented agribusiness. The research location was carried out in Cirebon Regency that potential for agribusiness development. The method used case study in cross sectional. The study focused on the physical aspects of the potential of the region, and socio-economic aspects. Data were primary and secondary data. Data collection method performed through interviews and study of literatures. The data collected were analyzed by analysis potential business activity, growth centres analysis, and SWOT analysis. The results of research are that Cirebon Regency devided 4 regions of business activity. Region I is Kapetakan Sub-district as growth centre, Region II is Plumbon and Cirebon Barat Sub-district as growth centre, Region III is Sumber Sub-district as growth centre, and Region IV is Ciledug Sub-district as growth centre. Need to create innovation which ensure linkages inter the growth centres through the development of integrated business networks such as developing of market centres in the area of growth centres, and making more linkages inter regional by developing of commercial production centres.

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1. Introduction

Natural resources have the potential to provide a significant comparative advantage in the process of development of a region (Gunton, T., 2003). Indonesia as an agricultural country has the advantage of natural resources that are suitable for agribusiness development. Therefore, policy of development-oriented agribusiness is key to successful regional development in Indonesia. Agribusiness development means development that focuses on the agricultural sector in a complete system from upstream to downstream and their supporting sectors harmoniously and simultaneously. Agribusiness development is more important for Indonesia since the world entered the era of globalization in early 1995. But the agricultural sector, which is the economic base of rural people, dominate the life of most of the population and absorb over half of the total workforce and a safety valve economic crisis still remain marginalized. While on the other hand, most people expect much on agriculture as the foundation of economic recovery. Therefore, the natural resources should be utilized as much as possible to support the people's economy, in the form of agribusiness development (Darmansyah, A., 2012). Agribusiness development by Saragih, B. (2001), will be able to bring Indonesian competitiveness in the globalization of the world economy because: (1) National agribusiness and agro-industry is still in a growing phase and will continue to grow in the future, (2) Indonesia has natural resources is a fundamental resource in the development of agribusiness and agro-industry, (3) Indonesia competitor countries such as USA, Canada, Malaysia and Thailand are traditionally controlled international agribusiness in the future will be difficult to develop because of the difficulty of agribusiness land. Agribusiness sector is the leading sector in Cirebon Regency, an area located in the eastern part of West Java Province. Agriculture and agribusiness sectors contribute most to the GDP Cirebon Regency amounting 5,330,751 million dollars (GDP at current prices) or 31.14% of the total GDP Cirebon Regency. This gives evidence that agriculture and agribusiness sector in Cirebon Regency is very dominant (Central Bureau of Statistics, 2011).

Efforts are being made Cirebon Regency government in order to optimize the implementation of regional development-oriented agribusiness, including a community empowerment program of farmers and fishermen, establishment of institutional agribusiness, increase value-added agro-industry and others, although the results have not been satisfactory. This is due to the lack of synergy among the various development sectors concerned. According Rachdiati, H. and S. Maarif (2002), an agribusiness development program is a development program of cross-sectoral, so as to realize it needed linkages, support and synergies with development sectors concerned. While Capello, R. (2011), emphasized the importance of the space in the growth and development of the region, in other words, an element of fundamental importance in determining the competitiveness of a local production system.

The area structure of Cirebon Regency have been set conceptually consist of several main growth areas and supporting growth areas. The main growth area is divided into four growth regions, namely (Government of Cirebon Regency, 2008):

1. Growth Region I which includes the Sub-district of Arjawinangun, Gegesik, Susukan, and Kapetakan.
2. Growth Region II which includes the Sub-district of Ciwaringin, Palimanan, Klangenan, and Plumbon.
3. Growth Region III which includes the Sub-district of Weru, Cirebon Barat, Cirebon Utara, Cirebon Selatan, Mundu and Beber.
4. Growth Region IV which includes the Sub-district of Astanajapura, Babakan, Lemah Abang, Losari, Ciledug, Waled and Karang Sembung.

Utilization of the four growth areas mentioned above is not currently visible, so there is a functional weakness among the major growth areas and supporting growth areas. Besides, there are also structural weaknesses of urban areas, rural areas, and region (Government of Cirebon Regency, 2008). In other words, it should be laid out new growth centres or new growth poles which more concerned with the potential commodity and potential sectors in the region to support the growth of agribusiness, along with service centres.

