

Analysis of Tourism Mapping in Lampung Province to Optimize Entrepreneurship Development

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ABSTRACT

The lack of information relating to the general locations in Lampung makes the tourists/people who want to go to Lampung difficult to meet the locations to be addressed. In an effort to implement the government program on the implementation of the regional autonomy law, the Lampung Provincial government wants to advance its region from the tourism sector because tourism is considered to be a high source of local government revenue. The main factors to consider is that if one is to travel, the question emerge will be about where to go, how far it is, what is interesting, and what activities can be done during the trip there, to answer the questions needed geographical insight about the mapping of tourism location. Geographic information systems are computer systems used to collect, integrate, organize, transform, manipulate, and analyze geographic data. The application of this geographic information system is built with java programming Android using ADT Bundle software which includes Eclipse as java programming language editor, ADT as plug-in for Eclipse, and SDK for the development of Android based application. This application will give benefit for tourists and the people who want to search good places to visit in Lampung.

Keywords: Mapping, Tourism, Android programming

1. INTRODUCTION

Tourism is an asset that is considered to be tangible and intangible with its attraction. This has elements and conditions that homes do not provide, Erislan (2016). It concludes the idea that tourism sector has a significant role in the enlargement of the national economy. The development of national tourism in its implementation is carried out in a comprehensive and integrated manner with other development sectors while maintaining the national personality and environmental sustainability.

Tourism development is something that the local government needs to do because it provides many benefits. In addition, tourism can also contribute to Regional Original Income. The benefits that can be taken from the tourism sector are, among others, creating jobs, increasing and leveling people's income, and introducing regional art and the results of local handicrafts to be marketed to domestic and foreign tourists. The government and private organization are one unit that have the responsibility to handle tourism attraction, Erislan (2018). Tourism development needs to be planned and managed well by the local government. Local authorities are widely acknowledged as a pivotal and influential stakeholder in a destination, and they are important actors to support tourism development, Can et al. (2014). In this case the authorities such as BAPPEDA (Development Planning Agency at Sub-National Level), Tourism Office, community, and stakeholders can produce satisfying results in realizing the economic and social growth of the community and avoid the negative consequences that will arise.

Economic activity has become a potential mainstay and a development priority for developing countries such as Indonesia, which has abundant regional and resource potential through the vast tourism sector with a large tourist attraction due to the many natural beauty, various historical cultural heritage and community life special. Tourism activities in an area can make a significant contribution to GRDP and increase Regional Original Revenue (PAD) and open up new jobs for residents around tourist attractions. Even though many efforts have been carried out for tourism-related development, still the results obtained are less than the expected target.

In an effort to implement the government program on the implementing regulations of the regional autonomy law, Lampung provincial government wants to advance its region from the tourism sector because tourism is considered to be a fairly high source of regional government revenue. Tourism as a driving force was expressed through the tourism infrastructure, commercial activity and services offered, Rozîte & Vinklere (2011). However, the main factor to consider when someone will travel is to question the destination, the distance, the interesting places to visit and various activities to do while traveling there. To answer these questions geographic insights about the location are needed, namely mapping the location of tourism.

Lampung Province is the gateway to Sumatera Island. The handicraft products of the people of Lampung introduced to foreign tourists are intestinal embroidery handicrafts, Lampung motive batik, and Lampung tapis. In addition to these handicrafts, Lampung is also famous for its earth products including coffee, pepper, cloves, and so on.

2. LITERATURE REVIEW

2.1 Definition of Tourism

In essence travel is a process of temporary departure from someone or more to another place outside his residence. The impetus of his interest is due to various interests, both because of economic, social, cultural, political, religious, health intelligence and other interests such as simply wanting to know, add experience, or even to learn, Suwantoro (2004). Tian & Hussain (2011) stated that tourism can be defined in terms of tourists,

generating region, transit route, destination region, and a tourist industry. Those elements cannot be separated from definition of tourism.

