



# Environmental Assessment of The Existence of The Tourism Village of Nagori Sait Buttu Saribu

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**Abstract :** Nagori Sait Buttu Saribu has been designated as the Sait Buttu Tourism Village since 2021. The existence of a Tourism Village affects physical aspects, one of which is land change. In order for the environment in the Sait Buttu area to be maintained and beneficial for life in a sustainable manner, appropriate and wise management efforts are needed. In order for environmental functions to survive sustainably, it is necessary to protect and manage the environment wisely and seriously through the implementation of programs that are carried out consistently and intensively. This village has a sympathetic project waste bank group whose management empowers housewives, by utilizing residents' waste into tourism products such as bags, key chains, flowers, tissue holders to add economic value to the village. This Tourism Village also has a sport tourism attraction by utilizing the tea garden as a track. , this tourism village also has coffee education from seedling to harvest and coffee brewing. In addition to enjoying honey, tourists can also do bee sting therapy to treat several diseases such as stroke, stomach acid, etc. according to acupuncture points and pain points

**IndexTerms - Environmental assessment, Tourism villageg, Waste Bank.**

## INTRODUCTION

The environment is the space occupied by humans and everything in it. There are 2 types of environment, namely the artificial environment and the natural environment. The artificial environment is an environment that is deliberately made by humans to meet their economic needs, for example such as reservoirs, agricultural land, plantations, mining, residential areas, and so on. While the natural environment is everything that exists in nature and was created by God so that humans can utilize and process it, such as mountains, lakes, forests, caves, rivers, beaches and so on (Kusmayadi, R. C. R. and Ahmad F. 2020).

In Law No. 32/2009 on Environmental Protection and Management states that everyone has the right to play a role in environmental protection and management. So that it is regulated how everyone plays a role in environmental protection and management and is required to maintain the preservation of environmental functions, and control pollution and / or environmental damage. The preservation of the natural human environment essentially establishes a harmonious relationship between the needs of human life and the available natural resources. Preserving nature does not mean that nature is left undisturbed, where humans do not attract any benefits. Preserving the natural environment must mean utilizing it continuously by always paying attention to the dynamics, pollution and productivity of these natural resources (Wulandari, A.D. 2017).

Nagori Sait Buttu Saribu has been designated as the Sait Buttu Tourism Village since 2021. From year to year it experiences better development. During this development period, there were many changes, both the behavior of the community and the surrounding environment. The existence of various kinds of training and socialization that must be received by the community will increase community knowledge and will change community behavior in everyday life.

The development of a tourist village is to preserve the natural environment and increase economic growth in an area so that by implementing the concept of a tourist village this is one form of tourism that is friendly to the environment in the future (Wulandari, A.D. 2017). Sait Buttu tourist village has the potential for natural resources, so it has a lot of potential for environmentally friendly tourist attractions that can be developed.

The development of tourist villages must also pay attention to aspects of sustainability, both in terms of economic, social and environmental aspects. One approach that can be used to integrate sustainability in the management of tourist villages is through Green Human Resource Management (HRM) which focuses on environmentally friendly human resource management (Murni et al., 2023). Green HRM is a human resource management approach that focuses on managing human resources based on

sustainability and environmental principles (Bangwal & Tiwari, 2015). In the context of tourism village development, Green HRM can play an important role in managing human resource potential in a sustainable manner (Ernawati et al., 2022), both in economic, social, and environmental aspects, so as to improve the overall quality of tourism village management (Hamzah & Irfan, 2018)..

## RESEARCH METHODOLOGY

The form of research conducted in this study is qualitative research, which is a research method based on the philosophy of positivism, used to research on natural object conditions, (as opposed to experiments) where the researcher is the key instrument, sampling of data sources is done purposively and snowball, collection techniques with triangulation, data analysis is inductive / qualitative, and qualitative research results emphasize meaning rather than generalization. This research uses descriptive method research, research that produces data in the form of written or spoken words from people and behaviors that can be observed. While the research procedure, which is an explanation of the steps that must be taken in this research, uses the procedure as stated by Moleong (2004) which includes three things, namely: (1) Pre-Field Stage, (2) Field Work Stage, and (3) Data Analysis Stage. Data analysis in research is done interactively. According to Sugiyono (2010: 246) that activities in qualitative data analysis are carried out interactively and take place continuously until completion. That is, in analyzing the data, researchers are directly involved in explaining and summarizing the data obtained by linking the theory used

## IV. RESULTS AND DISCUSSION

### Tourism Village Nagori Sait Buttu Saribu

Pamatang Sidamanik Sub-district is one of the sub-districts in Simalungun Regency. This sub-district is bordered by Panei/Dolok Pardamean sub-district to the north and Jorlang Hataran sub-district to the south. Then in the west it is bordered by Kecamatan Girsang Simpangan Bolon and in the east by Kecamatan Sidamanik. The area of Kecamatan Pamatang Sidamanik is 137.80 km<sup>2</sup>. This sub-district consists of 10 villages/nagori namely Sipolha Horison, Pematang Tambun Raya, Sihaporas, Jorlang Huluan, Bandar Manik, Sait Buttu Saribu, Pematang Sidamanik, Sarimattin, Simattin and Gorak (BPS, 2014). Pamatang Sidamanik sub-district is an area with an altitude between 950-1100 meters above sea level (Sihombing, B.H. and Meylida N. 2021).

