

Pulau Banyak extends a variety of tourism potential which has been hidden. However, it has begun to be developed by District Aceh Government Singkil, including surfing sports located at 12 wave points, which are relatively long and reach a height of 6 meters, spread over Pulau Bangkaru, Ujung Silinggar and the southern part of Pulau Tuangku. In addition, the destinations most visited by surfing sports lovers are Pantai Amandangan and Pantai Pelanggaran at Pulau Bangkaru. In addition, underwater beauty can be used for snorkeling and scuba diving (Maharani, 2020).

Pulau Banyak also extends several tours of Kedubahan waterfall, Danau Bungara, Danau Tanabara, and the turtle conservation tours at Pulau Bangkaru. Next, Aceh Singkil also offers a unique culture that can attract interest in tourism. Pulau Banyak infests the first position of the most exciting place by local and foreign tourists. Figures for tourism visits 2015 – 2016 have increased, including foreign and local tourists. In 2017, tourist visits increased by 40% from previous years (Perwirawati & Juprianto, 2019).

As a marine tourism area, there are several main destinations, such as Pulau Bangkaru, Thailana, Ujung Lolok, and Palambak. The islands have their glamour Pulau Bangkaru is a turtle conservation area because it has rare animals such as green turtles, leatherback, and scales, and also for surfing (Dinas Kelautan and Perikanan Kabupaten Aceh Singkil, 2012). Therefore, tourism development in Pulau Palambak can directly support Pulau Banyak country. Moreover, Pulau Palambak is the closest island of Pulau Banyak district ASDP ship crossing place (Angkatan, Sungai, Danau, Pulau). Tourism product development can be done at this Pulau Palambak, like conducting a tour package to around islands, because so far the tourism who wants to tour must rent a fishing boat to reach their destination.

Due to the various prominent potentials in the marine tourism sector, ecotourism has become an ideal solution for developing tourism in the Aceh Singkil Regency. However, in terms of developing marine ecotourism, it has not been carefully planned (Agusriadi, Mulyadi, & Nasution, 2014). Aceh Singkil is a pristine and natural area with its glamour, mainly in its natural beauty and stunning beaches. This is a perfect combination to develop Aceh Singkil as an ecotourism region. Ecotourism itself is crucial. Elements based on the natural environment support conservation, ethical use, sustainable socio-economic benefits for the community, the cultural integrity of tourist satisfaction, implementation is not mass, and management that supports all of these elements (Koroy, Yulianda & Butet, 2017).

On the other hand, due to the rich marine tourism potential, Pulau Banyak is also the natural habitat of the estuarine crocodile (*Crocodylus Porosus*). It could be explained according to the taxonomic classification of crocodiles: Kingdom: Animalia Phylum: Chordata Class: Reptilia Order: Crocodylia Family: Crocodylidae Genus: *Crocodylus* Species: *Crocodylus porosus* Schneider. The estuarine crocodile is included in Appendix II of CITES (Convention on International Trade of Endangered Species of Wild Flora and Fauna), which means species are not threatened with extinction but will be threatened with extinction if the trade continues without any control. According to the IUCN, estuarine crocodiles are included in a minor category concern (LC) (Oktwo, 2018).

The estuarine crocodile (*Crocodylus Porosus*) is a type of crocodile living in rivers and the sea near the estuary. The dispersion area can be found in all Indonesian waters. The species' snout is plenty broad, with no scale width at the nape; body to tail length can reach 12 meters. The dispersion of estuarine crocodiles in the Aceh Singkil region has overseas areas ranging from the waters of the Singkil swamp to Pulau Banyak.

Crocodiles are ectotherms, which means they depend on heat from outside to regulate the body's temperature. When the sun rises in the morning, it is meant to raise the body temperature that reaches the temperature required to do everyday activities and restore calories lost while inside the river at night. Crocodiles generally open their mouths until the sun heat as a cooling mechanism to maintain body temperature. Then the crocodile goes to the damp bushes or returns to the river because half of its body is submerged (Santoso, 1998). Crocodiles in nature are secretive (like to hide) and rarely seen in groups. In the afternoon, the crocodiles come out to look for eat and at night go down to the river (soak in the water) because the temperature of the water is higher

(warmer) than on land (Juni, 2002).

