Spatial Analysis of the Empowerment of Small and Medium Enterprises in the City of Medan

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ABSTRACT *National development policy in the early 1990s emphasized the growth and equal development, increasing dedecentralization, world of business and community participation (empowerment) in development, strategic regional development and sustainable development based on Agenda-21 Rio de Janeiro. The policy is implemented through PP No. 45/1992 on Regional Autonomy Implementation and Law No. 24/1992 on Spatial Planning. Regional approach in spatial planning also experiences the deepening and expanding its covered area. In its process, spatial planning does a comprehensive review of a region such as population, natural resources, artificial resources, social, economic and physical issues, and formulating the goal, objective and target of regional development. The analysis used is the models of various disciplines and of them is spatial analysis, and this study discussed about the spatial analysis of the empowerment of small and medium enterprises in the City of Medan. Through the Location Quotient (LQ), Shift Share (SS), Growth Ratio Model (GRM) and Overlay Method approaches, this study concluded that the Small and Medium Enterprises in the City of Medan are potentials to be the basic sector in generating the regional economy of the City of Medan. In addition, through multi-dimensional analysis approach, it is concluded that the subdistrict that becomes the main basis for the empowerment of Small and Medium Enterprises in the City of Medan is Medan Sunggal Subdistrict, hereinafter called "Sunggal SME's Zone"; the second is Medan Johor Subdistrict called "Johor SME's Zone" and the third is Medan Ampals Subdistrict called "Amplas SME's Zone".*

Introduction

The City of Medan is one of the urban areas in Indonesia, as the capital of the Province of Sumatera Utara as well as the icon known either in Sumatera Utara, Indonesia or in the International community. The City of Medan is located in a strategic positin which is geographically between 2° 27' and 2° 47' North Latitude and between 98° 35' and 98° 44' East Longitude with the area of 265.10 km² and the elevation of 2.5 to 37.5 meters above sea level, and multi access linkage by land, by sea and by air from and to either hiterland, districts/cities in the Province of Sumatera Utara and other district/cities in Indonesia or even abroad. All of these make the City of Medan become very strategic and potential to keep developing its area.
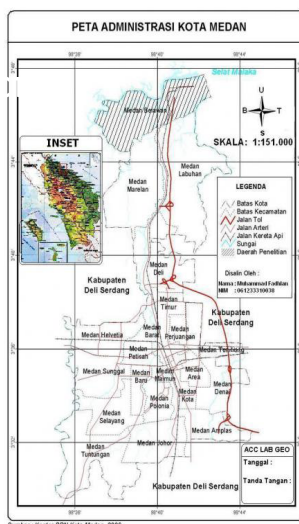

Fig 1. Map of the City of Medan

Misra (1982) argued that regional development bis an attempt to encourage regional development through comprehensive approach including physical, economic and social aspects. Alkadri (1999) argued that regional development is an attempt to build and develop a region based on spatial approach by considering socio-cultural, physical-environmental and institutional aspects in a planning framework and integrated development management. While according to Azwar (in Sinaga, 2013), the goal of regional development is among other things an optimal utilization of natural resources through the development of local economy based on the basic economic activity occurs in a region, that is Small and Medium Enterprises (SME).

SME is a part of the most strategic economic sector concerning the lives of many people and is an important pillar in supporting and generating the economic foundations in many countries in the world.

Tambunan (2003) said that one of the characteristics of the good economic dynamics and performance with high growth rate in the Newly Industrializing Countries (NICs) in East and Southeast Asia (South Korea, Singapore, and Taiwan) characterized by the performance of Small and Medium Enterprises which is very efficient, productive, having high level of competitiveness, export oriented, and responsive to the government's policies in private-sector development.

In the advanced industrial countries that are members of Organization for Econimic Co-operation and Development (OECD) like Japan, Germany, France and Canada, SMEs are the important motors of economic growth and technology progress (Thornburg, 1993). In Europe, especially Western Europe, the SMEs dominated the economy of the Netherlands and it is noted that 95% of the enterprises in the Netherlands are SMEs (Bijmolt and Zwart, 1994).