In addition to structural weakness of the region, there are also drawbacks residential areas, especially
in coastal settlements far from a healthy housing environment quality standards. Similarly, residential infrastructure such as water management, waste water and solid waste still requires intensive and ongoing arrangement. Factors other residential infrastructure such as public facilities in terms of quality and quantity need improvement. Territorial conditions mentioned above, should continue to be developed so as to support economic growth and to drive growth in order areas (Government of Cirebon Regency, 2008).

The growth centres are based on concepts as: the unbalanced growth, macro-units, lop-sided effects, economic power, domination effects. The main idea of the growth poles theory is that the economic life do not suppose only the action of some isolated firms, but rather it involves the specific action of complex economic entities which, through their market position and size may play a decisive role which on its turn may result in the development of new priority models generating economic growth (Borbely, L., 2011).

Based on the above description, the problems of this study are formulated as follows:

1. How to determine the centres of growth and potential of agribusiness activities suitability based on the comparative advantage of a region?
2. How to determine the service centres of agribusiness which resulting a regional spatial pattern comprehensively for agribusiness growth?
3. How the strategies of regional development-oriented agribusiness according to the characteristics of the area?

2. The Concept of Regional Development and Growth Centres

The formulation of regional development strategy is a basic requirement for the successful implementation of regional programming. A constitutive element of this strategy is the selection of the spatial or regional development model (Christofakis, M. and A. Papadaskalopoulos, 2011). Regional development aimed at increasing the competitiveness of the region by exploiting comparative advantages as an agricultural area, including agriculture, fisheries, and livestock.

The strategy, that is based on the growth poles model, has ruled the field at an international level since the beginning of the 20th century, most specifically after World War Two, and it constituted a 'dogma' in the development of economies throughout the world. Most of the regional development policies and theories of that period were based on the main hypothesis of the almost complete identification of industrialisation with enlargement and growth (Christofakis, M. and A. Papadaskalopoulos, 2011).

The planning of regional development need to understand the concept of growth pole or growth centre. Growth centre concept has several assumptions (Budiharsono, S., 2005):

1. Population is distributed in a variety of sizes settlement.
2. They have a need for biophysical as well as socio-economic needs.
3. They use natural and human resources such as the goods and services for their needs.
4. They form a settlement in the form of houses, small hamlets, villages and towns as well as continue to live together as long as sufficient resources for their needs.
5. They use the resources for basic needs which is restricted or limited desires.
6. They move to another place (migration) to find goods and services that are not they found in their settlements.

The foundation of the theory of growth centres in regional development emphasizes economic space, and geographic dimensions (Perroux, F., 1955, 1971; Boudeville, J.R., 1966, 1968). Growth centres also benefit because of the grouping of all economic activity ( Christaller, W., 1933) and the spread-backwash effects of economic growth in spatial (Myrdal, G., 1957).

In the scientific literature it is considered that the development of a growth pole in a quite small centre is a challenge for the planners acting in the field of regional development, this action being a way to get: higher revenues of the financial resources; a more efficient cohesion policy; actual and measurable results (Borbely, L., 2011).
3. Methodology

The method of research used a case study approach in cross-sectional. The study focused on the physical aspects of the potential of the region, and socio-economic aspects. A case study conducted in Cirebon Regency.

The data consist of primary data and secondary data. Primary data were collected through observation and interviews with the respondents using a questionnaire. Secondary data collected through a review of relevant literature sources, retrieval of data and information from reports several related institutions / agencies.

The respondents comprised of leaders of farmers, ranchers and fishermen, youth leaders, and leaders of related institutions / agencies. The method of determining the respondents were purposively sample.

