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COMMUNITY RESILIENCE IN A MOVING ISLAND OF SEKOPONG

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Abstract

Sekopong Island, located on the eastern coast of East Lampung Regency, Lampung Province, Indonesia, is a unique island characterized by constantly shifting land. The island lacks vegetation, has sandy soil, and its terrain is continually reshaped by weather and wave conditions. Despite being unsuitable for permanent settlement, many people have built homes and continue to reside there. Economic opportunity serves as the main draw for settlers, particularly due to the island's rich crab fishing grounds. This study seeks to understand how the community on Sekopong Island adapts and remains resilient in the face of its extreme environmental conditions. A qualitative approach was employed to gather in-depth information from residents and relevant stakeholders. Data collection methods included community group discussions and in-depth interviews. Findings indicate that the primary reason for continued settlement is economic necessity. Most inhabitants are crab fishermen who rely on the island's surrounding crab habitats for their livelihoods. The residents of Sekopong Island exhibit strong resilience in coping with the challenges posed by their dynamic and shifting environment.

Keywords: Sekopong Island, moving island, disaster, community resilience, qualitative research

INTRODUCTION

As one of the islands located in the Lampung Province area of Indonesia, Sekopong Island has unique geographical and geomorphological characteristics. Sekopong Island, also known as Gosongsekopong Island, is situated near Way Kambas National Park, only about 0.5 miles from its coastline (Meidiantama, 2022). Due to its size and location, Sekopong Island exhibits distinctive features. Based on Google Earth imagery over time, the shape of the island continuously changes. Not only does its shape shift, but the island's geographic coordinates also move, with land areas becoming submerged and submerged areas becoming exposed. There is thus a potential risk of land subsidence on this island (Budi et al., 2024). Sea sand mining activities in the waters surrounding Sekopong Island have been identified as a cause of this potential subsidence. These mining activities have led to conflicts between

miners and local fishermen (Budiman & Muklasin, 2020). It is known that Sekopong Island is a fragile landform that could eventually sink and disappear. On the other hand, the waters around Sekopong Island are rich in blue swimming crabs (*Portunus pelagicus*) (Halawa et al., 2013). The abundance of this resource attracts fishermen to these waters, drawing settlers to live on the island despite its extreme conditions. This research aims to understand how people live on Sekopong Island—an island known for its dynamic and challenging environment. The scarcity of literature and secondary data on Sekopong Island highlights the novelty and importance of conducting this study.

In relation to this phenomenon, community resilience is the central focus of this research topic. Life on Sekopong Island is challenging, as natural disasters may occur at any time. The term *resilience* originates from physics, particularly material science, where it refers to a material's ability to return to its original shape after being bent or compressed (Kirmayer et al., 2009). Over time, the concept has been widely adopted in various fields such as ecology, psychology, and psychiatry. In ecological contexts, resilience describes an ecosystem's capacity to recover following environmental stress. In psychology, it refers to an individual's ability to cope with stress and adversity. In both cases, the idea of resilience aligns with system stability when facing dynamic and unpredictable conditions. In this study, such dynamic conditions refer to the continuously shifting landscape of Sekopong Island. The research thus focuses on the local community as the subject of analysis, exploring how they adapt and maintain their livelihoods in the face of the island's ever-changing environment.

METHODOLOGY

A qualitative approach is the most suitable method for exploring both the people and the environment of Sekopong Island. As an island with limited existing data and information regarding its inhabitants and its physical landscape, this research requires a deep and nuanced understanding. To collect data, this study employs in-depth interviews, focus group discussions (FGDs), and observation. FGDs and interviews are classified as conversational methods, whereas drawings and photographs are considered visual data sources (Grossoehme, 2014). In-depth interviews are conducted to gather individual perspectives, while FGDs are used to capture insights from groups. The observation process is focused specifically on the area of Sekopong Island. Informants for the FGDs and in-depth interviews are selected through purposive sampling, targeting individuals who are highly familiar with and directly exposed to the island's context.

