

## ECO-TOURISM AND SUSTAINABLE PARK MANAGEMENT: THE TEMUAN EXPERIENCE IN GUNUNG LEDANG

Rohani Jangga<sup>1\*</sup>, Ahmad Naqiyuddin Bakar<sup>2</sup>, Ahmad Nawawi Yaakob<sup>3</sup>, Aliza Ali<sup>4</sup>, &  
Rosnani Mohd Salleh<sup>5</sup>

<sup>1,3,4,5</sup>Universiti Teknologi MARA (UiTM), Segamat, Johor, Malaysia

<sup>2</sup>Universiti Teknologi MARA (UiTM), Shah Alam, Malaysia

\*E-mail: [rohan107@uitm.edu.my](mailto:rohan107@uitm.edu.my)

### 1. INTRODUCTION

According to UNWTO's classification, **ecotourism** means types of tourism that are wholly nature-based, include informative and interpretation features, normally, arranged by dedicated locally owned tour operators, and focuses on small groups of tourists. It reduces undesirable effects upon the natural and socio-cultural settings and aids to create commercial gains for host communities, organizations, groups, and relevant authorities handling natural zones with conservation objectives. Furthermore, it also offers other employment and salary opportunities for local communities and increases appreciation towards the conservation of natural and cultural assets, both among the local communities and tourists alike which inaugurates the concept of 'community-based ecotourism' (UNTWO, 2002).

Community-based ecotourism is a type of ecotourism in which the local community has strong control over the management of ecotourism activities, as a result, some benefits remain within the community. Sustainable land use and ecotourism or nature-based tourism can either substitute or supplement current social, environmental, and economic activities, providing enough benefits to ensure residents' commitment to conservation (Park, Zielinski, Jeong & Kim, 2020).

According to Sanjay K. Nepal (2002), participatory park management that involves indigenous people and that addresses livelihood issues of these communities will ultimately succeed in its effort toward wildlife conservation. Nevertheless, the key challenge frequently encountered by numerous protected areas globally is the dispute with the local community living in and around the protected area (Andrade & Rhodes, 2012; Park et al., 2020; Ahmad et al., 2017b). Undue invasion of the natural environment in the name of eco-tourism has repeatedly led to considerable significant challenges of ecological ruin, and ultimately impairing the employment of local communities. In addition, some communities prefer farming and were neither interested in tourism nor had the experience and knowledge about the activity. This study explored the experience of the Temuan community and evaluate what are the conditions that can promote sustainable management of eco-tourism through constructive relationships among the Temuan people and the park management authorities.

Malaysia has the capability of developing into one of the leading destinations of ecotourism globally due to its abundance of rainforest areas that are in existence for the past 130 million years. Ecotourism has since grown rapidly into a fast-expanding niche market and has the probability to be developed into a dominant viable development tool in the travel and

tourism industry (Wood, 2002). As ecotourism strengthens local economies, Malaysia has a substantial interest in this industry for attaining a viable economic development.

Gunung Ledang is a mountain range in the Gunung Ledang National Park located in Tangkak District, Johor, Malaysia. The summit is situated between the border of Muar district in Johor and Asahan district in Melaka. Standing at 1,276 m (4,186 ft), it is the 64th highest mountain in Malaysia and the highest peak in Johor. The 8,611.9-ha protected area, that covers the whole Ledang mountain range, retains a spread of unspoiled tropical rainforest, and serves as an important water catchment area for both Johor and Melaka. It is a treasure trove of biodiversity and a progressively crucial sanctuary for flora and fauna. Not surprisingly, the mountain has been explored by top naturalists and scientists since the 1800s (Hussin et al, 2017). The Temuan people are a Proto-Malay ethnic group indigenous to western parts of Peninsular Malaysia. They can be found in the states of Selangor, Pahang, Johor, Negeri Sembilan and Malacca. They are categorized as part of the Orang Asli group according to the Malaysian government. They are also one of the biggest (only smaller in population in comparison to the Semai people and Jakun people) and the most prevalent of the Orang Asli ethnic groups. Several Temuan families are living in villages near Gunung Ledang in Tangkak district.

Protected areas are but one sector and profession where in recent years, there are seen increasing requirements to work jointly with a diversity of stakeholders for the most effective institutional arrangements for conserving the ecosystem (Dovers et al., 2015) and ensuring the well-being of a community). Protected areas that are under the management of the local government for which the accountability rests with public jurisdiction signify one of the most conventional forms of management (Borrini-Feyerabend & Hill, 2015). A crucial provision for a socially and ecologically suitable management of protected areas is linked to the capability and readiness of the numerous stakeholders to join forces for nature conservation (Avdibegović et al., 2015). This is a stimulating undertaking, notably since the financial segments associated with natural resource management (i.e., agriculture, forestry) and spatial planning either (i) have no exposure in protected area management and ‘conservation thinking’ and/or (ii) utilize natural assets, that frequently conflict with conservation. Guidelines on major commercial sectors are mainly related to optimization of production and sectoral policy mandates are often contradictory (Hossu et al., 2017).