Piper (1997) found that 12 millions or about 63.2% of the

number of workers in the United States worked for 350,000 SMEs. In the developing countrie in Asia, Africa, Latin America, SMEs plays a very important role in economic structure, especially in labor absorption, sources of income for the poor, equitable income distribution, poverty

No.	Business Sector	City of Medan		Province of Sumatera Utara	
		Number (Millions)	Contribu-tion (%)	Number (Billions)	Contribution (%)
1	Agriculture	2.340.771,21	2,5	70.635,87	22,48
2	Quarrying	2.910,46	0,00	4.341,19	1,38
3	Processing Industry	13.464.885,26	14,38	70 .672,27	22,50
4	Electricity, Gas and Drinking Water	1.579.106,41	1,69	2.966,49	0,94
5	Construction	9.830.513,95	10,50	20.172,80	6,42
6	Trade, Hotel and Restaurant	24.263.410,06	25,92	60.032,52	19,11
7	Transportation and Communication	17.804.019,19	19,02	28.832,79	9,18
8	Finance, Insurance, Leasing (Building, Land), and Business Service	14.142.262,49	15,11	21.887,63	6,97
9	Services	10.182.878,36	10,88	34.615,37	11,02
T o t a l		93.610.757,40	100	314.156,94	100
Big Enterprises (BEs)			60.20		44.00
Small and Medium Enter-prises (SMEs)			39.80		56.00

reduction, rural economic development and the increase of non-oil and gas export quota. In India, the contribution of SMEs was 32% of the export total value, and 40% of the output value of the sector of manufacturing industry.

In Indonesia alone, history has noted and proven that SMEs keep existing and developing and even functions as the safety valve of economy as well as the dinamisator of economic growthin the middle of the economic crisis in 1997 and the global crisis from 2008 to 2013. The fact obtained from the BPS (Central Bureau of Statistics)(2012) showed that the contribution of SMEs in Indonesia in forming PDB (Gross Domestic Product) was exceeding the contribution of big enterprises which was only 57.56%. In terms of the employmenmt of workers, the SMEs in Indonesia can employ up to 97.04% and create value-added for 57.56% but the control of export market share is still relatively small (only 18.12%).

In terms of its number, according to NSB Asia, SMEs in Indonesia was up to 98.89% in 2012 sitting in the fourth place after China, the Philippines and Cambodia in which 4.11% (1.099.003 units) of them were scattered in the Province of Sumatera Utara and 26.72% (293.613 units) of them were spread in the City of Medan.

Sinaga (2013) argued that Medan SME Cooperative Service recorded that the proportion of the SMEs in generating the economy of Medan was 46.12% ,which is bigger than that of BEs, and this percentage was almost two times bigger than the number of Bes in the City of Medan. Up to the end of 2012, the SMEs in the City of Medan were successful in employing the workers up to 96 percent, but interms of forming GRDP, the contribution of SMEs in the City of Medan is still relatively small which was only 39.85 or bigger than the contribution of the BEs which was 60.2%. This percentage is below the contribution of SMEs to the GRDP of the Province of Sumatera Utara (56.00%) and the contribution of SMEs to the GDP of Indonesia (57.56%) (See Table 1).

Table 1. Contribution of SMEs to the GRDP of the City of Medan and the province of Sumatera in 2011

This condition shows that SMEs not only play their strategic roles in an economy but also be susceptible to various problems. Therefore, if SMEs are to exist forever, a comprehensive and sustainable empowerment is needed.

Mubyarto (1998) emphasized that, in its process, the community empowerment is directed to human resources de-

velopment (in rural area), and creation of job opportunity which meets the community need. The community is given a chance to decide the business sector and the regional condition that an institution and service system which is from, by and for the local community can be created. This attempt of community empowerment can be applied in the empowerment of SMEs in the City of Medan later.

