

Tourism Development Strategies in the KHDTK (Special Purpose Forest Area) Mount Bromo and Their Impact on the Welfare of Local Communities

Sri Hilmi Pujihartati* and Mahendra Wijaya

Department of Sociology, Faculty of Social and Political Sciences, Sebelas Maret University, Indonesia

Abstract. Special Purpose Forest Zones, known in Indonesia as Kawasan Hutan Dengan Tujuan Khusus (KHDTK), are demarcated woodland territories explicitly purposed for educational and research undertakings. The present study revolves around a KHDTK region nestled in the Karanganyar Regency, presided over by Sebelas Maret University. The principal objective in fostering the KHDTK is to uplift the prosperity of adjacent communities, specifically the inhabitants of Sewurejo, Delingan, and Gedong villages. As time has progressed, this territory has also been transformed into a tourism hub. Numerous initiatives have been deployed to amplify the allure for tourists, consequently enhancing the local community's welfare. These initiatives encompass events such as the *Syawalan* celebration (May 2022), the Reog Festival (May 2022), the socialization of Off-Road activities (March 2022), and the Sunday Market. Hence, the primary focus of this research is to examine the direct impact of the development of the KHDTK Mount Bromo. A case study methodology was adopted for this research. Data collection methods employed include document analysis, focused group discussions, and observations. The findings of this study illustrate a significant influence on the welfare of the communities surrounding the KHDTK Mount Bromo.

1 Introduction

Forests serve as multi-dimensional natural resources, providing extensive benefits, especially vital to human survival at local, national, and international scales [1]. Aside from being a hotbed of biodiversity, forests also function as a buffer against various natural disasters such as floods and landslides. Given the manifold benefits that forests provide to humanity, the Ministry of Environment and Forestry decided to enhance forest management strategies to maximize the benefits derived from these biotic areas, leading to the creation of Special Purpose Forest Areas or KHDTK [2].

Special Purpose Forest Areas (KHDTK) are designated forest regions determined by the government for public interests such as research and development, education and training,

* Corresponding author: srihilmi@staff.uns.ac.id

and religious and cultural purposes, the management of which is entrusted to customary law communities, educational institutions, research institutions, and social and religious organizations [3]. Typically, forest areas also play an instrumental role for the surrounding communities, which includes the forest's function as a tourist attraction. This leads to a substantial number of communities relying on these forest areas in the hope of improving their living conditions. One such KHDTK is in the forest area of Mount Bromo [4].

The KHDTK in Mount Bromo has been managed by the Sebelas Maret University since 2018. The area underwent a status change and a transfer of management rights from being previously managed by *Perum Perhutani* with the status of Production Forest [5]. This shift implies a change in forest management priorities, which previously focused on the production aspect of forest yield, such as pine resin (*Pinus merkusii*), rosewood (*Dalbergia latifolia*), mahogany (*Swietenia macrophylla*), or forest tourism, to forest management emphasizing activities that support the implementation of education and training in forestry and tropical forest ecology, both for the academic community and the icon wider public, especially for communities living around the KHDTK [6].

The KHDTK Mount Bromo, while renowned for its breathtaking landscapes, has recently caught the attention of researchers and environmentalists for a distinct reason. Despite its well-documented physical characteristics and historical significance, there remains a gap in understanding how its transformation into an ecotourism hub impacts the surrounding communities. Specifically, what are the sociological and economic implications of this shift, and how does it reflect broader principles of sustainable tourism development? There are lingering questions about how the principles of social capital interplay with the sustainable rural tourism development theories in this context. Addressing this research problem is imperative not just to understand Mount Bromo's transformation but also to ascertain how similar ecotourism initiatives can be emulated in other regions. The objective of this research, therefore, is to delve deep into the interrelation between the emergence of KHDTK Mount Bromo as a community-centric ecotourism destination and the subsequent socioeconomic upliftment of its neighboring communities, framed within the lens of social capital and sustainable rural tourism development theories.