Determinate law in Indonesia stipulates that the estuarine crocodiles include in the species protected animals according to the Provisions of the Appendix to Government Regulations Republic of Indonesia Number 7 in 1999 concerning Preservation Type of Plant and Animal. From observations Made in the last five years, a very significant increase in the population of estuarine crocodiles in the Pulau Banyak area Aceh Singkil. The enhancement in the population of estuarine crocodiles is due to ecosystem imbalances that are affected by food chain disruption in lower predators. Wherever in some areas in the Kepulauan Banyak occurs territorial struggle between crocodiles and lizards. It is because lizards have a role in balancing crocodile habitat; lizards are natural predators of crocodile eggs. The disturbance in the population of lizards decreases due to the intervention of humans who hunt lizards, so it significantly affects the development of the crocodile population in Pulau Banyak.

In August 2020, BKSDA Resort Conservation Area 18 Singkil and WCS Bogor conducted a survey, and according to the results, every 64 kilometers found 42 crocodiles. Based on the survey, it was found that every 1.5 kilometers found, one crocodile. The survey locations were occurred around the Pulo Sarok high bridge to Kuala Singkil, then enter Singkil Lama, Suka Makmur, Lae Trup to Kuala Baru ("Wow Muara Singkil", 2020).

A result of the significant increase in the population of estuarine crocodiles, indeed, the impact on the security of implementing marine-based tourism in the Banyak Islands area. Estuarine crocodiles found not a few cases of assaults on humans at the Pulau Banyak location. Even concerns related to security prevent fishermen from going to sea at night due to the safety factor.

In developing tourism in Pulau Banyak Government, Aceh Singkil Regency needs to do several things related to conserving estuarine crocodiles with tourism development in the region Aceh Singkil tour. Therefore, it is necessary to know how to solve the controversy between humans and estuarine crocodiles in tourism development in Pulau Banyak, Aceh Singkil Regency.

LITERATURE REVIEW

The research on tourism development in the Pulau Banyak of Aceh Singkil has been occurred previously, including Eko Firdaus (2021) entitled "Tata Kelola Pariwisata Kepulauan Banyak Kabupaten Aceh Singkil", Abdil Sersana Diva (2022) entitled "Persepsi Pengunjung Terhadap Daya Tarik Objek Wisata Di Kecamatan Pulau Banyak Kabupaten Aceh Singkil", and Ega Refredo Banurea, et al (2022) entitled "Rancang Bangun Aplikasi Wisata Kabupaten Aceh Singkil Berbasis Android Menggunakan Metode Location Based Service (LBS)".

However, the research on the conflict between estuarine crocodiles and humans in Aceh Singkil Pulau Banyak tourism area can be confirmed that not yet been conducted. Moreover, this research was concerned with changes in human actions in a tourist area with conflicts between estuarine crocodiles and humans.

Weber explains human action in social life: a social definition picture, definitively interpreting and understanding the concept of social action between social relations to reach a causal explanation. Weber states that social relations are related to human goal action. The five main characteristics of Max Weber's goals include (Prastowo, 2008):

- Human actions according to subjective actors in the form of real action;
- The real action is entirely mental;
- Action includes the positive effect of a situation that is intentionally repeated and in the form of tacit consent;
- A person or individuals direct the action.

Weber's theory distinguishes social action from human behavior when acting gives the subjective meaning of goal-oriented and hope. Weber stated that action is a subjective meaning to open and closed behavior considering other people's behavior. It is indeed

action and behavior-oriented (Prahesti, 2021).

Weber's theory of social action refers to the motives and goals of actors. This theory realizes that the behavior of individuals and groups have differences, each for specific reasons (Prahesti, 2021). Weber stated that the best way to realize the various reasons for each individual or group could be classified into four things among them (Muhlis & Norkholis, 2016):

- Traditional actions are actions that bring up behavior that has been rooted in heredity;
- Effective action is an activity that focuses on emotional state and orientation. This action is disenchanting a human judgment when responding to its external and responding to other people around them to fill up necessities. Instrumental rational action is an action that refers to achieving goals that the relevant factors would calculate;
- Value rationality is a rational action based on values for reasons and purposes related to the values believed personally without calculating the prospects involved in the action's success and failure.