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RESULTS AND DISCUSSION

Data collection began with a focus group discussion (FGD), followed by in-depth interviews and concurrent observation. The fieldwork commenced from Kuala Penet Port in East Lampung Regency, Lampung Province, Indonesia, using a small boat. The estimated travel time from Kuala Penet Port to Sekopong Island was approximately 45 minutes along the coastline of Way Kambas National Park. Observation was conducted simultaneously with the FGD and in-depth interview processes. The purpose of the observation was to gain an understanding of the island's physical and geographical characteristics, such as water well salinity, vegetation, and other environmental features. Purposive sampling used in the FGDs and interviews aimed to explore the conditions of the island and the resilience of its community. The FGDs were conducted on the island, with participants gathered by a prominent local figure in a stilt house that also functions as a mosque. A total of 12 island residents participated in the discussions, where they shared various complaints and described conditions on the island. In-depth interviews were carried out with three key informants: the community leader of Sekopong Island, the Head of Margasari Village, and the Head of Division in the Regional Development Planning Board of East Lampung. All data collection activities—including observation, FGDs, and in-depth interviews—were conducted on July 1, 2024.

The phenomenon of the "moving island" in Sekopong Island was examined using secondary data gathered from satellite images via Google Earth. **Figure 1** illustrates the transition and movement of Sekopong Island, based on images taken from 2008 to 2024. The images show that the island has changed not only in shape but also in position over time. Observational data indicate that the island's water wells have very low salinity, meaning the water is drinkable. There are several houses on the island, built from wood and bamboo, where the island's settlers live. The settlers have also constructed a communal toilet above the sea, which serves as a public facility. There is no tree vegetation growing on the island's surface. Cellular signal coverage is very limited; settlers often need to hang their mobile phones at roof level to obtain reception. The island's inhabitants rely on solar panels and batteries as their primary sources of electricity for daily needs.

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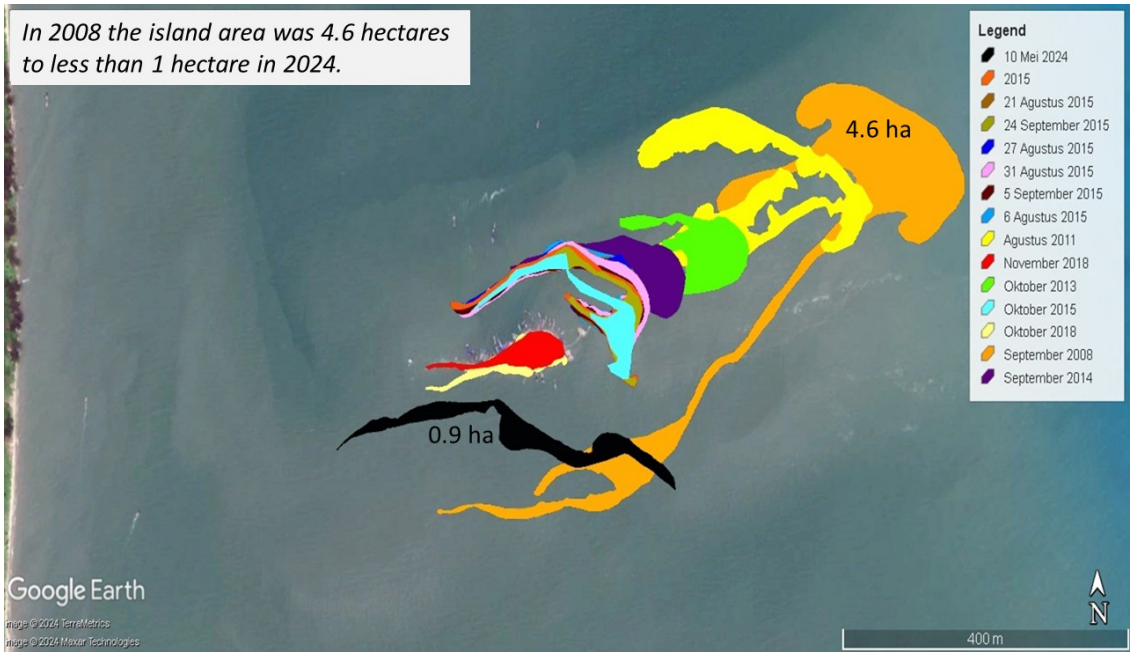

