

ADAPTATION OF LODOK LINGKO AS A MODEL FOR SUSTAINABLE TOURISM DEVELOPMENT IN THE REGENCY OF WEST MANGGARAI

Akib Hehanussa^{1*)}

Politeknik eLBajo Commodus, Labuan Bajo;
ak.hehanussa@gmail.com

I Nengah Dasi Astawa²

Universitas Pendidikan Nasional, Denpasar;
nengahdasiastawa@undiknas.ac.id

Mappiasse³

Politeknik eLBajo Commodus, Labuan Bajo
mappiasse800@gmail.com

ABSTRACT

The determination of Labuan Bajo as one of the Super Priority Tourism Destinations (SPTD) by the government has implications for the increase in the number of tourist visits to West Manggarai Regency, so a strategy is needed to ensure that the growth of the tourism sector remains oriented towards sustainability. This research was conducted with an exploratory qualitative approach, with a type of phenomenological research that aims to explore traditions Lingko Lodok as a model for sustainable tourism management in West Manggarai. The results of this study found that the tradition Lingko Lodok contains strategic values that are able to ensure a balance between cultural preservation, community welfare, and environmental sustainability. Lingko Lodok, as a spatial planning system based on local wisdom, has the potential to be an effective approach and model in integrating the principle of sustainability in tourism development. Through this study, it is hoped that this model can be implemented to optimize the tourism potential of West Manggarai while maintaining local cultural values.

Keywords: Lodok lingko; indigenous knowledge; sustainable tourism; Meler Village; Labuan Bajo; Komodo;

INTRODUCTION

West Manggarai, Flores, East Nusa Tenggara is famous for its diversity and beauty of tourism destinations, starting from Padar Island, Pink Beach, Manta Point, and Komodo Island which is famous for its magical and captivating Komodo (*Varanus komodoensis*) endemic animals. Several previous studies have reviewed the beauty of Manggarai Regency, especially those related to the beauty of Labuan

Bajo, such as; Hens et al., (2023), who conducted research on the potential and packaging of marine tourism in Komodo National Park. Khan et al., (2020) also conducted research with the aim of determining the tourism potential that will be managed by the community based on community perceptions. However, the cultural and traditional richness of the Manggarai community is also unique and has become a magnet for tourists, and also needs to be studied. One of the unique traditions that is full of philosophical values in Manggarai is the system of dividing customary land or customary land known as the tradition *Lodok Lingko*. *Lodok* means garden center or center point, and *Lingko* means area, field, land and garden (Lon et al., 2018). This tradition is not just a tradition of land division, more than that it contains important cultural, social and ecological values.

The various tourism attractions that are owned make tourists increasingly come to visit West Manggarai Regency and Flores in general. This can be seen in the level of tourist visits in West Manggarai Regency in the table below:

Table 1: Number Tourist Visits

No.	Year	Number of visits	Growth
1	2020	79,948	-
2	2021	142,965	78.82%.
3	2022	170,352	19.16%
4	2023	423,847	148.81%
5	2024	411,349	- 2.95%

Sources: Badan Pusat Statistik, 2025

Based on data from the Badan Pusat Statistik (BPS) as a central statistics agency of West Manggarai Regency in table 1, it can be seen that the trend of tourist visits from 2020 to 2024 shows a dynamic growth pattern with a significant increase in 2023 before experienced a slight decline in 2024. In 2021, the number of visits increased by 78.82% compared to the previous year, reflecting a fairly rapid recovery of the tourism sector. This trend continued in 2022 with a growth of 19.16%, although it slowed down compared to the previous year. A very significant increase occurred in 2023, where the number of visits jumped to 148.81% compared to 2022. However, in 2024, the number of visits experienced a slight decline of 2.95%, which could indicate a change in tourist trends, market saturation levels, or other external factors affecting tourist mobility

With the increasing flow of tourists coming to West Manggarai, efforts are needed to ensure that the growing tourism maintains sustainability in terms of economy, environment and socio-culture. Therefore, management based on local culture, such as *Lingko Lodok*, can be an appropriate model to create a balance management between cultural preservation, community welfare, and environmental sustainability. This study aims to explore how *Lodok Lingko* adaptation can be applied in sustainable tourism development, so that it can maximize tourism potential in West Manggarai while preserving local wisdom.

