The Potential Forest Ecotourism in Suligi Hill, Riau Province, Indonesia.

Irawan Harahap¹, and Irwan Effendi²*

¹ Irawan Harahap, Faculty of law. Lancang Kuning University, Pekanbaru. Indonesia
² Faculty of Fisheries and Marine Sciences, University of Riau, Pekanbaru, Indonesia.

*Corresponding author: irawan.hrp@gmail.com

Abstract. This study aimed to identify and analysed forest ecotourism objects in Suligi Hill, Kecamatan Kabun, Rokan Hulu. Indonesia. The locations and respondents was nominated by using purposive sampling method. Respondents consisted of local people, tourists, tourism businesses, and stakeholders. The collected data was associated with the concept of 4A (attraction, amenity, accessibility, and ancillary service) and SWOT (strength, weakness, opportunity and threat) analysed, WTA (willing to accept) and WTP (willing to pay), and descriptive potential analysis ecotourism economy. Ecotourism in Suligi Hill categorised as adventure, conservation and education tourism. Some ecotourism objects were named as; Suligi Hill, Puti Maifat Peak, Ranah Peak, Sikubin Waterfall, Dayang Baso Waterfall, Tirtan Waterfall, Macan Cave, and Garuda Cave. Suligi Hill is potential to develop as forest ecotourism area. It is necessary to improve the facilities and infrastructure access to each place of the ecotourism object. Ecotourism management must involve professionals as the main actors and then supported by local ecotourism actors.

1. Introduction
Ecotourism activities can increase income for nature conservation which is used as a tourist attraction and generate economic benefits for people who are in the area and surrounding areas. It is an environmentally friendly tourism activity that prioritizes aspects of nature conservation, aspects of socio-economic empowerment of local communities and aspects of learning and education. This activity indirectly gives everyone access to see, know, and enjoy the natural, intellectual and cultural experiences of the local community [1].

Other forest areas such as protected forests and production forests, if they have natural objects as ecotourism attractions, can also be used for ecotourism development. Natural areas of an ecosystem of rivers, lakes, swamps, peatlands, upstream or river estuaries can also be used for ecotourism [2]. The approach that must be implemented is to keep the area sustainable as a natural area. There are two aspects to consider. First, the destination aspect, then second is the market aspect. The development of ecotourism is carried out with a product driven concept. Although the market aspect needs to be considered, the types, nature and behavior of natural and cultural tourism objects and attractions are endeavored to maintain their sustainability and existence [3].

Ecotourism development in forest areas can guarantee the integrity and preservation of forest ecosystems. Ecotraveler has requirements for the quality and integrity of the ecosystem. Therefore, there are several points of principle for ecotourism development that must be fulfilled. If all these principles are implemented, ecotourism guarantees ecological friendly development from community-based development [4] [5].
Suligi Hill, located in Kabun District, Rokan Hulu Regency, Riau Province, Indonesia. The regency has a tropical climate with temperatures of 22-31 °C with an altitude of 70-86 M above sea level. In the western part of the regency, it has undulating contours which form part of the Bukit Barisan mountain range (15%) while the majority of the others (85%) are fertile low-lying areas, with three large rivers; Rokan Kiri River, Rokan Kanan River and Sosah River. Economic growth over the past 5 years averaged 6.46% per year, with population livelihoods in agriculture 52.42%, industry 11.49%, trade 7.14% and other sectors 28.95% [6].

Suligi Hill as an ecotourism object has begun to be recognized by the public. Proven in 2019, this location became the first place for the Indonesian Enchantment Award or API 2019, the most popular highland tourism category. However, to become one of the main drivers of the local economy, this tourist attraction still has not contributed much. Transportation limitations, road conditions, relatively long distances and improvement of tourist sites are the cause. This study aimed to identify and analyze forest ecotourism objects in Suligi Hill

2. Methodology
This study used a survey method and was carried out in March to July 2020. Some equipment used is geological positioning system (GPS), digital cameras, and stationery along with questionnaires. The location of the tourist attraction was chosen by purposive sampling method. Ecotourism objects were visited and observed directly. The selection of respondent samples to be interviewed was carried out by purposive sampling method. Respondents consisted of local people, tourists, tourism businesses, and stakeholders. Identification and inventory of potential objects and natural ecotourism activities carried out by observing tourist objects and activities. This data is associated with the concept of 4A (attraction, amenity, accessibility, and ancillary service). Followed by a SWOT analysis (strength, weakness, opportunity and threat) measurement of WTA (willing to accept) and WTP (willing to pay), and a descriptive analysis of its economic prospective.

