



# Potential of Orchid-Based Nature Tourism in the Traditional Zone of Lore Lindu National Park (Case Study of Karunia Village, Palolo District, Sigi Regency)

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**abstract** — This study aims to determine the feasibility of orchid-based nature tourism potential in the Traditional Zone of TNLL Karunia Village and determine the strategy of developing orchid-based nature tourism in the TNLL Zone of Karunia Village. The research was conducted through survey and interview activities which were completed with a list of questions (questionnaires). Determination of respondents is done intentionally (purposive sampling). Meanwhile, for data analysis, to determine the feasibility of orchid-based nature tourism potential in the Traditional Zone of TNLL, Karunia Village, the Analysis of Operation Areas for Natural Tourism Objects and Attractions (ADO-ODTWA) was used, while to determine the strategy for developing orchid-based nature tourism in the TNLL Zone. Based on the results of the research, it is known that the potential for orchid-based nature tourism in the Traditional Zone of TNLL Karunia Village deserves to be developed into a tourist destination because: (1) it has a tourist attraction in the form of an abundance of orchids both in nature and in captivity, the existence of unique and endemic flora and fauna, the existence of a river with protruding rocks, clear water and beautiful landscapes, a calm and comfortable atmosphere and many variations of tourist activities that can be done. (2) there are adequate minimal tourist facilities, and (3) relatively easy accessibility with fairly good road conditions.

**Keywords**— *Nature Tourism, Traditional Zone, Orchids*

## I. INTRODUCTION

The new paradigm for management of conservation areas today is to prioritize the role of the community as subjects in the management of forest areas (Wiratno, 2018). In 2018, the Directorate General of KSDAE of the Ministry of Environment and Forestry issued a conservation partnership policy. In the conservation partnership scheme, the community is given access rights in the Traditional Zone of the Lore Lindu National Park (TNLL), one of which is for the use and development of limited nature tourism.

The development of natural tourism is an effort to utilize conservation areas that prioritizes the utilization of environmental services. One of the goals is to increase the economic capacity and welfare of local communities. This activity is expected to reduce pressure on the area because it is replaced by tourism activities, as well as increase public awareness to maintain the sustainability of the TNLL area.

Karunia Village is one of the villages directly adjacent to the TNLL area. This village has extraordinary tourism potential, especially in the Traditional Zone of the TNLL, namely the abundance of orchid plants both in nature and in captivity. This potential is an extraordinary attraction for Karunia Village, so that this village is known as "Orchid Village". Many visitors come to this village with the aim of researching, studying, buying and selling or just enjoying the beauty of orchids both in nature and in captivity. According to Zein et al. (2019), in the Karunia Village TNLL area there are 18 types of orchids found in their natural habitat. Meanwhile, according to Fandani et al. (2018), there are 31 types of orchids found in community captivity.

In order to develop the tourism potential of orchids in the traditional zone, maintain the integrity and sustainability of the functions and benefits of the area, and realize the synergy between the management of the TNLL and the community, in 2020 a Conservation Partnership Cooperation Agreement was carried out between the TNLL and Karunia Village. In this conservation partnership cooperation scheme, the people of Karunia Village through the Village Conservation Management Agency (LPKD) are given access rights to an area of 100 Ha in the Traditional Zone of TNLL for several purposes including limited nature tourism activities based on orchid tourism (BBTNLL, 2020).

This is the basis for the importance of this research being carried out as an effort to provide input or suggestions and information to related parties for the development of nature tourism

based on orchids in the Traditional Zone of Lore Lindu National Park, Karunia Village. The formulation of the problem discussed in this study is how is the feasibility of the potential for orchid-based natural tourism in the Traditional Zone of the TNLL of Karunia Village? So in this study the aim was to determine the feasibility of the orchid-based natural tourism potential in the Karunia Village TNLL Traditional Zone.

## II. METHOD

This research was conducted in Karunia Village, Palolo District, Sigi Regency, Central Sulawesi Province. The time for the research starts in August 2021 until January 2022. The research data consists of two types, namely primary data

and secondary data. Primary data obtained from field observations and interviews with visitors. Research data

This is also supported by secondary data obtained from written literature studies that are relevant to the research topic.

