Jurnal EVOLUSI

STRATEGY FOR THE GROWTH OF LEADING PROCESSING INDUSTRY SUBSECTORS BASED ON THE COMMODITY OF THE AGRO INDUSTRY REGION OF JAMBI PROVINCE

(a)Erni Achmad*, (b)Muhammad Safri, (c)Rahma Nurjanah
*Corresponding author

(a) Faculty of Business & Economy, University of Jambi, Indonesia erniachmad24@gmail.com
(b) Faculty of Business & Economy, University of Jambi, Indonesia m_syafri@unja.ac.id
(c) Faculty of Business & Economy, Universiti of Jambi,Indonesia rahmanurjanah@ymail.com

ABSTRACT

This study investigates the growth potential of the Food and Beverage Industry, Paper Goods Industry, and Rubber and Plastic Goods Industry in Jambi Province as promising sectors for processing industries. It identifies challenges in expanding and leveraging the processing industry to benefit the regional economy. Urgent strategies and policies are proposed to overcome these obstacles, focusing on the agro-industrial commodity-based processing industry in Jambi. Using the Simultaneous Equation Model (SEM) and the Analytical Network Process (ANP), the study identifies key factors influencing the growth of each subsector. The results highlight the significant impact of variables such as Industrial Investment, Production Value, Labour Productivity, Industrial Raw Materials, Budget Allocation, and Manpower. By employing the ANP method, the study determines the most influential strategy for the development of the leading processing industry. The optimization of the government's role in policies and funding emerges as the key factor for successful strategy selection. Implementing the recommended strategies and policies will foster growth, maximize the industry's contribution, and strengthen the regional economy in Jambi Province.

Keywords: Development, Leading Industri, Agro Industry Commodities

INTRODUCTION

Jambi Province has been known as a producer of raw materials for products, such as wood, rubber, CPO (Crude Palm Oil) where there is no industry that processes natural products into ready-to-use products in Jambi Province. With conditions like this, of course, there is potential for lost income from the absence of this process, in addition to income as well as job opportunities that should be absorbed in Jambi Province then enjoyed by other regions that already have a complete processing process. In this regard, the Jambi provincial government is trying to optimize the potential of the region with the target of industrial down-streaming in accordance with regional development plans. To reach industrial downstream,

several prerequisites are needed, such as a connectivity system with solid infrastructure support, including the availability of energy sources, a quality workforce and a good investment climate.

Based on the Jambi Province Industrial Development Master Plan (RIPIP) 2017-2037 (Department of Industry and Commerce Jambi Province, 2013) and referring to the 2015-2035 National Industrial Development Master Plan, the analysis of the selection of Jambi province's priority industries is one of the downstream industries and the importance of downstream industries. in Jambi province such as downstream primary industries (rubber industry, palm oil industry, wood industry, coal industry, deep coconut industry and fishing industry).

The following table 1. is presented. Regarding leading commodities and their processing industries in the district in Jambi Province:

Table 1. Leading Local Commodities of Jambi Province and their Processing Industries.

No	Region	Regional Leading Commodity Processing Industry
1.	Kerinci	Cassiavera
2.	Merangin	Crumb Rubber and CPO
3.	Sarolangun	Crumb Rubber and CPO
4.	Batanghari	Crumb Rubber, CPO and Catfish
5.	Muaro Jambi	CPO, and Catfish
6.	East Tanjung Jabung	CCO Industry
7.	West Tanjung Jabung	CPO and CCO
8.	Muaro Tebo	CPO and Crumb Rubber
9.	Muaro Bungo	CPO and Crumb Rubber

Resource: Jambi Province Plantation Office, 2019

Based on table 1 above, in general it shows that most of the leading commodities in the district are in the form of rubber, oil palm, deep coconut and catfish, while the processing industry of these commodities is only limited to semi-finished processing industries, such as there are no advanced industries for goods processing industries. Finished or ready to use and almost all of Jambi province's crumb rubber products are exported. For the palm oil commodity processing industry in the form of Crude Palm Oil (CPO) and there are a few secondary industries, namely cooking oil and for the coconut commodity in the processing industry in the form of bulk cooking oil (CCO), shell charcoal, VCO, Nata Decoco and coir and this is partially managed by small industry. Based on the latest data from the Department of Industry and Trade of Jambi province, it shows that in Jambi province there are 11 units of crumb rubber processing industry, 31 units of CPO industry, 10 units of cooking oil industry and 5 units of bulk cooking oil. The industrial sub-sector of Jambi Province has developed, especially its contribution to the industrial sector which varies in each industrial sub-sector.

Currently, there are still many internal and external obstacles that hinder the growth of domestic industry. Constraints on internal factors include the existence of a very fragile industrial structure which is illustrated by the weak linkages between upstream and downstream industries, and between small, medium and large industries. External factors are constraints in terms of the availability and quality of infrastructure, both physical and non-physical, which are still inadequate and also labour regulations that do not support industrial development, legal uncertainty issues as well as difficult credit distribution to the industrial sector, and lack of protection in the domestic market and obstacles. Trade in the export market (Basri, 2013). One alternative solution to the problem of regional Industrialization is the development of industrial down-streaming, namely by selecting the industry referring to superior local commodities that are scattered and found in the districts/cities in an area.

Industrial development plays an important role for the economy of Jambi Province in the future while the availability of natural resources is sufficient to support realizing the down-streaming of the Agro Industry, which is still limited in the Jambi province. Therefore, it is necessary to carry out a series of efforts to identify and analyze the influencing factors in Jambi Province and strategic efforts (policies) to improve the condition of the performance of the manufacturing industry sector in Jambi Province..

