

A Review of Strategic for the Development of the Paraman Ampalu – West Pasaman Regency Based on Physical and Economic Conditions

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ABSTRACT

This study aims to examine the physical aspects (geology and geomorphology, and economics, as well as strategic policy directions for the development of the Paraman Ampalu area in Gunung Tuleh Sub-district (SWOT). This literature topic will explain geological, geomorphological, and human conditions in economic development. The information presented is based on reliable sources, so it is expected to provide an accurate and comprehensive picture of the geography of the area.

KeyWords: Paraman Ampalu, Geology, Geomorphology, Socioeconomic, Strategic Development Direction.



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INTRODUCTION

West Sumatra is a province located in the western part of Indonesia which is very rich in natural beauty, not only in Indonesia it has even been recognized abroad, this can be proven through data on the number of visits by domestic and international tourists (Subagio, 2013; Hermon, 2020). Not only because of its natural beauty, there are indeed other purposes that make tourists come to this Minang Realm, namely because this area has long been used as a trade center between provinces, and also because of the culture of the Minangkabau people, who have always lived predominantly from trade.

When viewed from how long tourist activities are in West Sumatra, it is found that the shorter the duration of tourist visits (with an indicator of less than a week), the higher tourist expenditure will be, the longer the duration of visits (with indicators of more than a week) makes it lower tourist expenditure figures (Asmoro, 2020). The reason is that generally, tourists who linger in West Sumatra will usually stay at the homes of friends or relatives. The total expenditure of domestic tourists in West Sumatra was recorded at IDR 4.9 trillion, while for foreign tourists it was IDR 170.79 billion per year (Hermon, 2016; Nurhasnah & Rozalinda, 2018).

In this literature review, researchers will take the boundaries of the study area on the outskirts of West Sumatra Province which is directly adjacent to North Sumatra Province, namely in the KeNagarian Rabi Jonggor area, Gunung Tuleh Sub-district, West Pasaman Regency, West Sumatra Province, to be precise, in Paraman Ampalu Area (Taufikri, 2022). In this area, there is a natural panorama of the hills in the form of natural forest which of course still has a wealth of animal origin. But unfortunately, the existence of natural wealth and the beauty of this natural panorama, goes without good management and management, by the local government or private parties. While the visits of tourists who come every year and even every month are increasing day by day. The worry is when the precious natural beauty will be damaged in the long run by irresponsible hands if it is

not managed properly and not managed by the right hands. From a social perspective, Paraman Ampalu Area has the culture and customs of a combination of Mandahiliang, Minang, and Javanese ethnicities, of which 99% consist of Mandahiliang who always maintain order and good relations between residents and have a high sense of cooperation. According to history, in this *Nagari*, the *Lubis* clan has been appointed a king who has his autonomous power, which according to Mandahiliang customs is called "*Sanggar Sian Minang Unggeh Sian Tapanuli*". This is due to regional conditions, namely that this area is a Minang area, but the people who inhabit it are the Mandahiling people (Hannah, 2020).

The purpose of this literature review is to examine how the physical and economic aspects, as well as strategic policy directions for the development of the Paraman Ampalu area in Gunung Tuleh SUB-district. The topics that will be explained include geology, geomorphology, and humans in economic development. The information presented is based on reliable sources, so it is expected to provide an accurate and comprehensive picture of the geography of the area.

LITERATURE REVIEW FINDINGS

2.1 Geology

Based on its geographical position, West Pasaman Regency is crossed by the equator and has boundaries, to the north it is bordered by Mandailing Natal and Padang Lawas Regencies of North Sumatra Province, in the east it is bordered by Rokan Hulu Riau Province and Lima Puluh Kota Regency, in the south it is bordered by Agam Regency, and in the west it is bordered by West Pasaman Regency.