Weber saw that the action of social change related to the action on purpose and hope on personal understanding; for Weber, Action is always on thought, and action arises from meaning, including some features (Prahesti, 2021). Future-oriented series of action failures in the past. Now with the meaning of learning to others, Every action that occurs entirely, the social character has other people-oriented meanings for an event that happens repeatedly, and Social action is identical with some individuals (groups) who notice the actions of others.

METHODS OF RESEARCH

The research method used a qualitative method. Descriptive qualitative research aims to describe and explain phenomena related to human relationships and behavior conditions through the perspective of individuals and groups. This research uses grounded theory. The location of this research is in Pulau Banyak Barat District and Pulau Banyak District, Aceh Singkil Regency. The research location has been selected because Aceh Singkil is one of the areas in Aceh that extends natural tourist destinations, which is so magnificent. In data collection, there are primary data and secondary data. Primary data collection techniques were obtained through interviews and observations.

First, interviews were conducted to obtain information through a question, answer, and face-to-face between researcher and informant. Interviews can be conducted with guidelines that have been prepared. Then the following observation is the method of collecting data by observing and recording the procedure research and systematic of the phenomenon to be researched. At the same time, secondary data was obtained from books, journals, articles, and media coverage. Data analysis uses Miles and Huberman models. Finally, data analysis was conducted after the data was collected.

Data analysis was conducted in three stages. First, this stage refers to the simplification process. Data obtained are classified, recorded in detail, and thoroughly based on the classification indeed—second data presentation. The presentation of the data shows the unity of meaning based on all the informants' experiences. Through the presentation of data, researchers will easily understand what happened. This stage requires making steps that Connect one data with other data to become one. Third, concluding. This stage is the last (Kartikasari, Oktantia & Sadewo, 2022).

RESULT AND DISCUSSION

Historically, facts have been found from several of the information quoted from residents; it is said that in the Aceh Singkil area, "The people usually coexist with estuarine crocodiles". Moreover, the relationship between humans and crocodiles can be found in several folk tales, so harmony and symbiosis are created from the relationship between the

two parties; humans and estuarine crocodiles create a safe environment. This safe condition also adds to the attractiveness of the island's tourism potential, which is owned by Pulau Banyak, apart from the fantastic natural beauty. With several advantages possessed by this demographic, the government of Aceh Singkil Regency declared that the area to be developed becomes a tourism area, so these advantages become a benefit that the community can utilize to increase the level of the live economy. However, in the past five years, several cases of assaults by estuarine crocodiles against humans caused casualties for residents and tourists visiting the tourist area.

As a result of these unfavorable conditions, the fishermen's community has local to impose a time limit for fishing at night, so this situation immediately impacted the public economy. Furthermore, according to information from residents, it is said that the cases of crocodile assaults on humans have an impact on the decline in the several of tourists visiting and limiting the sea hours of the local fishermen in earning a living, as well as advice for fishermen to go to sea safely group.

Based on the information collected in the field, it can be identified that the leading cause of crocodile attacks on humans in the area was a change in human behavior. The action has occurred in the past few years with intense hunted by residents against lizards. The hunting action was conducted to obtain economic benefits. Economic benefits meant that the lizard was hunted to be traded to the people of Nias with the actual condition, North Sumatra, for IDR 45,000/kg. So caused Human behavior immediately affects the balance of the ecosystem in the Pulau Banyak tourism area.

The description of the disturbed ecosystem balance can be explained wherever crocodiles are the highest predators at the top of the food chain in the ecosystem. However, the crocodile population was controlled by the presence of monitor lizards as predators from crocodile eggs, so the crocodile population was controlled. According to information, adult female crocodiles usually produce 80 (eighty) eggs in one egg-laying cycle. The rampant hunting of lizards immediately impacts the uncontrolled and rapidly growing crocodile population due to the declining population of the crocodile's original predator, namely lizards. In addition, the increase in the crocodile population causes other food chains to be disrupted. The rapidly growing crocodile population impacts insufficient food supplies in these habitats, forcing crocodiles to expand their hunting area to enter the public residential area.