Referring to the history of the development of regional concept and its development as pioneered by Walter Isard (in the 1950s), Hirschman (in the 1950s), Myrdal (in the 1950s) Friendman (in the 1960s) and Douglas (in the 1970s), the sense of economics was prioritized compared to the sense of social, physical enviroment and infrastructure that in general regional science can be understood as a science studying the aspects and principles of regionality, and looking for the effective ways in considering the aspects and principles in the planning process of developing human life quality (Rustiadi, 2009). Then, the study of regiopnal planning and development is based on the attempt to meet the need of the developing regional sciences leading to policy and planning. This field of study is trying to answer the problems of regional development which is unlimited to "why" but also "how" a region is developed. The answer to "how" will include the aspects of spatial planning, land/location use planning, institutional development planning including the process of the development itself (Rustiandi et. al., 2009).

Based on the view above, it is clear that in its application to the city and rural planning science, the sciences of land use/ location planning and financial pattern are needed in developing planners' skill to determine whether or not the location whose development to be planned is right. And the analysis of financial pattern itself is related to the aesthetic of a developed location. This leads to the mastery of the basic theories of location or financial pattern. Basically, location theory has been exposed in various versions by several scientists. Space pattern is the science related to the aesthetic that can be valued from its architectural aspect and location.

The explanation of inconsistent phenomenon of SME's contribution to the economi principles of the City of Medan and the analogy of the importance of empowerment and planalogy are the ideas originating the study on "Spatial Analysis of SMEs Empowerment in the City of Medan" in this study.

Spatial analysis is a location analysis focused on three elements such as distance, interaction, and movement. The purpose of spatial analysis is to determine whether or not the

existing condition goes well with the spatial structure, and to analyze the inter-spatial interaction which is the relationship between economic and spatial interaction, the accessibility of a region to reach, and interaction constraints based on the places (towns) functioning as the center of activities for the other places or also known as urban spatial hierarchy. In this study, the hierarchy mentioned previously will be focused in hinterland and subdistrict areas of the City of Medan which then will be planned as SME"s Zones.

Formulation of the Problem
Regional planning and development must start with the inventory of the available resource potentials and the regional condition either physical condition or socio-economic condition of the local community. Based on the result of the inventory of the available resource potentials in the City of Medan as previously mentioned, the problems studied in this study were:

1. Is SME potential to be the basis of economic sector in the City of Medan?
2. How is spatial-based empowerment of SME implemented in the City of Medan?

Purpose of Study
This study combined various aspects of SME-focused physical and economic regionality, regional socio-culture in a study to make a spatial planning of SME empowerment in the City of Medan namely regulating the subdistrict area and its pattern of utilization based on the types of economic activities and function of location. Being relevant to the two problems formulated in this study, the purpose of this study was:

1. to find out the potential of SME as the economic-based sector in the City of Medan
2. to find out the spatial basis of SME empowerment in the city of Medan.

Research Method

Reasearch method used in this study was descriptive quantitative method. The secondary data used in this study were obtained from the data of GRDP of the City of Medan for 2010-2011. These data were used to identify the potential of SMEs as the economic-basis sector of the City of Medan. The data were analyzed through Location Quotient (LQ), Shift Share (SS), Growth Ratio Model (GRM), Overlay Method (OM).

In addition to the secondary data, this study also used the primary data obtained through the questionnaires distributed to 206 SME stakeholders comprising the actors (SME practitioners), regulators (Local Legislative Members, Subdistrict Apparatuses, Cooperatives and SMEs Service, Trade and Industry Service, Regional Development and Planning Board, and Central Bureau of Statistics), and facilitators (NGOs, Indonesian Chamber of Commerce, Aspindo and Academicians). The primary data in this study were used to find out the continuity of SMEs in the City of Medan viewed from the dimensions economy, ecology, social, technology, partnership and location and to analyze the spatial SME empowerment in the City of Medan the primary data in this study were analyzed through multi dimensional analysis (MDS).

