Modern Nursery Ecotourism Infrastructure Master Plan in Nggorang Village, Labuan Bajo, NTT

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Abstract. The Ministry of Environment and Forestry of the Republic of Indonesia has a national program to meet domestic demand for wood with 1,000 nurseries and 51 modern nurseries throughout Indonesia. Nggorang Village was designated by the government as a Modern Nursery with a land area of 30 hectares. Nggorang village has a unique traditional village potential that is influenced by the Bugis and West Manggarai tribes, the combined with modern nurseries will add value to the village as a tourist village. As an initial step in the development of a modern nursery area as an ecotourism-based destination, it was proposed to have several supporting infrastructure and facilities such as a lobby building, souvenir center, gazebo and jogging track which are on the main route of the modern nursery area. The lobby building was located close to the main entrance of the modern nursery area with the adoption of the West Manggarai building model, namely Mbaru Niang. The souvenir center building is placed next to the lobby building, the building concept was adopted from the typology of the Bajo house. The jogging track will cross the main route in the modern nursery area. The length of the jogging track was 1500 meters. At several points along the jogging track, a gazebo was provided which used as a temporary rest area. The concept of a rest area was a gazebo with a thatched roof with a wooden structure to create a natural impression and blend with nature in the modern nursery area.

Keywords: Ecotourism, Modern Nursery, Nggorang, Labuan Bajo

Introduction

Ahead of the G20 Summit and the 2023 Asean Summit East Nusa Tenggara Province is one of the 19 Special Economic Zones (KEK) developed by the government and is also a super priority National Tourism Strategic Area (KSPN) in Indonesia [1][2]. The government supports the implementation of toll road infrastructure, ports, airports, railways, etc., provides facilities and incentives and facilitates investment [3]. In 2019-2020 the government has poured out 2T for the Labuan Bajo SEZ including 3A (Attractions, Accessibility, Amenities) Such as the arrangement of the Komodo National Park, the arrangement of Cultural DTW in Liang Ndara village, the arrangement of the Batu Cermin area. Accessibility includes upgrading the status of Komodo Airport to an International Airport, development of the tourist Marina area and the Labuan Bajo area as well as the construction of a national strategic road across North Flores (Labuan Bajo - Bari Reo). Southern Cross (Labuan Bajo – Warloka) [4].

Problems related to inadequate infrastructure still occur in Labuan Bajo. Based on initial research conducted by Master Program of Infrastructure and Environmental Engineering students an. Longginus Sinda and direct observations in the field, information was obtained that currently Nggorang Village has the potential in the form of beautiful landscapes and landscapes of rice fields. The existing infrastructure in Nggorang Village is quite good, but the infrastructure in the Modern Nursery area is not adequate and requires arrangement so that the community has not been able to carry out activities in the Nursery Location to increase income and is also safe for visitors [5]. From these conditions, it is necessary to identify the current condition of infrastructure and other infrastructure needs in an effort to realize the Modern Nursery as one of the destinations based on ecotourism.

One of the village plans that will be developed as an ecotourism-based village is the Modern Labuan Bajo nursery area which is included in the administrative area of Nggorang Village, Komodo sub-district. Here is the location of Nggorang Village Figure 1.



Figure 1. Map of the location of Nggorang Village

Based on the documentation of the survey results, information was obtained that currently in the modern nursery area located in Nggorang Village already has tourism potential, and the existing infrastructure is still relatively lacking [6]. The condition of the existing infrastructure facilities and infrastructure in the modern nursery area to be used as one of the ecotourism destinations in Labuan Bajo is not adequate and requires arrangement. Under these conditions, it is necessary to identify the current condition of infrastructure as well as other infrastructure development master plans in modern nursery areas in an effort to realize modern nurseries as one of the ecotourism-based destinations.

Method

The method of implementing the activity begins with collecting initial data and interviews with related parties to find out the existing tourism supporting infrastructure and potential tourist objects in the modern nursery area in Nggorang Village. This activity is expected to obtain information on the conditions and expectations of the people of Nggorang Village regarding the infrastructure needed

in an effort to realize a modern nursery area located in Nggorang Village as an ecotourism-based destination. The discussion was carried out to obtain information on infrastructure needs to support the modern nursery area located in Nggorang Village as an ecotourism-based destination. Discussions were held with the Nggorang Village Head, Nggorang village officials, and community leaders to obtain an overview of the plan for developing the modern nursery area of Labuan Bajo as an ecotourism-based destination as shown in Figure 2. Important information that is expected to be obtained at this stage are; 1) Potential of Nggorang Village, 2) Development plans, 3) Infrastructure needs [7].



Figure 2. Documentation of Discussions with the Nggorang Village Community

The measurement plan for the Lobby and Information building is carried out directly in the field. In carrying out the measurements involving students as surveyor assistants. In carrying out the measurements, it was carried out with the team in the modern nursery location to discuss in the field regarding the lobby development plan and information. The measurement plan for the souvenir center building is carried out by direct measurements in the field. The implementation of the measurements involved students as surveyor assistants. with the team in the modern nursery to discuss in the field the plan to build a souvenir center as shown in Figure 3.