2 Methods

This research was conducted employing a qualitative case study methodology. The qualitative method is an approach that involves devising clearly formulated questions, conducting intensive searches for relevant studies and journals, evaluating the quality of identified studies, and summarizing findings using an explicit methodology [7]. The case study method is conceptualized as a model that centers on the exploration of a "bounded system" of a particular case or a part thereof in detail through in-depth data analysis. A variety of information sources rich in context are harnessed to conceal data [8]. Data collection methods employed include document analysis, focused group discussions, and observations. Initially, 20 participants from communities surrounding the KHDTK Mount Bromo were selected purposefully in FGD, and in-depth interviews were conducted with some of them based on their profound knowledge and relevance to the study. Concurrently, site visits to the KHDTK Mount Bromo area were made, during which observational data was meticulously recorded. Additionally, a rigorous review of existing documents and publications concerning Mount Bromo, and its societal implications was undertaken. The findings of a case study are relative, implying they are not universally applicable to other cases but are specific to the case in question. This is because each case is unique, possessing distinct characteristics from others [9].

3 Results and Discussion

Ecotourism signifies a mode of travel that is undertaken by individuals responsible for preserving the natural state of an area, such as adventuring, tree observation, bird watching, and even different types of its promotion [10]. As a rapidly growing sector of tourism, ecotourism can be divided into scenic, adventure, research, cultural and historical, as well as social, conservation, and educational ecotourism. Specifically, the Special Purpose Forest Area (KHDTK) of Mount Bromo engages in research and educational ecotourism [11].

This region, covering 126,291 hectares of forest, is characterized by a flat and slightly undulating landscape, dominated by the growth of pine, *sonokeling*, and mahogany trees. In order to attract tourist attention and visits, and to boost the welfare of surrounding communities, KHDTK Mount Bromo provides services such as outbound activities, motor trails, and off-road [11]. However, the enforcement of community activity restrictions (PPKM) in Indonesia due to the coronavirus has led to a decrease in visitor numbers. Consequently, a series of events, namely, the *Syawalan* Alas Bromo "Bromo Culture Festival" 2022 was held from May 4-7, 2022, and the *Reog* Festival was conducted on Friday, May 6, 2022, at the Alas Bromo field [11]. Local communities enthusiastically watched the traditional *reog* art. Approximately 800-1000 visitors filled the performance arena [11].

Other community engagement activities at KHDTK Mount Bromo included the planting of eucalyptus, red ginger, and durian *bewor* seedlings on March 6, 2021. A total of 2000 seedlings were made available for planting in KHDTK Mount Bromo and were distributed to the communities surrounding Mount Bromo [12].

The ecosystem condition of KHDTK Mount Bromo comprises not only forest tree vegetation, but also agricultural land managed by local communities [6]. Prior to the development of the forest area into KHDTK, the surrounding communities actively contributed to preserving, maintaining, and cultivating the Mount Bromo forest area. Many community members obtained income from pine sap during their tenure as pine sap collectors [6]. Subsequently, with the transformation of Mount Bromo's forest area into KHDTK, communities continued to actively preserve and maintain the sustainability of the forest area. This commitment is evidenced by the formation of forest farmer groups that manage KHDTK. The Alas Bromo *Gapoktanhut* was formed on April 12, 2021, with the task of gathering human resources/traders from the surrounding communities of KHDTK Mount Bromo and coordinating with the village [12]. One way to realize community welfare by increasing SMEs was through the establishment of the Sunday Market at KHDTK Mount Bromo. This provided an ideal opportunity for the community to trade and introduce their regional products [12].

KHDTK Mount Bromo has significantly impacted the improvement of the welfare of the surrounding communities. This is evident in the use of water, cultivated land, wood, and animal feed sourced from KHDTK Mount Bromo [14]. The first role of KHDTK Mount Bromo is as a provider of animal feed for the surrounding communities, especially for the communities of Gedong and Delingan villages. The majority of the community takes the elephant grass that grows in KHDTK for their livestock feed and not for sale [14]. KHDTK Mount Bromo also provides clean water benefits for the community. A part of the community utilizes clean water for bathing, washing, sanitation, and drinking in high intensity [14]. The service benefits felt by the community around KHDTK Mount Bromo are the availability of many cultivated lands with intercropping systems. This is evidenced by the large number of community members working as farmers and farm laborers. The community also takes advantage of the wood originating from KHDTK Mount Bromo.

Generally, the types of wood include mahogany, *sonokeling*, pine, and *petai*. These woods are mostly used for personal needs, while some use them for sale [14].

