Strategy of Economic Development Areas Based on The Main Sector And Commodity In Tanah Laut Regency South Kalimantan Province Indonesia

Fauzan Riyadi[1], H.Muhammad Fauzi Makki andYudi Ferrianta[2]

[1](Student of Master Program Agricultural Economics of Lambung Mangkurat University)[2](Lecturer of Master Program Agricultural Economics of Lambung Mangkurat University)
Corresponding Author:Fauzan Riyadi

Abstract: *This study aims to develop regional economic development strategies based on sectors and superior commodities in Tanah Laut that will be able to encourage economic growth and at the same time is expected to open opportunities for investors to invest. This research was carried out in Tanah Laut Regency by using Location Quotient Analysis (LQ) method to determine the leading regional economic sub-sectors, Hierarchy Process Analysis (AHP) to determine superior commodity ranks and SWOT Analysis to obtain data on superior commodity development strategies.The results of the study are based on the calculation of Location Quotient (LQ) sectors that have the highest LQ values, namely the Agriculture, Forestry and Fisheries sectors with a value of 1.29, while for the agricultural commodities the highest LQ value is corn with a value of 5.06. Based on the calculation of AHP Corn commodity becomes the most favored commodity in Tanah Laut Regency with eigen value / weight of priority 0.36. Based on the results of SWOT analysis on Corn Commodity (S) is the experience of farmers who have been good in managing corn farming is a SO strategy with a weight of 1.2. The weakness factor (W) that must be considered is the quality of the product or the quality of the product with a weight of 0.9. SWOT Analysis Diagram of Corn Commodity shows on Quadrant I so that the chosen strategy is an aggressive strategy that increases strength and opportunity (SO), by increasing production and yield quality through the use of technology and the introduction of new technologies.*
Keywords: *Leading Sector and Commodity, Regency of Tanah Laut*

I.   Introduction

The Tanah Laut District Medium Term Development Plan (RPJMD) 2013 - 2018 has been revised and mandates that the mining sector is no longer a mainstay of development in Tanah Laut District. The revised RPJMD also establishes and mandates that in the effort to encourage and achieve high and quality growth goals and to create good development seen from various aspects in order to accelerate development needs a good and comprehensive development planning. Of course, including the planning of the development of a region based on the potential of superior sectors and commodities in the region that have high competitiveness and able to support local economic activity. So far, there is still a gap between development areas (sub-districts) so that the need for accelerated development in each of these areas. In this context, regional development planning based on regional superior commodities is important.

The development of a commodity-based region is a strategy of capacity building and economic activities of the community in an area within Tanah Laut Regency to improve the degree of economic progress of local communities. In turn, it is expected to be an important contributor to the increase in revenue of Tanah Laut District. Therefore, a proper development strategy is needed, to be able to identify and explore the economic potential in a region and able to develop a productive economy-based business activity (knowledge based economy) as well as based on local resources (resource based economy). The selection of potential / excellent commodities as the basis for regional development and cooperation among centers of growth is one solution.

Efforts that need to be considered one of them is determining the commodity superior comparative in terms of both bargaining power and demand for the commodity. In terms of bargaining power, the excellent commodity is shown by the extraordinary growth in biophysical condition, technology and socio-economic condition of producer of a region. This socio-economic condition encompasses various aspects ranging from understanding and skills to technology, human resource capability, infrastructure and customs of local producers. Meanwhile, if in terms of demand, the commodity is shown by the strong demand of domestic and international markets.

In addition to superior commodities, the success of regional development programs is also determined by the leading sectors. In the context of the rearrangement of "traffic" regional economic development programs based on the leading sectors and commodities, it is necessary to conduct a study on regional development strategies based on superior sectors and superior commodities in Tanah Laut post mining sector as excellent. This study is also able to "map" some of the problems that are still faced in the effort to accelerate economic development in Tanah Laut Regency as well as to formulate development strategy in order to achieve competitive and competitive advantage so that it is competitive.

Based on the above description it can be formulated as follows:
1. What sectors and commodities can be superior in order to improve the economic competitiveness of Tanah Laut Regency after the era of dependence on the mining sector?
2. How can strategies be applied for regional economic development in Tanah Laut regency post-dependency era in the mining sector?

This research generally aims to develop regional economic development strategy based on sectors and superior commodities in Tanah Laut regency that will be able to encourage economic growth as well as expected to open opportunities for investors to invest.