2.2 Tourist Attraction

Tourist attraction is the embodiment of human creation, the order of life of the arts and culture and the history of the nation and the place or state of nature that has an attraction to visit. International tourism became an attractive option for economic development for less developed countries, Berno & Bricker (2001). Tourism activities can be in the form of cultural tourism, health tourism, marine tourism, nature tourism, and city tourism. To get the desired happiness that is not obtained in the place of origin, people choose a particular destination to satisfy the happiness by doing tourism to tourist attractions. Pedit (2002) states that this type of tourism is divided into 15 types, namely Cultural Tourism, Health Tourism, Sports Tourism, Commercial Tourism, Industrial Tourism, Political Tourism, Convention Tourism, Social Tourism, Agricultural Tourism, Marine Tourism, Nature Reserve, Hunting Tourism, Pilgrim Tours, Honeymoon Tours and Adventure Tours. However, the tourists may experience problems relating to various factors such as unexpected expenses, pollution, safety and security, and other things, Chockalingam & Ganesh (2010).

2.3 Geographic Information System (GIS)

Geographic Information System (GIS) is a system designed to capture, store, manipulate, analyze, organize, and display all types of geographic data, Sadoun and Al-Bayari (2007). GIS is a computer system that is used to collect, combine, organize, transform, manipulate and analyze geographic data, the geographic data referred to here is spatial data, Yousman (2003). Some characteristics of GIS are as follows:

- 1) GIS has geometric properties such as coordinates and location.
- 2) It is related to aspects of space such as parcels, cities, development areas.
- 3) It is related to all phenomena found on the earth, for example data, events, symptoms, or objects.
- 4) It is used for certain purposes such as monitoring or management analysis.

2.4 Geographic Information System Components

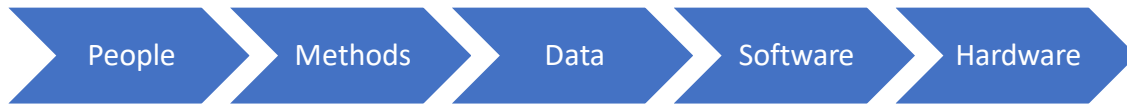
Geographic Information System is one of the modern systems used to analyze spatial symptoms through computer devices. Every local government agency needs a GIS to plan the development process in the area. Geographic Information Systems have several components to function, Chrisman (2001). GIS component consists of:

1. Humans, in the sense of people who operate or use GIS devices in their work.
2. Application, it is a procedure used to process data into information such as addition, classification, tabulation, and others.
3. Data, in the form of spatial / graphic data and attribute data. Spatial data is data in the form of representation of the phenomenon of the earth's surface which can be aerial photography, satellite imagery, coordinates, and others. Attribute data is data that represents descriptive aspects of the modeled phenomena such as population census data, number of unemployed and others.
4. Software, It is GIS software in the form of application programs that have the capability of processing, storing, processing, analyzing and displaying spatial data.

Examples of GIS software are ArcView, Map Info, and ILWIS.

5. Hardware, which is needed to run a computer system such as CPU, plotter, digitizer, RAM, hard drive and more.
6. The method, It is used in the operation of the GIS starting from the beginning to the end.

Figure 2.1: Component of GIS



2.5 Advantages of Using GIS

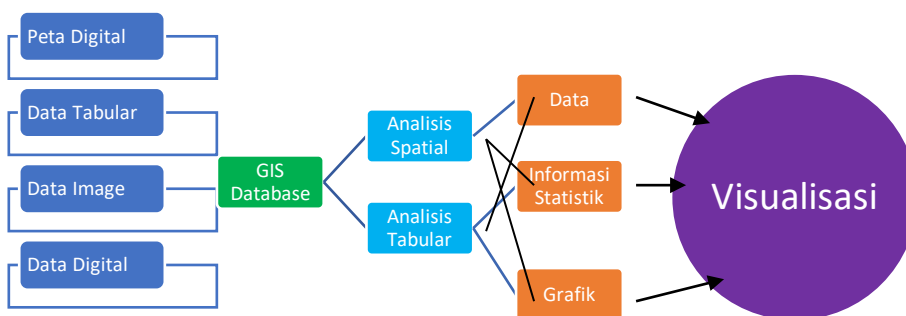
The followings are some of the advantages of using a Geographic Information System.