METHODOLOGY

Data Types and Sources

The types of data used in this study are secondary data and primary data. Because it is sourced from qualitative information, the selection of credible respondents greatly affects the final results of the ANP (Analytic Network Process) analysis, so it should be done with several qualifications. The expert determination technique is carried out using the purposive sampling method (Andi et al., 2017), which is to deliberately select competent experts and be directly involved with the processing industry in Jambi Province which consists of local governments as regulators, practitioners, academics and industry experts. The secondary data in this study were sourced from: Central Bureau of Statistics of Jambi Province, Regional Development Planning Agency of Jambi Province, District/City Industry and Trade Office of Jambi Province, and Plantation Service of Jambi Province and Regency/City.

Data Analysis and Processing Method

Factors Influencing the Development of Regional Leading Management Industry in Jambi Province

The method to analyze the factors that influence the development of the regional superior processing industry in Jambi Province uses Simultaneous Equation System Analysis. The factors referred to in this study are: Availability of Land Infrastructure (Length of Road) / KIJ, Availability of Electrical Energy Infrastructure (KEL), APBD Allocation for Industry (AAI), Regional Crime Level (TKD), Regional Economic Growth (PED) , Provincial Minimum Wage (UMP) and Investment in the industrial sector (INI) . Simultaneous Equation System Analysis is used to avoid bias, inconsistent and inefficient when using ordinary least squares (Koutsoyianis, 1977). For this reason, the multiple regression equation models is solved through Two Stage Least Square (TSLS). With TSLS, bias, inconsistent and inefficient problems will be changed to unbiased, consistent and efficient through 2 stages of least square calculation.

The factors that influence the development of the leading regional processing industry in Jambi province are the availability of land transportation infrastructure (roads), the availability of electrical energy, the regional budget allocation for industry, the regional crime index (regional stability), regional economic growth (regional economy), and the minimum wage (UMP). Provincial Minimum Wage) and Investment in the Industrial Sector, it can be mathematically formulated as follows:

Formula 1:
LOGPHIMM $= a_0 + a_1$LOG INI$+ a_2$LOG NPI$+ a_3$LOG TKI $+ a_4$LOG PTK $+a_5$LOG JPI $+ u_2$
LOGPHIKE $= a_0 + a_1$LOG BBI $+a_2$LOG NPI $+ a_3$LOGAAI $+ a_4$LOGPTK $+ a_5$LOG TKI $+ u_2$
LOGPHIBK $= a_0 + a_1$LOG KEL $+ a_2$LOG BBI $+ a_3$LOG AAI $+ a_4$LOG ABJ $+ a_5$LOG TKI $+ a_6$LOG NPI $+$
$\qquad a_7$LOG PED $+ a_8$ LOG UMP $+ u_2$

Formula 2:

LOGKIJ $= b_0+ b_1$LOGPHIKE $+ b_2$ LOGAAI $+ b_3$ LOGPHIBK $- b_4$LOGKJR$– b_5$PHIMM $– b_6$LOGUMP
$\qquad + b_7$LOGABJ $+ u_2$

Formula 3:

LOGPED $= c_0 + c_1$LOG INI $+ c_2$LOG TKI $+ c_3$LOG KIJ $+ c_4$LOG PTK $+ u_2$

Formula 4:

LOGINI $= d_0 + d_1$LOG KJB $+ d_2$LOG PED $+ d_3$LOG PTK $+ d_4$LOG UMP $+ u_2$

Strategy for Growth and Development of Leading Processing Industry Sub-Sector Based on Jambi Agro Industry Commodities

The method used for the strategy of developing the leading processing industry sub-sector based on agro-industrial commodities in Jambi Province is the Analytical Hierarchy Process (ANP) method. The ANP method is a development of the Analytical Hierarchy Process (AHP) method. ANP is a method that allows interaction and feedback from elements within the cluster (inner dependence) and between clusters (outer dependence). The ANP method is able to improve AHP's weaknesses in the form of the ability to accommodate the interrelationships between criteria or alternatives (saaty, 1999). The Analytic Network Process (ANP) is carried out in several stages, namely as follows:

1. **The construction of the ANP** model is formed or compiled based on a theoretical and empirical literature review and provides questions to experts and industry practitioners as well as conducting interviews through indept interviews to study and discuss in more depth to obtain real problems.
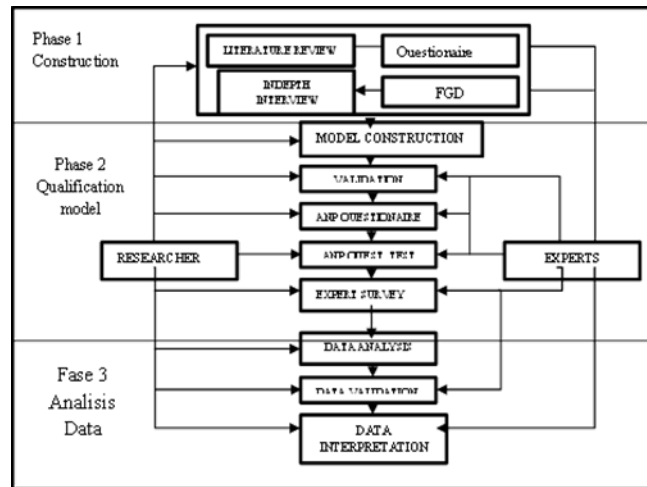
Figure 1. Stages of research with ANP

2. **The quantification of the model** uses questions that have been prepared in the ANP questionnaire in the form of pairwise comparisons between elements in the cluster to the respondents. This questionnaire is distributed to respondents in order to find out which of the two are more influential (more dominant) and some of the differences through a numerical scale of 1 – 9. The data from the assessment is then collected and inputted through super decision software to be processed so as to produce a super matrix output. The results of each respondent will be inputted into a separate ANP network. In the assessment process, problems can occur in the consistency of pairwise comparisons. The consistency ratio provides a numerical assessment of how much this evaluation may be inconsistent. If the calculated ratio is less than 0.10, then the consistency is considered satisfactory.

