



Mapping of Featured Micro-small-medium Enterprises in Buleleng Regency, Bali, Indonesia

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ABSTRACT

The results of the research were obtained, featured micro-small-medium enterprises in Buleleng Regency namely: (a) The agricultural sector are rice paddy, cattle, mango, cloves, pork, coffee, wine, fish, cocoa and strawberry; (b) the manufacturing sector are rice milling unit, processing and preserving fish, processing of red sugar, ingke webbing industrial, weaving handicraft industrial, poultry slaughterhouses, refill drinking water, food products of various chips, processing of coffee powder, and industrial of dodol from fruits; (c) the construction sector are a building construction contractor; (d) trade, hotels and restaurants is are jasmine hotel, restaurant/café, HP counter, homestay, villa, minimarket and retail shops (klontong), trading of agricultural products, and Artshop; (e) transport and communications sector are the land transport of goods (trucks), urban and rural passenger transport, package delivery services, motorcycle transport (ojek), rent car, and netcafe; (f) the financial sector, leasing, and other services are village credit institutions (LPD), saving and loan cooperation (KSP), village unit cooperation (KUD), people credit banks (BPR), and money changer; (g) The other services sector are barber shop and beauty salon, sewing of clothes, services of workshop cars and motorcycles, photocopying, tour guides, laundry, early childhood education (PAUD), a tourist attraction of Gitgit waterfall, tourist attractions of Lovina beach, and tourism attraction of Air Sanih.

Keywords: Micro-small-medium Enterprises, Featured, Mapping

JEL Classifications: L32, Q13

1. INTRODUCTION

Any time the terms of micro and small synonymous with small, so that micro-small-medium enterprise (MSMEs) synonymous with small and medium-sized enterprises (SMEs), also SMES or small and medium-sized businesses are businesses whose personnel numbers fall below certain limits. According the Wikipedia (2017), the abbreviation “SME” is used in the European Union and by international organizations such as the World Bank, the United Nations and the World Trade Organization. Small enterprises outnumber large companies by a wide margin and also employ many more people. SMEs are also said to be responsible for driving innovation and competition in many economic sectors. Meanwhile Ward (2017) state that definition of SME depends on who’s doing the defining and on the country, the size of the enterprise can be categorized based on the number of employees, annual sales, assets, or any combination of these. It may also vary from industry to industry. Small to medium enterprises make up

the vast majority of businesses in most countries. According to U.S. Census Bureau Data from 2012, SMEs account for 99% of all firms in the U.S. and 48.4% of total employment, making them hugely important for economic growth, innovation, and diversity.

MSMEs is anbusiness enterprises start micro businesses without a business license to medium-size enterprises with business licenses. Ownership from an individual for micro to collective ownership or partnership to medium sized businesses in the form of limited company. In practice, these MSMEs move from upstream of input providers, business process of production of various kinds of commodities/products to businesses moving downstream of processing and marketing. The production process of MSMEs in various economic sectors, ranging from agriculture, industry processing to the service industry. So MSMEs are driving the regional and national economy, therefore, empowering MSMEs continue to be done by the government in order to become stronger as a driver of regional and national economy (Bank

Indonesia, 2011). According to Anonim (2015), as evidence of the seriousness of the government represented by the Ministry of Cooperatives and SMEs, empowerment of MSMEs do not only through various coaching and training, but also since January 4, 2016 to provide business credit (KUR) with low interest rate of 9% per year without collateral, that previously 12% per year, on the condition that a maximum loan of Rp 25 million per one MSME.

Japhta et al. (2016) recognizes that Indonesia, a member of the G20 since 2008, has become one of the largest economies worldwide with the promise of substantial growth potential in the coming decades. In order to realize this potential, the government of Indonesia has identified the role of the MSME sector as pivotal to promoting growth, creating jobs, and alleviating poverty. This is unsurprising because MSMEs account for 99% of all enterprises, employ 89% of the private sector's workforce, and contribute 57% to the country's GDP. Indeed, the growth generated through the MSMEs because of their numbers, and the jobs they have provided in recent years, are the main drivers of reducing poverty and rising incomes. The government has supported MSMEs in many ways. The proliferation of microfinance through private and state-owned banks in particular has helped invigorate the sector. However, the economic strategy of recent years might soon bump up against inherent limits. That is because the thrust of the sector has been predominantly on microenterprises. Even though the growing number of microenterprises continue to be crucial for job creation, particularly in rural areas, their growth in productivity and contribution to GDP will likely remain limited.

