Superior Commodities Potential and the Strategy Development in Sigi District, Central Sulawesi Province

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ABSTRACT : *This research was conducted Sigi District, specifically in Palolo and Marawola Subdistrict. This research purpose is to analyze the superior commodity potential of agricultural sub-sector and agribusiness development strategy in Sigi District as New Autonomous Region. The study was conducted with descriptive qualitative method with analysis of maps, location question (LQ) and SWOT. The research results show that superior potential agricultural sub-sector in Palolo Subdistrict is cocoa and Sub Marawola is coconut. SWOT analysis results show that Palolo and Marawola sub-district need following development strategy: Government should facilitate soft loans, farmers' groups, information center and infrastructure to helps farmers in processing and marketing.*
Keywords: Superior commodity, agriculture, development strategy

I. INTRODUCTION

Regional autonomy essentially is an effort to develop the region potential within framework of welfare society. One most dominant sector in Indonesia region is the agricultural sector. Soekartawi (2007) explained that agriculture sector can provide jobs about 49% in rural areas. On other hand, agricultural sector was also able to demonstrate strong relations with other sectors (non-agricultural), so agricultural sector is able to create new industries from agricultural raw materials.

One areas potential of agriculture in Central Sulawesi is Sigi District. Sigi has an area of 519,602 ha with several resources potential. Besides agriculture, there are some potentials should considered as Tourism, SMEs, forest, Mineral Resources, Inland Fisheries, Water Resources and Livestock.

There are some obstacles should be studied and concerned by local governments such as the development of forest resources. Preliminary analysis show the forest area management is little constrained because of a very large forest area of 390,542.5 hectares or 75.17%. The main problem of agribusiness in Sigi district lies in potential that has not been managed optimally and development planning role is not optimal. Potential indicators have not been managed optimally as the lack cooperation between farmers and local authorities. The development planning role is still not documented to support the specifics agribusiness.

Data and accurate information about the condition of agribusiness development and relations with one another field are very important. Without agribusiness potential information it will be difficult to make strategic and policy direction to begin implementation of agribusiness development by Sigi local governments.

These problems must be pursued to find the starting point of agribusiness development in Sigi. One way is to analyze the potential of superior commodities as a whole. These activities are done through data collection and analyzing basic map of Sigi. The results can shows superior commodity of agriculture sub-sectors to make agribusiness development strategy.

Based on above background, this study aims are below.
1. To analyze the superior commodity potential of agricultural sub-sector in Sigi District as New Autonomous Region.
2. To define the agribusiness development strategy in Sigi District as New Autonomous Region.

Djaenudin and Abdurachman (2002) conducted a study in eastern Indonesia. The purpose was to determine the potential and constraints of agricultural commodities development that can be developed in eastern Indonesia. With implementation of regional autonomy, each region is required to explore and enhance the potential of its natural resources optimally, including in agricultural sector which includes the sub-sectors of agriculture, livestock and fisheries.

In connection with region development potential of agricultural sector, diversity of nature of land will largely determine the type of commodities that can be cultivated and productivity level. Any type of agricultural commodities need specific requirements of land properties to be able to grow and produce optimal (Djaenudin et al, 2000). Development of region agricultural commodities should consistent with requirements of pedo-agro-climate of plant, which includes climate, soil and topography to provide optimal results with excellent quality. In addition, it is important to manage lands aspect based on land properties to achieve sustainable productivity.

The results showed that Kalimantan region is suitable for agricultural commodities that require a wet climate. Sulawesi, Maluku and Irian Jaya have potential for commodities that require wet climate and dry climate. Nusa Tenggara islands needs commodities for mostly dry climates.

Yulistyo (2008) showed that Semarang District has potential for agropolitan development, with type of superior agribusiness products as horticultural, especially vegetables, crops, fruits, ornamental plants and medicinal. There are weaknesses and threats of agribusiness in Semarang District are management, agribusiness and legal aspects. There is a strong relation between the agribusiness promotions; change in one aspect will makes significant changes in other aspects. Agribusiness management and agropolitan development need steps to strengthen coherence between aspects. Institutional development is the impact of government policies; institutions will not run without the support of government policies, particularly to strengthen the institutional and business partnerships.