Result, Analysis And Discussion
Economic-Based Sector Analysis
Based on the types of business sector, the economy of the City of Medan is generated by 9 (nine) business sectors, whiled based on business scale, the economy of the City of Medan is generated by 2 (two) types of business scales, namely Bes and SMEs including micro business and cooperatives. The respective potentials of each business sector or business scale become the basis of the economy of the City of Medan shown through the result of analysis through Location Quotient (LQ), Shift Share (SS), Growth Ratio Model (GRM), Overlay Method (OM) in Table 2 below.

Table 2: The Result of Location Quotient (LQ), Shift Share (SS), Growth Ratio Model (GRM)

No.	GRDP	LQ Analysis		Shift Share Analysis (2011)				GRM	
		2010	2011	Nsi.t	Pr.it	Dr.i.t	E.r.i.t	RPr	RPs
1	Agriculture	0.12	0.11	310.40	-2,534.61	2,093.29	-130.91	0.85	0.42
2	Quarrying	0.00	0.00	0.41	-2.21	2.90	1.10	1.04	-0.10
3	Processing Industry	0.65	0.64	1,740.18	-14,214.59	5,488.00	-6,986.41	0.84	0.64
4	Electricity, Gas and Drinking Water	1.79	1.79	197.44	-1,611.74	-949.50	-2.363.81	0.98	0.48
5	Construction	1.54	1.64	1,136.81	-9,285.60	-3,498.11	- 11,646.89	1.09	1.67
6	Trade, Hotel and Restaurant	1.42	1.36	3,128.97	-25,559.76	-6,163.15	-28,593.94	1.05	0.66
7	Transportation and Communication	2.10	2.07	2,202.07	- 17,987.74	- 14,911.01	-30,696.68	1.13	1.03
8	Finance, Insurance, Building Leasing Business, Land and Service Busines	2.16	2.17	1,658.94	-13,550.87	-11,646.89	-23,538.82	1.45	1.53
9	Services	0.99	0.99	1,246.17	-10,178.96	1,362.93	-7,569.85	1.16	1.13
10	SMEs	0.67	0.71	4,183.71	-34,175.93	15,904.34	-14,051.88	1.30	1.96

The table above showed that SME LQ coeffisien in the City of Medan < 1 and proportional shift (Pr.it) coefficient was negative but SMEs still expected to become the basis sector in exploring various economic potentials availabe in the City of Medan. Due to the increasing SME LQ coeffisien from 0.67 in 2010 to 0.71 in 2011, the expectation of SMEs to be the basis of economy of the City of Medan is also sttenghened by the coeficient of national share (Nsi.t) with positive sign (4,183.71) which indicated that the growth of SMEs in the City of Medan was faster than the same sector at Sumatera Utara Province level. The coefficient of differential shift (Dr, i,t) which also had positive sign (15,940.34) indicated the sector with competitive excellence. The expectation of SME as the basis of the economy of the City of Medan was also strengthened by the coefficient of

the studied regional growth ratio (RPs of the City of Medan) with positive sign 1.30 and the coefficient of the referenced regional growth ratio (RPs of the Province of Sumatera Utara) which also had positive sign 1.96 meaning that SME sector had a clear growth both in the Province of Sumatera Utara and in the City of Medan. SME-based business sector in the City of Medan which is potential to increase GRDP includes:

1. Electricity, gas and drinking water business with the coefficient of LQ_{2011} = 1.79 > 1; Nsi,t with positive sign was 197.44; RPr with positive sign was 0.98; and RPs with positive sign was 0.48.
2. Construction business with the coefficient of LQ_{2011} = 1.64 > 1; Nsi,t with positive sign was 1,136.81; RPr with positive sign was 1.09; and RPs with positive sign was 1.67.