Data analysis to determine the feasibility of potential orchid-based natural tourism uses the 2003 Analysis of Areas of Operation of Natural Tourism Objects and Attractions (ADO-ODTWA), by looking at several components, namely: tourist attraction components, accessibility components, as well as facilities and infrastructure components support.

### III. RESULTS AND DISCUSSIONS

#### Tourism Attraction Components

The results of respondents' assessment of the components of natural tourist attraction based on orchids in the Traditional Zone of TNLL,

The traditional TNLL of Karunia Village has a feasibility percentage of 78.5 % and is categorized as feasible for development.

Suwantoro (1997) explains that the attractiveness of a tourist location is the main reason for visitors to visit tourist sites in order to carry out tourism activities. Meanwhile, according to Yoeti (2016) each of these attractions has its own value and this value indicates how strong an attraction can attract visitors to visit a particular area.

The tourist attraction in the Traditional Zone of the TNLL of Karunia Village consists of elements of the uniqueness of natural resources, the number of prominent natural resources, the variety of types of tourism activities

nature that can be done, the cleanliness of the location of the object, and the convenience of tourism. The following is a discussion of the elements of the tourist attraction.

#### The Uniqueness of Natural Resources

The uniqueness of natural resources is a characteristic possessed by a tourist attraction that is different from other tourist objects. The uniqueness of natural resources is also a component of attraction that cannot be separated from the interest or disinterest of visitors to visit tourist sites (Barus et al, 2013). The existence of orchids, both grown in nature and cultivated in captivity, is the main attraction in the Karunia Village TNLL Traditional Zone. According to Clarissa and Halim (2019) orchids are a type of flower whose species grow naturally in Indonesia. Until now, orchids are very popular among Indonesian people because of their elegance and beauty. Therefore, orchids have an appeal both in terms of history and education. PutriRahadi (2017) states that the diversity of orchid species is a potential attraction and can be managed as a tourist attraction.

Several types of natural orchids can be easily found around the tourist route in the Traditional Zone in Karunia Village for both terrestrial (terrestrial) and tree (epiphytic) orchids. Meanwhile, cultivated orchids can be found in green houses owned by residents and orchid women's groups in the Traditional Zone of the TNLL area.

Several types of natural orchids that can be found in locations both grown naturally and in captivity include *Arundina graminifolia*, *Phaius tankervilleae*, *Calanthe* sp., *Agrostophyllum majus*, *Bulbophyllum* sp., *Dendrobium* sp., *Eria* sp., and *Liparis pallida*.

In addition to orchids, the uniqueness of natural resources in the Karunia Village TNLL Traditional Zone is the presence of unique flora and fauna that can be witnessed by visitors. Several types of unique flora that can be found besides orchids are the types of Semar Sacs (*Nepenthes* sp), several endemic species of Sulawesi plants such as the Leda Tree (*Eucalyptus deglupta*), Wangi Tree (*Pigafetta elata*), and Sulawesi Forest Pandan (*Pandanus sanasinorum*). As for the unique fauna that can be found are various kinds of birds, butterflies, and the Sulawesi black monkey (*Macaca tonkeana*). Aryanto (2015) states that the potential of flora and fauna in the form of species diversity is a potential asset to attract visitors. Meanwhile, according to Butarbutar and Soemarno (2013) the wealth of biodiversity, especially unique and endemic ones, is the main attraction for tourists visiting an area or region.

The next natural resource uniqueness is the existence of rivers and forests. There are 2 rivers that can be found, namely the Watubose River and the Saleh River. The Watubose River which flows in this location has an average cross section of 6.5 meters with an average depth of 60 cm. Meanwhile, the Saleh River is smaller with an average cross-section of 2.3 meters and a depth of about 30 cm. Both of these rivers have a fairly clear water flow, have a water discharge that is not too large and the depth of the river is safe enough for tourists to use, especially the Watubose River. The combination of river and forest makes this location very suitable as a location to relax, seek tranquility and take selfies. According to Oktaviantari (2019) rivers in nature are very suitable locations for seekers of serenity and peace of mind. The sound of a waterfall splashing, the gurgling flow of water and the singing of birds can soothe the heart and soothe the soul.