SWOT analysis shows the general agribusiness conditions in Semarang are still in a weak and threatened. The cause is gap: management lack of socialization, coordination, synchronization and integrity, consistency and alignment of government policy and farmers. The enactment of Act Number 26 of 2007 on Spatial Planning also regulates the agropolitan development. It requires local government to immediately establish Regional Regulation and agropolitan development Master plan at provincial and district/city level.

Soemarno (2011) conducted a study to evaluate the land zoning of agricultural commodities, plantation and forestry land evaluation to map and zoning of commodity crops, plantation and forestry. The agricultural development dynamics today shown that economy needs more resources and a constantly face many serious obstacles, especially the availability of adequate land resources. These conditions absolutely need to focus the priority utilization of land resources and simultaneously tightening supervision of land conversion. One government's policy in this regard is land usage. Public policy sought to limit the land usage in accordance with its capabilities. However, public policy needs to be supported by more detail policies in every area of agricultural land usage.

Sucipto (2010) conducted a research in Blega Subdistrict, Bangkalan District, Madura. The study aim is to prepare a regional agricultural center with high competitiveness and competitive advantages through the development of number commodities. The methodology used is the field survey, observation, secondary data and transect studies. The results show some superior commodities in Blega Subdistrict, namely (1) food crops: rice, corn, peanuts and cassava, (2) vegetables and chili, (3) fruits: guava, sapodilla, bananas, mango, jackfruit and durian, (4) commodities; coconut, cotton, cashew, chilly herbs. This identification is used to compile a plan area (block plan) as a basis for development of commodities.

Law No. 22 of 1999 enhanced by Law No. 32 of 2004 on Regional Government explains the implementation of decentralization principle that established and composed of provincial, district, and local city authorities to regulate and manage the interests of local people initiative based on people aspirations. Therefore, local government and community participation to use the existing resources should estimate the potential resources required to design and build the local economy (Arsyad, 1999).

Saragih (2002) emphasized the importance of development with agribusiness approach for several reasons, namely: improving competitiveness through comparative advantage as main economic sector to contribute to GDP and employment and a significant source of new growth. Therefore, although the autonomy could be categorized as political variables, but in order to increase the economic competitiveness of region or agribusiness-based economic empowerment, it should also as be seen an economic change.

According Suryanto (2004) agribusiness is agriculture business in broadest sense to include all activities ranging from procurement and distribution of inputs to production of aquaculture farming, processing and marketing activities.

Agribusiness as a whole include: (1) upstream agribusiness as economic activities that produce and distribute the means of production; (2) on-farm agribusiness as economic activities to use inputs to produce primary production; (3) downstream agribusiness as economic activities to process agricultural products into a primary processed products ready for consumption; and (4) marketing agribusiness as activities to sell primary agricultural products and processed products.

Superior Commodity

Basic or superior commodity development will give value for efficiency of production system. Some superior commodity according to Mawardi (1997) is below.

1. Feasible and superior financially and economically
2. Having a broad market potential
3. Having a high ability to create multiplier effects for provision of value-added and job creation
4. Having the support of physical resources suitability
5. Commodity that has been cultivated by local people.

Location Quotient

LQ technique is used widely to discuss economic conditions to identify specific economic activity or measure the relative concentration of economic activity to get a figure to decide superior sector of economic (industry) activity. The economic activity of a region is divided into two groups below.

a. Industrial activities to serve the regional market itself and outside region. These Industries is so-called basic industries;
b. Economic activity or industry to serve markets in this area, this type is called non-basic industry or local industry.

LQ value indicates the ability of regions in sector and will give an indication below.

a. LQ> 1 indicates the area has export potential in certain activities.
b. LQ <1 indicates the area has potential to import from other regions.
c. LQ = 1 indicates the area is sufficient in certain activities.