The MSMEs in a region not always to be featured. In a given period may be subject to change. MSMEs to be a featured in 5 years ago, may not currently be featured again, because of changes in the indicators featured determinants, such as price, market demand potential, the potential of the area production, employment, and others indicator. Therefore, periodically at least every 5 years is necessary to identify a featured MSMEs in a region. The recommended method applied by Marimin (2004), Marimin (2010), as well as Kusdiana and Ardi (2014) to identify the featured MSMEs are methods of analytic hierarchy process (AHP) is modified or modified AHP. So called because this study also used Exponential Comparative Method (ECM) and Borda Method in determining the featured MSMEs in district and regency. AHP is an analysis tool that is supported by a simple mathematical approach, which can be used to solve problems "decision making," such as policy-making or prioritizing. So the featured can be viewed from several perspectives, the perspective of product life cycle, the perspective of goals, objectives perspective, and the perspective of policy scenarios.

In the digital and electronics era like today, presenting the results of the identification of featured commodities and MSMEs not enough narrative or descriptive terms are summarized in a report on the results of research, but it will be more complete and attractive if equipped with a presentation on interactive digital maps, which process commonly called mapping using geographic information system (GIS) or the digital map of Google map. According to Wikipedia (2017), Barus and Wiradisastra (2000), Ichtiara (2008), Darmawan (2016), GIS is a specialized information system that manages data having spatial information (referenced spatial).

The purpose of the research "Mapping of Featured MSMEs in Buleleng Regency, Bali Province" are as follows: (1) Identify the featured MSMEs in Buleleng Regency, (2) Mapping of the featured MSMEs in Buleleng Regency into digital maps using quantum GIS (Q-GIS).

2. RESEARCH METHOD

2.1. Research Location

The research location in Buleleng Regency, Bali Province, Indonesia which is determined purposively, based on the reason that the Buleleng Regency is considered to have the potential of MSMEs relatively large in various sectors.

2.2. Types and Sources of Data

Type of data is quantitative data and qualitative data. The type of quantitative data or shaped figures are as follows:

1. Profiles area for the regency and for each of the districts include geographical structure, demographic, economic, resource potential, and other related aspects.
2. The list of MSMEs in each district.
3. Featured MSMEs in each district were screened with ECM using local expert opinion.
4. The number of units/households engaged, marketing reach, contribute to the local economy, and the availability of raw materials of every MSMEs in each district.

The data source is a source of primary and secondary sources. Sources of primary data, ie data and information sourced from the first party or obtained directly from the source/respondents. Secondary data, i.e., data in the form of document/publications/ other reports that support the primary data source that originates from a second party or government agencies related to research, such as the Bali Statistic Center Agency and Buleleng Statistic Center Agency, Bali Planning Agency, Buleleng Planning Agency, Offices technical in Bali and Buleleng Regency.

2.3. Stages of Research and Data Analysis Methods

- I. Identification of the featured MSMEs:
 - a. District area

The analytical method used to filter featured MSMEs in each of the districts is ECM, with phases of activity, is as follows:

 1. Make a list of commodities and SMEs in each district are sourced from secondary data.
 2. Weighting the list of MSMEs in each district with the ECM with the criteria below.
 - a. Sum of the business units/households
 - b. Market, with criteria of commodity marketing and enterprises/product (the informants' perceptions)
 - c. Availability of raw materials/inputs and or business facilities (the informants' perceptions)
 - d. The contribution of each commodity and enterprise to the regional economy (the informants' perceptions).
 3. Rate or the weighting of each featured MSMEs based on informants (expert) opinion in the focus group discussion (FGD) in each district involving technical officer districts, namely agricultural extension,

district statistical officer, part of the economy of districts office.

4. Based on the ECM analysis set maximum of five MSMEs of featured for each sector/sub-sector of the economy at the district level.

b. Buleleng Regency area

Weighting method used in the Buleleng area is the Borda method. The results of the five featured MSMEs from each district are screened by the ECM, then the election of featured MSMEs for Buleleng Regency use the Borda method, a maximum of ten featured MSMEs for each sector of the economy.