3. **Synthesis and Analysis**

   a. Geometric Mean

   In this stage it aims to calculate and find out the results of individual assessments from the respondents and determine the results of opinions in one group, an assessment is carried out by calculating the geometric mean (Rusydiana, 2013). Questions in the form of comparison (Pairwise Comparison) from the respondents will be combined, so as to form a consensus. Geometric mean is a type of calculation of the average that shows the tendency.

$$GM = (R1* R2* R3* .... * Rn) 1/n$$

b. Rate Agreement

The next stage is to measure the rate agreement, what is meant by this rate agreement is a measure that shows the level of conformity (approval) of the respondents (R1 – Rn) to a problem in one cluster. The tool used to measure rate agreement is Kendall's Coefficient of Concordance (W ; 0 < W 1). W = 1 indicates a perfect match (Rusydiana, 2013). If the test value of W is 1 (W = 1), it can be concluded that the judgments or opinions of the respondents have a perfect match. Then if the W value is 0 or is getting closer to 0, then it shows a discrepancy between the respondents' answers or the answers vary (Ascarya in Rusydiana, 2013).

1) The principle of decomposition, which is applied to structure complex problems into a hierarchical framework or ANP framework consisting of cluster networks.

2) The principle of comparative assessment is applied to build pairwise comparisons of all combinations of elements in the cluster seen from the parent cluster. This pair comparison is used to get the local priority of the elements in a cluster from the parent cluster.

3) The principle of hierarchical composition or synthesis is applied to multiply the local priority of the elements in the cluster by the "global" priority of the parent element which results in the global priority of the entire hierarchy.

ANP is used and applied to complex, complex decision making and requires a variety of interactions and dependencies. As a development method of the AHP method, ANP still uses the Pairwise Comparison Judgment Matrices (PCJM) method between similar elements. Pairwise comparisons of ANP are carried out between elements in components or clusters for each interaction in the network. Pairwise comparisons using a numerical scale of 1-9 are translations of verbal assessments such as Table 2.:

Table 2. Comparison of verbal and numerical scales

Level of Importance	Definition
9	It's very much more influential
7	Very big influence
5	Bigger influence
3	Slightly bigger effect
1	Just as big of an impact
2,4,6,8	Middle value among adjacent considerations

Fishbone Research

The Fishbone Diagram below explains that the purpose of developing the Analytical Network Process ANP model is to determine the Strategy for the Development of the Leading Processing Industry in Jambi Province in a comprehensive manner so as to get the right strategy to increase the development of the processing industry subsector. The model consists of 3 clusters consisting of Factors, Problems and Strategies. Factors are divided into 4 namely Resources, Economics, Social and Local Government Policies. Then each factor consists of various problems. The four factor problems are further divided into several sub-sections:
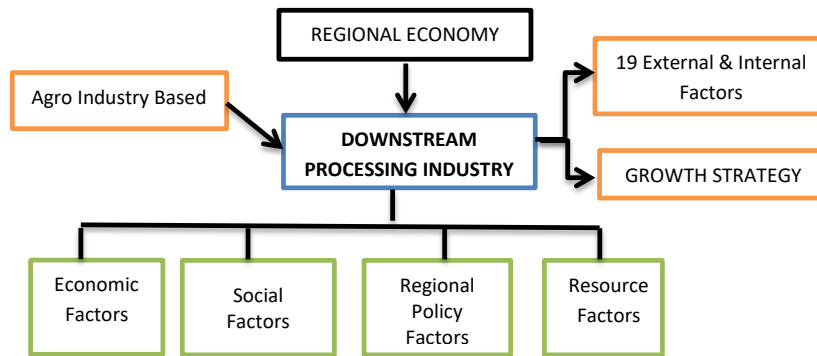
Figure 2: Fishbone Research

1.0 RESULT AND DISCUSSION

**Analysis of Factors Affecting the Development of Regional Leading Management Industry in Jambi Province**

In the Development of the Rubber Goods Industry (PHIbk), of the 8 independent variables, 6 (six) of them have significance to the dependent variable, namely Electrical Energy Availability (KEL), Industrial Raw Materials (BBI), Industrial Budget Allocation (AAI), Industrial Manpower (TKI), Industrial Production Value (NPI), and Regional Economic Growth (PED). The variables of Availability of Electrical Energy (KEL), Industrial Manpower (TKI) and Regional Economic Growth (PED) have a positive influence which indicates that if the Availability of Electrical Energy (KEL), Industrial Manpower (TKI) and Regional Economic Growth (PED) are high the growth of the rubber and rubber goods industry (PHIbk) will also be high. For Industrial Raw Materials (BBI), Budget Allocation for Industry (AAI), Expenditure Allocation for Roads (ABJ), and Industrial Production Value Variables (NPI) have a negative effect which indicates that BBI, AAI, ABJ and BOP increase, so the growth the rubber industry, rubber and plastic goods decreased, this can be interpreted if the availability of BBI, AAI, ABJ, and BOP is equal to zero, then the growth of the Rubber, Rubber and Plastic Goods Industry will decline. This can be interpreted that if for the growth of the rubber industry, rubber and plastic goods are largely determined by the availability of Industrial Raw Materials, Industrial Budget Allocations, Shopping Allocations for Roads and Industrial Production Value, if these variables are not available in the rubber industry, rubber and plastic goods there will be a decrease in the growth of the PHIBK processing industry in Jambi province because this variable directly affects the development of the Rubber, Rubber and Plastic Goods Industry in Jambi province. Furthermore, the variables KEL, BBI, AAI, ABJ, TKI, NPI, PED and UMP affect the development of the Rubber and Rubber Goods Industry by 97.38% and the remaining 2.62% is influenced by other factors outside the model.