The geological condition or rock structure in Gunung Tuleh Sub-district affects the physical condition of this area. Based on the geological map of Gunung Tuleh Sub-district with a scale of 1:200,000 and conditions in the field, the rocks scattered in Gunung Tuleh Sub-district are: 1) The Kuantan Formation (Puku), which is the oldest rock covered in the study area, is metasediment and slate that spreads to the northwest, southeast, and southwest, consisting of slate, quartzite, and meta quartz arenite, this formation is of Paleozoic Permo-Carbon age; and 2) Undifferentiated volcanic rock unit (Tmv), composed of volcanic rock layers and does not indicate a source of volcanic eruptions, Miocene age and spread in the center, west, and north of the study area. West Pasaman Regency has very unique geological conditions and has several active volcanoes including:

Mount Talamau

Mount Talamau or also called Mount Ophir is the highest mountain in West Sumatra which is located in West Pasaman Regency, side by side with Mount Pasaman. This mountain has a height of 2,920 m and is included in the type of inactive volcano. Under the top of the mountain at an altitude of about 2,750 m, there are 13 lakes.

Mount Talamau also has a waterfall with a height of more than 100 m, named Puti Lenggo Geni Waterfall. Mount Talamau has 3 peaks namely Trimarta Peak (main/highest peak), Rajawali Peak, and Rajo Dewa Peak. Mount Talamau is recorded as the site of the geopark area in West Pasaman Regency, West Sumatra Province. This mountain has been visited by many tourists, especially nature lovers and mountaineers. Different from other mountains in West Sumatra, Talamau has a beautiful natural charm in the form of thirteen lakes above its peak. These thirteen lakes keep various mystical stories that are still alive in the community.

Behind its natural beauty, Mount Talamau still has many stories that have yet to be revealed. Colonial period historical records mention Mount Talamau as Mount Ophir with the highest peak named Tella Maau or Talakmau. Newman van Padang (1940) states that this mountain has one body but has three peaks which are now known as Mount Talamau as the highest peak, next is Mount Pasaman and lastly is Mount Malintang.

Mount Pasaman

Mount Pasaman is a mountain located in West Pasaman Regency, West Sumatra Province, side by side with Mount Talamau. This mountain is included in the type of inactive volcano, also known as Puncak Rajo Imbang Langik, taken from the name of the king who once ruled in the area in ancient times (Santoso, 2018). Geographically, West Pasaman Regency is located between 00° 33' North Latitude to 00° 11' South Latitude and 99° 10' to 100° 04' East Longitude. In general, the topography of West Pasaman Regency is flat and slightly undulating, while hilly and mountainous areas are only found in Talamau and Gunung Tuleh Sub-district. The altitude of the area varies from 0 to 913 m above sea level. Flat areas with a slope of 0-3%, flat wavy with a slope of 3-8%, wavy and wavy with a slope of 8% -15%, and mountainous hill areas with slopes above 15%.

2.2 Geomorfology

There is a morphology in the area of the Gunung Tuleh sub-district which has an area of 163.99 km². The Ascension Bar has a flow length of approximately 10 km. The Batang Naik area is used by residents as a place for sand mining, human activities, and also for disposal of industrial waste from the residents' gardens on the left and right sides of the river. The existence of these activities affects the organisms that live at the bottom of the waters, one of which is Benthos. The purpose of this study was to determine the composition of the benthic genus and determine the physicochemical factors. Land use according to the type of use in Pasaman Regency is dominated by forest with an area of 190,433.00 ha or 48.24% of the total area in Pasaman Regency. While the smallest land use by type of use is in industrial areas, namely 30.70 ha or 0.01% of the total land area (Edy *et al.*, 2022). The Batang Naik Watershed is the main watershed in Gunung Tuleh Sub-district which can be divided into 7 landform units (geomorphology), namely: 1) alluvial plain landform; 2) volcanic alluvial plains; 3) volcanic downslope; 4) volcanic foot slopes; 5) volcanic middle slope; 6) oxbow lake/horseshoe lake; and 7) karst hills. The landform will distinguish land use changes that occur in each landform (Van Zuidam, 1983; Van Zuidam, 1979; Verstappen, 2011) in Gunung Tuleh Sub-district .