II. Mapping of the featured MSMEs

After featured MSMEs in Buleleng identified, and supporting data are collected, then the mapping, ie to plot of featured MSMEs of each district and its supporting data into digital maps using equipment Q-GIS. By clicking on each district in digital mapping of Buleleng Regency like shown by different of color among district, will perform the featured MSMEs in each district. It is hoped this information is very valuable for the government for the promotion and development of MSMEs, as well as for investors if they provided the potential development of featured MSMEs.

3. RESULTS AND DISCUSSION

3.1. Results Identification of Featured SMSEs

The featured MSMEs in Buleleng Regency obtained from filtering featured MSMEs per sector from nine districts using the Borda weighting method, in order to obtain a maximum of 10 featured MSMEs per sector, as presented in Table 1.

Paddy/rice enterprise is one food crops enterprise and the main food source for population in Buleleng specially and Indonesia generally, so that paddy/rice enterprise has a very strategic value. Aside from being a staple food is also sold to meet the needs of the

population for goods and other services. In the book of Buleleng Agricultural Statistics 2014, published by Buleleng Statistical Center (downloaded, July 13, 2016), there was information that the rice harvested area in Buleleng is 22,198 ha and the production of 133,440 tons of dry grain harvest, so the productivity is 6011 kuintal/ha. The highest productivity of rice produced in the Sukasada district is as much as 6668 kuintal/ha, whereas the lowest productivity of rice produced in the Seririt district amounted to 5259 kuintal/ha. Rice paddy fields are in the eight districts in Buleleng, namely district of Seririt, Busungbiu, Banjar, Sukasada, Sawan, Gerokgak, and Kubutambahan.

Mango in Buleleng is known to penetrate the export market, it turns out that efforts are still having serious problems. Buleleng that obstacle because mangoes to be exported has not completed by document pest list (list of pests/diseases). In fact, every state requires this document. Its irony the local government not yet complete this requirements. All this time the mango from Buleleng had been able to penetrate the export market. However, the export was done by entrepreneurs in Probolinggo, East Java. However, in Buleleng, mango continues to be featured in addition to supporting the agro-climate, a lot of people grow mangoes for a sweet taste. Mango enterprise dominant in Gerokgak, Tejakula, and Kubutambahan districts.

Cloves (*Syzygium aromaticum*) is a species of tree that has a large tree trunk and hardwood. Cloves can survive tens, even hundreds of years. Height can reach 20-30 m and its branches quite dense. Clove flower and fruit will appear on the top branches of leaves with short stalks and clustering. When still young clove purplish color, then change to greenish-yellow, and turned again to pink when they are older. Instead, clove flower will dry blackish brown and tasted spicy because it contains essential oils. Clove commodities are dominant in the district of Banjar, Sukasada, Sawan, Tejakula, Kubutambahan, and instead, clove flower will dry blackish brown and tasted spicy because it contains essential oils Busungbiu.

Table 1: Featured MSMEs in Buleleng Regency, Bali, Indonesia

No	Sectors	Featured MSMEs
1	Agriculture	(1) Rice paddy fields, (2) cattle/cow, (3) mango, (4) cloves, (5) pigs, (6) coffee (7) wine, (8) sea fish, (9) cocoa, (10) strawberry
2	Mining and digging	-
3	Processing industry	(1) RMU, (2) processing and preserving fish, (3) processing of brown sugar, (4) industrial of ingke woven, (5) industrial of weaving craft, (6) slaughterhouse of poultry, (7) drinking water of rechargeable, (8) miscellaneous food products of chips, (9) processing of coffee powder, (10) porocessing industrial of fruits dodol
4	Electricity, gas, and water	-
5	Building/construction	Contractors of building construction
6	Trade, hotels and restaurants	(1) Jasmine hotel, (2) restaurants, (3) hp counter, (4) homestay, (5) villa, (6) mini market, (7) trading of agricultural products, (8) artshop
7	Transportation and communications	(1) The land transport of goods (trucks), (2) urban and rural passenger transport, (3) a package delivery service, (4) motorcycle taxi, (5) rent car, (6) internet cafe
8	Finance, real estate, and business services	(1) The village credit institutions, (2) saving and loan cooperative, (3) village unit cooperative, (4) rural bank, (5) money changerere
9	Other services	(1) Cut the hair and beauty salon, (2) tailoring clothes, (3) services workshop cars and motorcycles, (4) photocopy, (5) tour guide, (6) services cleaning/laundry services, (7) early childhood education programs, (8) Gitgit water fall tourist attraction, (9) attractions Lovina beach, (10) attractions of Air Sanih

