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Competitiveness Monitor in Measuring the Competitiveness Level of Tourist Villages in Indonesia

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Abstract

The tourism sector is expected to be the savior of the economy in Indonesia, amid the weakening rupiah exchange rate. This research was conducted with the aim to measure the level of competitiveness of tourist villages in Indonesia. This research is important because of the contribution it makes to the tourism village development which is one of the tools to alleviate poverty in rural areas. Tourism village communities are required to play an active role in the village tourism business, in order to improve their own welfare using their own potential and capabilities. The study was conducted in the village of Ngrawan, Semarang Regency, Indonesia. The Competitiveness Monitor, built by the World Travel and Tourism Council, is the analytical tool used to measure the level of tourism competitiveness in this study. The measurements used in the Competitiveness Monitor consist of the Tourism Participation Index, Purchasing Power Parity, Infrastructure Development Indicators, Environment Indicators, Technology Advancement Indicators, Human Resources Indicators, Open Indicators, and Social Development Indicators. These indicators are then used as the basis for mapping the tourist village competitiveness index. The results of the study indicate that the tourist village of Ngrawan occupies a top position, among other tourist villages. This is evidenced by its ranking position based on the tourist village attributes. These attributes include product services that affect customers. However, the products are not what customer's look for, so, customers tend to be dissatisfied. The attributes that are considered superior in the tourist village of Ngrawan, are the Openness Indicator and Social Development Indicator. Nevertheless, the village is low in value with attributes relate to Technology Advancement Indicator Attribute, Tourism Participation Index, Infrastructure Development Indicator and Environment. These attributes are related to indicators of competitiveness unlike to other tourist villages. This finding is the basic information that the Indonesian government can use to formulate tourism sector development policies so as to achieve success in developing tourism villages.

Keywords: Competitiveness Monitor, Competitiveness, Tourist Village, Mapping

INTRODUCTION

The tourism sector is one of the factors driving a country's economic growth. The role of tourism industry occupies an important position in contributing to local revenue. According to data from the ILO in 2011, the tourism industry is able to create jobs and develop the economy significantly. One important fact is that many other related service benefits from the development of the tourism industry, i.e. local trade, transportation, accommodation and

entertainment. Based on the report of the World Travel and Tourism Council (WTTC) in 2016, tourism contribution to world gross domestic product reached 10 percent, while revenue from international tourist visits is about seven percent of the world's exports of goods and services (Ministry of Tourism, 2017). In terms of creating jobs, one in 10 workforces is created by the tourism sector. Yanti and Hadya (2018) noted, that contributions from tourism caused an increase in revenue to the PAD (locally-generated revenue) in Padang.

Central Java is one of the provinces in Indonesia that has the potential to spread tourism to rural areas. Potential tourist villages are expected to have multiplier effects on the villages and the community around the tourist attractions. The development of the villages around the tourist attractions has become a phenomenon which provided an opportunity to alleviate poverty in the villages.

The tourism sector has shown increasing growth. According to the World Tourism Organization (UNWTO) the number of international tourist visitors is expected to reach 1.8 billion in 2030 with an annual growth rate of 3.3 percent. With this, the emergence of a number of new tourist destinations with traditional concepts, will become very popular with tourists. This condition is both an opportunity and a challenge for Indonesia, in terms of the development of national tourism. The Ministry of Tourism noted that the number of foreign tourist arrivals in 2016 was 12 million and domestic tourists were approximately 263.68 million. Another important indicator in terms of tourism is the competitiveness aspect of tourism, where Indonesia's position has increased significantly from ranking 70 in the world to ranking 50 in 2015 based on the results of the WEF (World Economic Forum) assessment. Based on UNWTO data, the growth of Indonesian tourists in 2016 was 15.54%, which exceeded the world average of 3.9%. This gives the Tourism Ministry the confidence to increase the target of foreign tourist visits in 2017 from 12 million to 15 million with the main focus on Digital Tourism, Homestay Tourism Village and Air Connectivity (Ministry of Tourism, 2016).