3. Trade, hotel and restaurant business with the coefficient of $LQ_{2011} = 1.36 > 1$; Nsi,t with positive sign was 1,136.81; RPr with positive sign was 1.13; and RPs with positive sign was 0.66.
4. Transportation and communication business with the co-efficient of $LQ_{2011} = 2.07 > 1$; Nsi,t with positive sign was 3,128.97; RPr with positive sign was 1.05; and RPs with positive sign was 1.03.
5. Finance, insurance, building leasing, land, service business with the coefficient of $LQ_{2011} = 2.17 > 1$; Nsi,t with positive sign was 1,658.98; RPr with positive sign was 1.45; and RPs with positive sign was 1.53.

Harahap (2012) in the citation of Bisnis Indonesia stated that several major policies applied to keep the momentum of economic growth, among other things, are by providing fiscal incentives to the investors and trading business practitioners. Absorption of the budget from the goverment, he continued, is attempted to be efficient and effective. He also facilitated import and export policies through either Belawan Seaport or Polonia/Kualanamu Airport, and moved the SME sector as the basis of urban economy. One of the concrete steps done to materialize it is the empowerment which was made effective through the Regulation of the Citymayor of Medan No. 5 dated December 16, 2005 on the RPJMD the City of Medan 2005 – 2010.

Spatial Analysis of SME Empowerment in the City of Medan
In this study, the Spatial Analysis of SME Empowerment in the City of Medan is determined based on the average coefficient of the status of SME continuity in 21 subdistricts in the City of Medan as resulted from MDS analysis.

Based on the result of analysis of MDS, in the average, the six dimensions used to explain the status of SME continuity 21 subdistricts of the City of Medan had the "stress" value of 0.25 or less than 1. This value (0.25) is within the range of decision stating that the value of "stress" in the analysis using MDS method is adequate enough if it gets the value of 25%. Because, the smaller the "stress" value obtained, the better the result of the analysis done. Different from the determination coefficient (R^2), the quality of the result of analysis becomes increasingly better if the value of determination coefficien becomes increasing bigger (approaching 1). Thus, both parameters (the value of "stress" and R^2) showed that all of the attributs used in the analysis of the continuity of SMEs in the City of Medan is good enough to explain the six dimensions of continuity analyzed, and Medan Sunggal Subdistrict is the area which is expected to be the main basis of SMEs (Sunggal SME's Zone). This area explains the best six dimensions of SME continuity, namely the average lowest stress value (0.16719) with standard of deviation 0.02017 and the closest average RSQ to 1 (0.87329) with with standard of deviation 0.03840. Site plan and the description of this basis area is illustrated through the following figure.

Fig. 2: Sunggal SME's Site Plan

Further, MDS analysis conducted to each of the attributes of the six dimensions of the forming of SME continuity showed that, in terms of economic dimension, the most sensitive attribute influencing the continuity of SME in Sunggal Subdistrict (Sunggal SME's Zopne) is the price of commodity with leverage coefficient of 1.65, then followed by product market with leverage coefficient of 0.87. Viewed from dimension of ecology, the most sensitive attribute influencing the SME continuity in Sunggal Subdistrict is the attribute of waste disposal with leverage coefficient of 1.26, then followed by the attributes of drainage infrastructure and environmental hygiene with respective daya ungkit of 0.8 and 0.44.

In terms of social dimension, the most sensitive attribute influencing the SME continuity in Sunggal Subdistrict is the attribute of skilled manpower with the daya ungkit coefficient of 0.87, then followed by the attribute of manpower education with leverage coefficient of 0.62, the attribute of employment with daya ungkit coefficient of 0.47, and the attribute of local community education with leverage coefficient of 0.41. In terms of technological dimension, the most sensitive attribute influencing the SME continuity in Sunggal Subdistrict is the attirbute of technology of information with leverage coefficient of 1.29, then followed by the attribute of technology of management with daya ungkit coefficient 1.1.

In terms of the dimension of partnership, the most sensitive attribute influencing the SME continuity in Sunggal Subdistrict is the attribute of partnership with the raw material suppliers with leverage coefficient of 1.18, then followed by the attribute of partnership with the investors with daya unkit coefficient of 0.81, and the attribute of partnership with the government with leverage coefficient of 0.54.