Sustainable tourism as defined by The World Tourism Organization (UNWTO) is tourism that fully takes into account the current and future economic, social and environmental impacts, responding to the needs of visitors, the (tourism) industry, the environment and the host local community (Permenparekraf Nomor 14 Tahun 2016, 2016). This means that sustainable tourism development is an integrated and organized effort to develop the quality of life by regulating the provision, development, utilization and maintenance of natural and cultural resources in a sustainable manner. Based on the context of sustainable development, sustainable tourism can be defined as tourism development that is in accordance with the needs of tourists while still showing environmental sustainability and providing benefits for both current and future generations. This can only be achieved through a good governance system with active and balanced participation between government, private sector, and community. Sustainable tourism development is not only related to environmental issues, but also issues of democracy, human rights and other broader issues (Sulistiyadi et al., 2017).

In the aspect of developing tourism potential, the government through the Ministry of Tourism and Creative Economy of the Republic of Indonesia, has carried out a concept called penta helix. The penta Helix concept is one of the strategies launched by the government in tourism development is through the use of the Pentahelix Model collaboration (Aribowo et al., 2018). The Pentahelix model was first launched by tourism minister Arief Yahya and outlined in the Ministerial Regulation (Permen) of Tourism of the Republic of Indonesia Number 14 of 2016 concerning Guidelines for Sustainable Tourism Destinations that to create orchestration and ensure the quality of activities, facilities, services, and to create experiences and value of tourism benefits in order to provide benefits and benefits to society and the environment, it is necessary to drive the tourism system through optimizing the role of business, government, community, academic, and media (BGCAM).

The components in the Pentahelix ABCGM model include; 1) Academics, acting as knowledge providers and conceptors. Academics contribute the latest theories and concepts relevant to the development of tourism potential in order to create competitive and sustainable advantages; 2) Businesses, functioning as enablers that create added value through economic activities and provide supporting infrastructure to ensure sustainable growth; 3) Community, acting as an accelerator in development. The community, as a group that has a direct concern and involvement in local issues, plays a role as a bridge between stakeholders in realizing common goals; 4) Government, has the role of regulator and supervisor. The government is responsible for formulating policies, regulations, and controlling the direction of tourism sector development; 5) Media, acts as an expander, which expands the reach of information and supports promotional activities through various communication channels, including digital media, in order to build a broader image and brand of tourist destinations.

From the participation and existence of the pentahelix above, as well as through their respective functions and authorities, each party is expected to be able to move the wheels of development and develop Indonesian tourism massively and sustainable tourism in order to improve the community's economy (Widodo, 2021). Several researchers have conducted research related to the penta helix concept with various objectives, including research conducted by Rochaeni et al., (2022), which concluded that the Pentahelix model in tourism development in Rongga District, West Bandung Regency has not run optimally. This is because collaboration between actors has not been running considering that there is still a tendency for actors to run independently, besides that there is still distrust between actors. Meanwhile, Aribowo et al., (2018) in his research states that the tourism industry as the largest foreign exchange earner, is often less than optimal in driving the economic sector where the lack of development of the tourism industry in the region often experiences obstacles due to lack of coordination between various elements. In the management and development of tourism, a coordination and collaboration between the government, tourism businesses, communities, academics, and the media is needed, called Pentahelix collaboration in developing tourism potential (Kementerian Koordinator Bidang Pembangunan Manusia dan Kebudayaan, 2021) The concept of penta helix should actually be a commitment and synergy between one element and another element is the main key, to develop the potential of a region specifically and Indonesia in general.

METHODOLOGY

This research was conducted in Meler Village, Manggarai Regency. Meler Village is one of the villages with a unique tradition of land distribution that has been going on for hundreds of years. This tradition is known as *Lingko Lodok*. The uniqueness of this tradition is reflected in the shape of the Manggarai people's rice fields which are shaped like a spider's web or what is called spiderweb ricefield. This uniqueness is the background for choosing Meler Village as a village or research location.

Data collection techniques are the most important step in research (Sugiyono, 2019). Nugraha, (2019) explains that at this stage the researcher collects data according to the questions and data needs, therefore the initial step in this research is carried out by conducting observations, namely the researcher goes directly to the field to observe the environment and social conditions of the Meler Village community, especially related to the application of local wisdom in daily activities as well as the views and attitudes of the community regarding *Lingko Lodok* as a local wisdom that must be preserved. (Sugiyono, 2019). Then, the researcher conducted direct (face-to-face interview) towards the informants, which consist of *Tua Golo*, Head of Meler Hamlet, and Head of Meler Village (key informant). Determining informants was done by determining key informants, then using the technique purposive sampling which has been determined based on

informant criteria with the aim of obtaining information related to traditions *Lingko Lodok* Meler Village (Creswell, 2016). The interview approach in this study used semi-structured interviews or what is known as in-depth interviews. Sugiyono (2019), explains that this type of interview is freer and broader, aiming to find problems more openly regarding the traditions of informants in Meler Village. The data collection process ends with documentation techniques, which are carried out by researchers to enrich data from various sources, such as scientific journals, website articles, newspapers, village documents, books, and activity reports that are relevant to this study.