For Central Java, the tourism industry is one of the most important service sectors to be developed. In 2011, this sector was able to contribute to Central Java's GRDP of 2.98% and this number tended to be stable in 2012 and 2013, which was 2.96%. In 2015, it increased to 3.09% (Badan Pusat Statistik, 2015). The number of foreign tourists visiting Central Java through the entrance of Adi Sumarmo and Ahmad Yani airports in February 2016 was 1,834 visits, up compared to January 2016 which recorded 1,545 visits, an increase of 18.71 percent. (Badan Pusat Statistik, 2015)

Semarang Regency is also getting more aggressive in developing tourism, which included tourist villages. Semarang is one of the areas, which is a golden triangle area, which is the center of economic growth, known as the Joglosemar area. This area is directly adjacent to the provincial capital of Central Java, the center of economic growth. This area has the potential to be developed into a tourist destination. The development of the tourism sector in Semarang district is expected to encourage the tourism industry in the surrounding areas. At present, Ahmad Yani airport in Semarang and Adi Sumarmo airport in Solo is becoming international airports with increasing capacity and flight routes. Land transportation is also more efficient with the construction of toll roads that connect Semarang with other regions. Progress in the field of infrastructure and other supporting facilities has led to economic growth in the central area and its surroundings.

The motivation of this research is to analyse the determining competitiveness, which is very important to do to illustrate the position of competitiveness of tourism in the area of Ngrawan tourism village and to compare of the competitiveness of the area with the Kopeng tourism village area. Further, the purpose of this study is to measure the competitiveness of tourist villages in Semarang district. The results of this study are expected to be useful in providing an overview of the competitiveness position of Ngrawan village in the surrounding tourist villages. This information is important to use in establishing a tourism village development strategy by management. This research is part of a study of tourist villages in Semarang, Central Java that has been carried out by Koranti and Sriyanto (2017) i.e. Desa Menari.

LITERATURE REVIEW AND PREVIOUS RESEARCH STUDY

Tourism is one sector that is increasingly important in the economic development of the nations of the world. The benefits obtained include, among other things, the benefits of increasing income and creating jobs throughout the world. For Indonesia, tourism contributes 4% of GDP and 7.75% of employment (Kemenparekraf, 2011).

Tourist Competitiveness

Competitiveness is associated with the level of output produced for each input unit used (called productivity). Increased productivity is seen from the increase in capital and labor, the quality of inputs, and the technology applied. In the theory of competitiveness, the theory of comparative advantage and competitive advantage is known as a measure of competitiveness. The theory of comparative advantage refers to the superiority of each region or country. In the regional context, the comparative advantage of a commodity is a commodity that is relatively superior owned by other regions. In the regional context, the comparative advantage of a commodity is a commodity that is relatively superior to that owned by other regions. If an area knows a sector that has a comparative advantage, then the government as a policymaker can determine the direction of development of the sector to make it more profitable for the region by regulating competitiveness strategies. Competitive advantage is to be the one to have created it first to have it. The competitive advantage of a commodity is a processed product that is formed from its performance so that it can outperform other sector commodities.

Tourism has developed into a large industry and a mainstay in the world. This is indicated by the continued increase in income generated by the number of tourist visitors. According to Arianti (2016) tourism has the potential to create jobs, increase per capita income, increase foreign exchange and increase government revenues. Tourism affects the economy directly or indirectly. The results of the study revealed that in terms of demand structure in the economy, the role of the tourism sector (large & retail trade, hotels, restaurants, transportation and entertainment & recreation) was 40.86% if the business sector was grouped in the agriculture & mining sector, industrial sector, tourism sector and service sector.

Competitiveness is a complex concept and consists of several elements both observed and unobserved. This concept is difficult to measure. The study conducted by Kozak (1999) uses survey data to find out perceptions and opinions of tourists on regional or country visits to measure tourism competitiveness. Based on tourist opinions or perceptions, competitiveness indicators are made, namely beach quality, people's friendliness, shopping facilities and so on. These indicators are very subjective and are difficult to measure and are intrinsic.

