

I. INTRODUCTION

A. Background

With its rich culture and abundant biodiversity, Indonesia has been a popular tourist destination since the colonial era. Large-scale tourism development began in the 1960s and experienced rapid growth in the 1980s (Hampton & Jeyacheya, 2015). As an archipelago, Indonesia has a relatively beautiful coastal landscape that is not inferior to mainland tourism. Its attractions include coral reefs, mangrove forests, seagrass beds, and an ornamental fish population of around 263 species, a massive attraction for new marine tourism potential. (Masjhoer, 2019). Many tourists visit marine tourism to enjoy a vacation in the coastal area or small islands that offer the beauty of marine life. (Tranter et al., 2022). Several coastal areas in Indonesia have become prioritized for marine tourism in recent decades, such as Labuan Bajo, Lombok, Bali, and Raja Ampat. (Atmodjo et al., 2017; Lasso & Dahles, 2018; Prasetyo et al., 2020; Rosalina et al., 2023).

As one of the key sectors in the blue economy, marine tourism has become a driver of sustainable development in coastal areas and small islands. The blue economy is a sustainable development approach that utilizes marine resources to support economic growth, create jobs, and safeguard marine ecosystems. (Fudge et al., 2023; Hyytiäinen et al., 2022; Pace et al., 2023). In the context of tourism, the blue economy includes tourism activities based on exploring the beauty of the sea, such as snorkeling, diving, and shore excursions, which not only provide economic benefits but also demand environmental conservation.

Tourism development in Indonesia contributes to foreign exchange, estimated at US\$15.87 billion, with 12 percent coming from marine tourism by 2022 (BPS, 2023). Along with the growth of marine tourism in Indonesia, the government actively encourages the development of marine tourism. It promotes marine tourism destinations in various regions of Indonesia to the international market through various

tourism exhibitions and promotional campaigns, such as the "Wonderful Indonesia" program (Kemenparekraf RI, 2024). The Ministry of Tourism and Creative Economy established marine tourism as one of the priority sectors, with a target of 7 million foreign tourists by 2024 (Kemenparekraf, 2024). With the growing interest in marine tourism destinations, they tend to focus on small islands in Indonesia as vacation destinations.

Coastal areas with no tourism development and local communities still depend on the unstable fisheries sector (Stanford et al., 2013). This is shown in the high poverty rate in coastal areas in 2022, recorded at 4.19 percent of the total national poverty rate, which reached 9.36 percent, or around 25.90 million people (BPS, 2023). The transformation of fishing villages into marine tourism villages is a livelihood strategy for coastal communities in response to social, economic, and environmental changes in coastal areas. Factors that influence marine tourism development, such as tourist attraction, availability of supporting infrastructure and facilities, local community involvement, existence and function of tourism institutions, investment, environmental quality, resource protection, government policy, and marketing (Yang et al., 2023; Yin et al., 2022). The transformation of fishing villages into tourism villages is based on the cultural ecology of coastal communities that sustainably utilize natural and cultural resources to develop tourism (Prasetyo et al., 2020). This transformation can potentially encourage the growth of the creative economy of coastal communities. The products produced by the creative economy in marine tourism meet the needs of tourists in terms of tourism (culture, commercial activities, water sports, concerts, and recreation), accommodation, local culinary, crafts, and fashion items (Shasha et al., 2023).

Tourism has become a key driver of livelihood change in rural areas, including coastal communities often dependent on natural resources as the mainstay of their economy (Aazami & Shanazi, 2020; Allison & Ellis, 2001; Scoones, 2015). In the last decade, the role of tourism in diversifying livelihoods and improving economic well-being has become a significant concern. The Sustainable Livelihoods Framework (SLF) offers a comprehensive analytical tool to understand how these changes are occurring, taking into account the various factors that affect the livelihoods of coastal

communities. The SLF, introduced by the UK Department for International Development (DFID), includes five main concepts: vulnerability, livelihood assets, structures and processes, livelihood strategies, and livelihood outcomes (Hsu & Peng, 2023; Wu et al., 2023). Among these concepts, livelihood capital is at the core of the SLF, as it measures how communities can utilize existing resources to maintain or improve their livelihoods (Tipyan & Mee-Udon, 2014).

Communities with limited access to livelihood capital tend to be more vulnerable. (Opiyo et al., 2023). Therefore, strengthening adaptive capacity through livelihood diversification is crucial to reduce vulnerability and improve community welfare. The livelihood strategies coastal communities implement in dealing with these changes are also diverse. Many combine tourism activities with traditional fishing, agriculture, and livestock practices. (Stanford et al., 2014b). This combination reflects the community's adaptation to new opportunities while maintaining local wisdom passed down from generation to generation.

However, the impact of marine tourism development on local communities has not provided social, economic, and environmental benefits. Sangchumnon (2019) Found that tourism development has not offered many job opportunities for local communities, resulting in an uneven income distribution in terms of the economy. Likewise, with the social dimension, the community still does not play an important role in tourism development. (Rasheed & Abdulla, 2020). Rudianto et al. (2019) Found that tourism development has caused changes in the social structure of local communities, which then triggered social conflicts. One of the issues that provoked social conflict was land ownership and business competition between investors and local communities on Pari Island. (Kinseng et al., 2018). Ekaputra et al. (2020) reported that the expansion of marine tourism in the Mandeh Area, West Sumatra, has triggered the formation of a dividing line between tourists and local communities, resulting in social changes in local cultural values. Tourism growth often has an impact on the degradation of the coastal environment. (Carreño & Lloret, 2021).