The expansion of the crocodile hunting area also impacts the dominance of the role of territorial control that immediately interferes with human activities in the area. The occurrence of competition between humans and crocodiles to get food results in forcing fishermen to limit sea time and apply the pattern of fishing in groups to maintain the safety of the fishermen and has a direct impact on the reduction of fisherman catches. Dominance, the role of territorial control by crocodiles in finding prey also impacts the tourism sector's security, thereby limiting travel activities. Where it is known that offered by Pulau Banyak are marine tourism such as kayaking, surfing, diving, snorkeling, and island hopping, all of which have a high potential for coming into contact with crocodile activity to get food in the area.

Based on the explanation above, it can be seen that the impact is enormous on changes in human behavior, wherever the impact is ultimately also felt by humans. Furthermore, changes in human behavior that hunt lizards so it affects the crocodile population and has an impact on the disruption of the ecosystem, at least based on the results of the analysis influenced by 4 (four) parts, namely:

Economic Value of Lizard hunting

As mentioned earlier, one of the reasons for a surge in the crocodile population is the decrease in the original predators of crocodiles, namely: lizards. Humans conducted the hunt for lizards, instead influenced by economic factors, wherever it turns out lizards have economic value to be traded to other regions, namely Nias. Lizard meat is priced at IDR 45.000/kg to be served as culinary in the Nias area. It is then considered as one of the factors causing lizards' rampant hunting, which disturbs the tourism area's ecosystem.

Greed

Apart from the high economic value of lizards, other factors influencing the pattern of behavior change in the community are nature; the natural factor in question is none other than the nature of greed owned by humans. This nature of greed makes humans not think long and ignore the lasting impact of activities conducted. That nature of greed creates the conditions in which it does continuous hunting of lizards to obtain high financial value, then hunting activities for monitor lizards is an activity that is easy to do to create snares or traps to catch lizards. It then makes the lizard population decrease rapidly and causes disturbance to the ecosystem where the consequences of declining lizard populations have an impact on the population of freshwater crocodiles is increasing very rapidly.

Public Awareness Level

What is meant by the level of public awareness? Based on the information obtained in the field, several facts were found where the level of public awareness to protect the environment can be categorized in the low category. First, the environmental community's understanding shows that hunting lizards are commonplace, considering that lizards are pests and have no benefits apart from the economic benefits of being traded outside the region as previously described. Second, the factors that cause the low level of public awareness as intended, among others, are the low level of public education, lack of government socialization, and the perspective or mindset of people who tend to think practically to gain profit fast. Third, residents do not realize that lizard hunting behavior will continuously have a significant and sustainable impact on humans, as previously described can occur.

The Loss of Local Wisdom Values

Previously, it was mentioned earlier that historically, it is known that the community around the tourist area has a good relationship with the environment and nature. In addition, in earlier times, it was known that it was scarce exist a conflict between estuarine crocodiles and humans. Because, in the past, society was still rigorous in upholding values of existing local wisdom. The values of local wisdom in the community teach about the community's obligation to protect the environment, whereas previous generations have taught that human survival depends on the balance of nature. Humans can defend life because the environment has provided all the necessities of life.

The existence evidences this for several stories and customary rules that exist in the community that provides recommendations for maintaining the environment and prohibition taking actions that have the potential to disrupt the balance of the ecosystem that affects human survival. The fading of existing local wisdom values was caused by several factors, such as the occurrence of cultural acculturation in the surrounding community due to the entry of foreign tourists; it can be seen in the attitude of the people who tend to be proud of foreign culture than their native culture, then the apathy of the people who are indifferent suggestions in the form of a saga which according to the community is nothing more than the surroundings bedtime stories. These tales have philosophical values and profound history; every saga has a message that should be respected and implemented by the community. But, cause an indifferent attitude of the community due to low awareness, resulting in the values of the local wisdom being no longer heeded by the community

CONCLUSION

Based on the discussion results, it can be concluded that the cause of conflicts between estuarine crocodiles and humans in Pulau Banyak tourism, according to several of Max Weber's theories, is caused by changes in people's behavior that lead to changes in social action. The social action referred to continuously hunting by the community against lizards, which resulted in a decline in the lizard population and a surge in the crocodile population. The surge in the crocodile population affects the availability of food that exists in nature and is unable to meet the needs of crocodiles, impacting living things in the area. In

addition, expansion of the hunting area conducted by crocodiles with the intention of their daily consumption needs impacted the entry of crocodiles into community residential areas and increase the spread of crocodiles in the tourist area that contact with humans, and caused several acts of aggression what estuarine crocodiles do to humans.