The study by Dwyer (2000) measured the competitiveness of tourist destinations by comparing 19 destinations. The data used is publication data issued by each destination. Competitiveness Monitor (CM) analysis was introduced in 2001 as a measure of tourism competitiveness. CM was updated in 2002 as a result of the collaboration between WWTC and Christel De Haan Tourism and Travel Research Institute (TTRI), University of Nottingham. CM is also developed in different research areas such as the results of the World Bank Global Competitiveness report, the UK Regional Competitiveness Indicators and IMD World Competitiveness Yearbook. The CM analysis uses 8 (eight) indicators that are used to form competitiveness. These indicators are the Human Tourism Indicator, Price Competitiveness Indicator, Infrastructure Development Indicator, Environment indicators, Technology Advancement Indicators, Human Resources Indicators, Open Indicators, and Social Development Indicators. The study conducted by Trisnawati et al. (2008), uses these 8 indicators to compare destinations in Surakarta and Yogyakarta. Dwyer (2000) uses Price Competitiveness Indicator to measure the competitiveness of tourist destinations. This study distinguishes two categories of prices, namely travel costs and ground costs. Travel costs are related to the costs incurred from and to a destination and the ground costs associated with the cost of commodities in a destination. Another study was conducted by Mihalic (2000), which included Quality Environment as an indicator of determining tourism competitiveness. Ritchie and Crough (1999) extend previous research by basing on Comparative Advantage theory, which states that ownership and use of resources owned by a country (destination) will result in that the destination to be competitive compared to other destinations.

RESEARCH METHOD

Research Design

This research design is exploratory research which measures the competitiveness of the tourism industry in the tourist village of Ngrawan. The next step is to compare the competitiveness of the tourism industry in the study area with the Kopeng and Gemawan tourism villages as benchmarks. The analysis time period is from 2014 to 2016. The research object is the tourist village of Ngrawan with the tourist village of Kopeng and the village of Gemawan as a comparative analysis. The study uses secondary data obtained from the tourism agency, the regional statistics center, regional economy division and other related agencies. Primary data is needed if secondary data for measuring competitiveness indicators are not obtained. This data comes from hotels, restaurants and travel agencies as well as from tourists who come to the tourist village of Ngrawan. The data is needed to explore the factors that are the advantages or disadvantages of the tourism industry in the tourist village of Ngrawan.

Variables and Measurement

The variable used in this study is a tourism competitiveness index consisting of 8 indicators of tourism competitiveness. The calculation of the tourism competitiveness index in this study uses indicators from WWTC consisting of the Human Tourism Indicator, Price Competitiveness Indicator, Infrastructure Development Indicator, Environment indicators, Technology Advancement Indicators, Human Resources Indicators, Open Indicators, and Social Development Indicators. The explanation for the eight indicators is:

1. **Human Tourism Indicator (HTI).** This indicator shows the achievement of regional economic development due to the arrival of tourists in the area. The measurement used is the Tourism Impact Index (TII), which is the ratio between tourism receipts and GDP. Another measure is the Tourism Participation Index, which is the ratio of the activity of tourists (coming and going) to the population of the destination area.
2. **Price Competitiveness Indicator (PCI).** This indicator shows the price of commodities consumed by tourists during a tour such as accommodation, travel, vehicle rental and so on. The measurement used is Purchasing Power Parity (PPP), as a proxy of the price is the average minimum hotel tariff, which is a worldwide hotel. PPP is calculated from the number of tourists in area x the average hotel rate x and the average period of stay.
3. **Infrastructure Development Indicator (IDI).** The indicator shows the development of highways, improvement of sanitation facilities and increased population access to clean water facilities. To measure the IDI there are difficulties, so CM proxies the IDI with the income per capita of the population.
4. **Environment Indicator (EI).** This indicator shows the quality of the environment and awareness of the population in maintaining their environment. The measurements used are population density index (ratio between total population and area) and CO₂ emission index. Data on CO₂ emission index can be obtained from information on air pollution levels on major roads.
5. **Technology Advancement Indicator (TAI).** This indicator shows the development of modern infrastructure and technology as indicated by the widespread use of the internet, mobile telephone and the export of high-tech products. Measurements used are telephone index (ratio of telephone line usage to population) and export index (export ratio of high-tech products: computers, pharmaceutical products, industrial machinery and electronics with total export quantities)
6. **Human Resources Indicator (HRI).** This indicator shows the quality of human resources in the area so that it can provide better services to tourists. The measurement of HRI uses the education index which consists of the ratio of illiterate-free populations and the ratio of residents who have elementary, middle, high school, diploma and graduate education.
7. **Openness Indicator (OI).** This indicator shows the level of the openness demonstrated by destinations towards international trade and international tourists. The measurement uses the ratio of the number of receipts from international tourists to the total PAD and the ratio of export-import tax revenues to the total receipts.
8. **Social Development Indicator (SDI).** This indicator shows the comfort and safety of tourists to travel in the destination area. SDI size is the average length of stay of tourists in the destination area.