SWOT

SWOT analysis is systematic identification of various factors to formulate a strategy. This analysis is based on logic to maximize Strengths and Opportunities, but simultaneously can minimize the Weaknesses and Threats, as shown in figure 1 below.
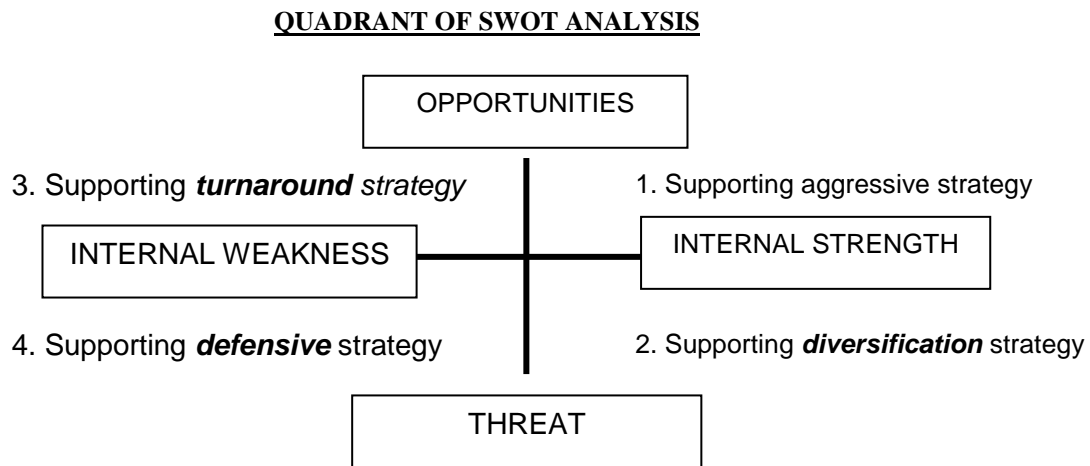
<u>**QUADRANT OF SWOT ANALYSIS**</u>

Figure 1. SWOT Analysis

Strategy Management

Identification of strategic issues is the heart of strategic planning process. Approaches to identify strategic issues that need to be responded are (Bryson, 1999): (1) Direct Approach; (2) indirect approach (3) The Goals Approach; (4) Vision of Success Approach. Which approach is best depends on nature of organization or community.

The strategic management concept is expected to produces a number of strategic alternatives of agribusiness development in Sigi District as New Autonomous Region. Local government and community manage the resources and establish cooperation to create new jobs and stimulate economic activity. Therefore, it is important to identify superior agricultural commodities and formulation development strategy for the agricultural potential in accordance with region conditions to support the advancement of economic development.

Agribusiness Development Strategy

Agribusiness Agency (1995) suggest that agribusiness development strategy in a region need to provide short-term and long-term solutions to economic issues of the region and need to correct agricultural policies that could hinder the agribusiness development. Agribusiness development area is part of local economic development. Two basic principles of economic development areas that need attention are: Region Economic Strengthening and Pro-business Region Development Management. Key steps that must be done in Region Economic Strengthening are to improve the farmer's ability and realize the institutional strengthening of farmers. This policy are aimed to (1) revitalize the extension and advisory services to farmers, including farmers, fishermen and fish farmers, and (2) turn on and strengthen agricultural and rural institutions to improve farmers' access to facilities and productive, building a delivery system through government support to agricultural sector, and increase the scale of activities that can improve the bargaining position of farmers and

fishermen. Pro-business Region Development Management formulates that District/city governments should maintain the sustainability of agribusiness development in order to bring beneficial effects for local population. It needs to understand that management of regional development can provide a good influence in order to achieve the expected goals of agribusiness development. If the policy is not targeted, the management development will lead to a slowdown growth in agribusiness area.

Therefore, management of regional development has the potential to boost economic development and create profitable business opportunities in accelerating the growth in agribusiness area. Pro-business Region Development Management is required to support the development of regional agribusiness. Development of competitive agribusiness requires substantial investment to improve agricultural infrastructure and a wide range of research related to agriculture. If the government does not make an effort of "big-push public investment" consistently in agriculture, agricultural development programs is difficult to achieve or merely rhetoric (Agribusiness Board, 1995).

II.   RESEARCH METHODS

This research is a qualitative descriptive approach. Descriptive approach is used in order researchers can better illustrate the relevant aspect detected of studied variables. Potential analysis of agribusiness development in Sigi district consists of several stages below.

    a.   Basic map of Palolo and Marawola Subdistrict
    b.   Fieldwork (socio-economic survey),
    c.   Overlay map (Agriculture Potential) of Palolo and Marawola Subdistrict
    d.   Superior commodities analysis (Location Quotient)
    e.   SWOT Analysis
    f.   Preparation of agribusiness development strategy

This research location is Sigi District, especially at Palolo and Marawola Subdistrict. The two subdistricts are selected on diversity of agricultural crops. Collections of field data are 6 months starting from October 2014 through to April 2015.