Data analysis was conducted in the following manner:

1. Potential Analysis of Business Activity.
   Business activity assessed in this study is based on the types of commodities that are in the study area. Research potential of business activities conducted on the level of productivity of each commodity, using a statistical model (Dixon, W.J. and F.J. Massey, 1969)

2. Analysis Service Centres.
   The analysis tools are sociogram and schallogram. This analysis is useful to support the analysis of the hierarchy of growth centres by location determination based on variables for a growth centre. The variables in the determination of these service centres are:
   a. Population.
   b. Education and training facilities.
   c. Health and transport facilities.
   d. Agricultural and industrial facilities.
   e. Social, communication and information facilities.
   f. Economic and financial facilities

3. SWOT (Strength, Weakness, Opportunity and Treath) analysis both qualitatively and quantitatively.

4. Current Condition of Cirebon Regency

Cirebon Regency is currently being actively promote agribusiness development. The regional development programs as outlined originated from several national and regional strategic which include 3 strategic issues (Government of Cirebon Regency, 2008):

1. The national economy in a state of crisis that required a relatively brief economic recovery.
2. Along with the advent of social upheaval in society, there are also demands for reform in various fields including politics and government reform, the regional desire to organize and manage their households who gave birth to decentralized governance or autonomy in the district.
3. Strategic areas that are “wangsit” guardian of “sanga”.

Cirebon regency structure consists of sub-districts, villages and wards. Cirebon regency government's position to the sub-district areas on the regional autonomy is the main organizer of the local government, while to the villages area are a builder and mover of the village administrative autonomy within the framework of a unity government, and fostering social development under the district government. In the framework of regional autonomy and the accelerated development of the region, needs to be improved the position, role and functions of the sub-district as an arm of district government.

Administratively Cirebon Regency consists of more than 30 sub-districts. Furthermore, if the terms of its geographical position, Cirebon Regency is part of the Province of West Java which is located in the eastern part and a boundary, as well as the gateway to the Central Java Province. Based on the geographical location, Cirebon Regency is located at position 108 40'-108 40' East Longitude and 6 30'-7 00' south latitude, which is bounded by: the north bordering the Majalengka region, the south by the district of Kuningan, the eastern border with the city of Cirebon and Brebes (Central Java).

In the agricultural sector, Cirebon Regency is one of the rice-producing areas are located on the north coast path. Location of land stretching from northwest to southeast. The ground / land can be divided into two parts: the first is a
low-lying area that is generally located along the northern coast of Java Island, namely the Sub-District of Gegesik, Kaliwedi, Kapetakan, Arjawinangun, Panguragan, Klangenan, North Cirebon, West Cirebon, Weru, Astanajapura, Pangenan, Lemahabang, Susukan Lebak, Karangsembung, Waled, Ciledug, Losari, and Pabedilan. While the latter is included in the plateau region.

Cirebon land area extending from the north coast and northeast up to the hills in the south. Therefore morphology to vary with altitude varying from 0 to 300 m above sea level. Based on the altitude above sea level, the district of Cirebon can be grouped into (Strategic Plan of Cirebon Regency, 2009):

a. Area with an altitude of 0-25 m above sea level in most of the Cirebon District (65.35%) with an area of 64,636 ha.
b. Area with an altitude of 25 m - 50 m above sea level, covering 11,525.20 ha or 11.65% of the total area of the district.
c. Area with an altitude of 50-100 m above sea level, covers an area of 10,196.40 ha or 10.3% of the total area of the district.
d. Area with an altitude of 100-200 m above sea level, covers an area of 6,150 ha or 6.21% of the total area of the district.
e. Area with an altitude of 200-300 m above sea level, covers an area of 4,275.55 ha or 4.32% of the total area of the district.
f. Area with an altitude of 300 m above sea level, covers an area of 2,180.2 ha or 2.21% of the total area of the district.

In general, 60% of Cirebon Regency along the north coast including the lowlands which has a height of between 0-20 meters above sea level. Sparse density contour with slope 0-5%. Land use in this area such as urban and rural settlements, fisheries, farming, agriculture, and mining. The remaining 40% area of the district of Cirebon, in the form of undulating hills with a height of 20 m - 400 m above sea level. Density contours are meeting up with a slope of 10% - 45%. Land use in this unit include forestry, plantation, and mining fields.