The metamorphosis of the Special Purpose Forest Zones (KHDTK) of Mount Bromo into a dynamic ecotourism hub can be interrogated through the lens of the social capital and community development theory. This theoretical construct, broadly construed as the organization's collective societal traits such as trust, norms, and networks, is renowned for augmenting societal efficiency by enabling harmonized action [9]. Indeed, this conceptual paradigm has gained traction within the ambit of community-centered tourism, asserting its value in forging robust trust relationships, fostering reciprocity, and orchestrating harmonious interactions amongst key players [9].

The transformational narrative of KHDTK Mount Bromo encapsulates the essence of this theory. The institution of the Sunday Market and the inception of Alas Bromo Gapoktanhut underscore proactive endeavors to cultivate productive networks within the community. These strategic initiatives are instrumental in enhancing communal capacity to steward the forest, thereby safeguarding its rich natural heritage [12]. Concurrently, the community's active engagement in environmental stewardship initiatives, such as the plantation of eucalyptus, red ginger, and durian *bewor* saplings, exemplifies the practice of harmonious collaboration, a core tenet undergirding the theory of social capital [12].

In a parallel vein, the theoretical underpinning of sustainable rural tourism development finds resonance within the context of KHDTK's transformation. This theory advocates for a tripartite focus on robust community involvement, steadfast cultural preservation, and unwavering commitment to environmental sustainability [13-21]. The transmutation of KHDTK into a vibrant tourism epicenter manifests these theoretical principles, with local communities assuming proactive roles in conservation endeavors. This ensures that the surge in tourism activities does not wreak havoc on the environment, even as they revel in the rich cultural tapestry showcased in festivals such as the Reog Festival and the Syawalan celebration.

4 Conclusion

In synthesizing the discourse, the emergence of KHDTK Mount Bromo as a community-centric ecotourism hub is emblematic of the principles of social capital and sustainable rural tourism development theories. This remarkable metamorphosis has not only allowed for the preservation of the natural topography but also precipitated a significant upliftment in the wellbeing of neighboring communities through the infusion of tourism revenue and an empowerment approach towards forest management.

References

1. Maryudi, Gadjah Mada Univ. Press (2015).
2. Perhutani, (2015).
3. A.F. N., Iin I., Nandi K., *neliti.com* (2017).
4. Evi I., Dwi P. A., Univ. Sebelas Maret (2021).
5. Diklathut, *diklathut.uns.ac.id* (2021). *Kegiatan Pengembangan Pariwisata dan Kebudayaan Masyarakat sekitar KHDTK Gunung Bromo*
6. Diklathut, *diklathut.uns.ac.id* (2022). *Bangkit Dari "Tidur", Alas Bromo Karanganyar Menggelar Acara Syawalan Alas Bromo "Bromo Culture Festival" 2022*
7. K.S. Khan, R. Kunz, J. Kleijnen, G. Antes, *J. R. Soc. Med.* 96, 118-121 (2003).
8. J.W. Creswell, *Pustaka Pelajar*, Yogyakarta (2015).

9. S.S. Nana, PT.Remaja Rosdakarya, Bandung (2011).
10. Eplerwood, *Tourism Recreation Research* 24, 199-213(1999).
11. Diklathut, diklathut.uns.ac.id (2021). *Gabungan Kelompok Tani Hutan KHDTK Gunung Bromo Siap Merealisasikan Sunday Market*
12. Diklathut, P. R., *Ind. For. J.* 2, (2021). *Press Release Penanaman Pohon Dalam Rangka Gerakan Karanganyar Ijo Royo-Royo di KHDTK Gunung Bromo UNS*
13. O. Mtapuri, A. Giampiccoli, *S. Afr. Geogr. J.* 95, 1-15 (2013).
14. Rezky L.W., Rissa R., Dwi A., *Jurnal Belantara* (2020).
15. W. An and S. Alarcon, *Sustainability* 12, 7758 (2020).
16. Y. Joo, H. Seok, and Y. Nam, *Sustainability* 12, 4095 (2020).
17. J. Guan, J. Gao, and C. Zhang, *Sustainability* 11, 2858 (2019).
18. P. D. Rosalina, K. Dupre, and Y. Wang, *J. Hosp. Tour. Manag.* 47, 134-149 (2021).
19. D. Hall, *Winning and Losing* (Routledge, 2022), pp. 72-89.
20. C. Liu et al., *J. Rural Stud.* 79, 177-188 (2020).
21. X. Ma et al., *J. Sustain. Tour.* 29, 1235-1252 (2021).