In terms of the dimension of location, the most sensitive attribute influencing the SME continuity in Sunggal Subdistrict is the attribute of quality of location with leverage coefficient of 1.92, then followed by the attribute of access from the location to the transportation infrastructure with leverage coefficient of 0.94, and the attribute of access from the location to the financial institutions with leverage coefficient of 0.75.

The result of direct observation conducted in several kelurahan (urban villages) in the vicinity of Medan Sunggal Subdistrict showed that the SMEs which are mostly practiced by the local community include retailing trade, household necessities and restaurants (See Fig. 3)

Subdistrict area which is expected to be the second basis of SME is Medan Johor Subdistrict (Johor SME's Zone) with average stress value of 0.17793, standard of deviation of 0.05276, and the average RSQ value of 0.86932, standard of deviation of 0.08245. The site plan and description of this basis area is illustrated as in Figure 4.
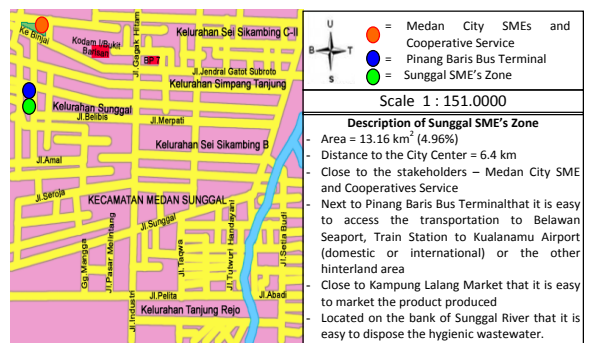

Fig. 3. Basis of SME Business Sector in Sunggal SME's Zone

Description of Sunggal SME's Zone
- Area = 11.9 km² (4.22%)
- Distance to the City Center = 10.0 km
- Close to Ringroad to access transportation from and to Amplas Bus Terminal, Belawan Seaport, Kualanamu International Airport either domestic or international and the other hinterland areas.
- Close to the Planned CBD of Medan (former Polonia Airport Area)
- Close to Babura River and Simalingkar Dump Site that it is easy to dispose the hygienic wastewater or solid waste
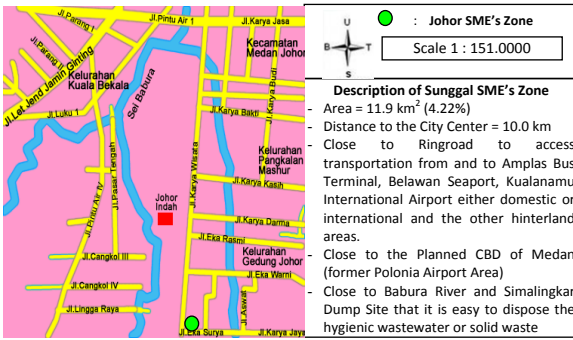
Fig. 4. Johor SME's Site Plan

Further MDS analysis done to each attribute of the six dimensions forming the continuity of SME showed that, in terms of the economic dimension, the most sensitive attribute influencing the SME continuity in Medan Johor Subdistrict (Johor SME's Zone) is the income of local community with leverage coefficient of 1.3 then followed by the price of the commodity with daya ungkit coefficient of 0.87, the contribution to Original Locally-Generated Revenue with leverage coeficient of 0.34, and the attribute of product market with daya ungkit coefficient of 0.1. In terms of the dimension of ecology, the most sensitive attribute influencing the SME continuity in Medan Johor Subdistrict is the attribute of waste processing with leverage coefficient of 1.38, then followed by the attribute of raw material availability with daya ungkit coefficient of 0.74 and environmental hygiene with leverage coefficient of 0.8.

In terms of social dimension, the most sensitive attribute influencing the SME continuity in Medan Johor Subdistrict is the attribute of workers' education with leverage coefficient of 1.25, then followed by workers' skills with leverage coefficient of 1.15 and local community education with leverage coefficient of 0.07. In terms of the dimension of technology, the most sensitive attribute influencing the SME continuity in Medan Johor Subdistrict is the attribute of information technology with leverage coefficient of 1.45, then followewd by the attribute of product certification with leverage coefficient of 0.6.