The launching of Sait Buttu Tourism Village was carried out on December 4, 2021. Sait Buttu Saribu is one of the nagori in Pematang Sidamanik District, Simalungun Regency, North Sumatra province, Indonesia. Sait Buttu Tourism Village is located in Pamatang Sidamanik sub-district, this village has tourism objects that utilize local wisdom such as bee breeding, tea gardens, this tourism village also has coffee education from seedling to harvest and coffee brewing.

In addition to enjoying honey, tourists can also do bee sting therapy to treat several diseases such as stroke, stomach acid, etc. according to acupuncture points and pain points. Then, this village has a sympathetic project waste bank group whose management empowers housewives, by utilizing residents' waste into tourism products such as bags, key chains, flowers, tissue holders to add economic value to the village. This Tourism Village also has a sport tourism attraction by utilizing the tea garden as a track.

### Environmental Assessment of Sait Buttu Tourism Village Development

Along with changes in consumption patterns and population growth rates, waste has become an increasingly troubling by-product that has made Indonesia the second largest contributor of plastic waste after China (Restuningdiah, Nagari, Jati, & Azzardina, 2021). The increase in the type, volume and characteristics of diverse waste is a serious problem that requires concern from many parties. Law No. 18 of 2008 states that waste has become a national problem whose management needs to be carried out in a comprehensive and integrated manner from upstream to downstream so that it provides economic benefits, is healthy for the community and can change people's behavior (Law No. 18, 2008).

One of Pangulu's efforts to deal with waste in Nagori Sait Buttu Saribu, Sidamanik District, Simalungun Regency, made a program by establishing the "Bank Sampah Simpatik Project" (plastic waste management) where the management of the waste bank is as follows: Mrs. Darsini, S.Pd.I. as chairman, Tiamsih as secretary, Mijah as treasurer, as public relations consisting of 6 people, and 2 members of the management. This waste bank processing activity is fully carried out by women or housewives of Sait Buttu.

The sympathetic project waste bank group (Setda Inisiatif Mengurangi Sampah Plastik) has been active since November 2019. From the beginning of the group's formation, the activities carried out on waste were only collecting, manually sorting the collected waste. Then sold to waste collection agents or botot (Purba, T. Elfina O. P. D., Rolando S., Eko A. S., Irkham W., Djarot H. S., Jhonson A. M., Corry. 2023). Over time, the activities carried out have developed, namely not only sorting organic and non-organic waste but also processing it to produce products that have economic value. Organic waste is processed into liquid or solid compost, while non-organic waste is processed into handicrafts.





Figure 1. Waste processing; compost blocks for organic waste, and handicrafts for non-organic waste

Marketing of household waste processing products can be done through social media, door to door, and promotion at affordable prices to make this business sellable by the community. Partners are later expected to become a reference in the implementation of an independence program that can help improve the partner's economy. One of the partners of the Saitu Buttu sympathetic waste bank is Bank Indonesia. The establishment of the Sympathetic Waste Bank currently standing on the Nagori Sait Buttu asset land received assistance from the Bank Indonesia Representative Office of Pematang Siantar. Through the Social Program, Bank Indonesia built a building as a place for processing and sorting waste.

In Addition to Bank Indonesia, several other partners also provided equipment that could support the sustainability of the Simpatik Sait Buttu Waste Bank. The University of Simalungun through the community service program (Kosabangsa) provided a waste sorting machine, plastic felt machine, plastic shredding machine, and pyrolysis distillator machine. A three-wheeled vehicle to collect waste from residents' homes was one of the gifts from the Department of Environment and Forestry and Bank Indonesia.



Figure 2. The building established by Bank Indonesia through the Social Program for the Simpatik Project Sait Buttu Waste Bank.

Waste banks are the same as other banks such as banks that manage finances, so the organizational structure of waste banks should also be the same as other banks, such as directors, tellers, customer service, marketing and others. waste bank financial management. Waste banks must also have clear bookkeeping so that the financial circulation of waste banks can be maintained properly. One of the simplest bookkeeping that a waste bank can prepare is a customer passbook. So, every time a customer deposits their garbage, it must also be recorded directly in the customer's passbook. In addition to the customer passbook, the waste bank manager must also have a financial record. So all expenses and income earned by the waste bank must be recorded in the book (Khaira, M. Uswah H. and Isra H. 2020). The waste exchange rate provided by the Simpatik Project Waste Bank is plastic waste IDR 2000; books/paper IDR 1000; iron IDR 5,000; aluminum IDR 18,000; zinc IDR 500; and cans IDR 1,500.