- GIS has the ability to select and search for the desired detail or thematic, combine a data set with other data sets, perform faster updating, model and analyze a decision.
- GIS can help governments, companies or individuals to make the best decisions or find solutions to certain problems that are closely related to objects on the surface of the earth.

2.6 Stages in GIS

In particular, GIS software consists of three stages: Input, Process and Analysis, Output and Visualization stages, Anwar et al. (2014). Figure 3.4 below explains the work diagram of the software.

Figure 2.2: Diagram GIS Software



2.7 Tourism Based on Science and Technology

Tourism that is applied in South Lampung Regency is tourism based on science and technology with the aim to be achieved that is to provide knowledge to the public regarding the development and utilization of tourism potential in the area. This digital era makes human entered a new lifestyle that cannot be separated by all-digital electronic. Technology becomes a tool that is very useful to help people to fulfill their needs, Nahdaleni & Dharmawan (2016). To mobilize innovation awareness of the scientific and technological enterprises and scientific research personnel, we are required to fully attract domestic and foreign investment and to introduce advanced technologies and talented people to

the city, Hu&Wu (2016). It is supported by 3 villages so that the community is able to develop existing potential creatively and innovatively and foster an entrepreneurial spirit so that the surrounding community can develop independently.

In addition, with the development of public knowledge regarding the use of existing tourism potential, it can be supported by the use of appropriate technology. The use of technology is intended so that people around understand the functions and uses of technology as a means of communication and information. Local communities can use technology to develop the tourism potential as well as the surrounding areas could expand information on the best travel destinations in South Lampung.

The owners and managers of tourism businesses should understand that this information is a goldmine. Without information generated by consumers and the market, business functions and planning are likely to become guesswork, Sotiriadis (2017). In this case, the community is no longer placed as an object that only accepts what is decided from the government, but the community at this time must also be involved as subjects in the framework of developing existing tourism potential. Community involvement in the development of tourism potential will lead to a sense of belonging and a sense of wanting to participate in maintaining tourism potential in the region. Rural tourism is any form of tourism that showcases the rural life, art, culture and heritage at rural locations, thereby benefiting the local community economically and socially, as well as enabling interaction between the tourists and the local community, Ahmad (2011). Community involvement refers to the development of a system that affords all relevant community stakeholder groups' full participation in collaborative decision making, and coownership of responsibility and benefits, Li & Hunter (2014).

The development of a tourism needs to be supported by careful planning and must reflect three dimensions of interest, namely the tourism industry, environmental carrying capacity (natural resources), and the local community with a goal to improve quality of life. The consequences of these three interests must be able to support the creation of two benefits at the same time in a balanced and proportionate manner:

- 1) Benefits for local residents to engage in tourism businesses to earn income (the multiplier effect is to contribute to the regional economy).
- 2) Preservation of tourism assets owned (maintenance of environmental quality of natural resources which is a tourist attraction).

In addition, the development of tourism can provide a change in Lampung Selatan District. Spillane (2001) states that tourism development can have a positive impact on the regional economy and is beneficial for increasing employment and business opportunities, both directly and indirectly, increasing foreign exchange so that it supports the development of other economic sectors, increasing and equalizing people's income, absorption of local products in the export market through promotion to tourists, and increasing regional development as a tourist destination.

3 OBJECTIVES OF THE RESEARCH

The objectives to be achieved in this survey are presenting tourist information in the form of maps related to tourism objects and infrastructure in South Lampung Regency, conducting mapping of tourism objects and existing infrastructure in South Lampung Regency, and knowing which tourist objects that are complete and incomplete.

4 SURVEY AND MAPPING METHODS

4.1 Documentation Method

We collected data by means of documentation through the collection of archives at the relevant agencies, namely retrieving data from BAPPEDA, Lampung Province Tourism Office, South Lampung Regency and Lampung Province BPS in the form of secondary data including tourist location data, tourist infrastructure data and map base of Lampung Province.

4.2 Field Survey

The field survey was carried out by conducting a survey in the field to find out the direct truth of an object in the field using GPS Receiver so that the position/coordinates of UTM attractions can be known easily.