The data sources in this study consist of primary and secondary data. The approach used in this study is exploratory qualitative, with the type of research applied being phenomenological research. The phenomenological approach was chosen because it is appropriate for understanding the meaning and essence of cultural experiences associated with traditions *Lingko Lodok* in Meler Village. With this approach, researchers will focus on the knowledge of the Meler Village community in understanding and implementing the tradition in daily life, as well as how it can be adapted into a sustainable tourism development model.

The Validity Technique used in this study is source triangulation. In source triangulation, data obtained from observation, interviews, and documentation are compared and verified to gain a more accurate and in-depth understanding. Through this technique, researchers can check the truth of information from various perspectives, thereby increasing the reliability and validity of the research results. After the data is collected, the data analysis technique used in this study is thematic analysis. Through thematic analysis, researchers will identify the main themes that emerge from the data that has been collected, especially related to local wisdom. *Lingko Lodok* and its adaptation potential in tourism development. These themes will be analyzed in depth to understand how these local cultural traditions can be integrated into sustainable tourism strategies, both from environmental, social and economic aspects.

RESULTS AND DISCUSSION

Meler Village is located in Cancar District, Manggarai Regency, East Nusa Tenggara, with an area of 165 ha (Meler Village Profile, 2013). Meler Village consists of 4 hamlets, one of which is Meler Hamlet which is the location of this research. Meler Village has a system of dividing rice fields or customary land that has been going on for 87 years since the year 1938, and is still implemented today. The land distribution was carried out by the ancestors of the Manggarai community in a centralized manner (*lodok*), with the zero point in the middle of the customary land to be divided. The division pattern the *lingko* done by drawing a long line from the center point which in Manggarai language is called the center of the garden (*lodok*) to the outermost area or called *cicing*. When viewed from above, the division of this land will resemble a spider's web. Another uniqueness in the

division system the *lingko* can also be seen from the division method which is done using the fingers or known as the term there is. The distribution of land to men is measured using the thumb, while the distribution to women uses the little finger. This shows that the Manggarai community still applies a patrilineal pattern in community life, namely inheritance of property is given to sons (Andaru & Jemarut, 2025; Latif et al., 1990).

Tradition *Lingko Lodok* for the Manggarai community, it is not just a ceremonial event, it is more than that *Lingko Lodok* contains philosophical values that are a guideline for the lives of the Manggarai people, starting from traditional plantation activities, the architecture of traditional houses (*Mbaru Gendang*), to the leadership values of the Meler Village community.

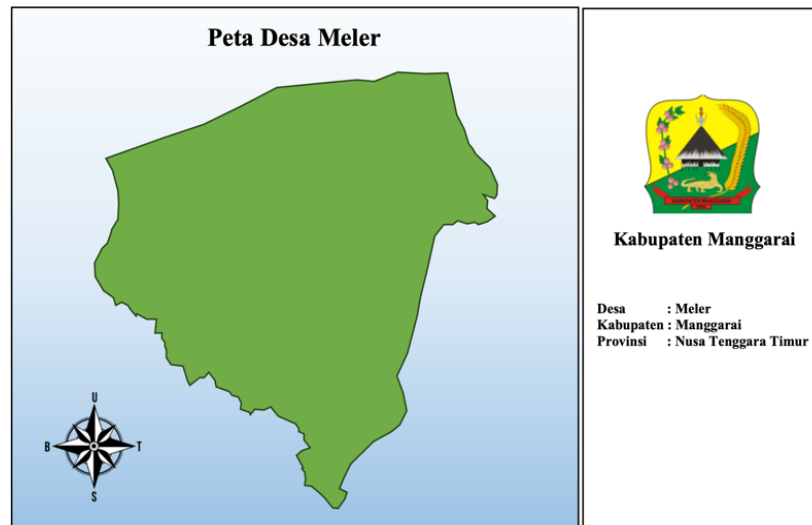


Figure 1: Map of Meler Village

In terms of understanding, *Lingko Lodok* interpreted as a traditional plantation land division system, which is circular in shape with four (4) parts as the initial form. These parts are then continuously divided again according to regeneration so that the *lingko* resembles a spider's web (spider web ricefield). In this study, this zone is a sustainable tourism zone or a destination zone that is a symbol and focus of development.