Figure 3. Arrangement of measurements for the Labuan Bajo Modern Nursery

Result and Discussion

The results of the initial discussion, several things were agreed upon, namely; 1) The master plan designed for community service activities is planning for the lobby building, souvenir center, gazebo and jogging track in this modern nursery area of Labuan Bajo. The purpose of this plan is to produce a lobby building design, souvenir center, gazebo and jogging track which can later be used as an ecotourism-based destination. Plans for the Loby building and souvenir center are placed near the landmarks of the modern nursery to make it easier for visitors to find out. As for the gazebo plan and jogging track, it is planned along the main route in the modern nursery area. This planning is also based on the proposal of the team that manages the modern nursery area in this case is PT. Eclat Gunung Arta and the villagers of Nggorang as shown in Figure 4.

The concept of the proposed design plan is to make the Lobby building close to the main entrance of the modern nursery area. this makes it easier for visitors to more easily get access and information about the modern nursery area. The concept of the building that will be designed as a lobby is an adoption of the typology of the Manggarai tribal house, namely Mbaru Niang, which is used as an icon of West Manggarai itself. The following is the proposed Lobby building plan concept as shown in Figure 5.

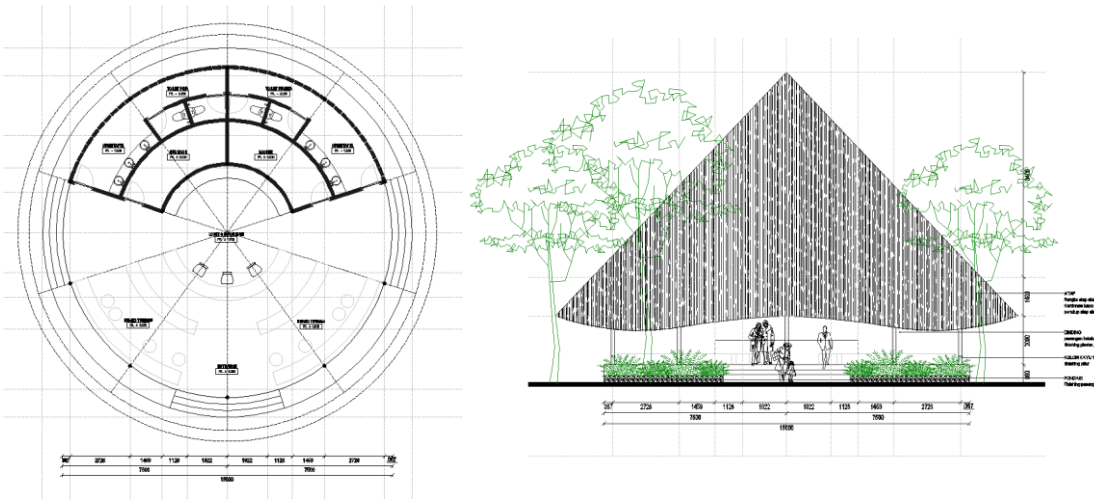


Figure 5. Plan and front view of the Lobby plan

The concept of the master plan proposed design is to make a jogging track along the main route of the modern nursery area as shown in Figure 6. Installation of paving blocks on the jogging track with pavement in the form of paving blocks and using sirtu to get a natural impression on the path as shown in Figure 7.