Data analysis

The stages of analysis carried out are:

1. Calculate the tourism index of the eight indicators that form the competitiveness index mentioned above with the formula:

$$X^c_i = X^c_i - \min(X^c_i) \text{ Max}(X^c_i) - \min(X^c_i)$$
2. Calculate the composite index of the eight indicators that determine tourism competitiveness

$$Y^c_k = 1/n \sum X^c_i$$
3. Calculating the tourism competitiveness index

$$Z^c = \sum W_k Y^c_k$$
4. Comparing the competitiveness of the tourism industry in the tourist village of Ngrawan with the tourist village of Kopeng and Gemawang, to find out what factors need to be developed.

RESULTS AND DISCUSSION

This study calculates the tourism competitiveness index by including all indicators of competitiveness from WWTC as many as 8 indicators and specializes in Ngrawan tourist village destinations. This study also compares the competitiveness of these destinations with the Gemawang tourism village and Kopeng tourist village, which is a benchmark for tourist village areas in Getasan district, Semarang Regency. This analysis focuses on determining competitiveness and is important to illustrate the position of competitiveness of Ngrawan tourism village and compares it with the competitiveness of Gemawang and Kopeng tourist villages. The results of the calculation of the tourism index in the tourist village of Ngrawan can be seen from Table 1 and Table 2.

Table 1. The calculation results of the tourism index from the indicators forming the competitiveness index

No	GEMAWANG	NGRAWAN	KOPENG
1	<i>Human Tourism Indicator (HTI)</i>		
2014	1,301 (13%)	1,743 (17%)	7,103 (70%)
2015	1,465 (8%)	2,105 (12%)	14,086 (80%)
2016	1,602 (8%)	2,242 (12%)	15,578 (80%)
2	<i>Price Competitiveness Indicator (PCI)</i>		
2014	31800000 (8%)	1550000 (1%)	342773640 (91%)
2015	38130000 (5%)	2067000 (3%)	740659500 (95%)
2016	46033680 (27%)	2368170 (14%)	103791870 (60%)
3	<i>Infrastructure Development Indicator (IDI)</i>		
2014	0,235 (12%)	1,041 (54%)	0,666 (34%)
2015	0,102 (27%)	0,980 (29%)	0,666 (44%)
2016	1,176 (8%)	0,962 (80%)	0,676 (12%)
4	<i>Environment Indicator (EI)</i>		
2014	5,133 (27%)	5,5113 (29%)	8,302 (44%)
2015	5,116 (7%)	54,807 (80%)	8,347 (12%)
2016	5,256 (8%)	55,267 (80%)	8,342 (12%)
5	<i>Technology Advancement Indicator (TAI)</i>		
2014	0,343 (36%)	0,403 (43%)	0,199 (21%)
2015	0,347 (38%)	0,376 (41%)	0,199 (22%)
2016	0,364 (37%)	0,404 (41%)	0,217 (22%)
6	<i>Openess Indicator (OI)</i>		
2014	7,361 (12 %)	2,507 (4 %)	52,635 (84 %)
2015	8,252 (8 %)	3,015 (3 %)	94,517 (89%)
2016	8,976 (8 %)	3,231 (3 %)	104,567 (90%)

7	<i>Social Development Indicator (SDI)</i>		
2014	2,01 (33 %)	2,00 (32 %)	2,20 (35 %)
2015	2,11 (32%)	2,12 (33 %)	2,32 (35 %)
2016	2,21 (30 %)	2,50 (34%)	2,59 (35%)
8	<i>Human Resources Indicator (HRI)</i>		
2014	0,068 (34 %)	0,060 (30 %)	0,070 (35 %)
2015	0,178 (31 %)	0,193 (33 %)	0,211 (36 %)
2016	0,085 (35 %)	0,072 (29 %)	0,088 (36 %)

Table 2. Tourism Competitiveness Index

Indicator	Gemawang	Ngrawan	Kopeng
Tourism Participation Index (TPI)	1,391	1,702	1,854
Purchasing Power Parity (PPP)	1,300	0,970	1,561
Infrastructure Development Indicator (IDI)	1,010	1,052	1,168
Environment Indicator (EI)	1,012	1,762	1,913
Technology Advancement Indicator (TAI)	1,090	0,934	2,056
Human Resources Indicator (HRI)	1,034	1,050	0,383
Openness Indicator (OI)	1,396	1,686	0,566
Social Development Indicator (SDI)	1,250	1,320	0,713