The Core Values of *Lodok Lingko*

The circle in tradition *Lodok Lingko* reflecting the values of effectiveness and close family in community life. This was conveyed by Mr. Mapetrus as the Customary Head (*Tua Golo*) of Meler Village. The circular pattern is said to make it easier for the community to organize the layout of the plantation, build fences, and manage the land collectively. The circular structure maximizes connectivity between community members and allows all parties to have equal access to resources, such as water and land. In addition, the circular shape also emphasizes the importance of mutual cooperation in carrying out joint tasks in the agricultural sector. Pattern of *Lodok Lingko* which forms spider web rice field can be seen in the following image.



Figure 2: *Lodok Lingko* Meler Village



Figure 3: Map of *Lodok Lingko*

Lingko Lodok was first made by the King of Manggarai named Aleksander Baruk in 1938 (Lon & Widyawati, 2020; Sumardi & Sukardja, 2017). “Currently, Meler Village has a number of the *lingko* as many as 18 *lodok*, which consists of 12 *lingko* in perfect circle, and 6 *lingko* half-circle, the half-circle of *lingko* is made because the previously reached the distribution limit”. As conveyed by *Tua Golo* of Meler Village. In principle, all local people get a share in opening the garden. The garden opening plan is usually determined one circle and decided based on beo deliberation. If the capacity circle does not correspond to the number of prospective cultivators, then *Tua Teno*’ will open the new *lingko* near by the first one as *pakep* (couple) and called *Saung Cue*. The circle which is opened for more than two gardens following to the population growth (Latif et al., 1990).

Lodok Lingko contains a broad meaning, including literal, social, and symbolic aspects. Literally, lodok circle refers to a spider's web-shaped rice field. Socially, rice fields lodok reflecting the customary order that strengthens solidarity in local communities. The rules in this land distribution system ensure that relations between community members remain harmonious, while maintaining the social structure that has been passed down from generation to generation. In the context of ritual, *lodok* ricefield not only functions as agricultural land, but also as a means to maintain the balance of human relations with *Mori Jari Dedek* (God), fellow human beings, nature, and ancestral spirits. From the meaning of these values, it can be concluded that the concept of division the *lingko* teaching the values of justice based on the proportion of needs and contributions. This will certainly be very effective if applied in the tourism industry in West Manggarai Regency, for example in the distribution of economic results fairly and evenly. In other words, if in the tradition the *lingko* the division is in the form of land, then in the context of the tourism industry this division can be in the form of distribution of economic benefits, job opportunities, opportunities, and local community involvement, which includes the government, local communities, business actors, and indigenous communities receiving a portion of the benefits based on their role in tourism management.

The Leader Role and Symbol in *Lodok Lingko*

As the holder of control in planning and managing development, the government and leaders have a strategic role in ensuring that the principles of justice and balance contained in the concept of *lodok lingko* can be adapted in various sectors, including tourism sector. With the right approach, this model can be the basis for a more inclusive policy, where the distribution of economic benefits and employment opportunities can be felt evenly by all levels of society.

In traditionthe *lingko*, the leader is depicted through the symbol of a tree called *Teno'* (*Melochia arborea/Melochia ef umbelata*), namely the tree which is the central point or *lodok* in land division. Trees there not only serves as the center of traditional spatial planning, but is also seen as a source of birth, symbolizing the origin of life and the continuity of the community. This tree has a straight shape and soft texture, reflecting the ideal character for a leader who is firm inprinciple but still protects with gentleness. Like a tree there which is the center of balance in the *lingko* system, a leader must also be able to be the axis that unites and prospers society, maintaining harmony between tradition, nature, and development. This concept is a reminder that a leader must be able to maintain a balance between firmness and wisdom in managing resources and ensuring collective prosperity.



Figure 4: *Teno'*

These principles must be applied and implemented in tourism development in West Manggarai. *Lodok* become core tourism areas, such as conservation areas, cultural parks, or tourism landmark locations, which are protected by strict regulations. All tourism activities must be centered on the preservation values of these areas.

The Manggarai people are a religious tribe. Long before Islam, Catholicism, Protestantism, and world religions were introduced to the Manggarai people in the early 20th century, this community already knew its own belief system. They have concepts about life, the relationship between humans and nature and beyond nature, have teachings of faith/belief, have various rituals to express their religious beliefs, have various sacred objects, symbols, places and times, have prayers and religious figures, and so on (Lon & Widyawati, 2020).