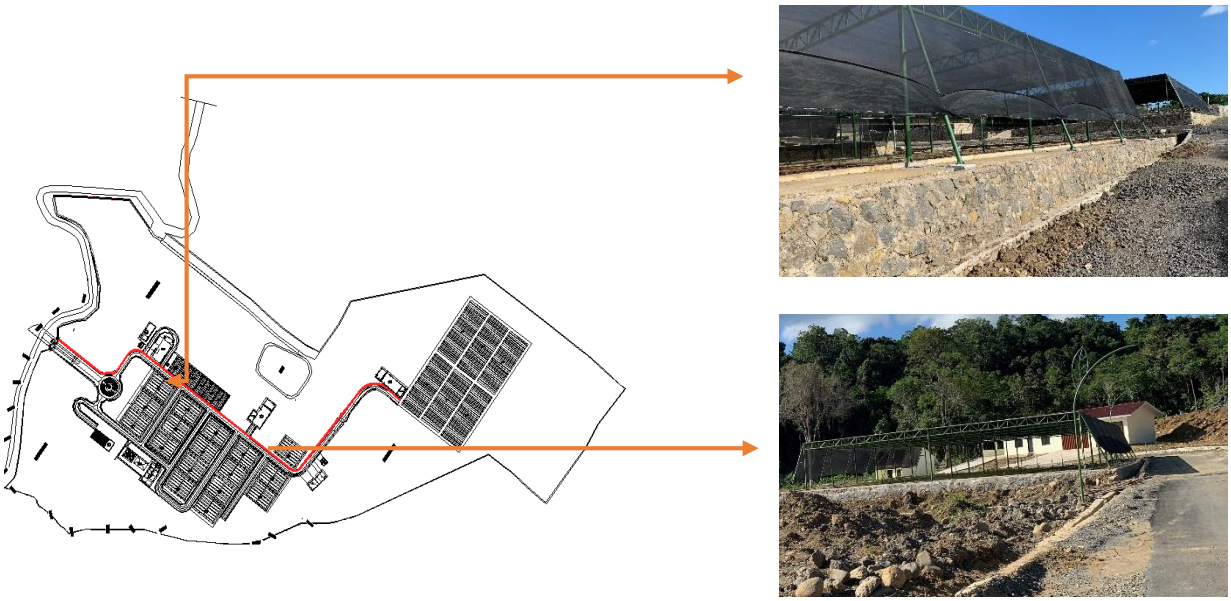


Figure 6. Master plan for jogging track

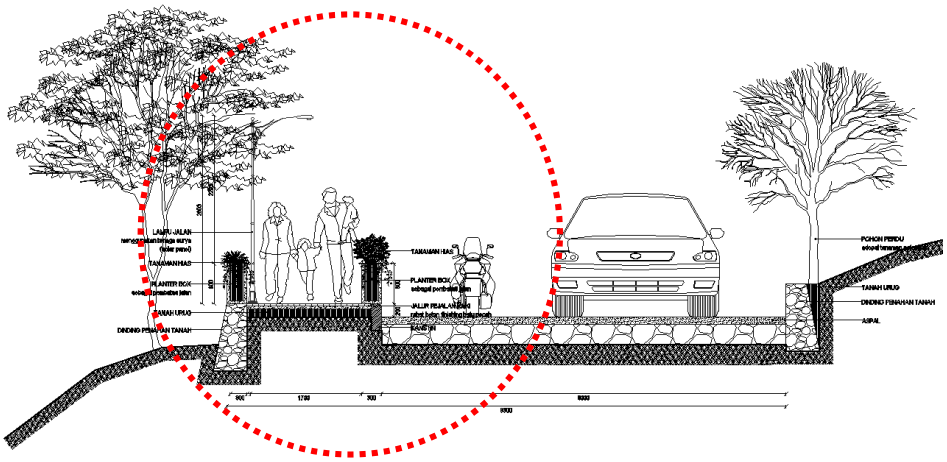


Figure 7. Jogging track structure

Several points along the jogging track are provided with gazebos which are used as temporary rest areas. The concept of a rest area is a gazebo with a thatched roof with a wooden structure to create a natural impression and blend with nature in the modern nursery area.

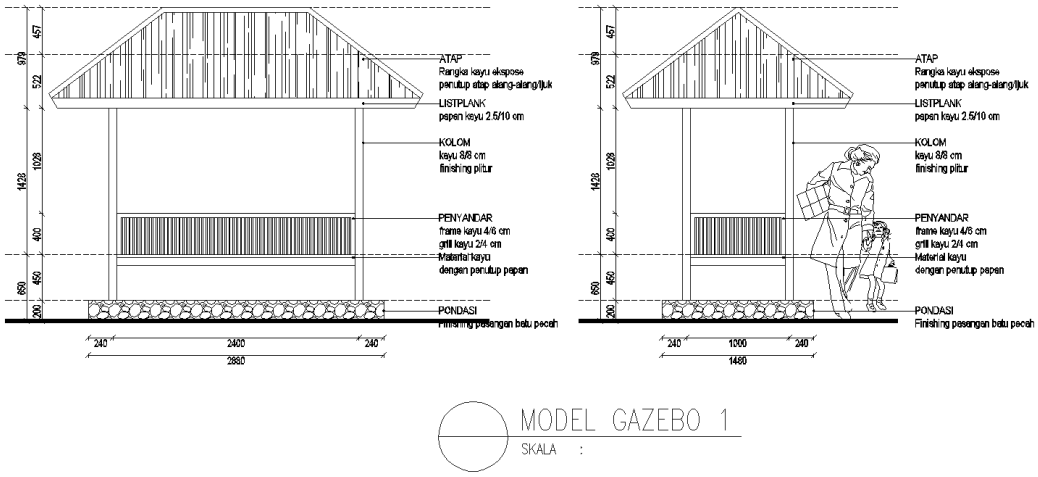


Figure 8. Gazebo view

In the long term, it is hoped that the people of Nggorang Village will explore the authentic cultural and handicraft potentials of the village.

Conclusion

The social and economic impacts resulting from the existence of this PKM cannot be measured because the dedication carried out is in the form of preparing a master plan to support the modern nursery area in Nggorang Village which has become one of the Ecotourism destinations. The impact that can be given to the community, especially the government of Nggorang Village and the management of the modern nursery area is that there are guidelines/references as directions in carrying out development and development to make the modern nursery area one of the ecotourism destinations in Labuan Bajo. If this design is later realized, the impact will be an increase in the economy of the Nggorang village community because it will bring in tourists due to the existence of ecotourism support facilities in this modern nursery area such as the existence of a lobby building, souvenir center, jogging track and gazebo which can support tourism activities.

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