Specifically this study aims:
1. Identification and analysis of the leading sectors and leading commodities of the post-mining era. The identification and analysis covers the Tanah Laut District level as well as in each subdistrict area as well as on regional economic development consisting of several Subdistricts.
2. Strategy of regional economic development by developing sectors and leading commodities in each of these development areas.

II. Method

This research is done by giving description about potential area by using 3 (three) method of analysis. The data used are secondary data and primary data. Secondary data were obtained from various agencies in relation to research data such as the Central Bureau of Statistics (BPS), Local Government Organization Units (SOPD) in Tanah Laut Regency and other published institutions collected in the time series for 5 years, starting in 2012 until 2016. Furthermore, conducted research in the form of primary data from stakeholders related to the purpose of research.

Primary data information is collected by Focus Group Discussion (FGD) and interviewing some key persons using questionnaires. The research location is located in Tanah Laut Regency which is one of regencies in South Kalimantan Province. The time of the study is adjusted to the time the author submits a research proposal as a condition of taking a Postgraduate degree. The study timeframe is November 2017 to May 2018.

The data that have been collected is researched and analyzed by using the analytical tools as follows:

LOCATION QUOTIENT (LQ)

The Location Quotient (LQ) method is often used as an indication of the base sector which is then used as an indication of the leading sector. The Location Quotient (LQ) method is a comparison of the magnitude of the role of a sector in an area to the role of a sector nationally or in a district to the role of a sector on a regional or provincial level. To know the sector and superior commodity of Regency of Tanah Laut is done by using equation as follows (Hendrayana, 2003):

Data analysis with LQ is summarized as follows:

$$LQ = \frac{Xr\,/\,RVr}{Xn\,/\,RVn} \ \text{ atau } \ LQ = \frac{Xr\,/\,Xn}{RVr\,/\,RVn}$$

Information :
Xr   =   the value of sub-sector I production in the district
RVr   =   total district GDP
Xn   =   the value of subsector production I in the province
RVn   =   total provincial GDP

The criteria for measuring the resulting LQ value are as follows:
1. If LQ> 1, then the sector becomes the base sector or a sector that can be used as a regional power to export its products outside the area concerned.
2. If LQ = 1, then there is a tendency that the sector is closed because it does not conduct transactions to and from outside the region.
3. Jila LQ <1, then the sector becomes an importer or non-base sector because it does not have the strength, the sector can not meet its own needs so need to supply or import from outside.

The various basic measures of LQ use should be tailored to the research interests and available data sources. If the research is intended to find sectors / sub-sectors whose economic activity is in the sector contribution,

then used as the basis of size is the value of GRDP, while to see the base commodity, then the number of selected commodity products can be used as the basis.

ANALITICAL HIERARCHY PROCESS (AHP)

Analytical Hierrchy Process (AHP) or Analytical Hierarchy Process (PHA) developed by Prof. Thomas Lorie Saaty of Wharton Business School in the early 1970s, used to rank or prioritize alternatives in solving a problem. In everyday life, one is always faced with the choice of alternatives. In a priority setting a consistency test is required on the options that have been made (Jefri Leo, 2014).

The process of analysis is intended to be able to organize information and rational decisions (judgment) in order to choose the most preferred alternative. This method is intended to help solve complex qualitative problems by using quantitative calculations to enable effective decision-making. This method has certain advantages as it helps to simplify complex issues into structured issues, thereby promoting the acceleration of the related decision-making process. Several studies on the determination of pre-eminent commodities are done by AHP method. The research is among others: research of superior commodity of UMKM in South Kalimantan by IPB with Bank Indonesia; a study of leading commodity development strategies in South Kalimantan by Balitbangda KalSel; and the leading commodity research in South Sulawesi by Unhas together with Bank Indonesia. However, the use of AHP methods in some of these studies was combined with the Bayes method (Marimin, 2004).

Analytical Hierarchy Process (AHP) is one of the methods of decision making. Models used in decision-making directives through multi-factor or complex multi-criteria decisions into a hierarchy. The hierarchy provides understanding as a very complex representation of problems in a first multi-level structure where the first level is the goal, followed by the factor level, criteria, sub criteria, and so on down to the last level of the alternative. The hierarchy of complex problems is spelled out into groups, which are subsequently shaped into a hierarchy, so that later problems will be systematically and structured.

SWOT ANALYSIS

Agropolitan development in Tanah Laut Regency is influenced by strategic environment, ie condition, situation, condition, event and also. influences that surround and influence the development of the city from time to time. Structurally, the strategic environment is an internal environment consisting of two strategic factors, namely strength (strenghts) and weakness (weakness), and an external environment consisting of two strategic factors, namely opportunities (opportunities) and threats (treats).