In terms of the dimension of partnership, the most sensitive attribute influencing the SME continuity in Medan Johor Subdistrict is the attribute of partnership with NGO with leverage coefficient of 1.2, then followed by the attribute of partnership with investor with leverage coefficient of 0.96. In terms of the dimension of location, the most sensitive attribute influencing the SME continuity in Medan Johor Subdistrict is the attribute of location quality with leverage coefficient of 1.58, then followed by the attributes of access from the location of SME's Zone to business center with leverage coefficient of 1.36 and access from the location of SME's Zone to stakeholders with leverage coefficient of 0.1.

The result of direct observation conducted in several kelurahan (urban villages) located in the vicinity of Medan Johor Subdistrict showed that the SME which are mostly practiced by the local community include home industry of making cakes and handicraft (See Figure 5).

Subdistrict area which is expected to be the third basis of SME is Medan Amplas Subdistrict (Amplas SME's Zone) with average stress value of 0.18788, standard of deviation of 0.02526, and the average RSQ value of 0.86498, standard of deviation of 0.02537. The site plan and description of this basis area is illustrated as in Figure 6.

Further MDS analysis done to each attribute of the six dimensions forming the continuity of SME showed that, in terms of the economic dimension, the most sensitive attribute influencing the SME continuity in Medan Amplas Subdistrict

(Amplas SMEs Zone) is the contribution to Local Originally Generated Revenue (PAD) with leverage coefficient of 1.72, then followed by the price of commodity with leverage coefficient of 0.66. In terms of the dimension of ecology, the most sensitive attribute influencing the SME continuity in Medan Amplas Subdistrict (Amplas SMEs Zone) is the raw material availability with leverage coefficient of 1.26, then followed by the attribute of waste disposal with leverage coefficient of 1.23.

Fig. 5. Basis of SME Business Sector in Johor SME's Zone

In terms of social dimension, the most sensitive attribute influencing the SME continuity in Medan Amplas Subdistrict (Amplas SMEs Zone) is the attribute of workers' education with leverage coefficient of 1.33, then followed by the attribute of workers' skills with leverage coefficient of 1.12. In terms of the dimension of technology, the most sensitive attribute influencing the SME continuity in Medan Amplas Subdistrict (Amplas SMEs Zone) is the processing technology with leverage coefficient of 1.00, then followed by the attribute of efficiency level with leverage coefficient of 1.12, attribute of information technology with leverage coefficient of 0.48, and the attribute of quality standardization with leverage coefficient of 0.04.
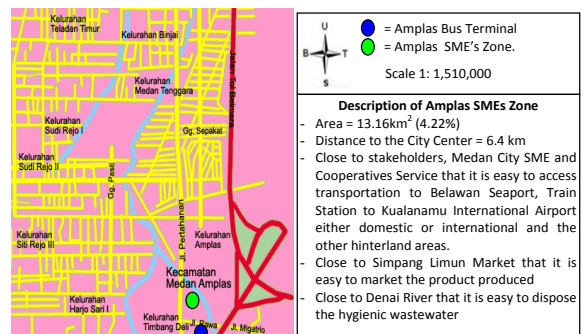

= Amplas Bus Terminal
= Amplas SME's Zone.