2.3 Economic

Gunung Tuleh Sub-district is one of the sub-districts in West Pasaman Regency, West Sumatra. This Regency is located 00°30'-00°11' North Latitude and 99°40'-99° 53' East Longitude. Based on its geographical position, Gunung Tuleh Sub-district has territorial boundaries, namely, to the north it is bordered by North Sumatra Province, to the south by Pasaman Sub-district, to the west by Lembah Melintang District, to the east by Talamau District and Pasaman Regency. Gunung Tuleh Sub-district has an area of 453.97 km². Gunung Tuleh Sub-district is located 26-1,875 m above sea level, crossed by 14 rivers. In general, the people in Gunung Tuleh Sub-district have a living as farmers, this is by the condition of the land in Gunung Tuleh Sub-district, namely agricultural land such as rice fields, fields, and gardens. Some people grow rice, corn, and vegetables, and some do gardening such as rubber, cacao, and oil palm plantations, and the community's agricultural

land as a whole is about 2 km², and the land owned by each head of the family is about 1 ha, and some families do not have agricultural land to cultivate or plant, so to meet their daily needs they work as laborers in other people's places.

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2.4 Strategic policy directions for the development

In the educational forest "Simpang Lolo" you can also find various uniqueness such as the existence of a spring, for example, Batang Kanaikan. Where this watershed is very necessary for people's lives in West Pasaman Regency in general and the people of Mount Tuleh in particular. This hot spring is also found in the Simpang Lolo educational forest. Some people have started to use it for medicine for various diseases. Various trees are currently very few available, such as patchouli. Besides that, the customs around the "Simpang Lolo" educational forest are also very unique, a blend of Minang, Javanese, and Mandailing Nata cultures. Types of tourism that can be done in the Simpang Lolo Educational Forest include tracking, hiking, camping, educational tours, bird watching, and so on.

Using the SWOT analysis, the indicators from the *Internal Factor Analysis Summary* (IFAS) are determined, namely strengths and weaknesses. On the strength factor, the following results are obtained (Marimin, 2005). First, the "Simpang Lolo" Educational Forest has high natural beauty making it ideal for educational tourism with a score of 2.50 (23% of the total strength indicators studied). Second, adequate local accessibility is supported by good road conditions to the location from the center of the provincial capital. This accessibility score is 1.33 (12% of the total strength indicators studied). Third, support from the community gets a score of 1.00 (9.2% of the total strength indicators studied). Fourth, there are customary forest areas that are highly guarded by the community with a score of 2.00 (18% of the total strength indicators studied). Fifth, the availability of abundant clean water (many watersheds along the road to the "Simpang Lolo" Educational Forest tour) obtained a score of 1.50 (14% of the total strength indicators studied) and sixth, there are various tourist objects in the forest tourism area. education "Lolo Intersection" obtained a score of 2.50 (23% of the total strength indicators studied).

Besides the strengths of this tourism forest, it also has weaknesses as follows. First, the high level of erosion towards the educational forest area obtained a score of 2.00 (24% of the total weakness indicators studied). Second, inadequate facilities and infrastructure

obtained a score of 2.00 (24% of the total weakness indicators studied). Third, not having received legality from the government obtained a score of 1.67 (20% of the total weakness indicators studied). Fourth, limited communication/signal/internet networks obtained a score of 1.00 (12% of the total weakness indicators studied). Fifth, limited human resource management obtained a score of 1.33 (16% of the total weakness indicators studied). And sixth, the distance to the provincial capital which is quite far (the relative distance is 5 hours) obtained a score of 0.33 (4% of the total weakness indicators studied). So the IFAS matrix obtained a value of 2.50.