Featured MSMEs in Buleleng Regency is determined based on the list of featured commodities and MSMEs in nine districts, weighted using the Borda method.
MSMEs: Micro-small-medium enterprise, RMU: Rice milling unit

Buleleng is a producer of fish are quite a lot, so it appears the enterprise of processing and preserving of fish, such as anchovies, shrimp paste, etc. Brown sugar industry in the Pedawa village very famous for its good quality. Until now consumers still prefer products mentioned. Brown sugar industry are also in the district of Tejakula, there are also woven ingke industry and weaving industry. The food processing industry a variety of chips, such as potato chips, taro, and the like are common in Buleleng. Processing industry of coffee into coffee powder contained in Banjar district, while the fruit processing industry became dodol in Kubutambahan district.

Building construction contractor enterprise dominant in Seririt, Sukasada, Kubutambahan, and Tejakula districts. It is a building that provides space or room to stay, eat and drink, as well as other services to the public, such as office/meeting place/seminars. Bed and breakfast hotels in Buleleng enough, this is due to other tourist areas also many tourists who come to Bali as Lovina and Munduk hotels and Jasmine predominate in the districts of Gerograk, Seririt, and Buleleng.

Village credit institutions (LPD) built to enhance and encourage economic growth and development in the traditional village (Pakraman village). In addition, also as a source of income for a rural, improve performance LPD through operational growth, excellent service, organizational and human empowerment, economic empowerment of rural communities, especially SMSEs in order to be strong and independent, while improving the income of rural peoples. Also, it is one place that is very useful for village peoples to save and borrow the money, so it requires a system

that is set through the computer-based system. LPD located in all district in Buleleng regency, namely Gerograk, Busungbiu, Banjar, Sukasada, Sawan, Kubutambahan, and Tejakula district.

3.2. Results of Mapping the Featured MSMEs

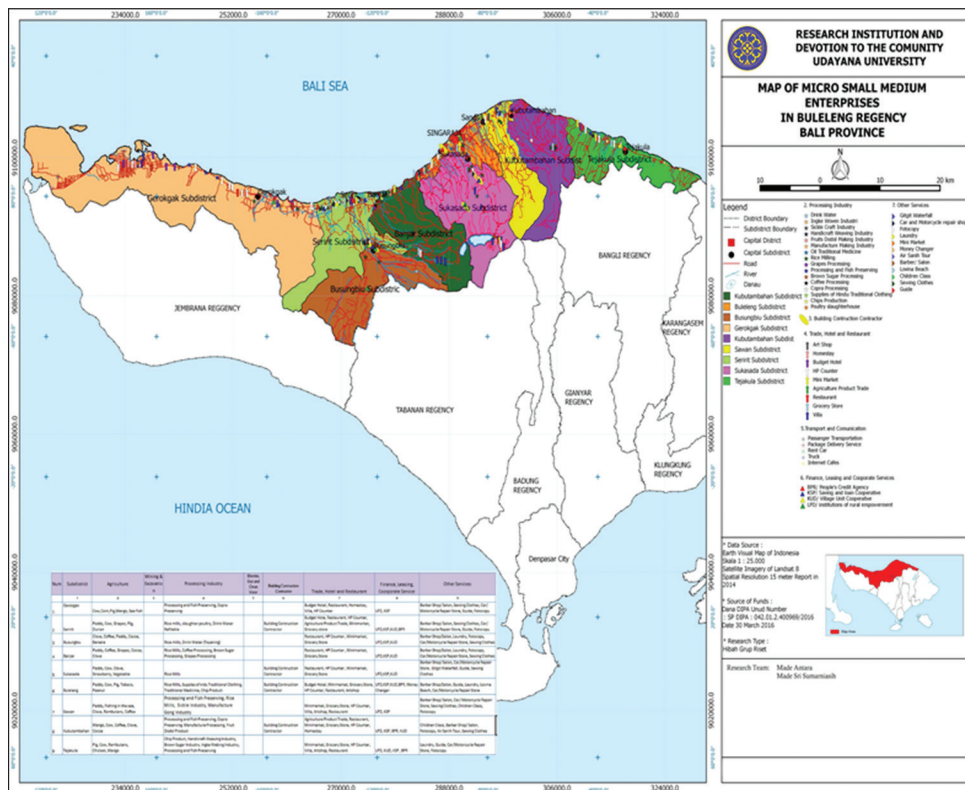
Steps mapping of featured MSMEs namely: (1) Making the administration map of Buleleng Regency, (2) conduct the survey and the results of surveys and interviews in each location maybe village or district are recorded in a notepad application, (3) To fill the attribute of the villages names at each point in the digital map to provide color, (4) making of the map layout featured MSMEs in Buleleng Regency, and (5) based on the maps that have been created digitally when clicked on one of the districts will appear of featured MSMEs in each districts. Therefore to make it appear to be using the program Q-GIS, which is a program that is capable of digitally displaying the hidden information in behind a point on the map (Darmawanm et al. 2005; Ramadona and Kusnanto, 2010; Ron's, 2011) (Figure 1).