#### Outstanding Natural Resources

Natural resources that stand out are objects that are easily seen by visitors the first time they are in a natural tourism area (Barus, et al, 2013). Objects that are easy for visitors to see when they first arrive at the location will give a significant first impression for visitors to tours in the Karunia Village TNLL Traditional Zone. From the results of an assessment of the prominent natural resource components, the objects that are easy for visitors to see when they are in the Traditional Zone of Karunia TNLL for the first time are flora, fauna, water and rocks.

When entering the Karunia Village TNLL Traditional Zone for the first time, visitors will be presented with a view of the flora in the form of orchids in captivity owned by residents who are in the TNLL Traditional Zone. In the captive area there are many species of natural orchids that are bred and cultivated. Visitors can see, ask questions, take selfies or buy orchids cultivated by the community.

Next, visitors will be presented with a view of the TNLL forest ecosystem which is quite beautiful. On either side of the route visitors can see a variety of interesting flora such as

various kinds of natural orchids, several types of Sulawesi endemic flora such as the Leda Tree (*Eucalyptus deglupta*), Wanga Tree (*Pigafetta elata*), and Sulawesi Forest Pandanus (*Pandanus sanasinorum*) which grow quite a lot in the area. right and left lane. On the way visitors can usually see various types of butterflies both in groups and those that fly alone. When entering the forest visitors can hear various sounds of birds and insects. If lucky, visitors can see the endemic bird of Sulawesi hornbill (*Rhyticeros cassidix*) flying past.

After that, visitors will be presented with views of the Watubose River which in the local language means "Big Stone River" and the pious river with fairly clear water, protruding rocks, beautiful landscape and beautiful scenery.

#### Natural Tourism Activities That Can Be Done

Types of nature tourism activities are activities that can be carried out by visitors while in tourist areas. Tourism activities that can be carried out in the Karunia Village TNLL Traditional Zone are enjoying the beauty of nature, observing flora and fauna, trekking, educational or research tours, and camping.

Enjoying the beauty of nature is one of the activities that can be done in the Karunia Village TNLL Traditional Zone. The natural beauty that is still beautiful with fresh air and a calm atmosphere, makes the Karunia Village TNLL Traditional Zone very comfortable to use for hiking and enjoying the beauty of nature.

The next activity that can be carried out is observing flora and fauna such as observing natural orchids, observing endemic flora, and observing birds. Aryanto (2015) states that the potential of flora and fauna in the form of species diversity is a potential asset to attract visitors. Meanwhile, according to Butarbutar and Soemarno (2013) the wealth of biodiversity, especially unique and endemic ones, is the main attraction for tourists visiting an area or region.

Trekking is a long journey on foot from one place to another with paths that are rarely traveled by people and very little transportation. The trekking route in the Karunia Village TNLL Traditional Zone is quite good and is quite well known as the "Lindu T-junction". This trekking route is an old footpath connects Karunia Village with Lake Lindu and the surrounding villages. The condition of the trekking track is still very good and is still actively used.

Other activities that can be carried out are educational tours or educational tours. Educational tourism itself is a type of special interest tourism that is categorized according to certain motivations, where there is a combination of recreation and education. This type of tourism is also a study tour or knowledge visit trip (Suwanto, 1997). While Rodger (1998) says educational tourism is a program in which participants in tourism activities travel to a certain place in a group with the main goal of getting a learning experience directly related to the location visited. Educational tourism activities that can be carried out at this location include educational tours with orchids, endemic flora and fauna, and biodiversity.

Camping is one of the tourist activities that can be carried out in the Karunia Village TNLL Traditional Zone. There are several camping ground locations that are quite ideal for camping. According to Ardiyani (2013) camping or camping is the activity of staying temporarily in an open space with

specific aims, objectives and activities. Camping activities are carried out to protect oneself from extreme temperatures or disturbances by wild animals while continuing to carry out activities to fulfill basic needs and supporting needs. Camping activities are also part of recreational activities with the main goal of seeking pleasure.