New economic opportunities emerge as tourism grows, but traditional livelihoods also face significant challenges. To address this concern, we analyzed patterns of

changes in the livelihoods of coastal communities on Pahawang Island in Lampung Province, Indonesia, by measuring access to capital assets and by examining whether or not livelihood strategies have led to sustainable livelihoods, with a focus on shifts in internal livelihood factors and household strategies over time. Therefore, the sustainable livelihood framework provides an important framework for understanding the complexity of the interaction between various livelihood capitals and adaptation strategies carried out by coastal communities. This analysis can provide deeper insights into how tourism can be developed as an effective strategy to support sustainable livelihoods in coastal areas while maintaining a balance between conservation and economic development.

B. Research Problem

Pahawang Island was an isolated village; most people depended on the fisheries sector. Fisheries management problems in Pahawang Island Village have several main challenges. First, climate change can threaten the sustainability of fish stocks in these waters. Islam et al. (2014) describe climate variability as a factor that threatens the entire livelihood system of small-scale fisher households. Second, there is damage to the aquatic environment, which is further exacerbated by the degradation of the coastal environment. Third, the low income level of fishermen is caused by an increase in the number of fishermen and more intensive competition in catching fish. With economic limitations, the people of Pahawang Island are looking for alternative sources of income other than the fisheries sector. The people of Pahawang Island are aware of the potential of tourism and the existence of Pahawang Island. In addition, given that fishermen's livelihoods cannot be used as the mainstay of economic support, the community decided to switch or seek alternative livelihoods in the tourism sector on Pahawang Island.

Planning for Pahawang Island as a marine tourism destination began in 2009 with the preparation of a master plan by the NGO Mitra Bentala and the coastal communities of Pahawang Island to make Pahawang Island a leading tourism destination in

Lampung Province. Then, in 2012, many tourists began to visit Pahawang Island to fish and dive by enjoying the beauty of coral reefs and marine fish. In 2017, the island became a priority destination in Lampung Province, Indonesia. It began to attract many tourists by offering various tourist attractions, such as snorkeling, diving, banana boating, boat tours, beach tours, mangrove ecotourism, and hiking. Even in 2019, the number of national and international tourist visits reached more than 448 thousand tourists (BPS Pesawaran Regency, 2024). Tourism development encourages the growth of the creative economy on Pahawang Island; this is following data from the Department of Tourism and Creative Economy of Pesawaran Regency (2023), which records the number of creative economies on Pahawang Island as many as 214 creative economies involved in various sectors supporting tourism activities such as lodging, culinary, lodging, handicrafts, clothing business, and so on. The shift from a fishing village to a marine tourism area on Pahawang Island can positively and negatively impact the community and the environment.

Tourism development in coastal areas is often seen as a strategy to boost local economies, create jobs, and reduce poverty (Fudge et al., 2023; Shasha et al., 2023). However, the changes brought about by tourism also bring significant challenges, especially for communities that depend on natural resources, such as coastal communities. These changes affect the local economic structure and alter the livelihood patterns and adaptation strategies of coastal community households. Previous studies have explored this issue, such as the study by Susilo et al. (2021), which explained that tourism development can disrupt traditional fishing activities, forcing households to adjust their strategies, which may involve diversifying income sources or switching entirely to tourism-related activities. A study by Li et al. (2020) confirmed that rural tourism development has promoted livelihood sustainability, including the accumulation of social and cultural capital, improved livelihood strategies, and increased coordination between livelihoods and the environment. Nonetheless, the livelihood sustainability index in the area is still relatively low and has not reached its optimal level, indicating potential for further improvement. However, whether these adaptations result in sustainable outcomes is uncertain and can vary significantly

among different groups within heterogeneous communities. (Aazami & Shanazi, 2020; Mahdi et al., 2009; Tong et al., 2024).

Therefore, this research is needed to evaluate the extent of changes in the livelihoods of coastal communities in response to marine tourism development in Pahawang Island Village, Marga Punduh district, Pesawaran Regency, Lampung Province at two separate points in time: 2016, before significant tourism development, and 2024, at the current stage of tourism development. Based on the description of the problems above, the problem formulation of this research is as follows:

1. How has the tourism development of Pahawang Island transformed the village from a fishing village to a marine tourism village?
2. What are the changes in the livelihood capital of the local community in Pahawang island?
3. How are changes in the livelihood strategies and livelihood outcomes of local communities in Pahawang Island in response to tourism development?

C. Research Objectives

Based on the formulation of the problem above, the objectives of this research are as follows:

- 1) Describe the tourism development of Pahawang Island that transformed the village from a fishing village to a marine tourism village
- 2) Analyze changes in the livelihood capital of local communities in Pahawang Island.
- 3) Describe changes in the livelihood strategies and livelihood outcomes of the local community in Pahawang island.

D. Research Contribution

The findings of this study are expected to provide the following benefits:

1. Theoretical Benefits

- a. The results of this writing are expected to benefit the development of science in the fields of environment and tourism development policies in coastal areas.
- b. The results of this writing are expected to enrich references and literature about tourism development areas and natural resources management.
- c. The results of this writing can be used as a reference for writing and similar research for the next stage.

2. Practical Benefits

- a. The results of this writing are expected to provide input for all interested parties and provide answers to the problems researched, as well as provide answers regarding factors that affect the tourism development areas on the sustainable livelihood of coastal communities.
- b. It is a vehicle for writers to develop reasoning, form a scientific mindset as well as find out the author's ability to apply the knowledge obtained.