5 RESULT

5.1 Geographical Area

The geographical location of Lampung Province is 35,376.50 km² and is located between 105 ° 45'-103 ° 48 'BT and 3 ° 45'-6 ° 45' LS. Some of the islands included in Lampung Province include: Darot Island, Legundi Island, Tegal Island, Sebuku Island, Ketagian Island, Sebesi Island, Pahawang Island, Krakatau Island, Putus Island and Tabuan Island. There are also Tampang Island and Pisang Island which are included in West Lampung Regency.

Lampung is a hilly area as a connection from the Bukit Barisan line on Sumatra Island. In the middle is lowland. The Lampung Province Region is limited by South Sumatra and Bengkulu Provinces (northern part), Sunda Strait (southern part), Java Sea (eastern part), and Indonesian Ocean (western part).

5.2 Mountain

Mountains with high peaks include Mount Rajabasa (1,261 m) in Kalianda, South Lampung, Mount Krakatau in the Sunda Strait, and Gunung Tanggung south Lampung

5.3 South Lampung Regency Area

Many fascinating things we can find in South Lampung. This regency has a million tourism prospectives that are ready for us to visit. We also do not need to worry about access to these places. To enter Sumatra Island there are two ways, through Bakauheni Port or Raden Intan II Airport.

If we come to visit, we can see Mount Anak Krakatau. Many local and overseas tourists who want to see first hand the proof of the awesomeness of the eruption of Mount Anak Krakatau in 1883. Anak Krakatau itself began to appear in 1927 or approximately 40 years after the eruption of the Krakatau mountain, until now it continues to grow tall and big. Eruptions and volcanic material from the Krakatau child become an attraction for tourists.

For beach tourists, there are many places we can enjoy. One of them is Elty Krakatau in Kalianda, in the capital of South Lampung. The only resort in Lampung has international service standards. The hotel industry may face the problem of finding qualified employees to provide services that could meet the standards of foreign tourists, Lee et al. (2016). So they have to have good human resources.

Here we can enjoy various tour packages such as outbound, package, gathering package, camp brave, honeymoon, and Krakatau discovery adventure. Western, Asian, and Indonesian dishes are available at the Grand Elty. Meanwhile, if you want to enjoy the typical cuisine of South Lampung, you can come to the BOM Kalianda Pier, which provides the mainstay menu of Simba Pindang Kepala.

5.4 Geographical Location of South Lampung Regency

South Lampung Regency is one of the regencies in Lampung Province. The district capital is located in Kalianda. The regency has an area of 2,109.74 km² and has a population of approximately 972,579 people (2016) which is divided into 17 districts and consists of 248 villages and 3 villages. South Lampung Regency is located between 1050 to 1050450 East Longitude and 50150 to 60 South Latitude. Given this location, South Lampung regency as well as other regions in Indonesia are tropical regions. The southern part of South Lampung Regency is tapered and has a large bay, Lampung Bay. In Lampung Bay, there is a port, the Panjang Port, where home and overseas ships can dock. In general, this port is a very important factor for the economic activities of the population of Lampung, especially residents of South Lampung. This port since 1982 belongs to the city of Bandar Lampung.

In the southern part of South Lampung Regency there is a Bakauheni ferry port, which is a transit point for residents from Java to Sumatra and vice versa. Thus Bakauheni Port is the gateway to the southern part of Sumatra Island. The distance between Bakauheni Port (South Lampung) and Merak Port (Banten Province) is approximately 30 kilometers, with the tour time of the ferry crossing around 1.5 hours.

5. CONCLUSION

Based on the surveys and interviews that have been conducted in the districts and cities mentioned above along with the discussion that has been described in the page above, the following conclusions can be drawn:

1. Mapping Tourism areas in five regencies and one city in Lampung province.
2. The mapping process carried out includes: data preparation, data retrieval in the field, interviews, map making with Google Map.
3. Of all tourism objects in the five regencies and one city in Lampung province, all tourism objects have adequate lodging, and have the most characteristic of the most visited sightseeing objects, namely beach tourism objects and natural attractions in South Lampung Regency.

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