Recommendation

According to the conclusions that have been formulated regarding the problem in this research, the suggestions that can be given are: The Public must stop hunting lizards to able to suppress the crocodile population and restore the balance of the ecosystem in the Banyak Islands tourist area to minimize conflict between humans and crocodiles. Moreover, it is hoped that the commonality will obey and uphold the values of local wisdom of preserving the natural environment. The government that an active role in providing socialization to raise public awareness about sustainability and symbiosis between humans and nature. Moreover, the government must map tourism safe zones and educate both the community and tourists who visit about the concept of ecotourism that can be applied to develop tourism in Pulau Banyak Aceh Singkil.

REFERENCES

1. Agusriadi, A., Mulyadi, A., & Nasution, S. (2014). Study of Marine Ecotourism Potential in Balai Island Aceh Singkil Regency of Aceh Province (Unpubshled Dissertation). Riau University, Riau.
2. Dinas Kelautan and Perikanan Kabupaten Aceh Singkil 2012. (2012). Aceh Singkil dalam Angka. Aceh Singkil: Dinas Kelautan and Perikanan Kabupaten Aceh Singkil.
3. <https://aceh.tribunnews.com/2020/10/23/wow-muara-singkil-jadi-tempat-buaya-bersarangsetiap-15-kilometer-terdapat-1-ekor-buaya>, published on Friday, 23rd October 2020.
4. Interview with Herlian, Resident of Pulau Haloban Pulau Banyak Barat Aceh Singkil Regency on 15th June 2022.
5. Interview with Yuhdi Fahrimal, Resident of Kuala Baro Aceh Singkil Regency on 6th June 2022.
6. Juni, H. (2002). Budidaya and Pelestarian Buaya Air Tawar Irian (*Crocodylus novaeguineae*) (Unpublished Thesis). Fakultas Kedokteran Hewan, Institut Pertanian Bogor
7. Kartikasari, H., Oktantia, A. B., & Sadewo, F. X. S. (2022). Konstruksi Masyarakat tentang Penerapan Protokol Kesehatan Pada Masa Pandemi Covid-19. *Community: Pengawas Dinamika Sosial*, 8(1), 11-22.
8. Koroy, K., Yulianda, F., & Butet, N. A. (2017). Pengembangan Ekowisata Bahari Berbasis Sumberdaya Pulau-pulau Kecil di Pulau Sayafi and Liwo, Kabupaten Halmahera Tengah. *Jurnal Teknologi Perikanan and Kelautan*, 8(1), 1-17.
9. Maharani, R. (2020). Analisis Pandangan Masyarakat Terhadap Budaya Berpakaian Wisatawan Mancanegara Pada Objek Wisata Pulau Banyak Kabupaten Aceh Singkil (Unpublished Dissertation). Universitas Negeri Medan, Medan.
10. Oktwo, D. L. R. B. (2018). Pengelolaan Buaya Muara (*Crocodylus porosus*) and Tingkat Kejesaheraan di Taman Buaya Asam Kumbang Sumatera Utara.
11. Perwirawati, E., & Juprianto, J. (2019). Strategi Komunikasi Pemasaran Pariwisata Kemaritiman Dalam Meningkatkan Kunjungan Wisatawan Di Pulau Banyak. *Jurnal Darma Agung*, 27(1), 871-883.
12. Santoso, J. (1998). Pengaruh Sumber Protein and Minyak dalam Ransum Terhadap Jumlah and Komposisi Asam Amino and Asam Lemak Otak Serta Kemampuan Belajar Tikus Percobaan.