## 5. Result

### 5.1 Potential Analysis of Business Activity

Agricultural commodities produced in Cirebon Regency consist of several types, namely:

1. Rice, consisting of lowland rice and upland rice.
2. Crops, consisting of maize, cassava, sweet potatoes, peanuts, soybeans, green beans.
3. Vegetables, consisting of onions, peppers, tomatoes, beans, cucumbers, eggplant, kale.
5. Plantations, consisting of coconut, clove, coffee, ylang, sugar cane, pepper, kapok, “melinjo”, galangal, turmeric, kapolaga, nymba.
6. Fishery, consisting of ground fish, fish ponds, swamps fish, marine fish.
7. Farm, consisting of horses, cows, buffaloes goats, sheep, pigs, ducks, chickens.

For determining the growth centres based comparative advantage, determined several criteria:

1. Similarity (homogeneity)
2. Potential level of each type of commodity.

The analysis of each area of production or productivity or population per type of commodity. For this purpose, each commodity is classified into 3 groups, low (L) = score 1, medium (M) = score 2, high (H) = score 3) through the
calculation of the formula: $Y = (X_1 - X_2) / N$. Furthermore, based on the calculation result obtained zoning map business as growth centres as follows:

(1) The growth centre I
- The region includes Sub-districts of Kapetakan, Susukan, Kaliwedi, Gegesik, Arjawinangun, and Panguragan.
- The type of potential commodity is rice, cashew water, ground fish, fish farms, sheep, ducks.
- The potential sector is agriculture (paddy), fisheries (inland and aquaculture), livestock, processing industry.

(2) The Growth centre II
- The region includes Sub-districts of Plumbon, Cirebon Barat, Palimanan, Ciwaringin, Depok, Cirebon Utara, Weru, Dukupuntang, Klangenan, and Cirebon Selatan.
- The type of potential commodity: beans, bananas, processed fish, mutton, chicken.
- The potential sector is processing industry (small), trade.

(3) The growth centre III
- This area includes Sub-districts of Sumber, Mundu, Beber, Astanajapura, Sedong, Lemahabang, Pangenan.
- The type of potential commodity is sweet potato, peanut, onion, guava, clover, cows, goats, sheep, chicken.
- The potential agricultural sector: dry land, plantations, farms.

(4) The growth centre IV
- The region includes Sub-districts of Ciledug, Karangsembung, Susukan Lebak, Waled, Babakan, Gebang, Pabedilan, Losari.
- The type of potential commodity is corn, onions, peppers, beans, eggplant, spinach, sugar cane, fish, horses, goats, sheep, chicken pieces.
- The potential sector is fisheries (marine), plantations (sugar cane), forestry.

5.2 Determination of Agribusiness Service Centres

Agribusiness service centres are needed in order to develop a region / growth centre, as an area of activity will grow if supported by an activity centre capable of serving the needs of its population. Agribusiness service centres will be able to foster and accelerate the development of a regional agribusiness through easy access to facilities such as educational facilities, health, agriculture and industry as well as market and financial.

Agribusiness service centre constitutes: (1) Residential centres, (2) centre of social, economic, (3) Agricultural and industrial centre, (4) Trade centre and information, and (5) Education and training centre. Determination of service centres use schallogram and sociogram method. Based on the that analysis obtained the agribusiness service centres, with the following explanation:

(1) The growth centre I with Sub-district of Kapetakan as service centre, serving Sub-district of Susukan, Kaliwedi, Gegesik, Arjawinangun, and Panguragan. Sub-district of Kapetakan is a sub-district that has a number of populations, most farmers and fishermen, social facilities, health and the economy (cooperatives, markets, small industry, fisheries, animal husbandry) is more complete than the other sub-districts in the growth centre I. These state allow the Sub-district of Kapetakan as a service centre for the surrounding areas of business activity in the region I.

(2) The growth centre II with the service centre namely Sub-district of Plumbon and Cirebon Barat. They serve Sub-district of Palimanan, Ciwaringin, Depok, Cirebon Utara, Weru, Dukupuntang, Klangenan, and Cirebon Selatan. Sub-district of Plumbon and Cirebon Barat are a sub-district that have a number of residents, traders, agribusiness entrepreneurs, social facilities, number of health, the power circuit (communication and transport), and economic facilities (cooperatives, markets, mining, agriculture), more complete than the other sub-districts in the business activity area II. Even Cirebon
Barat Sub-district is a sub-district having the highest value of the scale in terms of completeness of service centres throughout the Cirebon Regency.