#### Cleanliness of Tourist Attraction Locations

Cleanliness of the location of a tourist attraction is the freedom of an area of a tourist attraction from the influence of factors that interfere with tourist comfort. There are two hygiene factors location in the Karunia Village TNLL Traditional Zone, namely there is no influence from industry and no influence from busy roads.

The orchid-based nature tourism area in the Traditional Zone of the TNLL of Karunia Village is free from industrial influence because there are no large industries around it within a radius of several kilometers. In addition, the location of the TNLL Traditional Zone is far from busy roads so that the location is not affected by busy roads.

But on the other hand, the Karunia Village TNLL Traditional Zone is not yet free from the influence of human settlements, because in this location there are several settlements within the TNLL area. In addition, there is still trash, especially waste left over from community farming and plantation activities, as well as vandalism activities.

#### Comfort

A sense of comfort at tourist sites will increase the interest of visitors to revisit these tourist sites. The elements that cause the comfort factor at this location are clean and cool air, free from disturbing odors, free from noise and no disturbing traffic.

The Karunia Village TNLL Traditional Zone area is a tourist location that is quite comfortable with clean cool air, free from disturbing odors, free from noise, and no disturbing traffic. The Karunia Village TNLL Traditional Zone area is located far from large industries so there is no disturbing influence of waste in this area. Furqan et al (2021) mention that the presence of waste and an unpleasant odor can be one of the problems that disrupt tourism activities. In addition, the location of the TNLL Traditional Zone away from the main road makes it free from disturbing noise and traffic. Abdillah and Rahmini (2020) mention

the atmosphere of the tourist object provides comfort because the conditions are cool so that tourists feel comfortable free from disturbing odors.

#### Accessibility Component

Accessibility is a factor that makes it easier for visitors to travel from their place of residence to the location of the tourist object they will visit. These factors are very important in driving the market potential of an object. Accessibility discusses distance, road conditions, and travel time from the city center. To get to Karunia Village, it only takes 33 minutes from Sigi city by motorbike. Meanwhile, from Palu City, it takes 1 hour 25 minutes to travel .

What makes an area attractive to visitors is its location near the city center or far from the city center and whether travel to the area is easy and convenient, requires little effort, difficult or dangerous.

### Components of Supporting Facilities and Infrastructure

The role of supporting facilities and infrastructure is to make it easier for visitors to enjoy the potential and attractiveness of natural tourism. Means is one factor supporting factors that make it easier for visitors to enjoy tourist objects directly, while for infrastructure which is one of the supporting factors that make it easier for visitors to enjoy tourist objects indirectly. a public transport. The accommodation available is a local inn/guest house in Karunia Village with a capacity of around 4 visitors. While the existing public transportation is the Palolo-Palu public transportation that crosses Karunia Village where in one day there are about five routes.

For infrastructure which is one of the supporting factors that make it easier for visitors to enjoy tourist objects indirectly, within a 15 km radius it has a value of 30 where there are houses of worship (mosques and churches), health facilities, telephone networks, and electricity networks.

### Eligibility Index

After the object components and attractions of orchid-based nature tourism in the Karunia Village TNLL Traditional Zone are assessed, the results are then tabulated to see the feasibility index for the orchid-based nature tourism component in the Karunia Village TNLL Traditional Zone has an average value of 75.10%, which means Orchid-based nature tourism in the Traditional Zone of TNLL Desa Karunia deserves to be developed as a tourist destination. According to the Directorate General of PHKA (2003), an area is feasible to be developed into a tourist destination area if its components, namely the attractiveness component, the facilities and infrastructure component and the accessibility component have a feasibility percentage level of > 66.6%.

### IV. CONCLUSION

From the assessment of these guidelines, it can be concluded that orchid-based nature tourism in the Traditional Zone of TNLL of Karunia Village is feasible to be developed as a tourist destination area because: (1) it has a tourist attraction in the form of an abundance of orchids both in nature and in captivity, the presence of unique and endemic flora and fauna, the existence of a river with protruding rocks, clear water and beautiful landscape, a calm and comfortable atmosphere and a wide variety of tourist activities that can be carried out. (2) there are adequate minimum tourist facilities, and (3) relatively easy accessibility with fairly good road conditions.

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