Scale 1: 1,510,000

Description of Amplas SMEs Zone
- Area = 13.16km² (4.22%)
- Distance to the City Center = 6.4 km
- Close to stakeholders, Medan City SME and Cooperatives Service that it is easy to access transportation to Belawan Seaport, Train Station to Kualanamu International Airport either domestic or international and the other hinterland areas.
- Close to Simpang Limun Market that it is easy to market the product produced
- Close to Denai River that it is easy to dispose the hygienic wastewater

Figure 6: Amplas SMEs Site Plan

In terms of partnership dimension, the most sensitive attribute influencing the SME continuity in Medan Amplas Subdistrict (Amplas SMEs Zone) is the attribute of partnership with NGOs with leverage coefficient of 1.42, then followed by the attribute of partnership with investor with leverage coefficient of 1.17. In terms of the dimension of location, the most sensitive attribute influencing the SME continuity in Medan Amplas Subdistrict (Amplas SMEs Zone) is the attribute of the access from Amplas SMEs Zone to business center with leverage coefficient of 1.37, then followed by the attribute of the quality of location with leverage coefficient of 1.35, the attribute of the access from Amplas SMEs Zone to stakeholders with leverage coefficient of 0.34, and the attribute of the access from Amplas SMEs Zone to the financial institutions with leverage coefficient of 0.21.

The result of direct observation conducted in several kelura-han (urban villages) located in the vicinity of Medan Amplas Subdistrict showed that the SME which are mostly practiced by the local community include food/restaurant business and handicraft for (See Figure 7).

Fig 7. Basis of SME Business Sector in Amplas SMEs Zone

CONCLUSION

Area is a space in the form of geographical unity together with all of its integrated elements whose border and system is determined based on the administrative and/or functional aspects that regional development is an attempt to build and develop a region based on spatial approach by considering the aspects integrated in it, namely socio-cultural, economic, physical environment and institutional aspects in one planning framework and integrated development management. In the context of this study, spatial analysis and economic aspect of SMEs become very important in regional development.

The conclusion drawn from the result of Location Quotient (LQ), Shift Share (SS), Growth Ratio Model (GRM), Overlay Method (OM) analysis in this study is that the SMEs in the City of Medan have potentials to be the basis sector in generating the economy of the City of medan, and the conclusion drawn from the result of multidimensional analysis (MDS) done in this study reveals that the subdistrict areas which become the main basis of empowering the SMEs in the City of Medan are, first, Medan Sunggal Subdistrict (Sunggal SMEs Zone), second, Medan Johor Subdistrict (Johor SMEs Zone), and third, Medan Amplas Subdistrict (Amplas SMEs Zone).

REFERENCE Alkadri (2001). Manajemen Teknologi Untuk Pengembangan Wilayah : Konsep Dasar, Contoh Kasus, dan Implikasi Kebijakan, Penerbit Pusat Pengkajian dan Penerapan Teknologi, BPPT, Jakarta.; Bijmolt, T. dan P.S. Zwart, (1994), "The Impact of Internal Factors on Export Success of Dutch Small and Medium-Sized Firms", Journal of Small Business Management, 32(2): 222-238; Erlina (2011), Metode Penelitian, USU Press, Medan; Isard, W. (1956). Location and Space-economy. MIT Press, Cambridge; Misra, 1982, Regional Development, Maruzen Asia, Japan; Mubyarto, (1998). Menanggulangi Kemiskinan. Yogyakarta : Adytia Media; Myrdal, G, (1957), Economic Theory and Underdevelopment Regions, London; Piper, Randy P. (1997), "The Performance Determinants of Small and Medium-Sized Manufacturing Firms", Disertasi Ph.D. tidak dipublikasikan, University of South Caroline; Rustiadi E. et al.(2009). Perencanaan dan Pengembangan Wilayah, Crestpent Press dan Yayasan Obor Indonesia, Jakarta.; Sinaga, Anton A.P, (2013). "Pengaruh Pemberdayaan Usaha Kecil Dan Menengah Terhadap Pengembangan Ekonomi Lokal Dan Kesejahteraan Masyarakat Di Kota Medan", Desertasi Perencanaan Wilayah, Sekolah Pascasarjana, Universitas Sumatera Utara, Medan. ; Tambunan, Tulus, (2002), Usaha Kecil dan Menengah di Indonesia: Beberapa Isu Penting, Penerbit Salemba Empat, Jakarta; Thornburg, L., (1993), "IBM agent's of Influence", Human Resource Magazine, 38(2): 102-17