Lodok Lingko in Local Architecture

In the structure of the construction of traditional houses, the form and philosophy are also adapted the *lingko*. Home for the Manggarai people is a sacred place that is more than just a building (Erb, 1999 in Lon & Widyawati, 2020). In addition, Effendi et al., (2020) also conducted similar research which aims to describe the development of national education policies by uniting the main character values. As determined by the Indonesian Ministry of Education with cultural moral values *Lonto Leok* Manggarai society. Culture of *Lonto Leok* is one of the cultural heritages in Manggarai. The word "*Lonto leok*" consists of two words, namely "*lonto*" which means sitting and "*leok*" which means circle. So, *lonto leok* means sitting in a circle in a meeting and traditional ceremony (Verheijen, 1967 in Effendi et al., 2020). *Lonto leok* culture taking root from the culture. When looked up closely, the symbol of the traditional Manggarai house (*Mbaru Gendang*) circular shape, and agricultural land division model (*Lingko Lodok*) has a spider web-like shape (Dagur, 1997; Sutam, 2014 in Effendi et al., 2020). This can be seen more clearly in the following image:

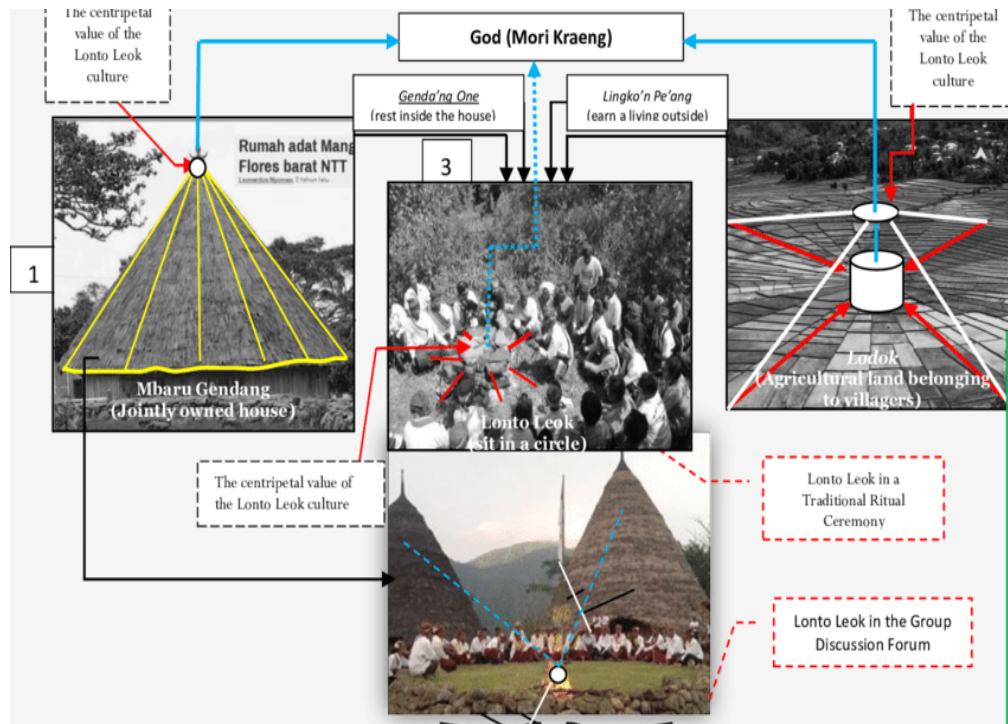
Figure 5: *Lonto Leok*

Figure 5 describing the social and cultural structure of the Manggarai community which is centered on the concept of Mori Kraeng (God) as the highest entity in their lives. This model shows the relationship between the three main elements in the Manggarai socio-cultural system, namely *Mbaru Gendang* (traditional house as the center of social and cultural life), *Lonto Leok* (tradition of deliberation in discussion forums), and *Lingko Lodok* (a communal-based agricultural land distribution system). The relationship between these elements forms a social, cultural, and economic balance in Manggarai society.

The left side of the image shows *Mbaru Gendang*, which is a traditional house belonging to an extended family that functions as a traditional center and a gathering place for community members for various ceremonies and traditional discussions. *Mbaru Gendang* a central role in the social life of the Manggarai people, reflecting communal values and traditional leadership. In the context of Manggarai culture, the existence of this traditional house is also a symbol of the strength and continuity of ancestral values.