The results of the analysis of the tourism index calculation have implications for the policies that must be carried out by the Ngrawan tourism village government to develop the tourism sector, because by paying attention to these indicators of competitiveness, it can be examined the strengths and weaknesses of the region in developing the tourism industry as a source of PAD potential can be examined. Based on Tables 1 and 2 above, it can be stated that the tourism competitiveness index in the Kopeng tourism village is higher compared to the tourist village of Ngrawan and Gemawang. The explanation of each indicator that forms a competitiveness index in the tourism sector is as follows:

Human Tourism Indicator (HTI)

The Human Tourism Indicator shows the achievement of regional economic development as a result of the arrival of tourists in the area. The measurement used is the Tourism Partition Index, the ratio between the number of tourist activities that come and go with the population of the destination area. The results of the analysis show that the number of tourists both domestic and foreign tourists visits the tourist village of Kopeng. In 2014 to 2016 the Kopeng tourism village showed an increase in the HTI index, which is sequentially from 7,103, 14,086 and 15,578. Likewise for the Tourism Participation Index (TPI) in Kopeng, Ngrawan, and Gemawang is 1.854, 1,702, and 1,391 respectively. This figure shows that the number of tourist arrivals with Kopeng tourism is the highest, followed by Ngrawan village, then Gemawang village.

The presence of tourists brings a huge multiplying effect on society. This industry has stimulated the economic life of the Kopeng tourism village, both in terms of the home industry and service and goods companies. Efforts really had to be made by the Ngrawan tourism village government to increase the presence of both domestic and foreign tourists. Efforts that have been made by the local government to promote culture and culinary tourism, in the village of Ngrawan, are packaged attractively so that the village of Ngrawan is able to attract both domestic and foreign tourists.

Price Competitiveness Indicator (PCI)

PCI shows the price of commodities consumed by tourists during tours such as accommodation, travel, vehicle rental and so on. The measurement used is the Purchasing Power Parity (PPP) as a proxy of price. It is the average minimum of hotel tariff. The researcher used data from hotels around the tourist village. PPP is calculated from

the number of tourists in area x the average hotel rate x the average period of stay. The rates for these hotels are relatively the same between hotels located around the tourist villages of Ngrawan, Gemawang and Kopeng.

The calculation results show that the highest PCI index is in the tourist village of Kopeng. The PCI index in Kopeng from 2014 to 2016 was 91%, 95% and 60% respectively. Likewise for the PPP index in Kopeng, Gemawang and Ngrawan, respectively are 1,561, 1,300 and 0,970 respectively. This is caused by the number of tourists who come to the tourist village of Kopeng more than to Ngrawan and Gemawang. Another factor that determines the PPP index is the average stay of tourists in the destination area. The average tourist stay in the tourist villages of Kopeng, Ngrawan and Gemawang, respectively is 1,561 days, 0.970 days, and 1,300 days respectively. The difference in average stay is largely determined by the convenience of tourists in the destination area and the tourist attraction offered by the destination. The village government needs to sell the attraction of the tourist village of Ngrawan attractions and the surrounding area. This area has a lot of tourism potential that needs to be developed and cultivated seriously so that the tourist village of Ngrawan, known as a cultural area, can develop its tourism potential as the tourist village of Kopeng.

The tourists stay is determined, among others, by the comfort of the hotel and the friendliness of the people in the destination area. In terms of service quality, hotels and homestays in the tourist villages of Ngrawan, Gemawang and Kopeng are not significantly different. These resources need to be managed properly, so that the comfort level of tourists in these destinations can be maintained. In addition, safety factors also need to be considered to protect tourists from acts of crime or other crime. By paying attention to these factors, tourists will feel safe and comfortable and will stay longer in the destination areas.

Infrastructure Development Indicator (IDI)

IDI shows the development of highways, improvement of sanitation facilities and increased population access to other facilities due to the trickle-down effect of the arrival of domestic and foreign tourists. Their arrival is expected to provide welfare to the residents of the destination area. To measure this index uses the per capita income of the population. In 2014 to 2016, the value of the Infrastructure Development Indicator in Kopeng was 0.666, 0.666 and 0.676 respectively. The competitiveness index measured using the Infrastructure Development Indicator Index shows that Kopeng (1,168), Ngrawan (1,052), and Gemawang (1,010) respectively. Thus the development of highways, improvement of sanitation facilities and an increase in population access to other facilities in Kopeng tourism is the highest, while the tourist villages of Ngrawan and Gemawang villages show relatively comparable conditions.