Critical factors are critical factors in achieving the goals and objectives and even the formulation of goals in agropolitan development in Tanah Laut District should take into account the existence of these factors of success. To determine the detailed factors of success in determining the agropolitan development strategy will be determined first by analyzing its strategic environment with the SWOT analysis approach.

By using SWOT analysis on internal and external factors, to obtain the assumptions that will be used in determining the success factors and the threat of failure in agropolitan development in Tanah Laut District. The results of the SWOT analysis will be described in the form of Strategic Environmental Matrix Analysis whose final objective is to provide an overview of the strategies that will guide the development of the agropolitan so that it will be able to empower the community and local economy.

III. Results And Discussion

Location Quotient (**LQ**)

One indicator that is able to describe the existence of base sector in Tanah Laut Regency is through LQ index that is a simple indicator that can show the strength or big part of the role of a sector in an area compared with the area above it or in this research is South Kalimantan Province.

Based on the calculation of Location Quotient (LQ) in sector / field of economic business of Regency of Tanah Laut there are 3 (three) sectors having highest LQ value that is Agriculture, Forestry and Fishery with value 1,29, Mining and Quarrying sector with value 1,18 and Large and Retail Trade, and Car and Motorcycle Repair with a value of 1.10.

The results of the index indicate that these sectors have good economic strength and are very influential to increase the economic growth of Tanah Laut Regency and those sectors are able to meet the needs in the region and even have the potential to export. If we describe in detail and sorted according to the largest index, then the agriculture, forestry and fishery sector is the largest sector with the largest index compared with other basic sectors with an average of 1.273, followed by mining and quarrying sector with the index of 1.193 and the base sector third is Big and Retail Trade, and Car and Motorcycle Repair with index 1,083. If the mining sector is past for Tanah Laut District then agriculture sector may be the future for Tanah Laut Regency. These three sectors are the base sector which is good enough capital for the development of Tanah Laut Regency.

From the leading sectors above, it can be seen also the types of commodities from the leading sectors, especially in the agricultural, forestry and fishery sectors that have the highest index. Based on the calculation of LQ, there are 10 (ten) commodities which become the basis for the development of agricultural sector spread in the sub-sector of food crops and horticulture; plantation crops; Ranch; fisheries and forestry. Ten commodities are corn (5.06), cattle (4.07), oil palm (3.63), broiler (3.43), laying hen (2.96), cassava (2.65), watermelon (2.33), sea fisheries (2.30), rubber (2.27), rice (1.89). High LQ values do not reflect large production, but are a reflection of the relative value of commodity share in the district.

Analytical Hierarchy Process (AHP)

In this research, there are 5 (five) normative criteria that serve as benchmark in determining the superior commodity that is: 1.Land Support Capacity (DDL), 2.Market opportunity(PP), 3.Technical Ease(KT), 4. Maintenance (P), 5. Supporting Facilities (SP) .Which criteria of the greatest weight and score will be determined by using Analytical Hierarchy Process (AHP). The hierarchy established to determine the priority scale of the leading commodities is organized into three levels. The first level is the ultimate goal that becomes the main goal of agriculture's superior commodity in the form of agricultural sub-sector that can be relied on to become prime mover of regional economy. Then the second level is the criteria of superior commodities that can be used as the goal of developing superior commodities. Finally the third level becomes the intermediate goal, which is an alternative choice of agricultural sector consisting of 5 (five) agricultural commodities; 1). corn; 2) rubber; 3). palm oil; 4). rice; and 5). cassava. The selection of 5 (five) commodities in agriculture sector is based on the similarity of species that is plant.

The above hierarchy will be evaluated by those who have been selected or regarded as experts ie academics and public figures. Each expert will translate all perceptions and information available in a set of questionnaires in pairs on a scale. Because many experts are involved in giving this basic AHP value, while for each level and criterion only a comparison matrix is required, finally the contents of the comparative matrix cell are calculated based on the average value of all the experts.

In the decomposition of the problem carried out a step where a goal / goal that has been set next will be described systematically into structures that arrange the series of systems to goals can be achieved rationally. Decomposition of the problem in determining the priority of leading subsector in agriculture sector in Tanah Laut Regency as follows:

Hierarchy 1

In hierarchy 1 contains the goal or goal to be achieved or solving the problems / problems studied namely the leading commodities of the agricultural sector.