In the middle of the image, there is an illustration *Lonto Leok*, a tradition of circular discussions that is the primary mechanism for collective decision-making. *Lonto Leok* not only functions in community discussion forums but also becomes part of traditional ceremonies. In this system, the Manggarai community bases decision-making on the principle of deliberation and consensus, which reflects local democracy that has been going on since ancient times. On the right side of the image, it is shown *Lodok Lingko*, namely a radial land distribution system that symbolizes the principle of justice in the management of natural resources. *Lodok Lingko*

reflects the philosophy of sustainability and togetherness in the use of agricultural land, where land is divided proportionally based on the needs of each community member. This system also has a spiritual dimension, because land is considered an ancestral heritage that must be managed wisely.

The relationship between these three elements shows how the Manggarai people build a socio-cultural system rooted in communal values, spirituality, and ecological balance. *Mbaru Gendang* as a center of traditional life, *Lonto Leok* as a mechanism of local democracy, and *Lingko Lodok* as a model of sustainable resource management becomes the main pillar in maintaining social and ecological harmony. This model can be an inspiration in the development of culture-based tourism that not only focuses on economic aspects but also maintains local values and ensures community involvement in the management process. The model based on *Lodok Lingko* can be a means of preserving culture as well as introducing local traditions and wisdom to the younger generation and tourists.

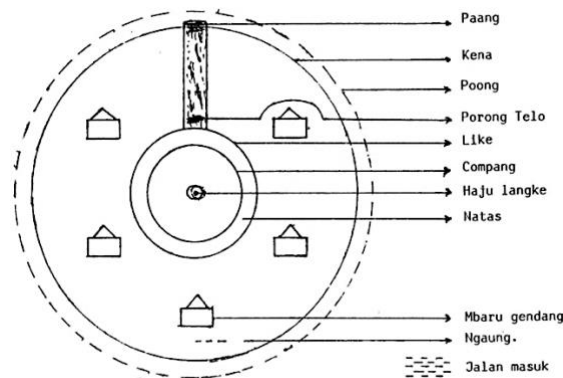


Figure 6: Village Patterns

Figure 6 describing a schematic representation of the spatial structure of the traditional Manggarai settlement. This structure has a similar concept to the system *Lodok Lingko* in the collective division of land and space, which is based on the principle of centralism and cosmological relationships between humans, nature, and ancestors. In the picture, the residential pattern is circular with the center functioning as the main element, most likely a *Compang* or stone altar for traditional rituals. From this center point, there is a concentric arrangement that reflects the social hierarchy and function of space in the community. Important elements seen in the picture include the *Compang* which is the center of traditional rituals as a place of respect for ancestors, *Natas* or empty land around the *Compang* which is used for traditional ceremonies and community meetings, and *Mbaru Gendang* or the main traditional house occupied by the traditional chief and functions as the center of decision-making. In addition, there is an entrance that shows access to the residential and the division of circular spaces such as *Paang*, *Kena*, *Poong*, *Porong Telo*, *Like*, and *Haju Langke* which have certain functions in the order of the community.

This residential concept has a close relationship with the system *Lingko Lodok*, especially in terms of spatial division patterns that are radial and community-based. One of the main relationships is the radial-centralistic pattern, where the same as *Lodok Lingko* which divides the land in a circle from one central point, this residential pattern also organizes space centrally with *Compang* as its epicenter. This structure reflects the value of balance in the relationship between humans, the environment, and customs. In addition, there is a philosophy of social order that shows how the Manggarai community builds an organized system based on customary law and local wisdom. Each member of the community has rights and obligations based on their position in the social structure, which is similar to the concept of land division in *Lodok*. The concept of sustainability and local wisdom is also a common thread that connects the two, where both systems *Lodok Lingko* and the spatial planning of this residential shows how the Manggarai community maintains a balance between culture, society and the environment. By understanding this relationship, the model *Lingko Lodok* can be used as an approach in managing sustainable tourism destinations, which not only considers economic aspects but also environmental sustainability and cultural preservation.

Lodok Lingko as a Model in Sustainable Tourism Development

The spatial structured patterns based on communal values can be an inspiration in developing destinations tourism that respects local values and involves the community in its management. This can also be a model in preserving and introducing Manggarai culture to the younger generation, so that the heritage of local wisdom is maintained in the dynamics of the development of the times. In general, it can be concluded that all traditions in the land of Manggarai always prioritize the involvement of the local community, thus creating a sense of ownership or sense of belonging the high one. This tradition can be used and become a relevant approach in developing tourism with the Community Based Tourism (CBT) concept, which encourages active participation of local communities. The Model of *Lodok Lingko* naturally conservation-based because the distribution pattern takes into account the availability of resources. This principle can be applied in the management of environmental carrying capacity.