Results of Simultaneous Equations of Variables Affecting the Development of Leading Processing Industries in Selected Regions of Jambi Province

Table 3. Summary of Simultaneous Equation Results of Variables Affecting the Development of Leading Processing Industries in Selected Regions Jambi Province

Leading Processing Industry	VARIABLES	SIGNIFICANT VARIABLES
I. Food and Beverage Industry	Industrial Investment (INI), Industrial Production Value (NPI), Industrial Manpower (TKI), Labor Productivity (PTK), Number of Industrial Companies (JPI)	Industrial Investment (INI), Industrial Production Value (NPI), Labor Productivity (PTK)
II. Paper And Paper Goods Industry	Industrial Raw Materials (BBI), Industrial Production Value (NPI), Industrial Budget Allocation (AAI), Labor Productivity (PTK), Industrial Manpower (TKI)	Industrial Raw Materials (BBI), Industrial Production Value (NPI), Industrial Budget Allocation (AAI), Labor Productivity (PTK), Industrial Manpower (TKI)
III. Rubber Industry, Rubber and Plastic Products	Availability of Electrical Energy (KEL), Industrial Raw Materials (BBI), Industrial Budget Allocation (AAI), Road Expenditure Allocation (ABJ), Industrial Manpower (TKI), Industrial Production Value (NPI), Regional Economic Growth (PED), Wages Provincial Minimum (UMP)	Availability of Electrical Energy (KEL), Industrial Raw Materials (BBI), Industrial Budget Allocation (AAI), Industrial Manpower (TKI), Industrial Production Value (NPI), Regional Economic Growth (PED)

Based on the table above, the variables that have a significant influence on the development of the leading processing industry in the Jambi province, namely the Food and Beverage Industry, the Paper and Paper Goods Industry and the Rubber and Rubber Goods Industry can be expressed in the form of a display in a scheme as follows:
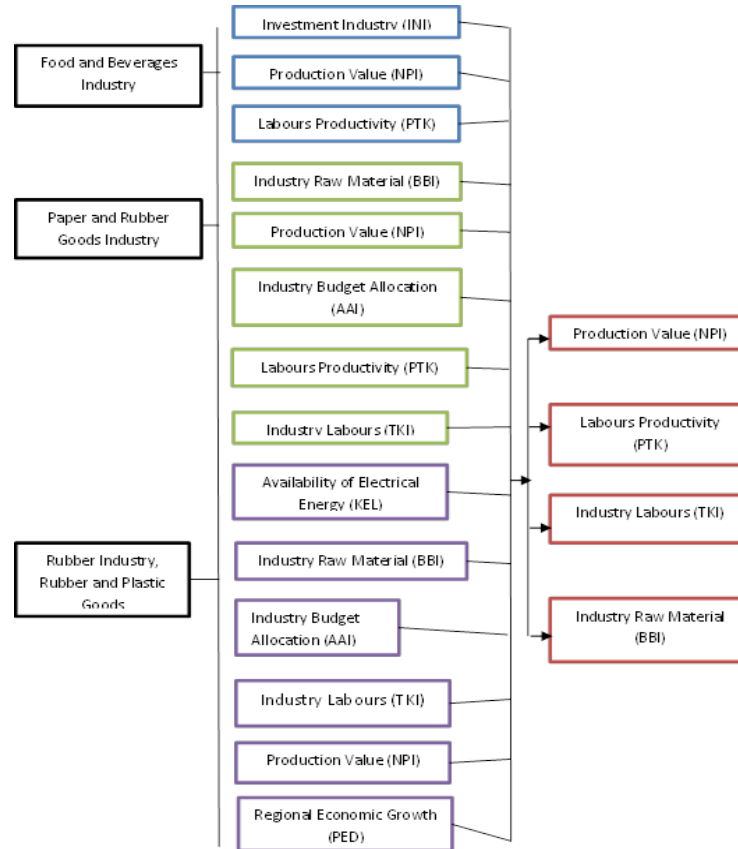
Figure3. Schematic of Series of Variables that Significantly Affect the Development of Selected Leading Processing Industries Based on Simultaneous Equation Models

Table 3 shows several variables that are significant for the three selected leading industries. For more details in Figure 3 above, it can be explained that from the three leading processing industries, several significant factors were obtained in each industry, after which it was summarized again that the main significant factors were Production Value (NPI), Labor Productivity (PTK), Labor Industry (TKI) and Industrial Raw Materials (BBI).

Analysis of Strategy for the Growth and Development of the Leading Processing Industry Sub-Sector Based on the Jambi Agro Industry Commodity

Divides the strategy on the problem of developing the leading processing industry based on agro-industry in Jambi Province into four strategies. Each of these strategies is to develop and improve infrastructure (roads, ports and the availability of electrical energy), cross-sectoral coordination involving the business world for industrial development, optimizing the government's role in policy and funding for industrial development programs and socializing the existence of local industrial processed products. jambi through promotional media. After the preparation of the ANP schema framework, the structure of this model is included in the Super Decision Software Version 2.1, then the following results are obtained:

Figure 4. Research Model Structure Using Super Decision Software
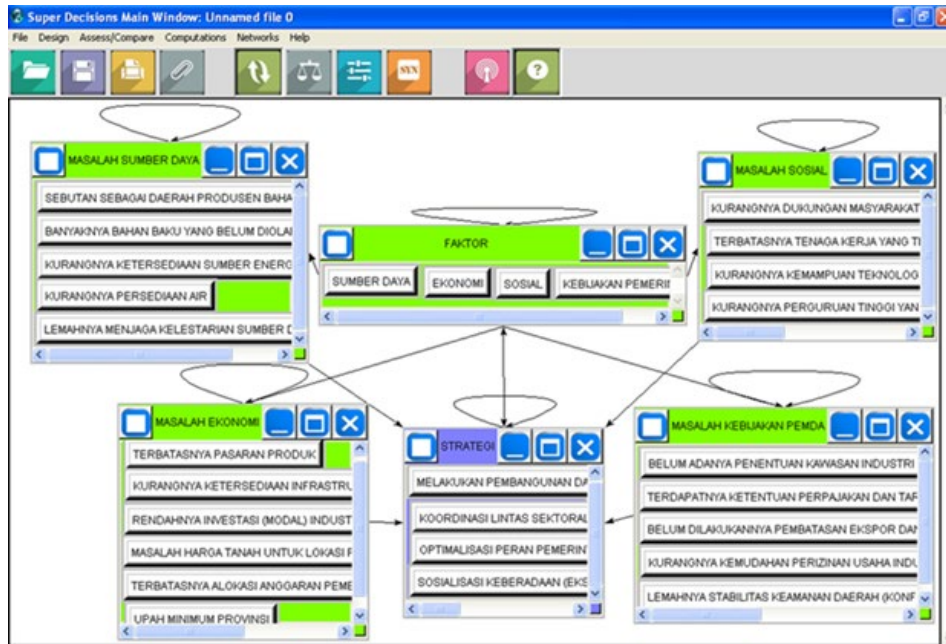
Each respondent has a different opinion, therefore the results of the ANP in the super decision software present the results of the conclusions obtained based on the average value to determine the order of priority as a whole and the results of the synthesis for each respondent based on the existing categories. For more details, the following describes how the results of the synthesis of each criterion and strategy in the ANP process are described. At this stage, the results will show the overall geometric mean as well as the rater agreement level using the Kendall's coefficient of concordance (W) measure.

3.3. Analysis of Factors Cluster Synthesis Results

The results of the factor cluster in Figure 5 show the results of data processing through the following super decision software:
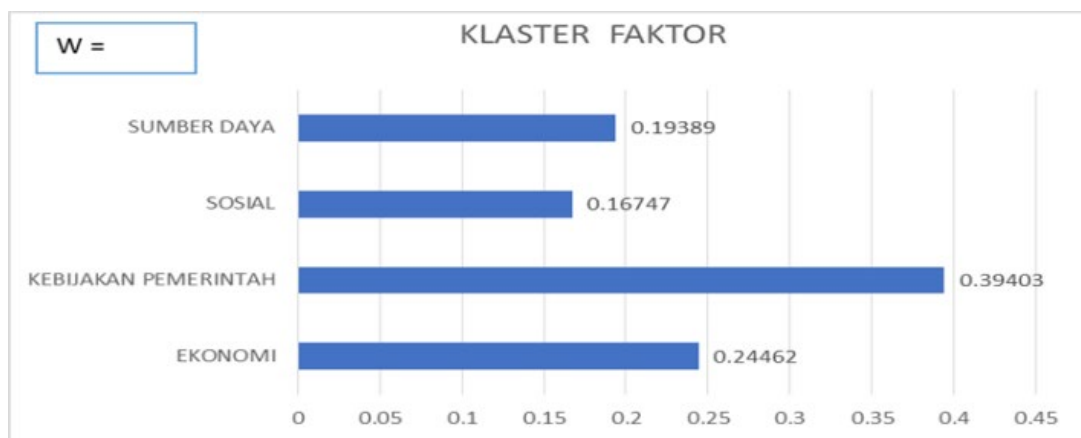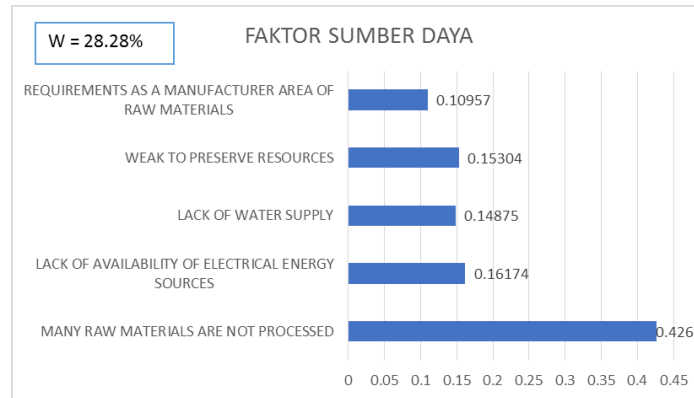

Figure 5 Synthesis of Priority Cluster Factors Based on Geometric Mean . Values

Figure 5 of the processed data can be seen the rater agreement value of 38.06%. this means that the level of agreement of respondents on the priority order of factor clusters in the form of Regional Government, Economic, Resources and Social Policies is 38.06%. Based on the combined score of respondents, each priority order of factors in determining the downstream strategy is government policy at 39.40%, followed by economic factors at 24.46%. then resources and social factors are 19.39% and 16.75%, respectively.

Result of Synthesis of Resource Factor Problems

Based on the results of data processing through super decision software, the priority of resource factor problems according to 12 respondents is obtained as shown in Figure 6 below:


W = 28.28%   FAKTOR SUMBER DAYA

REQUIREMENTS AS A MANUFACTURER AREA OF RAW MATERIALS — 0.10957
WEAK TO PRESERVE RESOURCES — 0.15304
LACK OF WATER SUPPLY — 0.14875
LACK OF AVAILABILITY OF ELECTRICAL ENERGY SOURCES — 0.16174
MANY RAW MATERIALS ARE NOT PROCESSED — 0.4269

Figure 6. Synthesis Results of Resource Factor Problem Priority Based on Geometric Mean . Value

From Figure 6, it can be seen that the main priority of the problem of resource factors in determining the strategy for the development of the leading processing industry is the problem of the number of raw materials that have not been processed. These results are the majority of respondents' answers with a value of 42.69%. Then the lack of availability of electrical energy sources is the second priority problem in determining the strategy for industrial development with a percentage of 16.17% followed by the weakness of preserving resources and the lack of water supply by 15.30% and 14.86%, respectively. While the last place is the designation as a raw material producer area of 10.96%. The result of obtaining a rater agreement for all respondents was 28.28%. This means that the respondent's level of agreement on the priority order of resource problems in the form of a large number of raw materials that have not been processed, the lack of availability of electrical energy sources, the weakness of preserving resources, the lack of water supply and the designation as a raw material producer area is 28.28%.