Environment Indicator (EI)

Environment Indicator shows the quality of the environment and awareness of the population in maintaining their environment. Measurements used are population density index (ratio between population and area) and CO₂ emission index. Data on CO₂ emission index can be obtained from information on air pollution levels on major roads. This index implies that if a destination area has a very high population density, it is assumed that the quality of the environment in the destination area is low. Environmental quality will affect the comfort of tourists in these destinations. In general they want a clean, comfortable and safe destination and a refreshingly natural atmosphere. The level of population density in the three tourist village destinations is not significantly different. So the thing that needs to be done is the awareness of the population to keep the environment clean and beautiful. With a quality environment, tourists will be comfortable to carry out tourism activities in the area. The Environment Indicator Index obtained shows that Kopeng shows the highest yield, namely 1,913, followed by the village of Ngrawan (1,762), and the smallest is the village of Gemawang (1,012). Efforts must really be made by the tourism village government of Ngrawan to increase the presence of tourists, among others by increasing the quality of the environment and awareness of the population in maintaining their environment, especially with tourism. The efforts that have been made such as mutual cooperation between villagers to clean up will make tourists more comfortable in carrying out their tourism activities.

Technology Advancement Indicator (TAI)

This indicator shows the development of modern infrastructure and technology as indicated by the widespread use of the internet, mobile telephone and the export of high-tech products. Measurements used are telephone index (ratio of telephone line usage to population) and export index (export ratio of high-tech products: computers, pharmaceutical products, industrial machinery and electronics with total export quantities). The results of the analysis show that the technology index in the destination area of Kopeng tourism village is higher than the Ngrawan and Gemawang tourist village which is 2,056, 0,934, and 1,090 respectively. This index explains that tourist arrivals will increase the use of high-tech products in the destination area. It is assumed that tourists, especially from overseas, will bring technological changes to the destination area.

Human Resources Indicator (HRI)

This indicator shows the quality of human resources in the area so that it can provide better services to tourists. The measurement of HRI uses the education index, which consists of the ratio of illiterate-free populations and the ratio of residents who have elementary, middle, high school, diploma and graduate education. The highest value of Human Resources Indicators from 2014 to 2016 is Kopeng village, which is 0.07, 0.211 and 0.088 respectively.

The results of the analysis show that the index of Human Resources Indicator in the tourist village of Kopeng is higher than the destination of the Ngrawan and Gemawang tourism village which is 0.383, 1,050, and 1,034 respectively. Thus this index implies that the higher the level of education of the population in the destination area, the better are services provided to tourists in the destination area. They understand that when more tourists come and stay longer in the destination areas, it will be more beneficial to the destination area. One of the benefits obtained is regional income from the tourism sector. The high regional income is assumed to increase the welfare of the population in the destination area and its rate of economic development in the will also increase.

Openness Indicator (OI)

OI shows the level of openness of destinations towards international trade and international tourists. The measurement uses the ratio of the total revenue from international tourists to the total Regional Original Income. The highest Openness Indicator value from 2014 to 2016 is Kopeng, which is 52,635, 94,517 and 104,567 respectively. This indicator implies that with the arrival of foreign or international tourists leading to trade between the two countries namely the country of origin of tourists and the country of a tourist destination. It should be realized that the purpose of tourist arrivals to a destination area is on vacation, doing trade and other professional purposes such as seminars, education and health. With the diversity of tourists from various countries who come to the destination area, it is expected that local products can be marketed in the international market. The results of the analysis show that the index of Openness Indicator in the tourist village of Ngrawan is higher than the destination of Gemawang and Kopeng tourism villages, namely 1.686, 1.396, and 0.566. Ngrawan Village presents local cultural attractions that are proven to be in demand by foreign tourists, while the village of Gemawang is famous for its batik products.