Center point of *Lodok Lingko* reflecting centrality or depicting the zero point that is the center of the division of customary land, and reflecting the philosophy of centralized and universal coordination, the values of balance, justice, and harmony. These elements can certainly be the key to realizing a holistic distribution of benefits. can be a guide in building an inclusive tourism management system. Tradition of *Lodok Lingko* emphasizing the philosophical meanings of the life of the Manggarai people, namely: (1) togetherness, which is circular in shape with the center point as the center, effectiveness, and a symbol of leadership which is symbolized by the *teno* ' tree which is planted in the middle or center. This symbol means that all human activity on earth is centered on "*Mori Kraeng*"/God; (2)

agricultural land (*lodok*) which is shaped like a spider's web. This symbol means that human life on earth is always moving towards the center of life (centripetal), namely "*Mori Kraeng*" / God (Sutam, 2014 in Effendi et al., 2020).

The *Lodok Lingko* has the potential as a strong symbol of cultural identity. The existence of traditional rituals such as *tente* rituals creating a sense of belonging among local communities. In the context of tourism, these rituals can be adapted to strengthen cultural identity and attract tourists seeking authentic experiences. However, challenges arise when kinship values begin to fade due to modernization and changes in land use. Then, social and economic changes challenge the preservation of traditional values. Modernization and individualism can erode community solidarity, so strategies are needed to maintain a balance between cultural preservation and adaptation to change.

However, along with the development of the times, the symbolic meaning of sawah *lodok* has changed. In the past, this rice field was a symbol of unity that brought people together in traditional rituals related to the agricultural cycle and cooperation through mutual cooperation (*gotong royong or dodo*). Nowadays, these values are starting to fade due to various factors. The decline in culture of *dodo*, the conversion of land from rice fields to commodity plantations, and the increasingly rare implementation of agricultural rituals have led to the weakening of social ties that were previously maintained through this tradition.

This shift is influenced by internal and external factors. From the internal side, culture of *lonto leok* (deliberation) is starting to be done less often, while the role *Mbaru Gendang* as the center of social life are increasingly diminishing. From the external side, the entry of modern agricultural technology and the flow of modernization have pushed society towards a more pragmatic and individualistic direction, so that the values of togetherness that were previously inherent in tradition the *lingko* starting to shift (Sumardi & Sukardja, 2017).

By developing a sustainable tourism model that adapts this philosophy, it is hoped that will be able to create a balance between the 4 pillars of sustainable tourism, including the economic, socio-cultural, environmental and management pillars, as depicted in the model below:

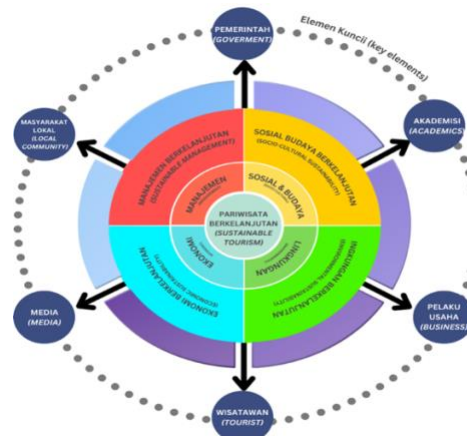


Figure 7. Model of *Lodok Lingko*

This model adapts the *Lodok Lingko* philosophy and is a development of the pentahelix model presented by the Ministry of Tourism and Creative Economy, Republic of Indonesia, as an approach to managing sustainable tourism. In this model there are 4 important aspects and 6 (hexa-helix) party indicators as key elements. Tourism sustainability is realized through a balance between management, socio-culture, economy, and environment, with support from various stakeholders. The concept of sustainable tourism, which is the core of this model, emphasizes that tourism development is not only oriented towards economic benefits, but must also pay attention to environmental and cultural sustainability, and actively involve the community in the process. Tourism sustainability in this model is based on four main pillars. Sustainable management emphasizes an effective and adaptive governance system to ensure that tourism activities do not damage the environment and local culture, with regulations that support sustainability and monitoring the impact of the tourism industry.