Results of the Synthesis of Economic Factor Problems

The results of the synthesis of economic factor problems that have been processed through super decision software can be seen in Figure 7 below:
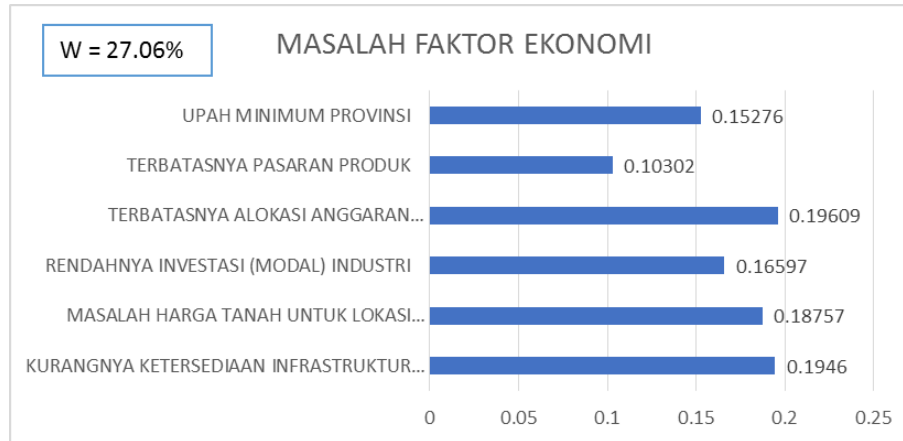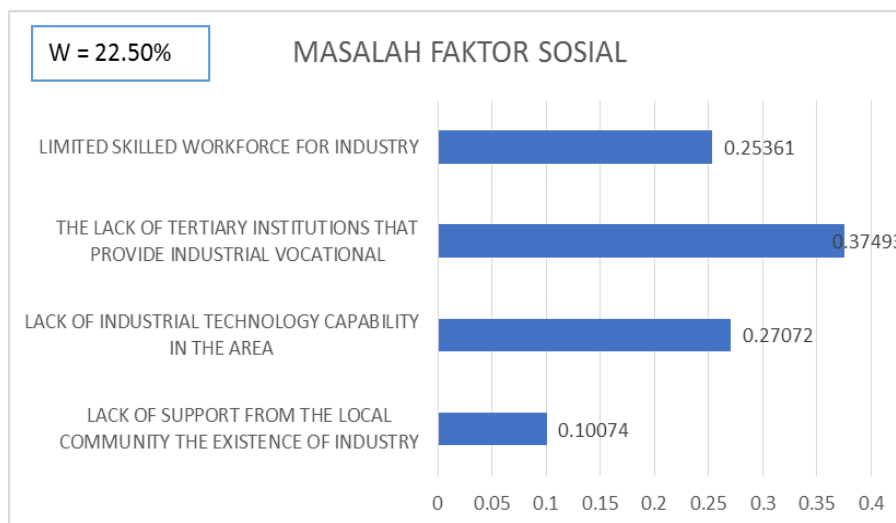
Figure 7. Results of Priority Synthesis of Economic Factor Problems Based on Geometric Mean . Values

It can be seen in Figure 7 that the combined average respondents answered the main priority of the problem of economic factors in determining the strategy for the development of the leading processing industry is the limited government budget allocation for the industry with a percentage rate of 19.61%, followed by the problem of the lack of availability of road infrastructure in good condition of 19.46%. and which ranks third and fourth is the problem of land prices for factory locations which are high at 18.76% and industrial investment (capital) is low at 16.60%. while the last two priority orders are occupied by the provincial minimum wage and the limited market for industrial products at 15.77% and 10.30%, respectively. The result of obtaining rater agreement for all respondents is 27.06%. this means that the level of agreement of respondents on the priority order of economic problems in the form of limited government budget allocations for industry, lack of availability of road infrastructure in good condition, problems with high land prices for factory locations, low industrial investment (capital), provincial minimum wages and limited markets. industrial product is 27.06%.

Results of the Analysis of the Synthesis of Social Factor Problems

Based on the results of data processing through super decision software, the priority of resource factor problems according to 12 respondents is obtained as shown in Figure 8 below:


Figure 8. Results of Priority Synthesis of Social Factor Problems Based on Geometric Mean . Values

From Figure 8 shows that the results of the combined opinion of respondents, the problem of social factors in determining the strategy for the development of the leading processing industry which is the most priority is the lack of universities that provide industrial vocational education in the regions, which is 37.49%, followed by the lack of industrial technology capabilities in the regions of 37.49%. 27.07%. for the third place in the problem of social factors is the limited skilled workforce in the industrial sector by 25.36%. and the last order for the problem of social factors is the lack of support from the local community for the existence of an industry by 10.07%. the result of obtaining the rater agreement value of all respondents is 22.50%. This means that the respondents' level of agreement on the priority order of social factor problems in the form of lack of universities providing industrial vocational education in the regions, lack of industrial technology capabilities in the regions, limited skilled labor in industry and lack of support from the local community for the existence of industry is 22.50%.