This study population is overall agricultural land usage in Palolo and Marawola Subdistrict. This study only uses agriculture land at Palolo and Marawola Subdistrict given the limited ability, time, and cost. Samples are selected by purposive sampling method.

Collection techniques used in this study are as below.
a.   Library study/document study.
b.   Field research.

This study uses two analysis methods for potential agribusiness, namely LQ analysis and SWOT analysis to determine its development strategy. Analytical tool that will be used in this study are as below.

Maps; Materials used in this study is administrative map, land area map and production map.

Location Quotient (LQ); to identify the sectors and sub-sectors of economic activity that have potential. LQ is used as a tool to analyze the potential of agribusiness. The economic activity of a region divided into two groups below.
a.   Industrial activities that serve regional market itself and outside region. These industries are so-called basic industries.
b.   Economic activity or industry to serve markets in the area, this type is called non-basic industry or local industry. The formulation of LQ method is below.

$$LQ = \frac{\frac{S_{ir}}{S_r}}{\frac{S_{in}}{S_n}}$$

Where:
Sir   : GDP of i sector each district
Sr   : GDP of all sectors in each district
Sin   : GDP of i sector in Central Sulawesi
Sn   : GDP of all sectors in Central Sulawesi

SWOT analysis is used to establish agribusiness development strategy. Information of agribusiness potential in Sigi district is analyzed together to establish policies that must be adopted. It ultimately can provide policy recommendations that should government do in Sigi district to determine the development strategy of agribusiness.

III.   RESEARCH RESULT

Sigi which is one districts from enhancement to shows a figure of many natural resources potential. Data obtained from these two areas are physical and social aspects. These figures show the land suitability directed at agricultural sub-sector. Furthermore, data of agricultural production with overlay method can show a description of agricultural potential in Palolo and Marawola sub-district.
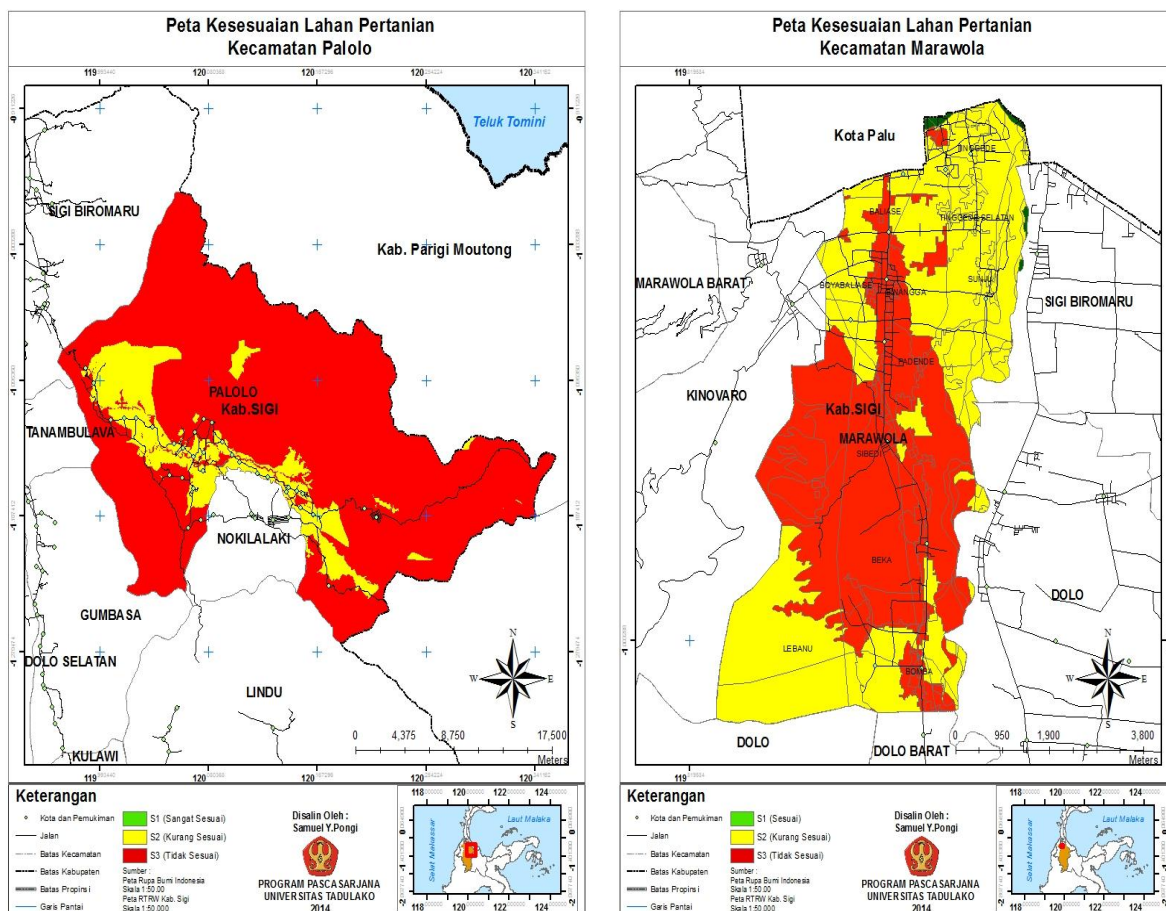
LQ Analysis at Palolo and Marawola subdistricts in Sigi is done to have the highest and lowest potential. This analysis aim is to determine potential in two subdistricts.