Consequently, environmental, and natural resource management has progressed away from a top-down, regulatory style, to one that features close and varied partnerships and collaborations amongst management agencies and local communities, resource users, other management agencies, non-governmental organizations (NGO), and the private sectors (Dovers et al., 2015). Disagreements between community customs and governance in assets’ use within forest reserves can only be resolved by utilizing a comprehensive methodology for successful management and ecological use of the natural resource. Constructive natural resource management necessitates the authorities to contemplate indigenous contribution and the integration of indigenous knowledge. This facilitates the improvement made by the management of protected areas. Indigenous knowledge of natural resources and landscape signifies the close association between indigenous communities and their natural habitats. Hence, it is vital to recognise them as the primary stakeholders in managing protected areas. Experts and legislators need to implement a universal approach by recognising the existence of several stakeholders in protected areas and acknowledging their various needs. When outlining suitable policies and management plans for protected areas, indigenous knowledge

and the difficulties which shape the way they use natural resources ought to be acknowledged and respected.

## **2. METHODOLOGY**

A systematic review of relevant published studies on ecotourism, protected areas, and indigenous communities' contributions was carried out to determine which factors may influence the level of community compliance with PA policies and initiatives in Gunung Ledang National Park. This study covers only one indigenous tribe and one protected area (PA) in peninsular Malaysia which is Gunung Ledang and it is under the Johor State Parks Corporation (JSPC) and as a case in focus (Ahmad et al., 2017a). A qualitative approach was chosen for this research because it involved a lot of variables from multiple parties and the topic needed to be explored in depth. Therefore, this approach was utilized to determine the attitudes, opinions, and mindsets of an individual or group regarding specific social events that are discussed in this study. Hence, the researchers had to consult, carried out discussions, and performed personal observations with the officials of JSPC and local communities of Gunung Ledang. Secondary data refers to data that is collected by someone other than the primary user. Common sources of secondary data for social science include censuses, information collected by government departments, organizational records, and data that was originally collected for other research purposes (Jennings, 2001; Yin, 2009). For this study, secondary sources such as official reports, community development guidelines, program books, websites, and working papers were used as a source of data.

## **3. RESULTS AND DISCUSSION**

Human dimensions factors are currently considered valid in examining the success of parks and protected areas. The creation of parks and protected areas itself lies in the context of societal and/or community objectives, which inherently reflect human aspirations and values. Therefore, when considering the objectives of establishing protected areas, biological and ecological goals must go along with human-oriented goals such as the promotion of effective partnership that will contribute towards enhanced lifestyle for the locals. Ecotourism's economic support to local people should mainly be assessed based on the accomplishment of local vendors. Tourism has caused numerous positive effects on the indigenous societies of Southeast Asia. If tourist destinations can accommodate more micro-enterprises, more probably a larger percentage of local people will benefit. All stakeholders must develop and implement a productive public involvement in tourism that must comprise ecotourism planning and encourage a true and effective public participation process (Gani et al., 2015).

## **4. RECOMMENDATIONS**

Getting indigenous people to participate in park management indicates an appreciation of their values, principles, and viewpoint regarding nature and integrating these merits into public policies and plans. Indigenous people be recognized as the legal keepers and equivalent partners in the growth and execution of conservation blueprints that have an impact on their lands, seaside areas, waters, seas, and other resources, precisely in the inception and management of protected areas. In all matters that concern the common interest of protected areas and indigenous people, decentralization, community involvement in participation of ideas, energy, assets, social skills and clarity, and accountability should be accepted as the fundamental concepts (Woelansari et al., 2020). Sharing completely and fairly the advantages

related to protected areas, with due recognition of the rights of other legal stakeholders is emphasized and it is acknowledged that the rights of indigenous people in association to protected areas are often a global duty.

## 5. CONCLUSION

Safeguarding local support for protected areas is progressively viewed as a crucial component of biodiversity conservation. This is often based on the establishment of benefits from protected areas, and a general method of delivering such benefits is tourism development. Ecotourism is frequently recommended as a means for advocating conservation however proof for its suitability is varied. The success of conservation projects is widely recognized to rely upon the positive viewpoints of local communities and thus it is crucial to know if ecotourism influences local opinions of natural resources and conservation. It is proposed that for further study, there is an urgent need to conduct a systematic inquiry on the governance of other local protected areas that echoes other indigenous tribes' important contributions towards the ecological biodiversity of our country.