Synthesis Results of Local Government Policy Factor Problems

Based on the results of data processing through super decision software, it is obtained the priority of resource factor problems according to 12 (twelve) respondents as shown in Figure 9 below:
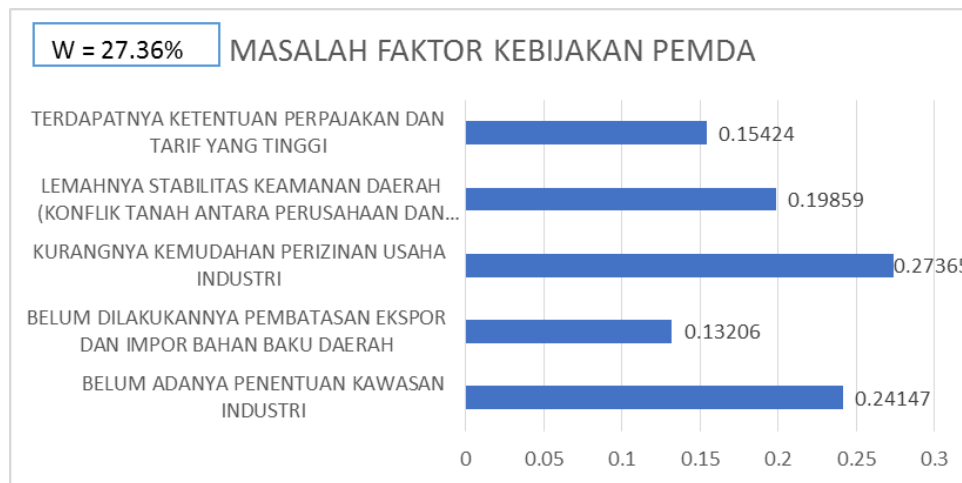

Figure 9. Synthesis of Priority Problems for Local Government Policy Factors Based on Geometric Mean Values

From Figure 9, it can be seen that the average respondent answered that the main priority issue of government policy factors in determining the strategy for the development of the leading processing industry was the lack of ease of licensing for industrial businesses by 27.37%. Meanwhile, the second place in the priority issue of local government policy factors is the absence of an industrial area determination of 24.15%. Weak regional security stability (land conflicts between companies and local communities) is the third priority at 19.86%. For the fourth priority order is the existence of tax provisions and high tariffs of 15.42%. And the last priority order with a percentage of 13.21% is that there are no restrictions on exports and imports of regional raw materials. The result of the rater agreement value of all respondents in answering the priority of local government policy issues is 27.36%. it can be interpreted that the level of respondents' agreement on the order of local government policy factors in the form of lack of convenience for industrial business licensing, the absence of determination of industrial estates, weak regional security stability (land conflicts between companies and local communities), the existence of tax provisions and high tariffs and has not been carried out. restrictions on exports and imports of regional raw materials amounted to 27.36%.

Strategy Cluster Synthesis Results

Based on the results of data processing through super decision software, the priority of the Strategic Cluster was obtained according to 12 (twelve) respondents as shown in Figure 10 below:
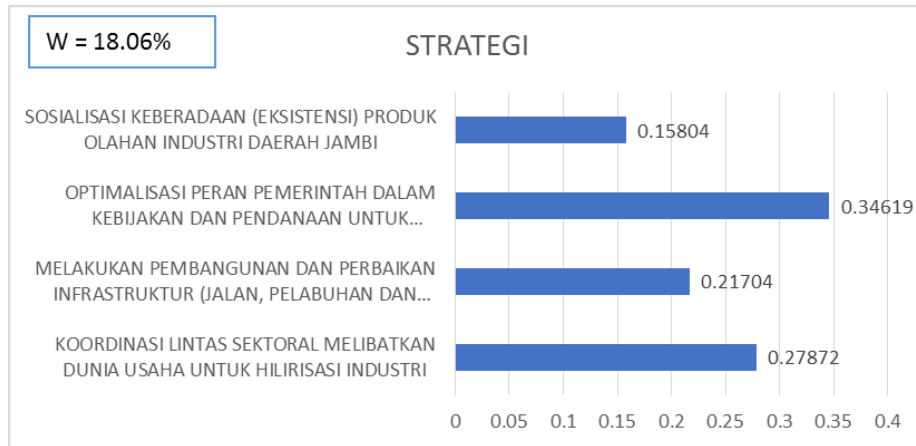
Figure 10. Results of Synthesis of Strategic Cluster Priorities Based on Geometric Mean . Values

It can be seen in Figure 10 that based on the combined opinion of the respondents about the most priority strategy in determining the strategy for the development of the leading processing industry is optimizing the government's role in policies and funding for the downstream program by 34.62%, followed by cross-sectoral coordination involving the business world for downstream industry of 34.62%. 27.87%. Carrying out the construction and improvement of infrastructure (roads, ports and availability of electrical energy) is the third priority at 21.70%. and the last priority is the socialization of the existence (existence) of processed industrial products in the Jambi region by 15.80%.

The result of obtaining the rater agreement value of all respondents was 18.06%. This means that the level of agreement between respondents on the strategic priority sequence in the form of optimizing the government's role in policies and funding for industrial development programs, cross-sectoral coordination involving the business world in industrial development, carrying out infrastructure development and improvement (roads, ports and availability of electrical energy) and socialization of existence (existence).) processed products of Jambi's industrial area amounted to 18.06%.

Based on the description and discussion above for the development of the three leading processing industries, namely the food and beverage industry, the paper and paper goods industry and the rubber industry, rubber and plastic goods and can have an influence on the regional economy, according to the results of the Analytical Network Process method, in general, according to the three industry players, according to practitioners/experts and related regional apparatus organizations, namely Bappeda, Licensing Service and One Stop Service, Plantation Service, and Industry and Trade Office with a total of 12 respondents and conducted In depth interviews so as to produce a combined opinion (rater agreement) on the priority of the problem factor clusters up to the results of determining the priority of the selected strategy for the development of the leading processing industry in the Jambi Province. The problem factor cluster is divided into four, namely: (1) Resource Factors, (2) Social Factors, (3) Government Policies, and (4) Economic Factors. From the ANP results, it shows that the most agreed upon factor to be resolved according to respondents regarding the Leading Processing Industry Development is the Government Policy Factor (39.40%), and for the strategy cluster, all respondents give their rater agreement priority on the strategy of optimizing the government's role in policy and funding. for development programs.