Data processing results show that Palolo is subdistrict with quite high agricultural potential compared to Marawola Subdistrict. The agriculture potential in this subdistrict, namely cocoa, clove, coffee, vanilla, hazelnut and rice. Cocoa production potential level is higher than other food crops. While in District Marawola, crops with highest potential is coconut.

Value of Location Quotient (LQ) of Food Crop Agriculture in Sigi

No.	Subdistrict	LQ Value of Food Crop Agriculture						
		Coconut	Cacao	Cloves	Coffee	Vanilla	Pecan	Rice
1	Palolo	0.00	1.17	1.17	1.17	1.17	1.17	1.17
2	Marawola	7.00	0.00	0.00	0.00	0.00	0.00	0.00

Source: Secondary data processed, 2015
Description:
  LQ> 1   : Superior Sector/Activities
  LQ <1   : Non superior Sector/ Activities
  LQ = 1   : Mixed Sector/Activities

Value of Location Quotient (LQ) of Food Crop Agriculture in Palolo Subdistrict

No.	Subdistrict	LQ Value of Food Crop Agriculture			
		Rice	Corn	Chocolate	Coconut
1	Sigimpu	0	1.24	0.51	0.4
2	Bakubaku	0	1.07	0.49	1.24
3	Bobo	0	2.43	0.58	1.74
4	Bunga	0	1.82	0.41	0.99
5	Kapiroe	0.9	1.69	0.56	1.26
6	Petimbe	0.61	1.82	0.4	1.65
7	Makmur	1.18	1.51	1.7	0.31
8	Ampera	2.03	0	0.63	1.09
9	Rejeki	0.94	0	1.58	1.85
10	Ranteleda	2.74	0	0.38	0.35
11	Sarumana	1.77	2.44	0	0
12	Sintuwu	0.71	1.4	1.33	1.23
13	Rahmat	0.97	0	3.49	0.5
14	Karunia	0	0	0	0
15	Tanah Harapan	2.46	0	0.05	0.93
16	Berdikari	1.16	0	1.94	1.05
17	Bahagia	1.46	0	0.89	1.63
18	Sejahtera	2.24	0	1.38	0.28
19	Uerani	3.23	0	0	0
20	Uenuni	1.75	0	1.61	0.8
21	Tongoa	1.07	1.38	1.43	0.74
22	Lembah tongoa	0.9	1.39	0.73	1.31