3. Result and discussion
Administratively, this ecotourism object is located in Kabun District. Dubbed the land above the clouds because of the view from the towering hilltops, it is as if we feel among the clouds. Suligi Hill, which is located at an altitude of 812 meters above sea level, has a panoramic view that can spoil the eyes with the green of the forest and of course we can feel like we are in a land above the clouds.

From Pekanbaru, visitors can use four-wheeled transportation. Then proceed with two-wheeled vehicles and on foot. From the capital city of Rokan Hulu, Pasir Pangaraian, tourists can start by using two or four wheels which is estimated to take about 1.5 hours of travel. However, if the trip from Kampar district can be shorter, it is estimated to be 1 hour away. After arriving in Aliantan Village, to be precise at the Koto Kampar Aliantan Simpang Simpang or the Kokar Simpang, the journey continues with a distance of 21 KM to the foot of Suligi Hill, and this can be reached using four and two wheels.

The tourist destination of Suligi Hill or Ocean of Clouds, won the first place in the Indonesian Enchantment Award or API 2019, the most popular highland tourism category. The preservation and popularity of Suligi Hill as a tourist spot cannot be separated from the struggle of the Head of Aliantan Village, Muhammad Rois Zakaria with the tourism awareness group and the local village community. Following are some of these ecotourism objects. Based on the results of identification and analysis, then there are at least 8 potential objects of interest in forest ecotourism. The following briefly describes some of the tourist objects in Suligi Hill.

Suligi Hill, is the top of a hill and has become an iconic name for all ecotourism objects in this area. From this peak the tourists will be treated to an amazing phenomenon in the form of clouds looking like a floating ocean (Figure 1). The scene can be seen throughout the day, depending on the weather conditions of course. The charm at the top of Suligi Hill, visitors are also presented with a panoramic view of sunset and sunrise, which allows visitors to witness the masterpiece of the Almighty creation. Special panoramas in the form of sunrise can only be enjoyed limitedly, starting at 05.00 AM until 09.30 AM, so visitors have to spend the night at the top of Suligi Hill. Likewise, the
sunset panorama will begin to appear around 17.00 PM until the red color on the western horizon completely disappears.

**Puti Maifat Peak.** It is a peak of one of the hills of the Suligi Hill mountain range. From this peak, tourists will be able to witness natural phenomena in the form of clouds that look like floating oceans. From Puti Maifat Peak tourists will also be able to enjoy the amazing phenomenon of an ocean of floating clouds (Figure 2). The scene can be seen throughout the day, depending on the weather conditions of course. From this peak, visitors are also presented with a panoramic view of sunset and sunrise, which allows visitors to witness the natural phenomenon of the Almighty creation. The special panorama in the form of sunrise can only be enjoyed limitedly, starting at 05.00 AM until 09.30 AM, so visitors have to spend the night on the top of Suligi Hill. Likewise, the sunset panorama will begin to appear around 17.00 PM until the red color on the western horizon completely disappears.

![Suligi Hill, view in the morning and in the evening.](image)
Ranah Peak, is another peak which is also a peak of one of the hills of the Bukit Suligi mountain range. From this peak, tourists will be able to witness natural phenomena in the form of clouds that look like floating oceans (Figure 3). From the Peak Realm, tourists will also be able to enjoy the amazing phenomenon of an ocean of floating clouds. The scene can be seen throughout the day, depending on the weather conditions of course. From this peak, visitors are also presented with a panoramic view of sunset and sunrise, which allows visitors to see the natural phenomenon created by God. The special panorama in the form of sunrise can only be enjoyed limitedly, starting at 05.00 AM until 09.30 AM, so visitors have to spend the night on the top of Suligi Hill. Likewise, the sunset panorama will begin to appear around 17.00 PM until the red color on the western horizon completely disappears.

Figure 2. Puti Maifat Peak, view in the morning.

Figure 3. Ranah Peak, view in the morning.
Sikubin Waterfall, is a waterfall with a height of about 10 meters (Figure 4). Water from this height falls on a small reservoir that is used by visitors to bathe and play. The sound was a little roaring amidst the rustling sound of the rustling of the leaves and branches of the trees being blown by the wind.