Sustainable socio-cultural aims to maintain local customs and cultural identities in tourism activities, while ensuring community involvement as the main subject in this industry. Sustainable economy emphasizes a fair distribution of economic benefits for local communities, by encouraging the growth of small and medium enterprises, ecotourism, and diversification of income sources. Meanwhile, Sustainable environment is an important element in maintaining the ecosystem and natural resources to remain sustainable, by implementing the principles of environmentally friendly tourism, such as the use of renewable energy, waste management, and carbon emission reduction. The successful implementation of this model depends on the involvement of six main stakeholders (key elements), namely government, academics, business actors, tourists, media, and local communities. The government acts as a regulator and policy supervisor, while academics provide research and education in the development of sustainable tourism innovations. Business actors are responsible for implementing environmentally and socially friendly business practices, while tourists have a role as service users who can contribute to sustainability with responsible behavior. The media is the main tool in promoting and educating about the importance of sustainable tourism, while local communities are the main guardians of culture and the environment, as well as direct beneficiaries of this industry.

This model reflects the philosophy of *Lodok Lingko*, where the resource management is carried out fairly and centered on balance. Like a spider's web pattern that spreads from the center, this concept emphasizes that tourism sustainability can only be achieved through harmony between management, culture, economy, and the environment by involving all stakeholders. By implementing this model, it is hoped that tourism in West Manggarai Regency can develop sustainably without damaging local wisdom and the environment, and still provide optimal economic benefits for the local community. Sustainable tourism development

model based on *Lodok Lingko* tradition is expected to not only function as an approach to sustainable tourism management, but also as a means to preserve and introduce culture to the younger generation. The philosophy of *Lodok Lingko*, which emphasizes balance, togetherness, and justice in resource management, can be the basis for education for the younger generation in understanding how local culture plays a role in sustainable development. In the context of tourism, this model can be used to introduce Manggarai cultural values, such as a communal-based land-sharing system, governance involving traditional figures, as well as harmonious relationships between humans and the environment.

As an educational effort, the younger generation can be involved in cultural tourism programs, local wisdom-based training, and digitalization of Manggarai history and traditions. With this involvement, they will not only understand the meaning behind the cultural heritage of *Lodok Lingko*, but will also be encouraged to develop innovations in its preservation, either through the use of technology, art, or community-based tourism business models. This model can also be integrated into the education system, either through formal curriculum or extracurricular activities, so that understanding of *Lodok Lingko* is not only theoretical, but also applied in everyday life, including in environmental management, strengthening cultural identity, and local economic development.

Some researchers also adapted *Lodok Lingko* in several other models, for example Lon's research (2020) in formulating a system that can be used as a solution to prevent human trafficking, especially for women (women trafficking) in Manggarai society. This system was developed by Yon based on on *Lodok lingko* tradition. According to Yon, *Lodok Lingko* is suitable to be a model for preventing human trafficking problems. This case can be prevented if all elements in society together to form a strong and complete unity against any attempt, no matter how small, to commit human trafficking (Lon, 2020).

Meanwhile, one company named JakLingko in Jakarta also adopted the same pattern. Conceptually, JakLingko and *Lodok Lingko* are two concepts that come from different contexts but have similarities in basic philosophy, namely integration and equal access. Both concepts emphasize connectivity and sustainability. Jak Lingko is an integrated transportation system in Jakarta that aims to connect various modes of public transportation to make them more accessible to the public. Meanwhile, *Lodok Lingko* reflects the principle of equal distribution of resources in the community. By implementing this model, the younger generation will not only become the successors of tradition, but also agents of change who play an active role in maintaining the balance between cultural preservation and sustainable innovation. Thus, tourism in West Manggarai Regency can develop not only as an economic sector, but also as a tool for education and social transformation that remains rooted in local culture.

CONCLUSION

The tradition of *Lodok Lingko* reflect philosophy balance, justice, and harmony that can be applied in the development of sustainable tourism. Centrality in the division of customary land illustrates centralized coordination that can be adapted in tourism management. This philosophy emphasizes the importance of fair and equitable distribution of benefits, which can be translated in the context of tourism as economic distribution, employment opportunities, and community involvement. The concept there in land distribution teaches justice based on the proportion of needs and contributions. In tourism, this means that all stakeholders, from the government, local communities, business actors, and tourists must benefit according to their roles. This approach is in line with Community Based Tourism (CBT) which encourages active participation of local communities, creates a sense of ownership, and ensures socio-cultural sustainability. The tourism development model is based on *Lodok Lingko* integrating indigenous philosophy, community management, and sustainability principles. This model not only serves as a guideline for cultural preservation, but also as a tool to empower local communities and protect the environment. With this comprehensive approach, the implementation of the model *Lodok Lingko* It is expected to support the balance between.

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