Social Development Indicator (SDI)

SDI shows the comfort and safety levels of tourists to travel in the destination area. SDI is the average length of stay of tourists in the destination area. The highest value of the SDI from 2014 to 2016 is in Kopeng village, which is 2.2; 2.32 and 2.59. This index implies that the longer tourists stay in the destination area, the more money will be spent on shopping or another spending in the area. This condition will produce income in the destination area to increase. Based on the average SDI index, tourists staying in the tourist village of Ngrawan are higher than the Gemawang and Kopeng destinations, namely 1,320, 1,250, and 0.713. This implies that the contribution of the tourism sector to Regional Original Revenue in the tourist village of Ngrawan is higher than that in the Gemawang and Kopeng destinations. Based on these eight types of indices, it can be seen that the position of tourism competitiveness in the tourist village of Ngrawan is higher than the tourist village of Kopeng and Gemawang as a

comparison. Based on the index value obtained from table 5.1, it can be explained that tourism competitiveness in the destination Ngrawan tourism village is lower than Kopeng tourism village. Kopeng tourism village which was used as the benchmark in this study, was the first tourist destination in Getasan district, Semarang Regency (Dinas Pariwisata, 2015). The results of this analysis have implications for the policies that must be carried out by the management of Ngrawan tourism village to develop the tourism sector by paying attention to those indicators. The most support should be given to Adi Sumarmo airport in Solo and Ahmad Yani in Semarang, as access to local and foreign tourists. This is important because considering the determinants of tourism competitiveness, we can examine the strengths and weaknesses of the region in developing the tourism industry. Based on the measurement of the competitiveness index of Ngrawan, Kopeng and Gemawang tourism villages, it can be described by the tourism map as shown in Figure 1 and Figure 2.