Source: Secondary data processed, 2015

LQ Value of Food Crop Agriculture in Marawola Subdistrict

No.	Subdistrict	LQ Value of Food Crop Agriculture			
		Rice	Corn	Coconut	Chocolate
1	Lebanu	1.12	0.70	0.03	2.62
2	Bomba	1.47	1.05	0.00	1.29
3	Beka	0.00	1.42	0.87	2.54
4	Sibedi	0.00	2.13	1.80	0.00
5	Padende	1.37	0.92	0.73	0.73
6	Binangga	2.10	0.00	1.34	0.00
7	Sunju	0.95	1.16	1.60	0.00
8	Tinggede	0.00	0.00	4.56	0.00
9	Baliase	1.22	1.05	1.32	0.00
10	Boya Baliase	1.63	1.30	0.36	0.00
11	Tinggede Selatan	0.61	0.48	3.00	0.00

Source: Analysis of secondary data, 2015

Description:

LQ> 1 : Superior Sector/Activities

LQ <1 : Non superior Sector/ Activities

LQ = 1 : Mixed Sector/Activities

Based on SWOT analysis table, the business development strategy of cocoa business in Palolo and Marawola sub-district can be formulated below.

Summary of SWOT Analysis at Palolo Subdistrict

SO	WO
• Government support to develop the production of cocoa continuously human resources and natural resources • Maintaining products quality to get competitive prices	• Local government can provide soft loans, through forms BUMDES, cooperatives, etc. • Through the farmer groups, open up the market information for farmer, also facilitate training and education by government • Provision of infrastructure which helps farmers in processing
ST	**WT**
• Intensive to eradicate pests and diseases, through pest eradication help and also giving superior seedlings and maintain land quality in order to maintain products quality	• Pesticides availability and counseling to kill the pest • Counseling about quality standard of cacao and good marketing

SWOT Analysis Summary of Marawola Subdistrict

SO	WO
• Government support to continue to develop coconut oil production through the training of human resources and sustainable natural resource processing • Maintain products quality in order to get competitive prices • The government prepares various support for farmers, capital and infrastructure	• Government can provide soft loans, through forms BUMDES, cooperatives, Perusda, etc. • Through the farmer groups, open up the market information for farmer, also facilitate training and education by government
ST	**WT**
• Intensive to eradicate pests and diseases, through pest eradication help and also giving superior seedlings and maintain land quality in order to maintain products quality • Developing partnerships with private sector	• Counseling about cocoa quality standards and good marketing • Government facilitate partnerships in capital and marketing development

SWOT analysis for two districts show that the two districts requires a development strategy to supports farmer's welfare improvement. Palolo sub-districts, especially in rural of Makmur, Rejeki, Sintuwu, Rahmat, Berdikari, Sejahtera, Uenuni and Tongoa are the villages that produce cacao with value of LQ> 1. Marawola districts, specifically in villages of Sibedi, Binangga, Sunju, Tinggede, Baliase and South Tinggede produces coconut with value of LQ> 1. SWOT analysis prioritizes the weakness aspects. The strategies needs are below.
1. Government can facilitate soft loans, through BUMDES, cooperatives, Perusda, etc.
2. Through the farmer groups, open up the market information for farmer, also facilitate training and education by government.
3. Provision of infrastructure which helps farmers in processing.

IV. CONCLUSION

Sigi District as new autonomous region shows excellent agricultural potential, namely cacao sub-sector in Palolo Subdistrict and coconut in Marawola Subdistrict. Based on existing potential, it is necessary to develop agribusiness strategy. The SWOT analysis results in two District Palolo and Marawola Subdistrict to support the agricultural sub-sector of superior commodity will need following strategies.
1. Government can facilitate soft loans.

2. Through the farmer groups, creating information center that managed by village to give information to help farmers
3. Provision of infrastructure to help farmers in processing and marketing.

In addition to above strategy, government can sharpen strategy, by cooperating with private sector to make partnership so that villages were able to improve and develop production and maintaining product quality in order to compete in global market. Recommendations from this study are below.

1. Local government may establish regional company in order to facilitate capital for cocoa and coconut farmers.
2. Local planning institution makes plan for local governments to provide guarantees to banks to provide soft loans to chocolate and coconut farmers without collateral.
3. The local government in collaboration with Tadulako University can improve the quantity and quality of cocoa plants and oil plants in order to compete in export markets.

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