### Takoma Honey Bee Farming

TAKOMA honeybee tourism is an edu-tourism-based tourism based on the science of beekeeping both from the cultivation process to the ready-to-eat process. This tourism belongs to a joint business group established in 2015, which was the beginning of concerns about the extinction of the honeybee ecosystem due to burning and the high use of pesticides in farmers' gardens. Armed with existing knowledge, education was carried out to the community to continue to preserve honey bees because bees are quite good pollinators for agricultural land (Rizal, 2019). This continued until many people eventually cultivated honey bees around their coffee plantations (Amri, 2015).

Until now, the development carried out in the educational concept at TAKOMA Honey Farm is based on: Education and introduction of honey bees with several types of bees namely: Apis cerana local bees, Apis melifera bees, Trigona thoracica, Trigona itama, Trigona apicalis, Tetragonula leviceps, Trigona bighami, Trigona vuvra cassiae, Trigona testa (funnel sun), Trigona sarawakensis, Trigona fimbriata (jinn tongue) and Trigona drescheri. Education about Bee therapy, namely Bee House Steam Therapy and Bee Sting Therapy, only for honey bee sting therapy to date at the point of general complaints only, with limited knowledge not yet at the stage of disease specialist therapy. Honey clinic education is a combination of honey and herbal

plants in order to strengthen the body's immunity from disease attacks. The above concept which will then be introduced in the future through schools and universities is expected to become one of the tour packages in Sait Buttu Saribu Village.

Honey bee tourism by Takoma is carried out by utilizing the potential of plants as the main food for honey bees. The plants around the honey bee farm do not grow naturally but are also planted. Takoma honey bee farming is unique because it is located on top of a hill. The name Takoma is taken from the words Talas, Coffee and Honey, where generally Sait Buttu Saribu residents earn income from the cultivation of these three products.



Figure 3. the potential of plants as food for honey bees

In addition, along the honey bee farming area, there is also a mountain spring pool that feels cool. tourists visiting Takoma, in addition to getting education about honey bee cultivation and also buying honey products, can also enjoy the natural swimming pool.



Figure 4. Takoma Nature Swimming Pool

### Environmental Assessment

The existence of a Tourism Village affects physical aspects, one of which is land change. The existence of the Tourism Village encourages the community to establish businesses that support tourism activities such as the construction of houses for homestays, food stalls, and grocery stores, as well as Rest Areas. Changes in land use activities that occur are due to the influence of the Tourism Village. Before becoming a Tourism Village, the land function was only as food stalls and grocery stores that served the surrounding community. After becoming a Tourism Village, the land use change was further developed by becoming a homestay area. The homestay was built because of the need for tourists to stay overnight, both tourists who only visit to stay overnight and tourists who take tour packages. Tourists visiting Sait Buttu Tourism Village spend some of their money at food stalls and grocery stores near the homestay to buy food, drinks, toiletries, and other necessities such as cigarettes. The increasing number of consumers encourages the community to continue to develop the business.

Sait Buttu tourist village is an area that has a unique ecosystem and affects various aspects of life in the surrounding area. In order for the environment in the Sait Buttu area to be maintained and beneficial for life in a sustainable manner, appropriate and wise management efforts are needed. One of the management efforts can be done by empowering local communities through strengthening participation in environmental management and protection. The community has a very important role (Hadiwijoyo, Suryo S. 2012).

In order for environmental functions to survive sustainably, it is necessary to protect and manage the environment wisely and seriously through the implementation of programs that are carried out consistently and intensively. Go green is a program that basically seeks to green the earth which is currently experiencing global warming or global warming with real action through the disposal of our bad habits and instilling good awareness in our daily lives. Go green is an action or deed aimed at saving the earth from all human damage, where the way to save it is done with a program that focuses more on greening the environment. The go green program is also related to efforts to reduce the use of goods that we usually use with the aim of minimizing the increase in

waste from the remains of the goods we use so that our lifestyle is more environmentally friendly (Sutirto T. W. and Supariadi. 2017). Through the Simpatik Waste Bank developed and managed by residents of Nagori Sait Buttu, it is a form of go green program by maximizing the management and processing of waste, especially inorganic waste into recycled products such as wallets, flower buckets, bags and others that can be used. Not only inorganic waste is processed, organic waste can also be processed into compost in both liquid and solid form.

Various efforts to preserve the environment will not be effective if they are not supported by the wider community, especially the local population. Local residents will support it if they can benefit from the sustainable environment, in the form of improved welfare. In their daily lives, there are still many people who are indifferent to the surrounding environment. Only the tourist attraction objects are maximally arranged and managed. However, the atmosphere and scenery of the village as a whole still seem ordinary, not reflecting that the village is a tourist attraction. The condition of the residents' yards is not neatly organized, the house fences are in the form of wild plants that are not maintained. The development process is often carried out only to pursue economic growth, without considering aspects of environmental sustainability, causing environmental damage.

### Acknowledgment

The preferred spelling of the word “acknowledgment” in America is without an “e” after the “g”. Avoid the tilted expression, “One of us (R.B.G.) thanks...”

Instead, try “R.B.G. thanks”. Put applicable sponsor acknowledgments here; DONOT place them on the first page of your paper or as a footnote.

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