On the external matrix, indicators of opportunities and threats are analyzed. The opportunity indicators are as follows. First, this educational tour is feasible for educational institutions in particular and the community in general, especially for natural laboratories with a score of 2.5 (30% of the total opportunity indicators studied). Second, it has the opportunity to create jobs for the surrounding community with a score of 2.50 (30% of the total opportunity indicators studied). Third, it has the opportunity to indirectly participate in conservation while inviting to protect the forest with a score of 1.33 (16% of the total opportunity indicators studied). Fourth, Has the opportunity to become a tourism icon in Gunung Tuleh Sub-district in West Pasaman with a score of 1.00 (12% of the total opportunity indicators studied). Fifth, it has decent DTWA potential with a score of 1.00 (12% of the total opportunity indicators studied). Apart from opportunities, other indicators of external factors are threats. The results of this study obtained the following results. First, the surrounding land has become the target of community farmer groups as company accomplices, with a score of 1.25 (23% of the total threat indicators studied). Second, the earthquake issue scored 2 (36% of the total threat indicators studied). Third, the potential for spatial use conflicts was obtained by a score of 0.75 (14% of the total threat indicators studied). Fourth, wild animal attacks scored 1.5 (27% of the total threat indicators studied).

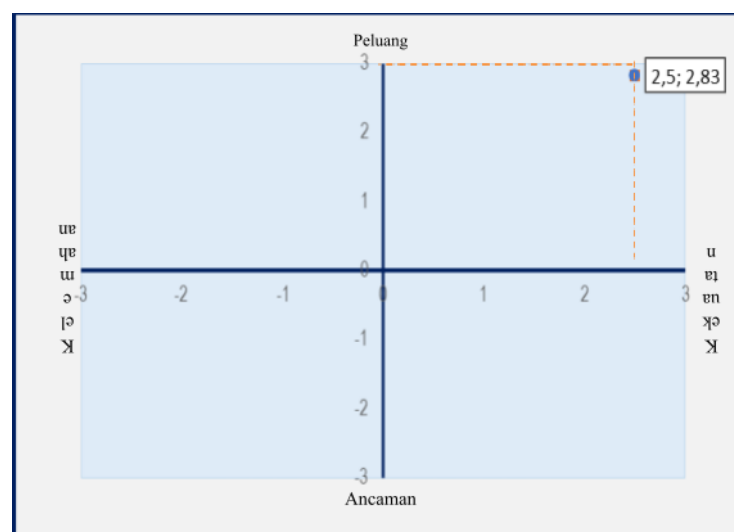


Figure 1. IFAS and EFAS Matrix

Through an analysis of the potential of the "Simpang Lolo" educational forest using the SWOT method with IFAS and External Factor Analysis Summary (IFAS and EFAS) classifications, it can be stated that the "Simpang Lolo" Educational Forest Tourism is very feasible to build and develop. This also shows that the "Simpang Lolo" Educational Forest has a fairly strong internal capacity and can carry out innovations and improvements to further enhance its internal resources. In its external capacity, the "Simpang Lolo" Educational Forest can respond to and take advantage of opportunities and threats in the tourism industry, especially in educational forest tours.

According to Rangkuti (2015), this Internal – External matrix has the aim of sharpening the analysis and seeing where the position of a region or even the company sees the direction of further development. This shows that the "Simpang Lolo" Educational Forest Tourism has a good development direction and will even get better if the manager can maintain and increase all the strengths he already has. Apart from that, the "Simpang Lolo" educational forest tour will further develop if it can manage the opportunities that exist. This analysis also shows that the Simpang Lolo forest can be one of the leading sectors that deserve to be considered as one of the sectors that can break the economy in West Pasaman Regency. The construction of accessibility or all facilities that support the "Simpang Lolo" Forest can also be included in the West Pasaman Regency Strategic Plan which is then poured into this year's or next year's work plan. It is very suitable to be included in the strategic plan because the strategic plan contains sharpening the Vision and Mission, Goals and Targets along with indicators of targets to be achieved within the next 5 (five) years.