2.0 CONCLUSION AND SUGGESTION

Conclusion

Based on the results of the research and its discussion, the following conclusions can be drawn:

1) The factors that influence the development of the leading processing industry in Jambi Province are (1) the development of the Food and Beverage Industry (PHIMM) is influenced by Industrial Investment (INI), Industrial Production Value (NPI) and Labor Productivity (PTK), (2) The growth of the Paper and Paper Goods Industry

(PHIKE) is influenced by Industrial Raw Materials (BBI), Industrial Production Value (NPI), Industrial Budget Allocation (AAI), Labor Productivity (PTK), and Industrial Manpower (TKI) and (3) The development of the Rubber, Rubber and Plastic Goods Industry (PHIBK) is influenced by the Availability of Electrical Energy (KEL), Industrial Raw Materials (BBI), Industrial Budget Allocation (AAI), Industrial Manpower (TKI), Industrial Production Value (NPI) , and Regional Economic Growth (PED).

2) Development strategies for leading processing industries in the Jambi province are: (1) Strategies for optimizing the government's role in policies and funding for downstream programs, the next priority weights are strategies that have influence, namely (2) Cross-sectoral coordination involving the business world for downstream industries, and (3) Strategies to develop and improve infrastructure (roads, ports and availability of electrical energy), and (4) Socialization of the existence of processed industrial products in the Jambi region.

Suggestion

Based on the results of the research and the conclusions above, the authors provide policy suggestions as a form of implementation of the results of this study, as follows:

1) Entrepreneurs need to increase the value of industrial production through the use of technology and product diversification as well as make efficient use of raw materials and labor so that their industrial products are competitive.
2) Employers need to improve the skills of the workforce through in-house training (internal training) in order to increase labor productivity and business efficiency in terms of labor costs
3) The Jambi Provincial Government needs to build industrial estates and provide tax incentives for leading processing industry entrepreneurs, especially those that have an impact on the regional economy through active and dynamic regional promotions
4) The Jambi Provincial Government needs to build business and social partnerships and build a superior processing industry and ensure the availability of environmentally sound raw materials and renewable energy.

REFERENCES

Agus Salim, Lestari. 2013. Hilirisasi Industri Agro Melalui Kebijaksanaan Pajak Ekspor dan peningkatan Prodktivitas Bagi Komoditas Ekspor Utama. Tesis. Insitut Pertanian Bogor (IPB).

Agus Salim, Lestari. 2016. Hilirisasi Industri Agro Hilirisasi Industri Agro, Teori, Kebijakan dan Kajian Empiris di Indonesia. Penerbit Universitas trilogy Jakarta

BPS, 2018.Direktori Industri pengolahan Besar dan Sedang Provinsi Jambi. Penerbit BPS Provinsi Jambi Tahun 2018

BPS, 2019.Direktori Industri pengolahan Besar dan Sedang Provinsi Jambi. Penerbit BPS Provinsi Jambi Tahun 2019.

Cowling Keith, 1987. An Industrial Strategy for Britain: The Nature and role of Planning. Internationl review of Applied Economics. ISSN: 0269-2171-1987.

Elizabeth, Roosgarda. Akselarasi Agroindustri dan Nilai Tambah Faktor Pendukung pencapain Daya Saing Produk dan Percepatan Pembangunan pertanian di Indonesia. UNES Journal of Agricultural Scientice. Volume 2. Februari 2018.

Fauzi,Rahmat IIF.2013. Alternatif Strategi Pengembangan Industri Barang Jadi Karet di Indonesia . Balai Penelitian Sungai Putih Medan.

Ghezavati, V.R, Ghaffarpour, M.H, dan Salimin, M.2015. A hierarchical Approach for Designing the Downstream Segment for a Supply Chain of Petroleum production system. Journal of Industrial and Systems Engineering. Volume. 8, No. 4, PP 1-17-2015.

Graha, Andi Nu. Analisis Faktor-faktor yang Mempengaruhi Keunggulan Komparatif dan Keunggulan Kompetitif Pada UKM Pengrajin Batu Marmer di Kabupaten Tulungagung. Jurnal Ekonomi Modernisasi, Volume 6. Nomor 1, Februari 2010. Fakultas Ekonomi Universitas Kanjuruhan Malang.

Hasibuan Muis, A. Nurmalina, R.R Wahyudi, A. (2012). Analisis Kebijakan Pengembangan Industri Hilir Kakao (Suatu Pendekatan Sistem Dinamis). Jurnal Informatika Pertanian,Volume 21 No.2, Desember 2012: 59-70.

Hastuti Diah, Sarma Ma'mun & Manuwoto.2016. Strategi Peningkatan Pertumbuhan Ekonomi Melalui Investasi Infrastruktur Jalan dan Jembatan di Provinsi Banten. Jurnal Manajemen Pembangunan Daerah. Volume 8 Nomor 1, Juni 2016.

Lewis,E,C Newton, dan Suntornsaratoon.1999, A Verification of Weight Coefficient in the Objective Function for Efficiency Optimalization of Dynamic System Using Data Envelopment Analysis, Australian Conference on Information System, h.907-912.

Mardiantony, T & Ciptomulyono, U. (2012). Penerapan Analisis Input Output dan ANP dalam penentuan Prioritas Pengembangan Sub Sektor Industri di Jawa Timur. Jurnal Teknik ITS. Volume 1, (September, 2012) ISSN: 2301-9271.

.