3. The growth center III. Sub-district of Sumber becomes area of service center, serving Sub-district of Mundu, Beber, Astanajapura, Sedong, Lemahabang, and Pangenan. Sub-district of Sumber is a sub-district that has a number of medium shops/small shops/stalls, markets, transportation, social, education and number of health facility, plantations, farms, more complete than the other sub-districts in region III. Therefore, Sumber Sub-district allows a service center for the surrounding areas of business activity in the region III.

4. The growth center IV with Sub-district of Ciledug as service center, serving sub-district of Karangsembung, Susukan Lebak, Waled, Babakan, Gebang, Pabedilan, and Losari. Sub-district of Ciledug is a sub-district that has markets, stalls, agricultural infrastructure, fisheries, education facilities more complete than the other sub-districts in business region IV. These state allow sub-district of Ciledug as a service center for the surrounding areas of business activity in the region IV.

5.3 The Development Strategy of Agribusiness

General policies and strategies should be carried out in accordance with the characteristics of Cirebon Regency are (Darmansyah A., et al, 2011):

1. Growth is concentrated.
   The development of Cirebon Regency should concentrate all its resources on the growth of a product based on the position of strategic advantage in every area.

2. Horizontal integration.
   This strategy is done by extending cooperation between regions on the same field of activity.

   Market development in each region as well as to expand inter-regional markets, national markets, and internationally through the development of distribution channels, improve advertising campaigns. Product development in each region by increasing the quantity and quality of the product.

Based on the above general strategies, operational policies must be made in order to accelerate agribusiness development are:

1. Enhancing the efficiency of the management of farm and agro-industry.
   By having the advantage of natural resources, geographical conditions, the availability of means of agricultural production and agroindustrial raw materials, much agricultural labor and farm management skills are hereditary is authorized to manage the farm and agro-industry. This policy was implemented through the utilization of information and communication in mass media either print or electronic, and education by utilizing strategic geographical location that will provide opportunities for obtaining variety of facilities and ease of procurement of raw materials farming and agro-industry. The management of farm and agro-industry enabled more efficient and able to provide more revenue for the perpetrators.

2. Increase community involvement in regional development. The involvement of local communities in the development process greatly affect the success of the development itself. The involvement of the community is in the form of freedom to work and make ends meet and to support each development policy adopted by the local government. Therefore, the strategy adopted in this case is through the communities empowerment of
economies productive and improving the capacity of agricultural extension personnel who connected directly with local community.

(3) Promoting production and quality of leading products of the each regions / areas as well as expand the market through settlement areas and utilization of information and communication.

(4) The development of local markets, improving access to and from the regional and national market and the world market. Product and activities of market development in each area should receive special emphasis.

(5) Increasing cooperation programs and projects across sectors and regions. Policy of regional development-oriented agribusiness involves a lot of programs and projects across sectors and regions. Therefore, the cooperation and coordination among programs and projects across sectors and regions should continue to receive priority in the implementation.

6. Conclusion

Regional development should rely on regional comparative advantage. Agribusiness is the leading sectors in almost all regions in Indonesia, including in Cirebon Regency. Therefore, the development of agribusiness is a great way to improve the economy and competitiveness of the region. To build and accelerate the development of agribusiness required determination agribusiness service centers as well as measures of operational strategies to suit local circumstances.

The determination of growth centers through the analysis of comparative advantage plays an important role in the development of agribusiness. Spatial arrangement of Cirebon Regency in some potential growth centre that includes potential business and service centres, can aim to sustainable agribusiness development. The four of new growth centres in Cirebon Regency generated from this study could provide the best solution for construction of Cirebon Regency in particular and Indonesia in general.

Agribusiness oriented regional development policy involves a lot of programs and projects that cross-sectoral and cross-region. Therefore, cooperation and coordination between programs and projects across sectors and regions still get priority in implementation. Regional development policies set out to create a government order districts as part of efforts to improve the quality of public services and in the context of accelerated development of the region that is capable of supporting the growth of the economy as well as environmental sustainability.

The growth centres which have been mapped are not separated each other. The interaction between universities, private parties or industries, and government is the key to innovation and development in this era of science based economy (Etzkowitz, 2008). Therefore, need to create innovation which ensures linkages inter the growth centre through the development of integrated networks of business.
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