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CRITICAL SUCCESS FACTORS DOWNSTREAM PALM OIL BASED SMALL AND MEDIUM ENTERPRISES (SME) IN INDONESIA

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Abstract: *This Study Aims Critical Success Factors Downstream Palm Oil Based Small And Medium Enterprises (Sme) In Indonesia. This type of research is quantitative descriptive. The population in this study population in the village of DesaMangkeiMangkei Old and New with the number of 341 heads of family. Sampling was done by purposive random sampling technique, which is sampling to certain criteria. The test results showed Aspects Employment Creation (X_1), Growth (X_3), Accessibility and Availability of Capital (X_6), Price (X_7) and Availability of Skilled Manpower (X_9) is the dominant factor in determining the Downstream Oil Palm in North Sumatra. Downstream Oil in Simalungun as the center of Regions has not yet optimal MP3EI supporting them by the government. In addition Sumatra SIDA development program to be developed so as to enhance the competitiveness and the economy.*

Keywords: *Small and Medium Enterprises, Regional Innovation System (SIDA), Masterplan Acceleration and Expansion of Indonesian Economic Development (MP3EI), Economic Corridor Sumatra and Oil Palm.*

1. INTRODUCTION

To know the general picture and the condition of SMEs in the research area that includes aspects of Creation Jobs, the Creation of Competitiveness, Aspects of Economic Growth, Aspect Availability Market, Aspects of Labor Absorption, accessibility and availability of capital, Prices, Production Facilities, Availability of Skilled Manpower, Technology and Business Management. SMEs became the center of rotation of the economy the

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government, especially local government. If the economy in each area well, then this will have an impact that is good for the national and local economy (Muda and Dharsuky, 2016). Innovative enterprises have a relevance to funding. One of the elements is the innovative financing mechanism. It can be a traditional mechanism which is to raise and distribute aid/fund (Michaud and Kates, 2011). Ma (2010), states that there are three important things affecting the funding of technological innovation of SMEs in China, they are the policies and regulations including taxation policies, the funding of SMEs technological innovation, and the increase of the cost of the inputs.

One of them is the research conducted by Jeetahand Reetoo (2016) and Omosebi and Aluko(2015) that found the potential of Biogas in producing a low-value of residue thus it is worth for mass production.The small and medium enterprises (SMEs) and other microfinance institutions are rarely touched by formal economic science. Whereas, in addition to the large numbers, they are also strong in supporting the Indonesian economy. According to Dibrell and Craig (2008), the products of SMEs generally do not contain the imported ingredients or components, because they use local materials or components, both the natural and human resources. At the moment of the increase of Dollar exchange rate, this sector can not only survive but also can get its export earnings increased sharply.To determine the level of empowerment of SMEs and entrepreneurs derivative Palm Oil used cross-tabulation between indicators Aspects of Creation Jobs, the Creation of Competitiveness, Aspects of Economic Growth, Aspect Availability Market, Aspects of Labor Absorption, accessibility and availability of capital, Prices, Production Facility/ technology, Availability of Skilled Manpower, technology and Business Management engine is dual-fuel system.

In the development of the Master Plan for the Acceleration and Expansion of economic development of Indonesia (MP3EI) Sumatra Economic Corridor, construction of space structures in the province were directed to understand the movement patterns of the gardens (rubber and oil palm), and the coal mines as a major economic activity to the point of processing or industrial area next to the port. The development of industrial areas downstream palm oil-based oleochemical main, decisive government three strategic industrial zones namely, SeiMangkei in North Sumatra, Dumai in Riau and East Kalimantan. Economic Corridor is a region of the Republic of Indonesia which consists of the island and its waters, which is composed of the centers of economic growth and connectivity between centers of growth. Establishment of Economic Corridor is essentially an integration of sectoral and regional approaches. Each region developed a product that became superiority. Increasing the economic potential of the region through the economic corridor has become one of the three main strategies (main pillar). Sirojuzilam *et al* (2016) stated Policies which don't support the agricultural sector should be analyzed, including increased number of policies relatedto opening agricultural import, low bargaining power of farmers on banks, reduced number of farmers, and government's inconsistency in agricultural revitalization agenda.North Sumatra is designated as the main entrance corridor I in MP3EI, develop oil palm as a

major comedy. It implies a strong support to the Regional Innovation System program that meets the downstream oil-based SMEs.