## 6. ACKNOWLEDGMENT

First and foremost, the authors would like to express our deepest appreciation for the support that our sponsors have given us [Project 600-RMC/LESTARI SDG-T 5/3 (075/2019)]. Second, we wish to acknowledge the Office of the Deputy Vice-Chancellor (Research & Innovation), particularly, the Research Management Centre (RMC), Universiti Teknologi MARA (UiTM), UiTM's Faculties of Administrative Science & Policy Studies, and UiTM Johor for enabling this study under the UiTM SDG Triangle grant to be carried out. Finally, we also thank the anonymous reviewers whose invaluable comments and insights are very helpful in improving this manuscript.

## 7. REFERENCES

- Ahmad N. B., Abdul Rauf Ambali, Farida Zuraina, M. Y., Harinder, R. S., & Lili, T. (2017a). *Gunung Ledang: Geology, biodiversity, and socio-economic development*. University Publication Centre (UiTM Press): Shah Alam, Selangor, ISBN 506000283037.
- Ahmad Naqiyuddin Bakar. (2018). Policy and related issues about community participation in the management of protected area (PA): A case of Pahang National Park, Malaysia.
- Andrade, G. S., & Rhodes, J. R. (2012). Protected areas and local communities: an inevitable partnership toward successful conservation strategies? *Ecology and Society*, 17(4).
- Avdibegović, Mersudin, Bruno Marić, Dženan Bećirović, Sabina Delić, Senka Mutabdzija & Bećirović (2015). *Cross-sectoral cooperation in the management of national park Una*. Works of the Faculty of Forestry University of Sarajevo No. 1, 2015 (66-86) 66 UDK 630\*93:712.2(1-751.2) (497.6 Una)
- Borrini-Feyerabend, G., & Hill, R. (2015). Governance for the conservation of nature. In G. L. Worboys, M. Lockwood, A. Kothari, S. Feary, & I. Pulsford (Eds.). *Protected area governance and management*, pp. 169–206, ANU Press, Canberra.
- Constantina Alina Hossu, Ioan Cristian Ioja, Mihai R. Nita, Tibor Hartel, Denisa L. Badiu, & Anna M. Hersperger (2017). Need for a cross-sector approach in protected area management. *Land Use Policy*, 69, 586-597.
- Dovers, S., Feary, S., Martin, A., McMillan, L., Morgan, D., & Tollefson, M. (2015). Engagement and participation in protected area management: Who, why, how, and

- when? In G. L. Worboys, M. Lockwood, A. Kothari, S. Feary, & I. Pulsford (Eds.). *Protected area governance and management*, pp. 413-440, ANU Press, Canberra.
- Gani, A. A., Awang, K. W., Samdin, Z., & Mohd, A. (2012). Local community participation in sustainable tourism planning of Malaysian protected areas. *Current Issues in Hospitality and Tourism Research and Innovations*, 459.
- Hussain, O., Khairul A., Berhannudin, M.S., M. Hisyam, A., & Shamsaadul, S. (2017). Orang Asli Jakun dan Taman Negara Endau Rompin Johor. Dalam Hussain Othman & Rosman Md. Yusoff (peny.). *Pendayaupayaan bahasa, agama dan transformasi masyarakat* (190-218). Batu Pahat, Johor: Penerbit UTHM.
- Jennings, G. (2001). *Tourism research*. John Wiley and Sons Australia, Ltd.
- Nepal, K. S. (2002). Involving indigenous peoples in protected area management: Comparative perspectives from Nepal, Thailand, and China. *Environmental Management*, 30(6), 748-763.
- Park, Sunjoo, Zielinski, Seweryn, Jeong Yoonjeong, & Kim, Seong-il (2020). Factors affecting residents' support for protected area designation. *Sustainability*, 12(7), 2800.
- Woelansari, M., Maryono, M., Muhammad, F., Halim, M. A. R., & Setyawan, A. (2020). *Community participation in conservation of Petungkriyono protected areas in Pekalongan district*. E3S Web of Conference (Vol. 202, p. 06002). EDP Sciences.
- Wood, M. (2002). *Ecotourism: Principles, practices, and policies for sustainability*. The International Ecotourism Society & United Nations Environment Division, Paris, France.
- Yin, R. K. (2009). *Case study research: Design and methods* (Vol. 5). Sage.