Hierarchy 2

In hierarchy 2 contains criteria to be met by all alternatives (settlement) in order to become the most ideal choice in determining the priority of the leading subsectors of agricultural sector and agricultural commodities. There are 5 (five) normative criteria which serve as benchmark of priority of subsector and commodity of superior are: 1. Land Support Capacity (DDL), 2. Market Opportunity (PP), 3. Technical Ease, (KT) 4. Maintenance (P), 5. Supporting Facilities (SP).

Hierarchy 3

Creating an alternative problem solving option consisting of 5 (five) agricultural commodities; 1). corn; 2). rubber; 3). palm oil; 4). rice; and 5). cassava.

After decomposition of the problem, then the assessment or weighting of each element of the matrix and test Consistency Ratio (CR). Assessment or weighting of each element of the matrix is intended to compare the value or character of choice one by one and by pair. The pairwise comparison appraisal procedure in AHP refers to the scoring score developed by Thomas L Saaty.

The unqualified questionnaire Consistency Ratio (CR) can be disallowed or refined for repairs. Based on the number of matrix order (n) used is 5 for the criteria matrix and 5 for the alternative matrix, it can be determined Random Index (RI) based on the matrix order table below is for the RI = 1.12 criterion matrix and the alternative matrix RI = 1.12. Based on the results of calculations CR, obtained a value of 0% (<10%) so it can be said preference weighted criteria selection of superior commodities is consistent.

Based on the results of the synthesis or priority determination, it is known that the carrying capacity of the land becomes the most important priority to determine the leading agricultural commodity in Tanah Laut Regency with eigen value of 0.36, Technical Ease becomes second priority with eigen value 0.28, and so on criteria of Market Opportunity 0,2, maintenance of 0.12, and the last is the 0.04 Supporting Facilities criterion.

The final step in the process of calculating the Analytical Hierarchy Process (AHP) is to determine the best alternative by combining the results of the weighting on the criteria and the weighting of alternatives based on the criteria. The results of these calculations have produced the best alternative in the form of priority commodities. Corn commodity becomes the main commodity favored in Tanah Laut Regency, based on respondent / expert choice with eigen / priority value 0,36. Next is the rubber commodity as an alternative

second pre-eminent commodity with a weight value of 0.28 priority. The palm commodity ranks third with a value of 0.2, Rice becomes the fourth priority with a value of 0.12, and the last consideration to be the fifth seeded commodity is Cassava with a value of 0.04.

***Strengths Weaknesses, Opportunities, dan Threats*(SWOT)**
SWOT analysis is one method that can be used to know the prospect of development and formulate the form of development of Corn Commodity in Regency of Tanah Laut. This analysis is an analytical tool used to:
1. Systematically identifies the factors of the strengths and weaknesses (internal environment) of the development of Corn Commodities and the opportunities and threats (external environment) faced during the development of the Maize Commodity in Tanah Laut District.
2. Designing the best formulation and alternative strategies for the development of Maize Commodities in Tanah Laut District.

The SWOT analysis is based on the assumption that an effective strategy will maximize strengths and opportunities and minimize weaknesses and threats. The initial stage in this analysis is identifying internal and external environmental condition factors that are owned by the development of Maize Commodities in Tanah Laut District.

Based on SWOT calculation results obtained data: SWOT factor weight is for the power (S) is considered the most important is the experience of farmers so as to manage corn farming well with the weight of 1.2. The weakness factor (W) to be considered is the quality of the product or the quality of the product with a weight of 0.9. As it is known that the product of Tanah Laut Regency maize is mostly the water content is not yet as desired by the factory so when it is assessed then the price falls. Opportunity factor (O) is the increasing need for corn or the market demand is still high with a weight of 1.2. The threat factor (T) to note is corn production from outside with a weight of 0.9. The highest strategy value is SO strategy (2.4); WO strategy (2.1); strategy WT (1,8) and strategy ST (2,1).