2. METHOD

This study uses primary data and secondary data such as the results of the field survey in North Sumatra, especially in the village of Patronage Village Bukit SintangLangkat and Special Economic Zones Sei Mangkei Simalungun consists of Village Mangkei Lama, Village Mangkei Baru, Perlanaan, Parbutaran, Mayang, Hamlet Pengkolan, Bosar Maligas, Boluk, Sei Mangkei, Gunung Bayu, Talun Saragih, Marihat Tanjung, Marihat Butar, Sei Torop, Adil Makmur, Teladan, Tempel Jaya, Sidomulyo, Nanggar Bayu and Mekar Rejosubdistrict Bosar Maligas, Simalungun. Loburapa village Asahan District of Aek welcome and partnered with Agency for Research and Development (BPP) of North Sumatra Province to collaborate and partner in the implementation of research grants. Number of questionnaires distributed to respondents is as much as 404 copies and is willing to fill as many as 244 questionnaires in the village of Patronage Desa Bukit Sintang Langkat and Special Economic Zones Sei Mangkei Simalungun consists of Village Mangkei Lama, Village Mangkei Baru, Perlanaan, Parbutaran, Mayang, Hamlet Pengkolan, Bosar Maligas, Boluk, Sei Mangkei, Gunung Bayu, Talun Saragih, Marihat Tanjung, Marihat Butar, SeiTorop, Adil Makmur, Teladan, Tempel Jaya, Sidomulyo, Nanggar Bayu and Mekar Rejosubdistrict Bosar Maligas, Simalungun. Loburapa village Asahan District of Aek Songsongan. Then, in accordance with a predetermined time the questionnaire to be brought back. All questionnaires were distributed can be collected back and can be used as data in this study.The definition fo research variable is as the following:

Table 1
Operational Variable

Variable	*Indicator*	*Scale*	*Measurement*
Oil Palm Based Regional Innovation System (SIDA)	Oil Palm nursery in the villages is drastically increased	Ordinal	Likert scale
	Oil Palm nursery in the villages supplies the needs of Oil Palm in the villages.	Ordinal	Likert scale
	There is a Cooperative of Oil Palm midribs based Cattle Feeds Didesa.	Ordinal	Likert scale
	The Cooperative of Oil Palm midribs based Cattle Feeds as the Cattle feeds supplier	Ordinal	Likert scale
	The cattle business produces Beef, Excelent Calves and Bio Gas	Ordinal	Likert scale
	The cattle business produces Excellent Calves	Ordinal	Likert scale
	The cattle business produces Bio Gas	Ordinal	Likert scale
	The plantations community empowerment is very suitable to the Bio Gas stove using the Shells and Briquets.	Ordinal	Likert scale
	The Oil Palm plantations produce CPO but not fully distributed.	Ordinal	Likert scale

contd. table

Variable	*Indicator*	*Scale*	*Measurement*
	The laboratory-scale distributed oil palm products need to be developed into industry scale	Ordinal	Likert scale
	The diversification of CPO products into derivative foods and cosmetics (Chocolate, Butter, Soap, Cosmetic, etc)	Ordinal	Likert scale
	The developing SME based Oil Palm industry is expected that the Oil Palm industry gives a wider multiplier effect to the welfare of the society.	Ordinal	Likert scale
	Thederivatives of Oil Palm are used toobtain the bank financing	Ordinal	Likert scale
	The efforts have been conducted in the form of Laboratory to produce Excellent Seeds, and also Oil Palm processed products in the form of Cocoa Butter Subtitutes (CBS), paraffin, Soap and Butter.	Ordinal	Likert scale

Analysis by SEM Warp PLS requires several fit indices to measure the correctness of the proposed model (Kock, 2013). There are several fit indices and cut–off values to see whether a model is accepted or rejected (model fitness test) including Effect size, Output combined loadings and cross loadings, Output pattern loading and cross loading, Output indicator weight, Output latent variable coefecient, Q squared (Stoner-Geisser coefficient), Full colinearity test, Output correlations among Latent variable, Output block VIF, Output correlation among indicator and Output indirect and Total Effect if necessary. (Kock, 2013).