4. CONCLUSIONS AND POLICY RECOMMENDATIONS

4.1. Conclusion

1. The Featured MSMEs in Buleleng on:
 - a. Agriculture sector are: (1) Rice paddy fields, (2) cattle/cow, (3) mango, (4) cloves, (5) pigs, (6) coffee (7) wine, (8) sea fish, (9) cocoa, (10) strawberry.
 - b. Processing industry are: (1) Rice milling unit, (2) processing and preserving fish, (3) processing of

Figure 1: Map of the featured micro-small-medium enterprises (MSMEs) in Buleleng Regency, Bali, Indonesia



Note: This is the interactive digital map, can be open by quantum geographic information system, and the information about MSMEs per district in Buleleng Regency can be known

- brown sugar, (4) industrial of ingke woven, (5) industrial of weaving craft, (6) slaughterhouse of poultry, (7) drinking water of rechargeable, (8) miscellaneous food products of chips, (9) processing of coffee powder, (10) porocessing industrial of fruits dodol.
- c. Building/construction sector is contractors of building construction.
 - d. Trade, hotels and restaurants sector are: (1) Jasmine hotel, (2) restaurants, (3) hp counter, (4) homestay, (5) villa, (6) mini market, (7) trading of agricultural products, (8) artshop.
 - e. Transportation and communications sector are: (1) The land transport of goods (trucks), (2) urban and rural passenger transport, (3) a package delivery service, (4) motorcycle taxi, (5) rent car, (6) internet café.
 - f. Finance, real estate, and business services sector are: (1) The village credit institutions, (2) saving and loan cooperative, (3) village unit cooperative, (4) rural bank, (5) money changerere.
 - g. Other other services are: (1) Cut the hair and beauty salon, (2) tailoring clothes, (3) services workshop cars and motorcycles, (4) photocopy, (5) tour guide, (6) services cleaning/laundry services, (7) early childhood education programs, (8) Gitgit waterfall tourist attraction, (9) attractions Lovina beach, (10) attractions of Air Sanih.
2. Based on the identification of featured MSMEs n Buleleng and implementation steps Q-GIS, the obtained results of the mapping (digital map) of featured MSMEs in each district in Buleleng as presented in Figure 1.

4.2. Policy Recommendations

1. Featured MSMEs of sector, both at the district level and at the Buleleng Regency level should continue to be coached intensively by all stakeholders (government, state enterprises, private sector, NGOs, etc.) by providing technical training, business management, entrepreneurship, and capital loans so it remains to be featured.
2. The government needs to seek the creation of a conducive environment, the simplification of enterprises licensing procedures with easy, cheap, and fast including through licensing of the one roof and sweat taxes.

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staff of the Buleleng Offices Technicaland the other speakers when FGDs were conducted in Buleleng, and all the officials and staff of government offices in nine districts in Buleleng regency, which has refused to provide the data and take the time consulted for weighting the list of the MSMEs in the each districts.

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