Figure 1. Sekopong Island land shifting

Community resilience on Sekopong Island, an island that is constantly changing, was analyzed using an inductive approach. The primary data from focus group discussions (FGDs) and in-depth interviews were transcribed, coded, and categorized. Qualitative data generated from FGDs and in-depth interviews were transcribed into text documents. This process enabled a thorough understanding of the text for the coding stage. Each code derived from the transcripts was then summarized in a coding data table, which facilitated the process of data categorization. The categorized data were further summarized into several thematic categories. These main categories were subsequently used to develop the research findings framework. The validation of qualitative data was carried out through the triangulation method. Specifically, data source triangulation was applied, involving comparison of data from different informants to establish the validity of the findings.

The analysis was conducted using an inductive approach. The qualitative data were organized into four main categories: shifting/moving island, economic aspects, social society, and the history and condition of the island. Data within each category were then used to construct the research findings framework. Figure 2 illustrates how this framework was developed through qualitative analysis, with community resilience as its central focus. The analysis identified two key variables influencing community resilience: rejector factors and attraction factors. Furthermore, resources, economic activities, and social dynamics were found to be the main elements contributing to the community's resilience in facing extreme environmental conditions.

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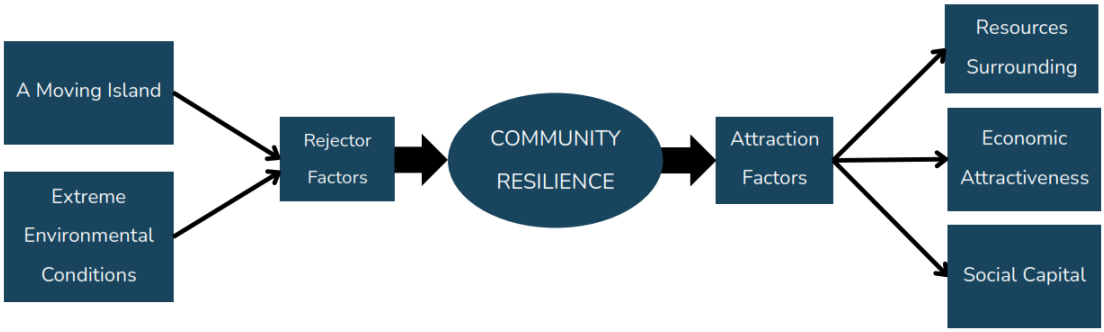

Figure 2. Community resilience in a moving island framework

Based on theory, resilience is not merely an individual trait but a collective phenomenon that emerges within groups of people (Kirmayer et al., 2009). Community resilience depends on the quantity and quality of human, social, and material resources, as well as the community's capacity to adapt these resources to new challenges (Kirmayer et al., 2009). This study found that island communities face extreme environmental conditions primarily for economic reasons. There are also attraction factors that contribute to strengthening community resilience in the face of disasters.

CONCLUSION AND RECOMMENDATIONS

Sekopong Island is an island that continuously shifts over time. It is characterized by extreme environmental conditions. Despite these challenges, people continue to settle on the island. Economic factors are the primary motivation for the settlers who choose to live there. The natural resources, particularly the crab fishing grounds, serve as the main attraction factor. This attraction factor explains why people are drawn to the island despite its harsh conditions. These findings contribute to the development of the community resilience in a moving island framework.

The government and relevant stakeholders need to stabilize the island's position, using engineering or biological approaches. It is also important for the government to formally recognize the island as part of an administrative region. Social bonds within the island community should be strengthened to help maintain social stability. Furthermore, the island's main economic activity—the crab fishing grounds—should be managed sustainably to support long-term community resilience.

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