2.1. Analysis of Data Quality Testing

2.1.1. Validity Test

From the results of a questionnaire distributed to 244 respondents then used the combined output loadings and cross loading convergent validity as an indicator which is part of the measurement model in SEM-PLS (Kock, 2013). With the results of the test constructs eligible convergent validity and loading to construct another inferior to construct it.

2.1.2. Reliability Test

Based on the output WarpPLS reliability test results as follows:

Cronbach's alpha coefficients

X1	*X2*	*X3*	*X4*	*X5*	*X6*	*X7*	*X8*	*X9*	*X10*	*Y*
0.937	0.742	0.898	0.669	0.775	0.605	0.700	0.691	0.652	0.750	0.828

Sources: WarpPLS result test. (2016).

Based on the results of reliability test of the 10 (ten) constructs obtained Cronbach's Alpha above 60% so that the whole question stated reliably Hair et al (2013).

2.1.3. Goodness of Fit Test Model

Indicators fit model which is based on three indicators: average path coeficient (APC), average R-Squared (ARS) and variancee average inflation factor (AVIF). The p-value was given for the APC and ARS indicators are calculated by resampling estimation and like Bonferroni correction. The results show:

Model fit indices and P values

Average path coefficient (APC)=0.129, P=0.010
Average R-squared (ARS)=0.380, P<0.001
Average adjusted R-squared (AARS)=0.353, P<0.001
TenenhausGoF (GoF)=0.490, small >= 0.1, medium >= 0.25, large >= 0.36
Sympson's paradox ratio (SPR)=0.700, acceptable if >= 0.7, ideally = 1
R-squared contribution ratio (RSCR)=0.781, acceptable if >= 0.9, ideally = 1
Statistical suppression ratio (SSR)=1.000, acceptable if >= 0.7
Nonlinear bivariate causality direction ratio (NLBCDR)=1.000, acceptable if >= 0.7
Sources: WarpPLS result test. (2016).

Thus good value ARS APC and significant at alpha level below 5% and the value of AVIF below the value 5.Thus model fit.

2.1.4. Multicolinearity Test

Based on the results of correlation between independent variables and view the VIF can be concluded there was no trouble Multicolinearity This is supported by the value of the Full Collon.VIF relatively small, ie no greater than 3.3 (Kock, 2013).

Test Results Table Multicolinearity (Full collinearity VIFs)

Average block VIF (AVIF) = 2,401, acceptable if <= 5, ideally <= 3.3
Average full collinearity VIF (AFVIF) = 2,516, acceptable if <= 5, ideally <= 3.3
Source: Testing Results WarpPLS 5.0. (2016).

These results can be concluded that the independent variable is not happening Multicolinearity where AVIF overall value less than 5 (Kock, 2013) so that the model has qualified classical assumption in the SEM WarpPLS.

2.1.5. Hypothesis Testing

Results of testing the hypothesis that the variable aspect of Creation Jobs, the Creation of Competitiveness, Aspects of Economic Growth, Aspects of Availability Market, Aspects of Labor Absorption, accessibility and availability of capital, Prices, Production Facilities, Availability of Skilled Manpower and Technology and Business Management in Sumatra Northern affect the Downstream Oil Palm Innovation. In partial statistical test with the critical t value (critical value) on df = (n-k), where n is the number of samples and k is the number of independent variables including constant. To test the partial regression coefficients individually from each of the independent variables can be seen in the following figure:

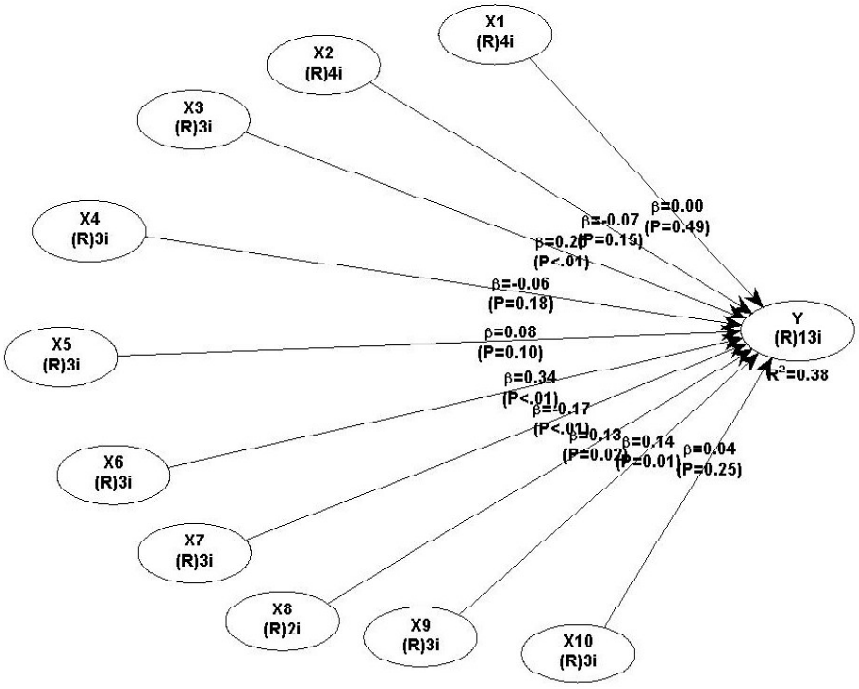

Figure 1: Testing Results WarpPLS 5.0 (2016).

Sources: WarpPLS result test. (2016).

3. RESULTS AND DISCUSSIONS

The results will be discussed in 5 subsections, they are output power, total efficiency, specific fuel consumption, exhaust gas emissions, and diesel replacement ratio. The hypothesis that the variable effect of variable aspect of Creation Jobs, the Creation of Competitiveness, Aspects of Economic Growth, Aspect Availability Market, Aspects of Project, accessibility and availability of capital, Prices, Production Facilities,

Availability of Skilled Manpower and Technology and Business Management in Sumatra Northern affect the Downstream Oil Palm Innovation. Partially Aspects Employment Creation (X_1), Growth (X_3), Accessibility and Availability of Capital (X_6), Price (X_7) and Availability of Skilled Manpower (X_9). Downstream oil is the role of government to socialize and build communities using palm oil derivative products. Minister of Industry of the Republic of Indonesia (2010) sets policy with the downstream palm oil industry cluster approach to create the industry's competitiveness, which is based on the creation of comparative advantages and competitive advantages. Robust industrial competitiveness will create the industry's efficiency, new product innovation, market penetration and adaptive response to the change. In addition, the competitiveness of the industry also includes global awareness of the need for green products, sustainable business practices, and in harmony with the environment (environmentally friendly). Aspects of industrial technological innovation plays an important role as a vehicle (enabler) leap creator competitiveness through R&D activities are dynamic, adaptive, applicable and sustainable. Industrial technology developed should be applied to support the operation of the cluster. In this case, one of the concrete steps the government is establishing Oil Palm Industry Innovation Centre in the Industrial Area SeiMangkei North Sumatra as a center of excellence embryo technology development of downstream industries and the formation of human resources for downstream industries reliableLingga and Pratomo (2013). In general, IHKS including technology-industry-oriented, where the added value is highly dependent on technology products and production efficiency. The use oleofood products and oleochemicals, especially specialty chemicals, is increasing in line with the global trend of lifestyle that promotes the safe use, hygiene, health and nutritional adequacy. Both of the above aspects of the challenge (challenge) and an opportunity (opportunity) in the implementation of the national program downstream palm oil industry. Not to forget, the establishment of industrial human resources qualified and in sufficient numbers should be taken to face the free market laborAsean Economic Community in 2015.

4. CONCLUSIONS

Aspects Employment Creation (X_1), Growth (X_3), Accessibility and Availability of Capital (X_6), Price (X_7) and Availability of Skilled Manpower (X_9) is the dominant factor in determining the Downstream Oil Palm in North Sumatra. Downstream Oil in Simalungun as the center of Regions has not yet optimal MP3EI supporting them by the government. In addition Sumatra SIDA development program to be developed so as to enhance the competitiveness and the economy.

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