Dayang Baso Waterfall, is a waterfall with a height of about 11 meters (Figure 4). The water that flows from this height falls on a small lake which visitors can also use for bathing and playing. Surrounded by secondary forest plants as if to fence off the bathing reservoir.

Tirtan Waterfall, is a waterfall with a height of about 12 meters (Figure 5). This water is water from the top of the hill above and falls from a height and forms a small lake which is used by visitors to bathe and play. The sound was slightly hissed under the rustling sound of the trees being blown by the wind.

Macan Cave. Is a niche formed by natural geological processes. It is located at the foot of the Bukit Suligi hills (Figure). The local people call it the Macan Cave. It is not clear why the name of the king of the jungle was used as the name of this cave. Is the largest cave of a collection of cave niches around this. The niche is winding and some of them are connected. Not much information about the contents of the cave collection. But in our opinion it is not too wise to enter the passages of the cave too far inward. There are concerns that there are nests of dangerous insects, reptiles or sized animals like wild boar, hedgehogs or maybe tigers and honey bears.

Figure 4. Sikubin Waterfall and Dayang Baso Waterfall, Suligi Hill.
Garuda Cave. It is also a cluster of niches that are thought to have formed due to natural geological processes in this area (Figure). Located at the foot of the hilly area of Bukit Suligi. The local people call it Garuda Cave. It is also unclear who and what is the reason why the name of the bird, which is the symbol of the Republic of Indonesia, is the name of this cave. This cave is the largest of a collection of cave niches around this. The niche is winding and some of them are connected to each other. However, according to researchers, it is not too wise to enter the passages of the cave too far inward. There is concern that in the nest are dangerous insects, reptiles or sized animals such as wild boar, hedgehogs or maybe tigers and bears. There is not much information about the contents of the cave collection.

Ecotourism is not just for bird watching, horse riding, tracing in the wilderness, but has been linked to the concept of forest conservation and local residents. Ecotourism is then a combination of various interests that arise from concerns for the environment, economy and social. Ecotourism cannot be separated from conservation. Therefore, ecotourism is called a form of responsible tourism. Destination areas elect to become involved in tourism primarily for economic reasons: to provide employment opportunities, to increase standard of leaving and, in the case of international tourism to generate foreign exchange. Tourism is viewed as a development tool and as a means of diversifying economics.

Ecotourism is a form of tourism that is closely related to the principles of conservation. Even the ecotourism development strategy also uses a conservation strategy. Thus ecotourism is very appropriate and useful in maintaining the integrity and authenticity of ecosystems in pristine areas. Even with ecotourism, the preservation of nature can be improved because of the insistence and demands of eco-travelers.

Bukit Suligi tourism object is a natural tourism destination for tourists who come from various parts of the region, especially young people from Riau Province and West Sumatra Province. This, we can see when the holiday season comes, where one of these attractions looks so crowded by tourists. This tourist attraction does have a special attraction for the visitors. For example access roads that climb and descend, the atmosphere of the mountain air, [7], various biodiversity of primary forest
plants and the quiet atmosphere along the road [8], the wind blows, the cold and the freshness of the water and so on [9]. Based on the SWOT analysis, the distance and mode of transportation are the main weaknesses of this ecotourism object. It takes a long time, the terrain is difficult, and even dangerous to reach some ecotourism objects. However, the WTA and WTP analysis of the community is quite accepting of the presence of this tourist attraction and the costs incurred by tourists are still acceptable. Therefore, in an economic prospective, this ecotourism area will be further developed in the future [10] [11] [12].

**Figure 6.** Macan Cave. Suligi Hill.

**Figure 7.** Garuda Cave. Suligi Hill.

4. Conclusion and remark
From the results of this study it was found that ecotourism in Suligi Hill categorised as adventure, conservation and education tourism. Some ecotourism objects were named as; Suligi Hill, Puti Maifat Peak, Ranah Peak, Sikubin Waterfall, Dayang Baso Waterfall, Tirtan Waterfall, Macan Cave, and Garuda Cave. It is necessary to improve the facilities and infrastructure access to each place of the
ecotourism object. Ecotourism management must involve professionals as the main actors and then supported by local ecotourism actors.

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