Based on the calculation of SWOT analysis: EFAS and IFAS total Internal Strategic Factor (0,6) and External Staregis Factor (0,6) can be made grand strategy matrix to show position whether in quadrant-1, quadrant-2 quadrant-3 and quadrant -4. Diagram of SWOT Analysis The Corn Commodity shows in Quadrant I, so the chosen strategy is aggressive strategy which further increase the strength and opportunity (SO) (Figure 1).
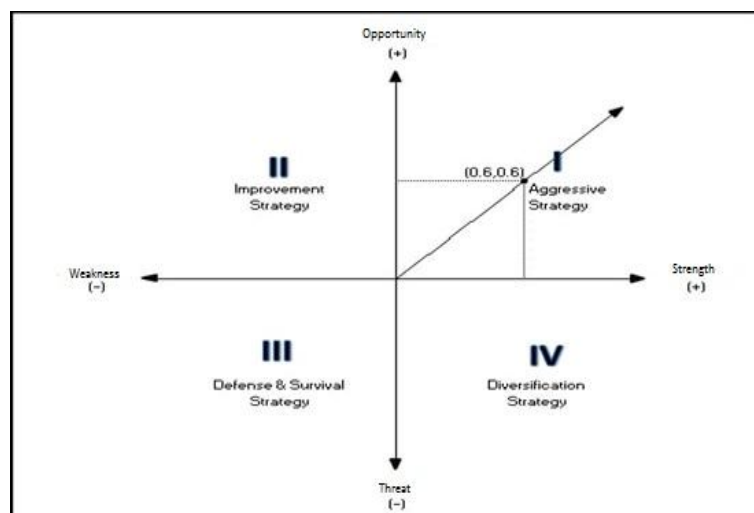

Figure 1. Diagram of SWOT Analysis of Corn Commodity

SWOT analysis is used to be able to set a strategy that is comparing external factors in the form of opportunities and threats with internal factors in the form of strengths and weaknesses. The main disadvantages in the development of Maize Commodity in Tanah Laut Regency are (1) Non-standardized yield quality (2) Limited capital. Factors of strength in the development of Corn Commodities are (1) Experienced farmers (2) Maize is a government priority.
External strategy factors for opportunities for the development of Corn Commodities are (1) The need for maize continues to increase (2) strong government support. Threats in the development of corn commodities are: (1) Maize production from outside the region (2) Input price increasingly expensive. Matrix SWOT of Corn Commodity in Tanah Laut Regency is presented in Table 1.

Table 1. SWOT Matrix Commodity Matrix

Eksternal / Internal	Opportunity (O) : 01. The need for corn continues to increase 02. Strong government support 03. Industrial products that use corn as raw materials are growing 04. Increasing number of sources of financing for corn farming	Threat (T) : T1. Climatic anomalies T2. Production of maize from outside the area that goes to South Kalimantan T3. Increasingly expensive input prices T4. Land transfer function
Strength (S) : S1. The land is still wide S2. Farmers are experienced S3. Corn became the government's priority S4. The existence of a feed mill	Strategy SO : Market penetration Improve production and quality of results through the use of technology as well as introduction of new technologies	Strategy ST : Capacity building of farmer groups; Prevention over function and supervision of commodities that go to South Kalimantan
Weakness (W): W1. The quality of the results is not standard W2. Drying equipment not owned W3. Limited capital W4. The bargaining power of farmers is weak	Strategy WO : Future Integration Improved farming system and efficiency; product quality and supply chain system and marketing improvements	Strategy WT : Product standardization and establishment of institutions such as cooperatives for marketing improvement

To support the strategy, the necessary policies are:

a. Optimizing infrastructure support coupled with improved farmer development both cultivation and processing technology results.

b. Increase the support of banking institutions or other service institutions in strengthening farmers' capital.

c. Streamline the marketing channels of production and production facilities at the farm level.

d. Improvement of trading system and means of agricultural production.

IV. Conclusions And Recommendations

Conclusion

1. Based on the calculation of Location Quotient (LQ) on the sector / field of economic business of Tanah Laut Regency there are 3 (three) sectors having the highest LQ value that is Agriculture, Forestry and Fishery sector with value 1.29, Mining and Quarrying sector with value 1, 18 and Large and Retail Trade, and Car and Motorcycle Repair with a value of 1.10. The position of agriculture, forestry and fishery sector is the superior sector with the highest value compared to other leading sectors and has potentials for economic contribution, regional economic base sector, renewable, raw materials, capital, technology and price criteria. There are 10 best commodities which become the basis for the development of agricultural sector spread in food crops and horticulture sub sector; plantation crops; Ranch; fishery and forestry, corn (5.06), cattle (4.07), oil palm (3.63), broiler (3.43), laying hen (2.96), cassava (2.65) watermelon (2.33), marine fisheries (2.30), rubber (2.27), rice (1.89). Corn is a superior commodity with the highest value compared to other commodities and has potential for employment, contributes to the economy, wide market availability, raw materials, availability of facilities and infrastructure, production, technology and prices.