CONCLUSIONS

The conclusions of this study vary depending on the results of the analysis found. However, the following are some possible conclusions that can be drawn from a strategic study of the development of an area based on physical and economic conditions: 1) Identification of Potentials and Opportunities: The study may identify the potentials that exist in West Pasaman Regency based on physical and economic aspects, such as resources nature, tourism, agriculture, or local industry. This conclusion can help governments and stakeholders develop sectors that have growth opportunities; 2) Challenges and Obstacles: The study may also identify challenges or obstacles in regional development, such as inadequate infrastructure, environmental problems, or problems within certain economic sectors. This conclusion can be used as a basis for formulating coping strategies; 3) Development Priorities: Based on analysis of physical and economic conditions, studies can produce recommendations regarding priority sectors that need attention in development efforts. This can help a more effective allocation of resources; 4) Sustainable Development Model: If the study pays attention to environmental and social aspects, conclusions can encourage the development of a sustainable development model that takes into account the balance between economic growth, social welfare, and environmental preservation; and 6) Collaboration and Partnerships: If the assessment identifies complex needs, conclusions can suggest the need for collaboration between government, the private sector, and local communities to achieve broader development goals.

REFERENCES

- Asmoro, A. Y. (2020). *Manajemen Usaha Perjalanan Wisata*. Madza Media.
- Edy, S., Priana, S. E., & Yusman, A. S. (2022). Tinjauan Perencanaan Saluran Primer Daerah Irigasi Di Tanjung Durian Kabupaten Pasaman Barat. *Ensiklopedia Research and Community Service Review*, 2(1), 220-226.
- Faizah, I., Umar, I., Iskarni, P., & Triyatno, T. (2023). Analysis of The Simpang Lolo Educational Forest Tourism Potential as an Alternative Tourism Development In the Gunung Tuleh Sub-District of West Pasaman District. *Sumatra Journal of Disaster, Geography and Geography Education*, 7(1), 49-54.

- Hannah, H. (2020). *Tradisi Magido Bantu dalam Pernikahan Masyarakat Mandailing di Jorong Tamiang Ampalu Kabupaten Pasaman Barat* (Doctoral dissertation, Universitas Islam Negeri Sumatera Utara Medan).
- Hermon, D. (2016). Arahan Kebijakan Pengembangan Pariwisata Pesisir Berbasis Perubahan Cadangan Karbon di Kabupaten Belitung Propinsi Kepulauan Bangka Belitung Indonesia.
- Hermon, D. (2020). Modification of Land Conservation on Agriculture Based on Environmental Mitigation in Biosequent Marapi. *Science and Environmental Journal for Postgraduate*, 3(1), 8-13.
- Marimin. (2005). Teknik dan Aplikasi : Pengambilan Keputusan Kriteria Majemuk. PT. Grasindo, Jakarta
- Nurhasnah, N., & Rozalinda, R. (2018). Industri wisata halal di Sumatera Barat: potensi, peluang dan tantangan pengembangan ekonomi daerah. *UIN IMAM BONJOL PADANG*.
- Rangkuti, F. (2015). *Personal SWOT analysis*. Gramedia Pustaka Utama.
- Santoso, B. (2018). Sejarah Perkembangan Bahasa Arab di Pulau Sumatera. *Jurnal Al-Fawa'id: Jurnal Agama dan Bahasa*, 8(1), 1-11.
- Subagio, A. (2013). *Go Go Indonesia; 101 Alasan Bangsa Jadi Anak Indonesia*. Cerdas Interaktif.
- Taufikri, T. (2022). *Pemetaan Destinasi Objek Wisata di Kabupaten Pasaman Barat* (Doctoral dissertation, Fakultas Ilmu Sosial).
- Van Zuidam, R. A. (1979). *Terrain analysis and classification using aerial photographs: a geomorphological approach* (No. 526.982 V3).
- Van Zuidam, R. A. (1983). *Guide to Geomorphologic aerial photographic interpretation and mapping*.
- Verstappen, H. T. (2011). Old and new trends in geomorphological and landform mapping. *Developments in earth surface processes*, 15, 13-38.