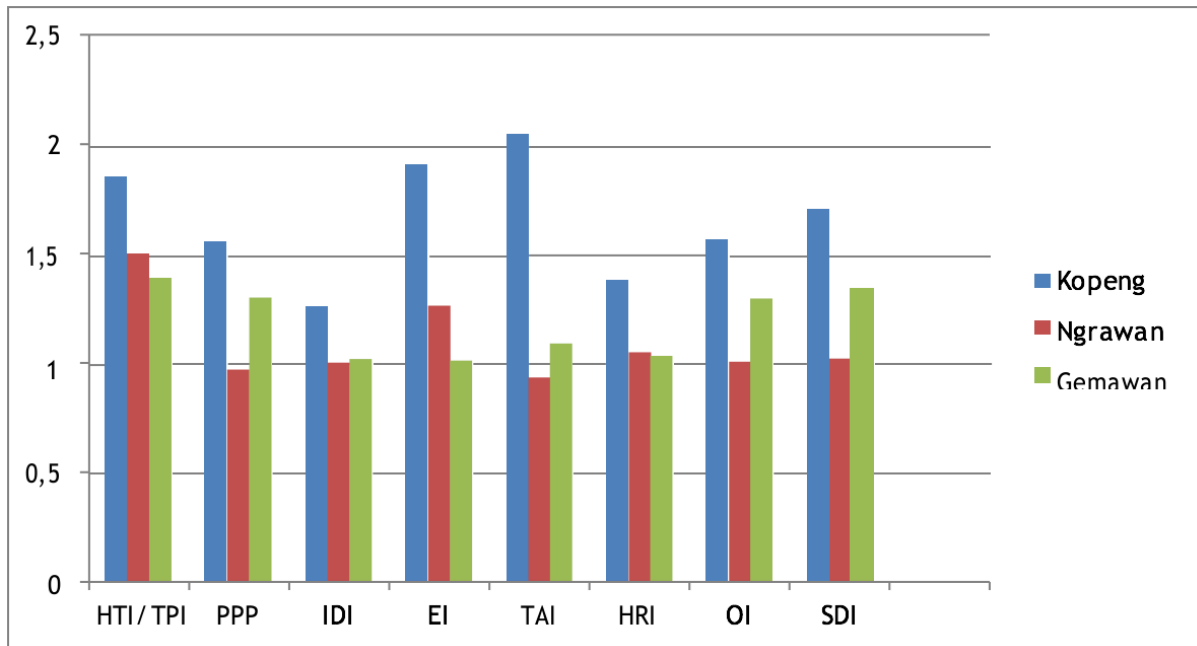


Figure 1. Mapping of Tourist Village Ngrawan, Kopeng dan Gemawang

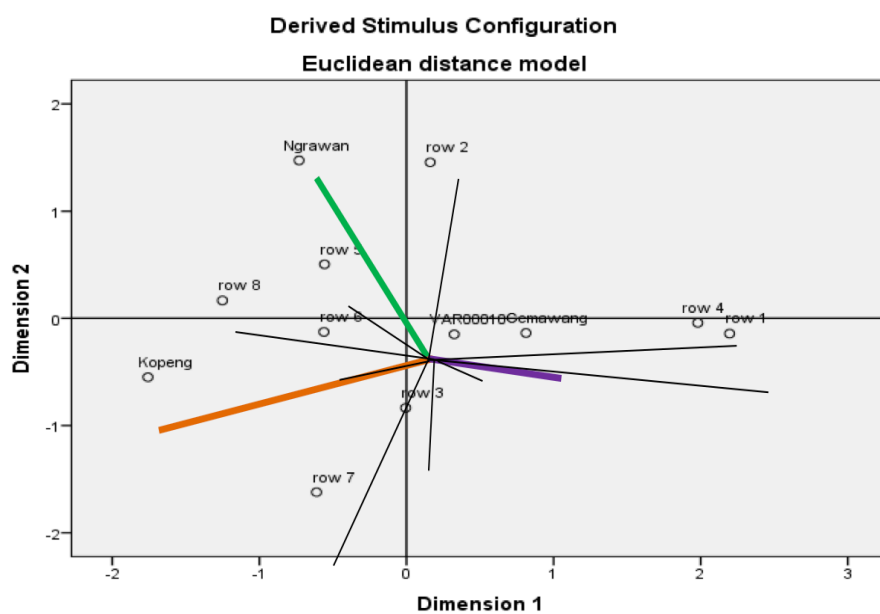


Figure 2. Mapping of Ngrawan, Kopeng and Gemawang tourist villages based on the Euclidean Distance

CONCLUSION

Based on the analysis that has been done, it can be concluded that the tourism competitiveness index in the tourist village of Kopeng is higher than that of the tourist village of Ngrawan and the village of Gemawang.

1. Human Tourism Indicator (HTI) is an indicator to measure the number of tourist arrivals, where the highest value is in the tourist village of Kopeng.
2. Price Competitiveness Indicator (PCI) as measured by the PPP index, shows that the tourist village of Kopeng has the highest value. Comparison of average tourist stays in Kopeng, Ngrawan and Gemawang is 1,561, 1,300, 0,970 days.
3. Infrastructure Development Indicator (IDI) shows per capita income, wherein the three destinations are not significantly different. The IDI index of Kopeng, Ngrawan, and Gemawang tourism villages in a row is 1.168, 1.052 and 1.010.
4. Environment Indicator (EI) shows the level of population density, where Kopeng tourism village is higher than Ngrawan and Gemawang, which is 1,913, 1,762, 1,012.
5. Technology Advancement Indicator (TAI) shows a technology index, where the value of the Kopeng tourism village is higher than that of Ngrawan and Gemawang, which is 2.056, 0.934, 1.090.
6. The Human Resources Indicator (HRI) shows the education index, where the tourist village of Kopeng is higher than Ngrawan and Gemawang, which is 0.383, 1,050, 1,034.
7. Openness Indicator (OI) shows the level of openness to international trade and tourists, where the tourist village of Ngrawan is higher than Gemawang and Kopeng which is 1,686, 1,396, 0,566.
8. The Social Development Indicator (SDI) shows the average length of stay of tourists, where tourists live in the tourist village of Ngrawan longer than Kopeng and Gemawan which is 1,320, 1,250, 0,713.

LIMITATION OF THE RESEARCH

This study focuses on mapping tourism competitiveness in the tourist village of Ngrawan by making comparisons with Kopeng and Gemawang tourist village destinations as benchmarks. The limitation of this study is that the data used in this study is over a period of three years. Therefore, to obtain a more accurate picture of competitiveness, it should collect data over a longer period of time. The expansion of the study area needs to be carried out so that a comprehensive comparison can be made.

The development of the tourism sector in the tourist village of Ngrawan requires more publicity, government support, infrastructure and tourism facilities to increase tourist visits. Between Ngrawan and Kopeng tourist villages, there are many similarities including culture, natural conditions, access and attractions, in order to achieve the same conditions as Kopeng. To accelerate the process of tourism development, of course it requires support from the community as well and the government should establish tourism development policies. The ease of licensing and adequate facilities are very important to attract investors to Ngrawan. As a result, in the future the tourist village of Ngrawan will have a higher chance to become like the tourist village of Kopeng.

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