2. Based on the calculation of AHP Corn Commodity becomes the most favored commodity in Tanah Laut Regency with eigen value / weight of priority 0.36. Next is the Rubber Commodities as an alternative second pre-eminent commodity with a weight value of 0.28 priority. Palm Commodity ranks third with a value of 0.2, Rice becomes the fourth priority with a value of 0.12, and the last consideration to be the fifth seeded commodity is Cassava with a value of 0.04.

3. Based on the results of SWOT analysis on Corn Commodity (S) that is the experience of farmers who are good in managing corn farming is a SO strategy with a weight of 1.2. The weakness factor (W) to be considered is the quality of the product or the quality of the product with a weight of 0.9. Diagram of SWOT Analysis The Corn Commodity shows in Quadrant I that the chosen strategy is aggressive strategy that further strengthens the strength and opportunity (SO), by increasing production and yield quality through the use of technology and introduction of new technology.

Recommendation

The Government of Tanah Laut Regency is expected to be able to increase the superiority of agricultural commodities by taking into account the condition of production invoices, market demand conditions, supporting industries and related industries, corporate strategy, structure and competition, opportunities and role of the government itself.

1. The role of the government is needed to improve the productivity of leading commodities

2. Provision of fertilizers, machinery and medicines

3. Provision of production facilities

4. Provide processing activities of agricultural commodities into processed products both between form and final product form

5. Provision of supporting services for both transportation and banking.

To maintain the sustainability of leading commodities so as to be competitive to a wider market share, it is necessary activities:

1. Increasing agricultural production and quality
2. Development of entrepreneurial spirit for farmers
3. Development of an agribusiness partnership network
4. Creating a conducive investment climate in agribusiness.

Regardless of the superiority of the various criteria, it is still necessary to increase the productivity of maize as the most superior commodity in Tanah Laut Regency, by the way; 1) Provision of agricultural assistance for farmers so that farmers can reduce production costs. 2) Improvement and development of agricultural facilities and infrastructures and agricultural infrastructure for land, roads, irrigation and others. 3) Strengthening partnership pattern and coordination among farmers through the role of farmer institution. 4) The need for the development of production and marketing information systems and optimizing the role of the market in order to maintain the stability of commodities.

THANKS TO

References

[1]. Arsyad, L. . 1999. Pengantar Perencanaan dan Pembangunan Ekonomi Daerah. Edisi Pertama, BPPE, Yogyakarta.
[2]. Badan Pusat Statistik. 2016. Tanah Laut dalam Angka Edisi Tahun 2010; 2011; 2012; 2013; 2014 dan 2015. Kabupaten Tanah Laut.
[3]. Badan Pusat Statistik. 2017. Tanah Laut dalam Angka 2017. Kabupaten Tanah Laut.
[4]. Badan Perencanaan Pembangunan Daerah. 2016. Revisi Dokumen RPJMD Kabupaten Tanah Laut 2013 – 2018. Kabupaten Tanah Laut
[5]. Djaenudin, D., Y. Sulaeman, dan A. Abdurachman. 2002. Pendekatan Pewilayahan Komoditas Pertanian Menurut Pedo-Agroklimat di Kawasan Timur Indonesia. Jurnal Litbang Pertanian, 21(1). Bogor.
[6]. Jefri Leo. 2014. Penentuan Komoditas Unggulan Pertanian dengan Metode Analitycal Hierarchy Process (AHP). Jurnal Saintia Matematika. Volume 02. Nomor 03 (2014). ISSN : 2337-9197.
[7]. Hendayana, Rachmat. 2003. Aplikasi Metode Location Quotient (LQ) dalam Penentuan Komoditas Unggulan Nasional. Informatika Pertanian Volume 12. Jakarta.
[8]. Marimin. 2004. Metode Bayes Untuk Penentuan Ranking Komoditas Unggulan Lintas Sektor dalam Laporan Penelitian Pengembangan Komoditas Unggulan Usaha Mikro, Kecil dan Menengah (UMKM) Di Kalimantan Selatan. Kerjasama Kantor Bank Indonesia Banjarmasin dengan IPB Bogor.
[9]. Saaty, T. 1990. The Analytic Hierarchy Process. Mc GRAW HILL Press. USA
[10]. Saaty, T. Lorie. 1993. Pengambilan Keputusan Bagi Para Pemimpin, Proses Hirarki Analitik untuk Pengambilan Keputusan dalam Situasi yang Kompleks. Pustaka Binama Pressindo.